



**IMPACT OF EKALAVYA MODEL RESIDENTIAL SCHOOLS
IN ENHANCING THE EDUCATIONAL ATTAINMENT OF ST
CHILDREN IN FIVE STATES**



PREPARED

BY



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Foreword

Indian school system in tribal areas has experienced a tremendous change in the recent past. The education system has become very large and complex in nature. The number of schools and teachers in tribal areas has grown multi-fold. The expansion has also brought with it tremendous stress and strain on the school management system in the tribal areas. National Policy on Education (1986) as well as the revised policy adopted in 1992 called for a total overhauling of the school management set-up in the country. The policy suggested a major restructuring and revitalizing of the system.

The Ministry of Tribal Affairs has taken up several new schemes over the years for educational upliftment of the tribal people. The introduction of Ekalavya Model Residential Schools since 1997-1998 is a novel experimental scheme to provide quality middle and high level education to meritorious tribal students in the remote tribal areas of the country. The present study has probed into the functioning of Ekalavya Model Residential Schools in tribal areas and attempted an analysis of their impact on enhancing the educational attainment of tribal children. The basic purpose of these schools is to provide Scheduled Tribe (ST) students the best opportunities in education at par with the non-ST students at the middle and high school level in remote locations so as to enable them to avail the reservation in high and professional educational courses and in jobs in government and public and private sectors. The objective of these schools is to ensure comprehensive physical, mental and socially relevant development of all its students and empowering them to be change agents in school, at homes, in the village and in the larger society.

EMRSs are structured to transmit cultural values of the larger society while facilitating social mobility and promoting social change. The analysis of various interrelated aspects of the functioning of EMRSs and their impact on educational attainment of children are highlighted in the present study. The study has analyzed school, hostel infrastructure facilities, staff profile, service condition of teaching and non-teaching staff, school & hostel educational climate, school community linkage, school monitoring and supervision, students' enrolment, retention and students' educational attainment. The document presents five separate State reports (Odisha, Madhya Pradesh, Gujarat, Maharashtra and Rajasthan) and an integrated report of 5

states. The study has contributed some guiding principles and 25 actionable recommendations for enhancing the educational attainment as well as functioning of EMRS. The impact of EMRS vis-à-vis other schools meant for tribal children has been examined in the present research with a focus to identify grey areas, suggest measures for strengthening the EMRS program in Odisha, Maharashtra, Rajasthan , Gujrat and Madhya Pradesh. Since education is an engine for change and progress, the government can concentrate or focus attention on the EMRS for the tribal children where they can learn new skills and modern techniques. Ekalavya Model Residential Schools will help accelerate the forces for advancement, higher standards of living and thus a justiciable social set up for tribal children.

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- Collector & District Magistrate , Nasik, Maharashtra
- Collector & District Magistrate , Sundergarh, Odisha
- Collector & District Magistrate , Nabarangpur, Odisha
- Deputy Commissioner, NVS Regional Office, Bhopal
- Deputy Commissioner, NVS Regional Office, Pune
- Deputy Commissioner, NVS Regional Office, Jaipur
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List of Acronyms

ADM	<i>Additional District Magistrate</i>
ANM	<i>Auxiliary Nursing Mid-wife</i>
BSE	<i>Board of Secondary Education</i>
CBSE	<i>Central Board of Secondary Education</i>
CCA	<i>Cook-Cum-Attendant</i>
CCE	<i>Continuous and Comprehensive Evaluation</i>
ELTI	<i>English Language Training Institute</i>
EMRS	<i>Ekalavya Model Residential School</i>
FGD	<i>Focus Group Discussion</i>
GOI	<i>Government of India</i>
HSC	<i>High School Certificate</i>
HSSC	<i>Higher Secondary School Certificate</i>
ITDA	<i>Integrated Tribal Development Agency</i>
ITI	<i>Industrial Training Institute</i>
JNV	<i>Jawahar Navodaya Vidyalaya</i>
KGVB	<i>Kasturba Gandhi Balika Vidyalaya</i>
KV	<i>Kendriya Vidyalaya</i>
LDC	<i>Lower Division Clerk</i>
MHRD	<i>Ministry of Human Resource Development</i>
MoTA	<i>Ministry of Tribal Affairs</i>
MTA	<i>Mother-Teacher Association</i>
NCC	<i>National Cadet Corps</i>
NCERT	<i>National Council of Educational Research and Training</i>
NCF	<i>National Curriculum Framework</i>
NSS	<i>National Social Service</i>
NTS	<i>National Talent Search</i>
OMTES	<i>Odisha Model Tribal Education Society</i>
OS	<i>Office Superintendent</i>
PA	<i>Project Administrator</i>
PET	<i>Physical Education Instructor</i>
PGT	<i>Post-Graduate Teacher</i>
PTR	<i>Pupil-Teacher Ratio</i>

RMSA	<i>Rashtriya Madhyamik Shiksha Abhiyan</i>
RPVV	<i>Rajkiya Pratibha Vikas Vidyalaya</i>
SC	<i>Schedule Caste</i>
SCSTRTI	<i>Scheduled Caste and Scheduled Tribe Research and Training Institute</i>
SDP	<i>School Development Plan</i>
SMC	<i>School Management Committee</i>
SSA	<i>Sarva Shiksha Abhiyan</i>
ST	<i>Scheduled Tribe</i>
TGT	<i>Trained Graduate Teacher</i>
TLE	<i>Teaching-Learning Equipments</i>
TLM	<i>Teaching-Learning Materials</i>
UDC	<i>Upper Division Clerk</i>

Executive Summary

Education is an investment in people for empowering them to cope with the changing economic and technological conditions (Srivastava, 1981). Imparting education in the tribal habitations is a challenge for the administration as teachers most often tend to avoid working in tribal locations. Article 46 of the Indian Constitution expresses a clear intent to promote the educational and economic interests of Scheduled Tribes and to protect them from social injustice and all forms of exploitation. Since the problems and needs of Scheduled Tribes are different from those in respect of other communities in the society, particularly due to isolation of tribal areas from rest of the parts in the country, a separate and focused approach was considered necessary in terms of solutions to those problems. Accordingly, a separate Ministry of Tribal Affairs was created out of the then existing Ministry of Social Justice and Empowerment in the year 1999. The Ministry has taken up several new schemes over the years for educational upliftment of the tribal people. The introduction of Ekalavya Model Residential Schools since 1997-1998 is a novel experimental scheme to provide quality middle and high level education to meritorious tribal students in the remote tribal areas of the country.

The overall objective of the study was to ascertain the impact of EMRS scheme in India with reference to school and hostel infrastructure facilities, school and hostel environment, teaching-learning and evaluation processes, children's learning outcomes and their upward mobility in career, service conditions and benefits of teaching and non-teaching staff, school-community linkage and efficacy in realizing the objectives for which EMRS was set. The study examined the impact of EMRS vis-à-vis other schools meant for tribal children with a focus to identify grey areas, suggest measures for strengthening the EMRS program.

The sample included five states with high tribal concentration: Madhya Pradesh (1.53 crore), Maharashtra (1.05 crore), Odisha (0.96 crore), Rajasthan (0.92 crore) and Gujarat (0.89 crore). From among the 72 EMRSs spread over 5 states, 10 EMRSs with 2 per state were sampled for the study. Two districts per state were selected: one with the highest literacy rate and the other with the lowest literacy rate as per 2011 census (where EMRSs were functional). One EMRS from each of these two districts were finally selected as the sampled school. For purposes of comparison, two ST & SC schools were sampled from each state from the same two districts used for selecting the EMRSs. One JNV was selected from each state from the district with the lowest literacy rate. The document presents five separate state reports (Odisha, Madhya Pradesh, Gujarat, Maharashtra and Rajasthan) and an integrated report of all five States of India.

The tools used in the study are one School Information Schedule, one Hostel information Schedule, seven Interview Schedules (one each for the principal, teacher, student, hostel superintendent, non-teaching staff, community member, collector/ ADM/ PA, ITDA), one Focus Group Discussion Schedule with students and 13 Achievement Tests (four for Class VIII, four for Class X and five for class XII students). Students in Classes VIII and X were assessed on their achievement in English, Mathematics, Science and Social Science and students in Class XII were assessed in English, Physics, Chemistry, mathematics and Biology. All achievement tests had multiple-choice items with 4 alternatives per question.

The English versions of the tests and interview schedules were translated into regional languages of the respective states (*Odia* for Odisha, *Gujurati* for Gujarat, *Marathi* for Maharashtra and *Hindi* for

Rajasthan and Madhya Pradesh). The English and the regional-language versions of the tests were administered to students keeping in view their medium of instructions of the schools. The information and interview schedules along with the format for FGD with students were prepared by the research team through three workshops covering a total duration of 10 days. Brief description of each of the schedules is given in the Table 3.3.3.

School and Hostel Infrastructure Facilities

Each of the EMRS, ST & SC schools and JNV have a lot of space for students to move around and are provided with safe habitations. The EMRS and ST & SC schools did not fare well on hygienic parameters. On most of the important infrastructure parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools, across all the five sampled states. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.

All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions. Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for names' sake only. Schools were lacking on adequate play grounds and child-friendly facilities such as slides and swings. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.

Power supply was a major concern in some EMRSs and ST & SC schools. While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.

Nearly 100% of students in EMRS and JNV stayed in hostels while about 30% of students in ST & SC schools did not stay in hostels. For those who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor, as many of them were sleeping on the floor or in sharing beds with others in rooms without proper light and ventilation and in many instances not having fans. Many rooms had leaking roofs, and accommodation hardly met safety and child-friendly parameters. The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.

All schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since a few teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.

Students did not have enough water in EMRS and ST & SC hostels for daily routine activities. The toilet condition and cleanliness was poor in ST & SC hostels, manageable in EMRS and good in JNV. Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked child-friendly and disability-friendly provisions. No fire safety measures were taken in ST & SC schools while fire-safety measures taken in EMRS as well as in JNV were inadequate.

Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Solar lanterns were provided to all EMRS and ST & SC schools which were inadequate. The furniture supply in these hostels was inadequate. While JNV had spent all its allocated funds during 2014-15, EMRS had spent only 70 to 80% and ST & SC schools only 80 to 85%.

Staff Profile and Service Condition

Twenty-percent of the teaching and 10% of the non-teaching staff positions were lying vacant in EMRS compared to 33% and 10% in ST & SC schools and 12% and 6% in JNV respectively. All the teaching staff in EMRS and 60% in ST & SC schools were employed on contractual basis and 28% of teachers in JNV were employed on daily-remuneration basis. The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools, while PTRs in EMRS and JNV were good and were as per state norm. About 24% of teachers in EMRS, 70% in ST & SC schools and 6% in JNV were not

trained. Teachers in EMRS and teachers in ST & SC schools and JNV in contractual employment are leaving their respective schools when better employment opportunities were available to them. All the non-teaching staff in EMRS and ST & SC schools and more than half of the non-teaching staff in JNV have not received any formal training as required in their respective jobs.

Regrettably, there was no service condition for EMRS teaching and non-teaching staff. There were noticeable differences in gross monthly emoluments among the teachers of EMRS and the teachers of ST & SC schools and JNV, greatly disfavoring the former. Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality education and outcomes.

The capacity building training of the teaching and non-teaching staff of EMRS and ST & SC schools was weak. The EMRS vision is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. Need on skills assessment necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

Student Enrolment and Retention

The demand for admission to all types of schools has been increased over the years. There was more demand for JNV followed by EMRS and ST & SC schools. The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time ignoring the quality of education. Average number of students per classroom was approximately 30-35 in EMRS and JNV, which is 60-65 numbers in ST & SC schools.

Student attendance in all types of schools was satisfactory. Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15. The information in respect of students staying out of the school system was not available with the school authorities.

School and Hostel Environment

The school campus and classrooms are appeared to be clean in all types of schools. Initiative for school campus beautification was missing in ST & SC schools. While First-Aid Boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health checkup was done irregularly in EMRS and ST & SC schools. All schools suffered for not having adequate garbage disposal pit and proper drainage system.

In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipment were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.

The status of EMRS did not turn out to be satisfactory in respect of preparation of lesson plan, activity-based teaching, group-based learning, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools. The classrooms in all types of schools and student participation were either manageable or poor.

Mostly TLMs and TLEs which were purchased by the teachers; were not purchased with a proper plan to cater to the students' need and course requirements and were not available in classrooms

for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.

Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defense were evident to some degree in EMRS, but personal and career counseling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS. The ST & SC schools appeared to be weak on many fronts except that of training for life skills and artistic talents and coaching for sports competitions available to students to some extent. Adoption of CCE along with most of the parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period was not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.

In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.

Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students. In JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying student talents.

Health checkup schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.

In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box; wall magazine was not updated and play equipment's were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.

The Mess Committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.

On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.

The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

Students' Educational Attainment

In all the four subjects (English, Mathematics, Science and Social Science), Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.

The performance of students from all the three types of schools was not in the satisfactory range. Class VIII students in ST & SC schools scored in the range of only 25% to 35% across four subject areas, while those in EMRS scored in the range of 30% to 40%. Even if the performance of JNV

students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 40% to 54 % across the four subject areas.

The ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in English language attainment. The ST students in ST & SC schools performed in the range of 25% to 33% while their performance in EMRS was within 30% to 41% and in JNV in the range of 45% to 60%. It is difficult to ascertain whether one programme was better than the other because students in JNV constituted a screened population and were better to begin with.

The performance of Class X students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 27% to 41%, while those in EMRS showed attainment in the range of 33% to 64%. The students in JNV performed in the range of 57% to 71%.

Class X ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools. It was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant

Though Class XII students in JNV were better than their grade-mates in EMRS and ST & SC schools, the performance gap between students of ST & SC schools, EMRS and JNV narrowed down though JNV students performed better than others.

The performance level of Class XII students of ST & SC schools was poor in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 57%. Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.

On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC school students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average. In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had different levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

In Class X Board examination, more percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 90% of marks. 4% of ST & SC school students got less than 40% and none of them got above 80%. In JNV none of the students got less than 50% and 8% of students got above 90%.

The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 70% to 80% bracket.

The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of

40% to 50% for ST & SC schools, 50% to 60% for EMRS and 60% to 70% for JNV. The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.

During the last five years, none of the students of JNV, 6% of students of EMRS and 19% of the students of ST & SC schools scored below 40%, while 9% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.

The SC and general students performed almost at an equal level and both groups performed better than ST students. The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.

In Class XII Board examinations in 2014, maximum number of students scored in 50% to 60% bracket in EMRS and in 60% to 70% bracket in JNV. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 80% and 31% of JNV students scored above 80% of whom 4% scored above 90%. There was approximately 10% gap in students' scores in Class XII examination between EMRS and JNV students favoring the latter.

The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 50% to 60% bracket and maximum number of JNV students scored in the 60% to 70% bracket. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favoring the latter.

In class XII Board examination in 2014, maximum number of ST and general students scored in 60% to 80% bracket, while maximum number of SC students scored in 33% to 66% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.

Success Rate in NTS and Progress of Student Pass outs

None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

Over the last three years, 47% of EMRS students took up general courses in the arts, science and commerce streams in general colleges, while 9% went for Bachelor level courses in Engineering and 17% went for Diploma / ITI courses. 22% of pass outs took up employment; many of them were working as teachers in primary schools.

None of the student pass outs went for medical or management or law courses. Information was not available in respect of 5% of pass outs.

That 95% of student pass outs (56% in Bachelor level general or technical courses, 22% in employment and 17% in diploma courses) progressed in their life in some way or the other reveals positive indications concerning the EMRS programme. But student preparation in EMRS to take up more valued professional courses such as medical or management was not satisfactory.

Student Participation in Co-curricular and Social Activities

More girls than boys participated in co-curricular activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.

The participation of ST & SC school students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.

In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.

Nine percent of EMRS students were in NCC, 8% in Scouts and 7% in NSS, while 3% of ST & SC students were in Scouts and NCC and NSS were not adopted in ST & SC schools. Among JNV students, 4% adopted Scouts and 13% were in NSS. *Shramdan* was carried in all types of schools with maximum student participation in the range of 80% to 100%.

Six percent of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV were 25% and 20% respectively. These activities were missing in ST & SC schools.

School-Community Linkage

The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.

SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC and MTA members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals or monitoring utilization of funds. Their participation in preparing TLMs was non-existent and in schools' co-curricular activities, very poor.

The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

School Monitoring and Supervision

During the span of last one year, District Social Welfare Officers visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits by authorities to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavors.

The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 15-17 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively less. Hostel visits were done by the principals about twice a week. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

Stakeholders' Feedback and Suggestions

Teaching and Non-teaching staff

Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counseling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counseling students and maintaining record of success rate of school pass outs.

Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements. The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.

The non-teaching staff members of EMRS and ST & SC schools were unhappy that attempts were not taken to provide capacity building training to them. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

Student feedback

Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV.

Pertaining to the hostels, the major issues of concern for EMRS students were scarcity of water for daily-routine work, cleanliness of toilets and hostel environment, light, ventilation and accommodation facilities, water accumulation around hostel because of improper drainage system, poor repair and maintenance work, quality of food, health checkup facilities and indoor sports activities. Some expressed fear of bragging in schools and hostels. Students in ST & SC schools also experienced the same deficiencies to a greater degree. It was astonishing to observe that students in ST & SC hostels were not provided with mosquito nets in spite of the fact that their environment was more unhygienic. The students in JNV had a more favorable perception of school and hostel environment and facilities. JNV fared better on most of these parameters.

Students perceived teachers to be supportive of them and nice to their parents. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, access to computers, irregular correction of students' text, lack of group-based projects and lack of supervised study and remedial classes.

Students' perception of provisions in ST & SC schools was more unfavorable. There was nearly a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic conditions. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern. JNV was far better in most of curricular and co-curricular parameters.

In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback from Community Members

Most of the community members in relation to EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About one-third of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. They were not directly involved in school planning and were aware that they did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Views of Educational Administrators

The District level educational administrators (ADM and PA, ITDA) expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 13.7.1). The Table explains itself very well. While stakeholders

approached the issues from their points of view, certain common themes emerged (refer to Table 13.7.1 for feedback from each category of stakeholders).

EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

Programme Strengths:

- * Good school and hostel infrastructure
- * Residential facilities for students
- * Favourable PTR
- * Supply of free textbooks and uniforms and learning materials
- * Scope for games, sports and co-curricular activities
- * Engagement of qualified teaching staff
- * Special attention and coaching to student
- * Gender and Social equity.

Concerns (need special attention):

- * Poor salary and service conditions of the staff
- * Poor hostel maintenance and cleanliness
- * Water, power and toilet problems
- * Poor community involvement in school activities
- * Lack of regular health worker
- * Teacher-directed rather than student-initiated activities
- * Poor attention to build capacities of teachers
- * Adoption of CCE in student assessment

Suggestions (need to be implemented):

- * Regular employment, proper salary and service conditions of staff
- * Solving water and power crises; Regular maintenance of hostel building and proper drainage system
- * Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit
- * Special measures for improving students' language proficiency
- * Capacity building of teaching and non-teaching staff
- * Student involvement in school practices and mess management
- * Strengthening school-community link.

The sampled schools are instances of how the educational programmes (EMRS, SC & ST, JNV) have been implemented. The findings obtained can be generalized to the students of such schools with, of course, admissible variations. The findings are meant to highlight the salient features of these educational programmes, project a perspective on their effectiveness and carry implications for future planning.

Suggestions and Recommendations

The suggestions given pertaining to strengthen the EMRS programme in five major domains: (i) raising staff motivation and commitment through proper service conditions and service benefits for

the teaching and non-teaching staff, (ii) strengthening infrastructure facilities, (iii) providing student-friendly and learning-supportive accommodation to students, (iv) upgrading key pedagogic interventions, (v) strengthening school-community linkage, and (vi) instituting programme-supportive monitoring and supervision mechanisms.

Improving staff commitment

- i. There needs to be a set of uniform service conditions for the teaching as well as the non-teaching staff working in EMRSs across the country.
- ii. The Ministry of Tribal Affairs may consider forming a Society at the central level, similar to Navodaya Vidyalay Samiti (NVS) under MHRD.
- iii. The engagement of teaching and non-teaching staff needs to be made regular and; contractual appointment should be avoided as far as possible. The staff structure needs to be uniform across all EMRSs in the country
- iv. Career advancement plans for the staffs needs to be clearly stipulated along with competencies expected of teachers to avail of such opportunities.
- v. Regular capacity building training for the teaching and the non-teaching staff along with opportunities for teachers to be in close contact with experts in different knowledge domains is to be instituted on a priority basis.

Strengthening school infrastructure

- i. The building layout plan implemented in the construction of EMRSs in Gujarat may be adopted for construction of EMRS in future in other locations across the country.
- ii. The per-child fund allocation for EMRS falls much short of that for JNV and therefore, needs to be reviewed.
- iii. Adequate number of classrooms (14 classrooms, one for each of the two sections in every class from VI to XII) along with well-equipped laboratories and spacious library-cum-reading room are required.
- iv. The residential quarters for all teachers and selected non-teaching staff are to be made available in the school premises.
- v. Ramps and rails must be made available to each block of the schools. Fire-safety measures need to be strengthened.
- vi. Adequate number of overhead tanks and generators/ inverters/ solar panels would be helpful to partially address the problems of water scarcity and electricity.
- vii. It is important to assess the reasons for which funds allocated to EMRSs were not utilized fully during the financial year, particularly when the schools lacked many facilities.

Providing Student-friendly and learning-supportive accommodation

- i. The water scarcity and power-failure problems can be addressed by installing overhead tanks and generators/ inverters/ solar panels in each hostel and making adequate provisions of solar lanterns for students.
- ii. The school authorities ensure conducive accommodation facilities and RCC tables inside hostel rooms following the pattern adopted in JNV.
- iii. The hostels need to satisfy the child-friendly, disabled-friendly and safety parameters. There is a necessity to construct boundary walls around girls' hostels.

- iv. The school authorities may consider hiring a vehicle on contractual basis to carry sick students for medical treatment and to meet other emergency requirements of the school and hostels.

Upgrading Key Pedagogic Interventions

- i. Resource teams may be set up at the central as well as state levels. The resource teams would be responsible for hand-holding support to teachers and academic monitoring of the EMRSs.
- ii. Special focus must be placed on distribution of textbooks to students at the beginning of the academic session
- iii. Immediate steps need to be taken to build the capacities of the teaching staff to update their instructional skills and procedures on a list of selected school climate indicators in which the EMRS were found to be weak.
- iv. The resource team may be called upon to rate teachers on the effective use of student-friendly innovative educational practices on a cumulative basis, which would be given due weightage at the time of teacher promotions.
- v. One or two counsellors may be recruited for each EMRS. The role of the counsellor and the resource team is extremely important for effecting changes in teaching-learning practices with a view to enhancing students' educational attainment level.
- vi. While all the teachers would be involved, the counsellor and the PET in coordination, can design, implement and monitor the co-curricular activities to link them to students' curricular learning.
- vii. The counsellor, if engaged in each EMRS, will be responsible for maintaining student profiles and monitor student development activities so that this important objective of EMRS would be realized.

Empowering Community Ownership

- i. The district-level administration / resource team need to monitor school-community linkage by remaining present in the SMC/ PTA meetings and by sensitizing them to their roles and responsibilities in school functioning. The SMC / PTA meetings need to be conducted every quarter.
- ii. A clear annual agenda for staff involvement in raising the awareness level of the community and students' social awareness campaigns and social service measures need to be formulated in consultation with SMC / MTA/ community members.

Mechanism of monitoring and supervision

- i. The resource team, if constituted, would have the primary responsibility of providing academic monitoring to schools on a monthly basis along the criteria suggested in the format given below.
- ii. The resource team in collaboration with the counsellor can sensitize the community members, particularly the members of the SMC, and build their capacity to monitor how the school is implementing the facilities provided under the EMRS scheme.
- iii. The monitoring format outlining the important parameters of school's functioning given in this document can be used by the monitoring personnel to ascertain the status of the school on a quarterly basis and assess *how the school is progressing over time*.

Section 1

INTRODUCTION

India is a pluralistic society with rich diversity reflected in multitudes of its cultures, communities, religions, castes, languages, social groups and racial stocks. The pluralistic culture is founded on heterogeneity making the social fabric stratified and hierarchical. Consequently, the social and economic resources are differentially distributed along lines of caste, class and community affiliations. Furthermore, divergence in geography, ecology and economic status has resulted in different sections of people having differential contact with the mainstream society. Nearly 80% of the Indian population lives in rural areas characterized by poverty, lack of infrastructure facilities and lack of opportunities for upward social mobility. Inequalities and disparities exist at various levels in the Indian society. As a result, certain deprived sections of the population have not been able to participate in the process of national development, which has affected the very pace of the country's socio-economic progress. The problem is severe particularly in case of the Scheduled Tribes, who constitute 8.6% of the Indian population, and most of them live in hinterlands with little access to basic amenities of modern life. They are socially and economically marginalized and their social deprivation is noticeably reflected in their educational backwardness. Even children have not escaped the all-pervasive negative effects of such features. In this context, it can be said that the tribal India is the least developed India, requiring maximum attention and minimum neglect.

Since independence, attempts have been made to break the isolation of tribal communities more in terms of land, labor and credit market, which were predominantly exploitative, but less in terms of welfare measures such as education, health, agricultural development, irrigation and road networks in which they continue to remain neglected. The onus of the problems of tribes is squarely put on their geographical isolation and the economic, social and cultural features of their societies. While this has been the dominant view, exploitation of tribes by non-tribes and lack of a serious concern by the dominant group for their participation in national progress has not altogether been overlooked. It is against this backdrop that the state's agenda towards tribes in post-Independence India needs to be understood.

1.1 Scheduled Tribes: Population and Status

Article 366 (25) of the Constitution of India refers to Scheduled Tribes as those communities, who are scheduled in accordance with Article 342 of the Constitution. The essential characteristics, first laid down by the Looker Committee, for a community to be identified as Scheduled Tribes are (i) indications of primitive traits, (ii) distinctive culture, (iii) shyness of contact with the community at large, (iv) geographical isolation, and (v) backwardness. The tribal communities in India are largely concentrated in the Central and the North-Eastern regions of the country, who are specially treated under 5th Schedule and 6th Schedule of the Indian Constitution, respectively.

The Scheduled Tribes population of India stands at 104.3 million, constituting 8.6% of the total population, who live in about 15% of the country's areas in various ecological and geo-climatic conditions ranging from plains and forests to hills and inaccessible areas. About 11.3% of ST community lives in rural areas while 2.8% live in urban areas (Annual report of the Ministry of tribal Affairs, GOI, 2014). In 2011, the literacy rate for the ST community was 59% which increased from 8.53% in 1961. During 2001 to 2011, the ST male literacy rate increased from 59.2% to 68.5% and ST female literacy rate increased from 34.8% to 49.2%.

More than half the Scheduled Tribes population (67.17%) is concentrated in the States of Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Gujarat, Jharkhand and Chhattisgarh. Tribal groups are at different stages of social, economic and educational development. There are more than 700 scheduled tribes speaking about 105 languages with 225 speaking subsidiary languages. The number of tribes in Odisha is 62, which is the largest compared to any other state. While some tribal communities have adopted a mainstream way of life, at the other end of the spectrum, there are 75 Scheduled Tribes known as Particularly Vulnerable Tribal Groups (PVTGs) who are characterized by: a) a pre-agriculture level of technology, b) a stagnant or declining population, c) extremely low literacy, and d) a subsistence level economy. They have lived as isolate entities for centuries, largely untouched by the mainstream society. This isolation is largely responsible for their politico-socio-economic backwardness.

1.2 Approaches to Tribal Development and Education: Changing Perspectives

The policies of engagement with tribals have evolved over centuries. In ancient India, the aboriginal tribes remained in isolation, residing in the dense and interior forests with little or no interaction with other people, and as such, there was no need for tribal policy. The medieval period was a period of contrasting trends of tribal assimilation and isolation. No medieval state or empire had a specific policy towards the tribal communities or clans. The Muslim rulers during the late medieval period adopted a patronizing attitude towards tribal chieftains depending on situational requirements. The Mughal rule too witnessed many a revolt by the tribal peoples, mainly over the issues of land, taxation and dwelling rights.

The post-independent India acknowledged the tribal problem as an integral part of the development of Indian people as a whole and pursued special welfare measures for the tribal people through a policy of integration. The Indian Constitution assigns special status to the Scheduled Tribes, traditionally referred to as *adivasis*, *vanbasis*, *tribes*, or *tribals*. Article 46 of the Indian constitution safeguards the interests and rights of the tribal communities and many policies flow from this. Under the Article 275(1), special grants are earmarked for the tribal areas to raise the level of administration. Special provisions have been made in Articles 46, 275, 330, 332, 335, 338, 340 etc. to safeguard the interests and rights of scheduled tribes and protect them from social injustice and exploitation. Many social scientists also have focused their study on the tribal problems to aid planners and policy makers.

The various measures taken up for the upliftment of the tribal people are usually divided into three categories: (i) protective, (ii) mobilization, and (iii) developmental. The *Protective* measures include formulation of laws by the concerned states to safeguard the rights and interests of the tribal community in the form of restoration of tribal land rights, providing special administration in the scheduled tribal areas (Articles 244 and 244a in the 5th and 6th schedule of the Indian Constitution). *Mobilization* refers to the reservation extended to the tribal communities in the domains of politics, government employment and educational institutions. *Developmental* measures aim at programmes and activities that are initiated for promoting the welfare and development of the tribal people.

As a first step to developmental initiatives, special multipurpose development projects were introduced in tribal areas. During the Fifth Plan period, the perspective on tribals changed from 'welfare' to 'development' with a new concept of Tribal Sub-Plan (TSP) and integrated tribal development projects focused on improving the quality of life of the tribal communities. A number of schemes under the broad strategy of Tribal Sub-Plan were introduced to uplift the condition of the tribal people which fall under two broad categories – economic and social. While economic domain focused on employment and income generation, credit and market support mechanism,

skill and vocational training, the social development domain focused on health and education. The domain of health pursued programmes to improve infrastructure such as PHC, CHC, etc. as well as prevention and control of communicable and non-communicable diseases. In the sphere of education, emphasis was placed on introduction of schools and residential schools at various levels, vocational education, scholarships, book grants, free uniforms, mid-day meals etc.

During post-independent India, there were three major trends in approaches towards strategies for tribal development. 'The multi-purpose project blocks' was termed as "top-down approach" with the central government exercising all administrative roles and monitoring mechanisms. In course of time, there came democratic decentralization in which the Panchayat Samitis were formed to supervise the administration of tribal blocks and the administrative staff followed a specific approach called the "target group approach" in which specific programmes were devised to suit the needs and problems of each tribal group. Then came launching of Tribal Sub Plan in the Fifth Five Year Plan in which along with several economic sectors, the primary education was accorded highest priority. The prospective planning initiatives tried to incorporate the complexities of tribal life. Consequently, a worthwhile policy approach in the field of tribal education evolved.

A Ministry was set up in 1999 after the bifurcation of Ministry of Social Justice and Empowerment to provide more focused approach on the integrated socio-economic development of the Scheduled Tribes. This became the nodal Ministry for overall policy, planning and coordination of programmes for development of Scheduled Tribes. The programmes and schemes of the Ministry are intended to support and supplement, through financial assistance, the efforts primarily of other Central Ministries, the State Governments and partly of voluntary organizations, and to fill critical gaps in institutions and programmes taking into account the situations of STs. The Ministry supplements their efforts by way of various developmental interventions in critical sectors through specially tailored schemes. These schemes for economic, educational and social development through institution building are administered by the Ministry of Tribal Affairs and implemented mainly through the State Government / Union Territory Administrations.

1.3 Programmes of MoTA for Promotion of Tribal Education

In order to attract tribal children towards education and motivate their parents to avail of incentive schemes for their children's education, the Ministry of Tribal Affairs has launched from time to time several programmes and schemes that reflect government's commitment to educationally uplift the tribal communities. Some major schemes are described below.

Hostels for ST Girls and Boys –The scheme aims to promote literacy among ST students by providing hostels to such students, who would otherwise have been unable to continue their education. The hostels are provided as a part of educational institutions or in the close vicinity of such institutions. While the Scheme of Hostels for ST Girls is in operation since the 3rd Five Year Plan, the Scheme for of ST Boys was started with effect from the year 1989-90. During the 10th Five Year Plan both the schemes have been merged into a single scheme.

Ashram Schools – The scheme aims to promote expansion of educational facilities for Scheduled Tribe students including Primitive Tribal Groups by providing residential facilities in an environment conducive to learning. The scheme covers all the Tribal Sub-Plan areas of the country spread over 22 States and 2 Union Territories. The running and maintenance of the Ashram Schools is the responsibility of the State Government/ UT concerned.

Post-Matric Scholarship – Launched in 2010, the objective is to provide financial assistance to the Scheduled Tribe students studying at post-matriculation or post-secondary levels to enable them to complete their education. The scheme is open to all ST students whose parents' annual income is Rs.2.50 lakh or less and the scholarships are awarded through the Government of the State/ Union Territory where the student is domiciled. The Commercial Pilot License Course is also

included in the Scheme of Post-Matric Scholarship for ST students and 10 Scholarships are to be given to the eligible ST students per year.

Book Bank –Many ST students selected in professional courses find it difficult to continue their education for want of books on their subjects, as these are often expensive. In order to reduce the dropout rate of ST students from professional institutes/universities, funds are provided for purchase of books under this scheme. The scheme is open to all ST students pursuing medical, engineering, agriculture, veterinary, polytechnic, law, chartered accountancy, business management, bio-science subjects, who are receiving Post-Matric Scholarships.

Upgradation of Merit –The objective is to provide special coaching to students so that they can compete with other students for admission to higher educational courses and for senior administrative and technical occupations.

National Overseas Scholarship Scheme for Higher Studies Abroad –The objective is to provide financial assistance to students selected for pursuing higher studies abroad for Post-Graduation, Ph. D and Post-Doctoral research programmes.

Rajiv Gandhi National Fellowship (RGNF) –It provides fellowships in the form of financial assistance to students belonging to the Scheduled Tribes to pursue higher studies such as M.Phil and Ph.D. The scheme covers all the Universities/ Institutions recognized by the University Grants Commission.

Scheme of Top Class Education for ST Students –It aims to encourage meritorious ST students for pursuing studies at degree and post-degree level in any of the 213 selected institutes, in which the scholarship scheme is operative. The Scheme has started from 2007-08 with 625 scholarships per year.

Vocational Training in Tribal Areas (VTC) –The main aim of the scheme is to upgrade the skills of the tribal youth in various traditional/ modern vocations depending upon their educational qualification, present economic trends and the market potential, which would enable them to gain suitable employment or enable them to become self-employed. The scheme covers all the States and Union Territories.

Pre-Matric Scholarship for Needy Scheduled Tribe Students Studying In Classes IX & X – The objectives of the Scheme are to: (i) support parents of ST students for education of their wards studying in Classes IX and X so that the incidence of dropout, especially in transition from the elementary to secondary and during secondary stage of education, is minimized, and (ii) improve participation of ST students in Classes IX and X of Pre-Matric stage, so that they perform well and have a better chance of progressing to Post-Matric stages of education.

Ekalavya Model Residential Schools – It aims to provide quality middle, high school and higher-secondary education (classes VI to XII) to meritorious tribal students in a residential mode with quality staff who can cater to their distinctive environmental, educational and cultural needs and prepare them to live a life of dignity and become contributing members to the society at large.

1.4 Ekalavya Model Residential Schools: An Innovative Experimentation

Education is an investment in people for empowering them to cope with the changing economic and technological conditions (Srivastava, 1981). Imparting education in the tribal habitations is a challenge for the administration as teachers most often tend to avoid working in tribal locations. Article 46 of the Indian Constitution expresses a clear intent to promote the educational and economic interests of Scheduled Tribes and to protect them from social injustice and all forms of exploitation. Since the problems and needs of Scheduled Tribes are different from those in respect of other communities in the society, particularly due to isolation of tribal areas from rest of the parts in the country, a separate and focused approach was considered necessary in terms of solutions to those problems. Accordingly, a separate Ministry of Tribal Affairs was created out of the then existing Ministry of Social Justice and Empowerment in the year 1999. The Ministry has taken up several new schemes over the years for educational upliftment of the tribal people. The introduction of Ekalavya Model Residential Schools since 1997-1998 is a novel experimental scheme

to provide quality middle and high level education to meritorious tribal students in the remote tribal areas of the country.

The Ekalavya Model Residential School (EMRS) scheme supports the establishment and running of quality residential schools covering classes VI to XII for ST students in remote tribal locations of the country under the provisions of the Article 275(1) of the Constitution. EMRSs start at Class VI and admission to these schools is patterned on the Jawahar Navodaya Vidyalaya model, through selection/competition with suitable provision for primitive tribal groups, first generation school goers etc. Education in EMRSs is entirely free, as in the Navodaya Vidyalayas. Each school will have ST Students from 6th to 12th standard and every class will have 60 students (30 boys and 30 girls) and the total sanctioned strength of the school will be 480 students. The Ministry of Tribal Affairs (MoTA) supports States/UTs for setting up these residential schools provided that they can ensure smooth management and efficient running of the schools including timely fund flows, recruitment of teachers in required numbers, medical facilities for students and staff, nutritious and hygienic food, and generally a happy and healthy environment. Sufficient land for constructing an EMRS is made available by the concerned State/UT free of cost. The scheme provides for a holistic and generous building lay-out, which includes all the features expected in a good quality school. EMRS funding is governed by liberal norms, both in terms of capital as well as recurring costs. The schools were required to be operated in each State through an autonomous society formed for this purpose.

Objectives of EMRS

The objective of EMRS is to provide Scheduled Tribe (ST) the best opportunities in education at par with the non-ST population at the middle and high school level in remote locations so as to enable them to avail of reservation in high and professional educational courses and in jobs in government and public and private sectors (Source: Ministry of Tribal Affairs, GOI). The EMRS intervention plans to achieve this overall objective by

- (i) To ensure comprehensive physical, mental and socially relevant development of all its students and empowering them to be change agents in school, at homes, in the village and in the larger society.
- (ii) To provide differential educational support in order to meet the distinctive needs of all the students from standard VI to XII.
- (iii) To support the annual running expenses in a manner that offers reasonable remuneration to the staff and upkeep of the facilities.
- (iv) To support the construction of infrastructure that caters to the educational, physical, environmental and cultural needs of student life. (Source: Ministry of Tribal Affairs, GOI).

Structure and Management of EMRS

Each school should have at least 20 acres of land with about 16 to 17 acres earmarked for sports and games, kitchen vegetable garden and plantation. The fuel saving or renewable energy technologies must be used in the school by availing of the schemes of the Ministry of New & Renewable Energy. The annual budget for recurring expenditure (based on the prevailing rates for Jawahar Navodaya

Vidyalaya) shall be formulated and placed before the Management Committee for approval at the end of the each financial year for the next year.

Admission to EMRS will be through selection/ competition with suitable preference to children belonging to primitive tribal groups and first generation learners. The number of seats for boys and girls would be equal and each of classes VI to X can have maximum 60 students in two sections of 30 each and classes XI and XII will have three sections per class for the three streams in Science, Commerce & Humanities with 30 students in each stream. Education will be entirely free in these schools and sufficient land would be provided by the State Government for the school, play grounds, hostels, residential quarters, etc., free of cost.

Each State Government/ UT Administration would be solely responsible for the management and effective functioning of the EMRSs. The State Governments/ UT Administration are encouraged to set up a society or use an existing registered education society for the management of the EMRSs, which will accept donations, contributions and grants from individuals and institutions for augmenting the infrastructure facilities and educational resources of the schools to ensure quality education. The tasks of school admissions, appointment of teachers, appointment of staff, personnel matters and day-to-day running of the schools would be handled entirely by the society and would not be the responsibility of the Central Government. The society would ensure and maintain highest quality in the selection of teachers and staff for academic and extra-curricular excellence. The RTI norms for the elementary stage would be strictly followed in respect of the number of teachers to be appointed with focus on recruiting maximum number of women teachers and women as cooks, helpers and cleaners. The EMRSs may be affiliated either to the State or Central Boards of Secondary Education as desired by the State Governments/UT Administration.

The Union Ministry of Tribal Affairs would review the EMRS scheme through periodic reports from the State Governments and would also develop a centralized mechanism for the online monitoring of the EMRSs. The states /UTs may adopt their own methods. The Government of India is free to make any modification in EMRS scheme in consultation with selected State Governments/ UTs, whenever deemed necessary.

1.5 Evaluation of Educational Programmes for Tribal Communities: Evidence from Research

In recent years sustained and high levels of economic growth provides a unique opportunity and momentum for faster social sector development. Investing in education plays a key role in meeting the World Bank's social development objectives, which support inclusive growth, social cohesion, and accountability in development (Sen, 2007). Professor Amartya Sen recently emphasized education as an important factor for inclusive growth in an economy. The policies need to focus on inclusive rather than divisive growth strategies. Educational planning in a country is norm-based following a standard set of procedures. These norms do not reflect the local specific requirements of the tribal regions. This suggests that planning for tribal groups must be considered as a special case rather than being guided by the norms of the general population. The national and state governments have recognized the need for special provisions for tribal groups and have adopted policies that are flexible.

Despite various policies and programmes framed and executed for their social and economic upliftment in post-Independent India, the tribal communities as a whole still remain isolated from the mainstream developmental process. Needless to say that exclusion from the fruits of

development has adversely affected the quality of life of the tribal people including their children. The participation in the process of development and access to social and economic opportunities have been negatively affected by two major factors: social differentiation and characteristics of the population. Social differentiation refers to the viability of the region in terms of geographical location. A region well served by roadways, nearer to areas of financial, political, industrial, business and entrepreneurial importance and not hindered by natural barriers is better placed to profit from the development agenda. The second factor is characteristic of the population which refers to social customs and orientations of a particular community. The regions where Scheduled Tribes live are affected by these factors.

While planning for education in tribal areas, attention has been paid to provide extra facilities in the form of various inputs for education of tribal children with a view to reducing existing disparities in educational access thus influencing retention and achievement of tribal children. The high dropout rate in general and that of tribal children in particular has to be tackled through attractive schemes beneficial for them. Biswal (1991) in Orissa found that as compared to boys, fewer girls in the tribal areas got enrolled in the schools. Most of the teachers working in these schools were found to be non-tribal and less qualified. Very surprisingly, the study found that the dropout rate at the higher level is higher than that at the lower level. A study conducted by Ekka (1990) on development of tribal education in Orissa after Independence showed that percentage of bigger habitations in the tribal inhabited areas was very negligible. Thus, educational interventions need to be planned for various types of tribal habitations, big or small, to allow tribal children easy access to education and ensure their retention in schools.

Joy and Srihari (2014) examined the school dropouts of scheduled tribe students in the Wayanad district of Kerala. Most of the children who dropped out were living with their family and majority of their parents did not have proper education as they themselves were early dropouts. The parents of the dropouts said that they were aware that the project plans were implemented for their welfare. The reasons for dropout cases were more related to individual attitude for education than to poverty and ignorance. The major reasons were: negative attitude towards schooling, peer influence, alcoholism of parents, early responsibility and caste-related and health issues.

Tripathi (1981) found that the rate of increase in enrolment in respect of scheduled castes and scheduled tribes was higher than the general rate during 1960-61 and 1965-66 but during the next five-year period, it was far below the general rate. Masavi (1976) found the wastage rate to be 65 per cent at the primary level; only 9.1 per cent of the total enrolled children of class I could complete class IV. The stagnation rate at class I was very high which came down considerably for classes II, III and IV. The overall wastage in Ashram Schools was 46.7 per cent. The main causes for wastage and stagnation were found to be socioeconomic conditions, ignorance among tribal parents, ill equipped teachers, teaching in alien languages, physical illness inappropriate curricula.

Haseena and Mohammed (2014) analyzed the reasons for tribal student drop out in Kerala. The major factors identified by them for drop out were: extreme poverty, deprivation and vulnerability, low level of political, social and economic empowerment, zero-level participation in developmental programmes, low literacy, quick deterioration of traditional knowledge system by outside interference, weak monitoring system, dependency-inducing developmental programmes relying on distribution of benefits rather than building up of capabilities, and implementation of adhoc and stereo typed developmental programmes in the absence of proper planning.

Kamble (1992) carried out a survey of educational facilities for weaker sections in Orissa and Maharashtra respectively. The study found that educational facilities for Scheduled Tribe habitations were poorer in comparison to other habitations in the district, though facilities like free textbooks, free uniforms, stipends and midday meals were available to children coming from tribal communities. In the opinion of Headmasters, 74 percent of students took advantage of facilities available for tribal children; viz., free textbooks, uniforms, writing materials and nutritious meal, and 84 percent of these students were regular in their attendance. A significant finding of the study was that the Headmasters opined that government facilities were useful to arrest wastage in education but they were not useful to increase the "percentage of pass" students.

NCERT (1995) reviewed the status of various educational interventions for scheduled tribe children in seven selected DPEP states with respect to nature and administration, organization, target beneficiaries, cost monitoring procedures and effectiveness. It observed that a comprehensive picture on the education of tribal children is hardly available as the education of tribal children is managed by many departments. In almost all the states, primary institutions catering to the needs of children from tribal communities are looked after by the education department while Ashram schools are the responsibilities of Tribal Welfare Departments and pre-primary education is looked after by voluntary agencies or Social Welfare Departments. Therefore a clear picture of all the inputs in the form of interventions for education of tribal children may not be available for a given geographical area. Yet to plan for education of tribal children, it is necessary to study the linkages between different schemes.

In case of states, where Ashram schools were functional, the dropout rate was reported to be very minimal. Some communities took full advantage of these facilities and came up to a considerable extent while others remained at the same level. NCERT (1995) study revealed that hostel facility provided for tribal children away from their families was usually perceived as an additional stipend and not as something supporting education of children. Another important provision in the form of merit-scholarships, stipends and other attendance scholarships, also suffered because of poor planning. In case of most of the States, attendance scholarships were available to all boys and girls coming from tribal communities. Some States had developed instructional materials in tribal dialects.

The status of quality education for tribal children was alarming in 1990s. Therefore, a need was projected to have tribe-specific learning arrangements which can make full use of tribal culture and tribal traditions. Some of the major constraints of planning for tribal education were scattered population, small-sized habitations, lack of facilities of transport and communication, curriculum, textbooks and medium of instruction not relevant to their culture and environment and non-availability of teachers knowing tribal languages. However, there are some favourable factors in tribal situation: egalitarian social structure, strong community organization in certain areas, availability of traditional local institutions like youth dormitories and an intimate environmental knowledge base. After independence, many changes have been noticed in various aspects of tribal culture, economic, social, political, religious and ethical life. These changes need to be channelized in a more planned and systematic way to carry forward programmes of development in tribal areas.

Feedback from field-level implementation is essential for proper planning. The two studies conducted on Ashram Schools by Desai and Patel (1981) and Pratap & Raju (1973) did not project a good profile of the Ashram Schools. They found the working and physical conditions of Ashram Schools unsatisfactory. Some of the teachers working in these schools did not stay there and visited

schools occasionally. The study pointed out that the schools were treated as source of income rather than avenues of service. Desai and Patel (1981) found that in most of the Ashram Schools, the number of children enrolled was much higher than the prescribed number (120 students each) and except in two schools, the 1: 1 ratio among boys and girls was not maintained. Only 18 out of 22 Ashram Schools had cent per cent teacher strength and in some cases the educational qualifications of teachers was class VII. The overall wastage rate reported in these Ashram Schools was 44.42 per cent.

In an evaluative study conducted on hostels and Ashram schools for Tribal Girl students, Jha (1985) found that like most of other beneficiary schemes meant for tribals, mostly the rich amongst the tribal community availed of these facilities. The number of students admitted to the hostels was much higher than the number expected and the superintendents of these hostels were neither trained nor qualified. The hostel rooms were overcrowded and did not have basic facilities. The scholarships given to girls was not only inadequate but in some cases were used by parents for objectives other than education. Sharma (1984) found that introduction of different incentives like free uniforms, textbooks and boarding and lodging facilities resulted in higher enrolment of SC and ST students including girls. This increase in case of SC and ST children ranged from 49.2 per cent to 92.7 per cent. A study by Garnaik & Barik (2012) on 11 Ashram schools in the Jharsuguda district of Odisha revealed poor infrastructure and teaching-learning facilities, inadequate teaching and non-teaching staff, lack of adequate capacity building measures, late disbursement of teaching-learning materials and incentives to students and poor provision of remedial instruction for slow learners as major obstacles in realizing the visions of the Ashram schools.

The study by Joshi (1980) besides other things, found that the majority of teachers did not have a specialized training for working in backward areas. Srivastava (1981) observed that unproductive and traditional type of educational system for the tribals was the cause of indifferent attitude of tribal parents towards their children's education. Besides, lack of adequate facilities and equipments for teaching was considered as a cause of lack of motivation for education among the tribals. In a socio-economic survey, Parvathamma (1984) reflected the perceptions of the tribal people regarding the developmental programmes. In her survey, nearly one-half of the samples were not aware of the constitutional provisions meant for the development of the downtrodden and those who were aware did not avail of the opportunities as expected. They perceived the officials to be apathetic and not sincere in implementing the provisions. Both STs and SCs were critical of their so-called community leaders whom they labelled as selfish as they were using the opportunities for themselves and family members with no concern for the welfare of all.

Similarly, various studies conducted on the progress of tribal education in different states revealed several discouraging trends (Revathi & Geetha, 2012). These studies revealed that the progress achieved so far in the tribal education is considerable, but not sufficient. The level of educational attainment among tribal students is lower compared to that of non-tribal students. The reasons for this dismal situation can be attributed to various external and internal constraints. They are related to defects in the policy and administration system and also to the socio-cultural and economic environment in which the tribals live (Revathi & Geetha, 2012). Notwithstanding its crucial role, education continues to receive inadequate priority by the policy makers and planners in India.

Sujatha's (1999) study on community schools in the district of Vishakhapatnam, Andhra Pradesh found that the community school in the tribal areas was a result of the culmination of several processes at the community and administrative levels. Extensive developmental work, namely

building infrastructure, promotion of alternative economic activities, introduction of market mechanism etc. among tribal communities was part of a community mobilization drive that ensured community participation.

Jayaswal, Sinha, Kumari and Arora (2003) examined the role of parental support on academic achievement of 300 tribal school students of Ranchi studying in classes I, VI and XI. He observed that parents of high achievers had more concern with children's academic success, were more inclined to learn from others and extended more support to their children, while the parents of low achievers were more fatalistic, less self-confident and less ambitious, without having role models and initiative to guide their children.

Gautam (2003) addressed the issue of medium of instruction in tribal education through a joint programme 'Janshala' for the universalisation of primary education among educationally underserved communities. Records collected from schools in the Janshala Programme areas of nine Indian States indicated continuing high dropout rates among tribal children, the major reason being the medium of instruction in the regional language as a result of which most tribal children did not understand the textbooks written in regional language. The non-tribal teachers had difficulty in understanding and communicating in tribal languages. The researcher suggested for the need to strengthen tribal education by appointing teachers, developing of textbooks and curricula and training of teachers according due primacy to tribal languages as the medium of instruction.

Geetha & Revathi (2012) examined tribal education and tribal development policy in India. They suggested that promotion of tribal education needs a fresh thinking and renewed efforts in new direction. The new policy and administrative initiatives should focus on the improvement of quantity as well as quality aspects for tribal education with due regard to their needs, culture and eco-systems.

Bhukya (2014) in a study on empowerment of tribal women through education in Andhra Pradesh suggested that in order to bring women under the ambit of inclusive growth, the government, NGOs, and voluntary organizations must frame and implement genuine tribal-friendly policies and provide them means to improve their social position, especially through education. Access to education widens social participation of tribal women in many developmental programmes implemented at the grassroots level.

Over the years, certain changes have been observed in the life and livelihoods of tribal communities including literacy status, educational achievement and their employment status, but by and large, the benefits of development programmes are yet to reach the tribal population in general because of difficulties such as staff shortage, lack of adequate and single-window fund flow and lack of single-line administration (Patnaik, 2005; Sahoo, 2011). It is important for the state to understand the links between the development activities, livelihood requirements and natural resource base of the tribal communities for the development of these regions. Most often, questions are raised regarding whether the pattern of development so far adopted is in accordance with the tribal people, their cultural needs and livelihood requirements. Perhaps the change processes have started and need to be strengthened in coming days with adequate financial and human resource support.

Sahu (2014) examined challenging issues of tribal education in India and observed that some important critical issues and problems confronting tribal education are: (i) language of instruction

which is different from the mother tongue of the tribal children preventing their access to education, (ii) physical barriers preventing children from distant habitations to attend neighborhood schools, (iii) children are used in family income-generating activities and not sent to schools, (iv) poor educational awareness of the parents, (v) high teacher absenteeism in schools located in tribal areas, and (vi) inadequate monitoring mechanism because of poor coordination between the Tribal Welfare Department and School Education Department.

Revathi & Geetha (2012) observed that the slow pace of progress in the sphere of tribal education is due to several constraints. The socio-cultural and economic constraints constitute the major problem. These constraints relate to the utter poverty, peculiar traditions and customs, and other cultural lags, lack of awareness among the tribals, and so on. The policy and administrative constraints are related to lack of adequate number of schools and teacher, irrelevant and unsuitable curriculum and content, lack of appropriate medium of instruction in the schools, lack of books and other reading material and so on. On the external side, the major constraints relate to the planning system which fails to take into consideration the peculiar environmental conditions, cultural milieu and also the needs of the tribal societies while evolving policies and strategies for the development of education in the tribal setting. The same is the case with the preparation of various programmes and schemes initiated for promotion of tribal education.

The review of literature consisted of several studies conducted on enrolment, retention, dropout, functioning of Ashram schools and community schools and residential facilities, empowerment of tribal women through education, intervention in the field of tribal education, challenges of tribal education, awareness and implementation of constitutional provisions for tribals by the administration. EMRSs have become reliably functional in the past decade. A recent study by Geddam (2015) on an EMRS in Andhra Pradesh evaluated student profile, a few educational and residential facilities and stakeholders' perception of the EMRS functioning. On most parameters, the EMRS located at Y. Ramavaram ITDA, Andhra Pradesh exhibited a picture not conforming to the state objectives of the EMRS scheme.

A national level evaluation of the EMRS scheme covering a large set of infrastructure and educational parameters including the educational attainment and career progression of students has not been conducted. The present study is planned to evaluate the impact of EMRS on the educational attainment of ST children in some selected states of India with high concentration of tribal population with due regard to the input, throughput and output variables under the EMRS scheme. It is hoped that the study findings would help authorities to apply mid-course corrections, if necessary, and provide information to planners for revising EMRS policy guidelines, if required.

Section 2

RATIONALE AND OBJECTIVES OF THE STUDY

2.1 Rationale

Education has been a priority agenda of the Central as well the State Governments to empower communities, particularly the marginalized sections of the society to safeguard their interests and rights. Several educational intervention measures have been taken up by the Government during the last two decades for the tribal communities not only to facilitate their protection from all kinds of exploitation but also to promote their integration with the national mainstream. Scheduled tribes constitute 8.6% of the Indian population most of whom live in backward areas bereft of basic amenities of modern life. Education is considered as a means to bring a visible change in their present life style so that they can meaningfully participate in the process of national development.

In pursuance of the Article (46) of the Indian constitution, the central as well the state governments are committed to pursue a quality education agenda in the tribal areas. The Ministry of Tribal Affairs, Government of India has been implementing many special schemes to attract tribal children to schools and to help them progress in their educational and vocational career. The Government is consistently trying to give a boost to their education by establishing Ashram Schools, Hostels for Tribal Boys and Girls, Educational Complexes, Pre-Matric and Post-Matric Scholarships, Rajiv Gandhi National Fellowship, National Overseas Scholarship, Top-class Education Scheme, Vocational Training, Book Bank schemes etc. The introduction of Ekalavya Model Residential Schools since 1997-1998 is a novel experimental scheme to provide quality middle and high level education to meritorious tribal students in the remote tribal areas of the country.

The Ministry of Tribal Affairs launched the scheme of 'Ekalavya Model Residential School (EMRS)' for classes VI to XII during 1997-1998 under Article 275(1) of the Indian Constitution on the pattern of Jawahar Navodaya Vidyalaya. Till date, 197 EMRSs have been sanctioned by the Ministry in various parts of the county, out of which, 129 EMRSs are fully functional and the remaining 68 EMRSs are under construction.

The EMRSs are established to function as centers of excellence to provide high quality education at the middle, secondary, higher-secondary school level to the meritorious tribal students of remote rural areas so that they avail of all opportunities for higher education and employment and become contributing members to their society at par with their non-ST counterparts. The vision of EMRS is to be achieved by ensuring comprehensive physical, mental and socially relevant development of all its students with the help of trained staff who cater to the distinctive educational, environmental and cultural needs of student life.

The outcomes and progress of any scheme need to be evaluated from time to time not only to assess the extent to which its vision has been realized but also to apply mid-course corrections, if required, for realizing the programme objectives. The Ministry considered it important to launch a research to assess the functioning of EMRS in some states with thick tribal population with respect to whether the target objectives have been met.

The present study is an attempt to assess the status of EMRS with reference to infrastructure facilities, quality of school and classroom educational climate, quality of staff and services offered,

children's learning outcomes and their upward mobility in career, and the objectives for which the EMRS scheme was launched. The study was conducted in five states with high tribal population: Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Gujarat using 2 EMRSs as its sample from each state. For purposes of comparison of the impact of educational programmes on ST children, two ST & SC schools and one JNV were sampled from each state from the same two districts from which EMRSs were sampled. It is hoped that the study findings would help authorities to apply mid-course corrections, if necessary, and provide information to planners for revising EMRS policy guidelines, if required.

2.2 Objectives of the Study

The overall objective of the study was to ascertain the impact of educational opportunities available in EMRS with reference to the quality of services offered, quality of learners and teachers and quality of school and classroom environment, teaching-learning processes, evaluation procedure, children's learning outcomes and their upward mobility in career and in the realization of the objectives of setting EMRS as an educational intervention focusing on tribal children.

The specific objectives of the study could be enumerated as follows:

1. To assess the nature of the school environment including infrastructure facilities and services in schools, classrooms and hostels as necessary for effective learning with due regard to child-friendly parameters.
2. To assess children's enrolment in Classes VI and XI to EMRS and their attendance and retention on a progressive basis in elementary, secondary and higher secondary stages.
3. To assess the quality of educational climate in schools and residential climate in hostels, student development activities in curricular and other curricular domains and innovative teaching practices addressing the learning needs of the students.
4. To examine the process of student assessment, feedback and follow-up mechanism conforming to the guidelines of Continuous and Comprehensive Evaluation (CCE)
5. To assess the educational achievement level of students in major subjects through achievement tests with reference to competencies attained at three successive levels (i.e., Classes VII, IX and XI) and also in HSC (Class X) and HSSC (Class XII) examinations.
6. To examine the success rate of EMRS students in National Talent Search assessment and the success rate of the pass outs in pursuing higher education and in the employment sector.
7. To ascertain the effectiveness of the program for professional enrichment of teaching and non-teaching staff including capacity building, service conditions, incentive plans, performance monitoring and appraisal and school-community linkage.
8. To evaluate the impact of EMRS in realizing its mission of effecting comprehensive development in students and empowering them to move upward in carrier and life and to function as contributing members to the society.
9. To ascertain the impact of EMRS intervention vis-à-vis that of other schools meant for tribal children on parameters of quality education imparted and learning outcomes observed.
10. To identify grey areas, suggest measures for strengthening the EMRS program and draw implications for policy making on education of tribal children

Section 3

METHODS AND PROCEDURES ADOPTED

3.1 Variables and Operational Definitions

The important variables and constructs used in the study are operationally explained as follows:

- * *School Environment* – Conditions and facilities prevailing in the school to make teaching and learning effective
- * *Teaching-Learning Process* – Processes adopted by teachers to make learning effective for students in classrooms and schools
- * *Child-friendly* – Environmental provisions and behavioural patterns meeting the needs and preferences of children
- * *Capacity Building* – Training to enrich job-related capabilities of employees in service
- * *Educational Climate* – Conditions and facilities prevailing in the school to make learning effective for students
- * *Residential Climate* – Features of student residence with comfortable living condition and designed to facilitate student engagement in learning
- * *Student Development Activities* – Activities meant to help slow learners perform at the maximum limit of their potential and encourage students to utilize their potential in a positive direction
- * *Educational Attainment* – Students' achievement in curricular and co-curricular areas
- * *Terminal Examinations* – An examination conducted at the state/national level by an Examining Board for designated classes as per policy
- * *Co-Curricular Activities* – Activities that promote life-skills and foster achievement in curricular domains
- * *Social Activities* – Activities connected with and related to making social contribution
- * *Success Indicators* – Pursuing higher education or getting employed after passing out from an institution
- * *Stakeholders* – All beneficiaries and all those having responsibility to the system
- * *Modal response* – Typical response pattern as given by majority of a section of people

3.2 Sample

A total 197 EMRSs have been sanctioned by the MHRD, Govt. of India in various parts of the country with an intake capacity of 480 students per school, of which 129 are fully functional and the remaining 68 are under construction. These schools are set up under the Article 275(1) of the Constitution of India on the pattern of Rajkiya Pratibha Vikas Vidyalaya (RPVV) in Delhi, Jawahar Navodaya Vidyalaya (JNV), and the Kendriya Vidyalaya (KV).

The objective of this research was to study the impact of Ekalavya Model Residential Schools in enhancing educational attainment of ST Children in 5 states with high concentration of tribal population. A multi-stage sampling procedure was followed to select states, then districts and finally the EMRSs.

As per the Census 2011 data, 21 States were ranked with respect to ST population and the 5 states with high tribal population were selected as the sampled states. The states were Madhya Pradesh (1.53 crore), Maharashtra (1.05 crore), Odisha (0.96 crore), Rajasthan (0.92 crore) and Gujrat (0.89 crore) in descending order. The numbers of functional EMRSs in these 5 states were 20, 08, 13, 09 and 22 for Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Gujrat, respectively. From among these 72 EMRSs spread over 5 states, 10 EMRSs with 2 per state were sampled for the study. Figure 3.2.1 marks the states sampled for the study in the India Map.

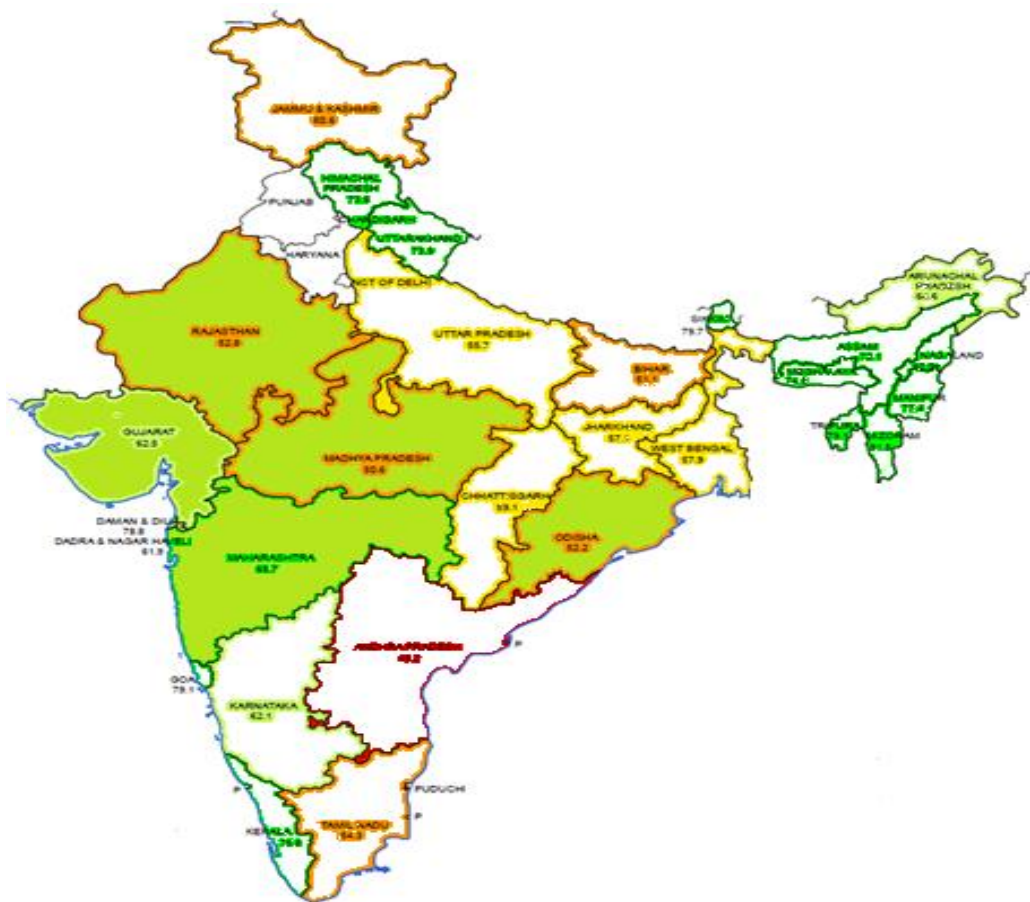


Figure 3.2.1. States sampled for the study: Gujarat, Madhya Pradesh, Maharashtra, Odisha, and Rajasthan

Two districts per state were selected: one with the highest literacy rate and the other with the lowest literacy rate as per 2011 census (where EMRSs were functional). One EMRS from each of these two districts were finally selected as the sampled school. A total of 10 EMRSs were sampled for the study. For purposes of comparison of the impact of educational programmes on ST children, two ST & SC schools were sampled from each state from the same two districts used for selecting

EMRSs. One JNV was selected from each state from the district with lowest literacy rate. Table 3.2.1 provides the schools selected from different states, the districts from which they were selected and the percentage of literacy in those districts.

Table 3.2.1 : Districts and Schools Sampled for the Study

State	District	District Literacy percentage	Schools		
			EMRS	ST & SC School	JNV
Odisha	Sundargarh	74.13	Bhawanipur	Balisankara	---
	Nawarangpur	48.20	Hirli	Raigarh	Khatiguda
Gujarat	Surat	86.65	Mota	Mahuva	---
	Dahod	60.60	Kharedi	Usharaban	Kharedi
Maharashtra	Nagpur	89.52	Khairi Prasoda	HSS, Belda	---
	Nasik	80.96	Nasik	HSS, Chankapur	Khedgam
Rajasthan	Tonk	62.46	Newai	Nayagoan	---
	Sirohi	56.02	Abu Road	Udaypur	Kalendri
Madhya Pradesh	Jabalpur	82.47	Narainala	Rampur	---
	Alirajpur	37.22 %	Sandwa	HSS, Sandwa	Alirajpur
No. of Schools Sampled			10	10	5

For purposes of assessing educational attainment of students, it was not possible to include students from each of the classes VI to XII. Assessing performance of students in the terminal grades of elementary, secondary and higher-secondary stages was considered appropriate for revealing the impact of schools' educational programme on the educational attainment of children. The terminal grades at each of these stages are Classes VIII, X and XII, respectively. All students available on the day of testing in classes VIII, X and XII were assessed through achievement tests prepared by the research team with the help of experts in the field. Since data collection was done 2 months after the beginning of the academic session, students in classes VIII, X and XII were assessed on competencies expected to be mastered at the end of Classes VII, IX and XI respectively.

Besides achievement tests, the principals, teachers, hostel superintendents, non-teaching staff, community members and educational administrators were also interviewed to obtain their perception and feedback concerning the implementation and impact of the school programme. Students also participated in Focus Group Discussions (FGDs). It was initially planned to sample specific numbers of stakeholders from different categories such as one principal, 5 teachers, 3 non-teaching staff, 5 community members and one educational administrator (Collector/PA, ITDA/Assistant Commissioner) concerning each school. The field realities and the availability of different personnel units for the study allowed us to select the sample stakeholders matching our

target as far as possible. The units finally included in the sample of the study are detailed in Table 3.2.2. The number of students taking achievement tests is given in the Tables in Chapter 6 in the reports prepared for different states.

Table 3.2.2: Units of Stakeholders Sampled for the Study

<i>Stakeholders Sampled</i>	<i>EMRS</i>		<i>SC & ST</i>		<i>JNV</i>	
Odisha						<i>Total</i>
<i>Schools</i>	<i>Bhawanipur</i>	<i>Hirli</i>	<i>Balisankara</i>	<i>Raighar</i>	<i>Khatiguda</i>	
Principal	1	1	1	1	1	5
Teacher	7	6	7	5	6	31
Hostel Superintendent	2	2	1	2	1	8
Non-teaching staff	4	4	2	3	4	17
Student	12	10	11	9	10	52
Community members	5	6	5	5	1	22
Educational Administrator	---	1	1	---	1	3
Students in FGD (N)	14 (2)	27 (2)	21 (2)	12 (1)	14 (2)	88 (9)
Gujarat						<i>Total</i>
<i>Schools</i>	<i>Mota</i>	<i>Kharedi</i>	<i>Mahuva</i>	<i>Usharaban</i>	<i>Kharedi</i>	
Principal	1	1	1	1	1	5
Teacher	5	5	5	5	5	25
Hostel Superintendent	2	2	1	1	10	16
Non-teaching staff	4	4	4	4	4	16
Student	10	12	9	8	12	51
Community members	5	4	3	4	4	20
Educational Administrator	1	---	---	1	---	2
Students in FGD (N)	15(1)	20(2)	16(1)	15(1)	16(2)	82
Maharashtra						<i>Total</i>
<i>Schools</i>	<i>Nasik</i>	<i>Khairi Prasoda</i>	<i>Chankapur</i>	<i>Belda</i>	<i>Khedgam</i>	
Principal	1	1	1	1	1	5
Teacher	5	5	5	4	6	25
Hostel Superintendent	2	2	2	2	2	
Non-teaching staff	3	2	3	2	4	14
Student	11	15	11	11	10	10
Community members	5	5	2	4	1	17
Educational Administrator	1	1	---	---	---	2

Students in FGD (N)	12 (1)	12 (1)	12 (1)	11(1)	10(1)	57
Rajasthan						Total
<i>Schools</i>	<i>Newai</i>	<i>Abu Road</i>	<i>Nayagoan</i>	<i>Udaypur</i>	<i>Kalendri</i>	
Principal	1	1	1	1	1	5
Teacher	5	5	5	5	5	25
Hostel Superintendent	1	1	1	1	10	14
Non-teaching staff	6	3	2	4	5	20
Student	12	8	10	12	10	52
Community members	2	4	4	2	4	18
Educational Administrator	---	---	---	---	---	
Students in FGD (N)	16(1)	16(1)	12(1)	16(1)	16(1)	76
Madhya Pradesh						Total
<i>Schools</i>	<i>Narainala</i>	<i>Sandwa</i>	<i>Rampur</i>	<i>HSS, Sandwa</i>	<i>Alirajpur</i>	
Principal	1	1	1	1	1	5
Teacher	7	6	5	5	3	26
Hostel Superintendent	2	2	2	2	6	14
Non-teaching staff	5	4	4	5	1	19
Student	10	10	10	9	19	58
Community members	3	1	2	2	2	10
Educational Administrator	1	1	---	---	---	2
Students in FGD (N)	20(2)	18(2)	20(2)	15(2)	26(2)	99

3.3 Tools

The tools used in the study were one School Information Schedule, one Hostel information Schedule, seven Interview Schedules (one each for the principal, teacher, student, hostel superintendent, non-teaching staff, community member, collector/ ADM/ PA, ITDA/Assistant Commissioner), one Focus Group Discussion Schedule with students and 13 Achievement Tests (four for Class VIII, four for Class X and five for class XII students) (Table 3.3.1).

Table 3.3.1 : Tools used in the Study

<i>Information and Interview Schedules</i>	<i>Achievement Tests</i>
<ol style="list-style-type: none"> 1. School Information Schedule 2. Hostel Information Schedule 3. Interview Schedule for the Principal 4. Interview Schedule for Teachers 5. Interview Schedule for Hostel 	<p style="text-align: center;"><u>Class VIII</u></p> <ol style="list-style-type: none"> 11. English Achievement Test for Class VIII 12. Mathematics Achievement Test for Class VIII 13. Science Achievement Test for Class VIII

Superintendents	14. Social Science Achievement Test for Class VIII
6. Interview Schedule for Students	<u>Class X</u>
7. Interview Schedule for Community Members	15. Achievement Test in English for Class X
8. Interview Schedule for Non-Teaching Staff	16. Mathematics Achievement Test for Class X
9. Interview Schedule for the Collector/ PA, ITDA	17. Science Achievement Test for Class X
10. Focus Group Discussion (FGD) with students	18. Social Science Achievement Test for Class X
	<u>Class XII</u>
	19. English Achievement Test for Class XII
	20. Physics Achievement Test for Class XII
	21. Chemistry Achievement Test for Class XII
	22. Mathematics Achievement Test for Class XII
	23. Biology Achievement Test for Class XII

Preparation of Achievement Tests. The two information schedules, 7 interview schedules and the format for FGD with students were developed by the research team in consultation with professors in the disciplines of psychology and education.

Thirteen achievement tests were prepared during a three-day workshop at the Scheduled Caste and Scheduled Tribe Research and Training Institute (SCSTRTI), Odisha involving experts and resource persons from different subject areas including professors of psychology, professors of education, Headmasters of High Schools, former experts of Board of Secondary Education (BSE), Odisha, faculty of English Language Training Institute (ELTI), Odisha, Post-Graduate Teachers (PGTs) and Trained Graduate Teachers (TGTs) of reputed CBSE schools. The names of the experts and resource persons who prepared the achievement tests are given in *Appendix-1*.

The achievement tests were edited, printed and finalized in two additional workshops. The competencies to be tapped through the tests were primarily drawn from the syllabi of CBSE and the Odisha State Board with due cognizance given to the syllabi of the Boards of Maharashtra, Gujarat, Madhya Pradesh and Rajasthan and provided the basics for preparing questions for the present study. The common and the basic competencies that students at successive stages of schooling are expected to master were tapped through the achievement tests. All achievement tests had multiple-choice items with 4 alternatives per question. The details of educational achievement tests are given in Table 3.3.2.

The English versions of the achievement tests were translated into respective state languages such as *Odia* for Odisha, *Gujurati* for Gujarat, *Marathi* for Maharashtra and *Hindi* for Rajasthan and Madhya Pradesh. Irrespective of the types of schools, English versions of the tests were used for students in schools where the medium of instruction was English, while state-language versions of the tests were used in schools where the medium of instruction was in the state language.

Table 3.3.2: Details of Educational Achievement Tests

Class	Subjects in which students were assessed	Competency level assessed	Question type	No. of questions	Time allotted	Maximum score
VIII	English Mathematics Science Social Science	Class VII terminal competencies	Multiple-choice with 4 alternatives	25 in each test	30 minutes for each test	25 in each test
X	English Mathematics Science Social Science	Class IX terminal competencies	Multiple-choice with 4 alternatives	25 in each test	30 minutes for each test	25 in each test
XII	English Physics Chemistry Mathematics Biology	Class XI terminal competencies	Multiple-choice with 4 alternatives	30 in each test	40 minutes for each test	30 in each test

Preparation of Information and Interview Schedules. The information and interview schedules along with the format for FGD with students were prepared by the research team through three workshops covering a total duration of 10 days. Brief description of each of the schedules is given in the Table 3.3.3.

Table 3.3.3: Dimensions Captured through Information and Interview Schedules and FGD

Schedules	Dimensions captured
School Information Schedule	Physical infrastructure of the school, classrooms and laboratories; School and classroom instructional climate; Facilities for students; Teaching-learning materials and equipment; Student enrolment, attendance and retention; Curricular, co-curricular and student development activities; Student evaluation practices; Educational achievement level of students; Student success rate; Profiles of teaching and non-teaching staff; Vacancy positions; Capacity building of staff; Community-school linkage; Monitoring and supervision
Hostel Information Schedule	Hostel infrastructure and facilities; Hostel environment; Mess management; Kitchen and food; Capacity building of hostel staff; Monitoring and supervision
Interview Schedule for the Principal	Feedback on Programme strength; School and hostel environment; Quality of meals; Curricular and co-curricular activities; Teaching-Learning conditions; Student empowerment and success rate; Service conditions and incentive plans; Capacity building initiatives; Emergency preparedness, Community participation, Monitoring and supervision; Measures to strengthen programme
Interview Schedule for Teachers	Feedback on programme strength; Curricular and co-curricular activities; Student evaluation practices; Service conditions and incentive plans; Capacity building initiatives; Student empowerment and success rate; Community participation, Measures to strengthen programme

Interview Schedule for Hostel Superintendents	Feedback on hostel infrastructure and learning environment; Kitchen and food; Service conditions and incentives; Capacity building of hostel staff; Monitoring and supervision; Difficulties experienced; Measures for improvement
Interview Schedule for Students	Feedback on school environment; Curricular and co-curricular activities; Hostel facilities; Relationship of teachers with students; Role in school and hostel management; Features in school liked or disliked
Interview Schedule for Community Members	Feedback on SMC meeting discussions; Facilities received by children; Interaction with teachers and employees; Contribution to school; Measures for improvement
Interview Schedule for Non-Teaching Staff	Feedback on Participation in curricular and co-curricular activities; Capacity building initiatives; Incentive plans; Relationship with employees and community members; Difficulties experienced; Measures for strengthening the programme
Interview Schedule for the Collector/ PA, ITDA	Feedback on School and hostel management policies; Quality of education; Quality of food; Service conditions of employees; School's contribution to students' success; Measures for improving the programme
FGD with students	Discussion on school and hostel infrastructure and facilities; Quality of teaching; Co-curricular and development activities and student participation; Teachers' interaction with students; Interpersonal relationships; Measures for improvement

3.4 Data Collection and Processing

After obtaining permission from the Secretaries and Directors of the concerned Departments in the state and the Regional Director of JNV of concerned States and following their instruction to the District Collectors and the Heads of the sampled schools, the project research team proceeded to schools for data collection in the month of April, 2015 in Odisha and in July 2015 in other four States. Depending upon requirements, 3-4 days were spent in each school by the research team. Assistance from the school staff was sought in obtaining and filling up the two information schedules. Interviews were conducted individually by the team members (or in the presence of a team member) with the principal, students, staff, hostel superintendents and community members. The community members were contacted with the assistance of the principals and their interviews took place in the school campus. FGDs were conducted with students selected particularly from higher classes (classes IX to XII). For purposes of interview and group discussions, the team took the help of a staff in respective schools, who knew the state language. He/she served as the interpreter in the interview and discussion sessions. The members of the research team visited classrooms, laboratories, toilets and hostels accompanied by the principal/ teachers and sought clarifications from them regarding the facilities provided to students as and when required (Table 3.4.1).

Table 3.4.1: Research Team for Collecting Data in the Two Districts of Odisha

<i>State</i>	<i>Districts covered</i>	<i>Members in the Team</i>	<i>Period of data collection</i>
Odisha	Sundergarh	Prof. U.N. Dash, Consultant Sri S. S. Sahoo, Research Associate Sri S. C. Patnaik, Research Assistant B. Palai, Research Assistant	1 st week of April, 2015
	Nawarangpur	Dr. Neena Dash, Consultant Sri S. S. Sahoo, Research Associate	3 rd and 4 th week of April, 2015
Maharashtra	Nagpur	Sri D. Haransingh, Research Assistant	3 rd July to 3 rd August 2015
	Nasik	Sri S. C. Pattnaik, Research Assistant	
Madhya Pradesh	Jabalpur	Sri S. Panda, Research Assistant	
	Alirajpur	Sri A. Kanhar, Research Assistant	
Gujrat	Surat	Sri S. S. Sahoo, Research Associate	5 th July to 5 th August 2015
	Dahod	Sri S. R. Patra , Research Assistant	
Rajasthan	Tonk	Sri D. K. Mohapatra, Research Assistant	
	Sirohi		

Achievement tests were administered to students of respective classes available on the day of testing. The testing sessions were separated by reasonable time intervals for not overburdening the students. Strict vigilance was maintained to ensure that each student answers on his/her own without obtaining assistance from others. Team members acted as invigilators and teachers were kept away from the testing sessions. On returning to the District Headquarters, a member of the team met the District Collector / ADM/ PA, ITDA/Assistant Commissioners for an interview.

Data were analyzed quantitatively using Microsoft Office Excel Worksheet and qualitatively by personal inspection of the themes running through the responses of different stakeholders. Quantitative analysis comprised calculation of means, standard deviations, t-values and percentages to reflect the overall trend pertaining to variables of interest. The data were cast in the form of Tables and Figures for easy visual inspection of the reader.

3.5 Scope of the Study

The sampled schools are instances of how the educational programmes (EMRS, SC & ST, JNV) have been implemented. The findings obtained can be generalized to the population of such schools with, of course, admissible variations. The findings are meant to highlight the salient features of these educational programmes, project a perspective on their effectiveness and carry implications for future planning.

3.6 Delimitations of the Study

While the study reflects in general the trends in respect of school, hostel, student and staff variables, a sample of two EMRSs, two ST & SC schools and one JNV may not paint a representative picture of the impact of these educational programmes as they are implemented all across the state. The findings, however, are assumed to closely approximate the true nature and impact of these programmes.

The time and budgetary constraints put a limit to what can be observed and obtained from schools. Within a limited period of 3 days in each school and with so many aspects to cover, the team members had to run through the schedules and observation of variables. Classroom teaching, teacher-student interactions and student participation in curricular and co-curricular activities as they naturally manifest was beyond the scope of this study. The truthfulness of the responses to many aspects in the interview schedules was checked by probing and cross-questioning in the interview session itself and observing a few important parameters in the school and hostel. There was not enough time to make a full proof reality check. The functioning of the school, staff and students in the presence of the research team which has been captured through these schedules may not fully represent their normal behaviors and interaction styles. Though enough care was taken by the research team to gather information uncontaminated by artificiality, the findings particularly in respect of outcomes from interviews (not student performance on achievement tests) may be viewed and interpreted in the light of these limitations.

Section 4

Impact of Ekalavya Model Residential Schools in Enhancing the Educational Attainment of ST Children in Five States

(ODISHA REPORT)

*Prepared
By*

Scheduled Castes and Scheduled Tribes Research
and Training Institute
Bhubaneswar, Odisha

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Chapter 1

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 School Infrastructure and Facilities

Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. The approximate average school campus area for EMRS, ST & SC and JNV is 26 acres, 30 acres and 13 acres, respectively. The built-up area for the EMRS and ST & SC schools and hostels for students run into 90,000 to 100, 000 sq. ft. and for the JNV to about 140, 000 sq. ft. All the buildings provided safe habitations for students except that the EMRS and ST & SC schools required regular maintenance and white washing. The condition of the school and the hostel building in JNV were found to be better compared to those in EMRS and ST & SC schools. The EMRS and ST & SC schools did not fare well on hygienic condition as toilets appeared not to have been maintained properly. Regrettably one of the ST & SC schools did not have usable toilets and students had to go to the open field and nearby forest areas to attend to the call of nature.

None of the schools had common room for either boys or girls. While each of the five sampled schools (EMRS, ST & SC and JNV) had building spaces marked for the principal's room, teachers' common room, office room, kitchen, store room and prayer space, there was no proper common room or auditorium for students. Each of the schools had physics, chemistry, zoology, botany and IT labs. The rooms marked for different labs did not function in one of the ST & SC schools and some of these rooms were used for higher-secondary student accommodation. The English language lab was found only in EMRS in Bhawanipur. Formal library, reading room and SMART classes were available in EMRS in Bhawanipur and JNV in Kathiguda but not in any of the ST & SC schools. The EMRS had library facilities but no adequate reading room. The condition of labs, library and reading rooms was better in EMRS and JNV as compared to that of ST & SC schools. On most of the important parameters, JNV was judged to be better than EMRS and EMRS to be better than the ST & SC schools.

Tables given below provide information relating to water and sanitation facilities in school (Table 1.1.1), child-friendly and safety facilities (Table 1.1.2) and boundary wall, garden and school gate (Table 1.1.3).

Table 1.1.1: School-wise Availability of Water and Sanitation Facilities

School	Drinking water			Hand wash		Toilet for Boys					Toilet for Girls					No. of children per toilet		
	adequate	Safety	Major source	Soap available	hand washed before and after meal	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	Boys	Girls	
EMRS	Bhawanipur	Yes	Yes	Bw	Yes	Yes	8	Yes	**	Yes	Yes	8	Yes	**	Yes	Yes	35	30
	Hirli	No	Yes	Bw	Yes	Yes	16	Yes	**	Yes	Yes	20	Yes	**	Yes	Yes	28	25
SC & ST	Balisanakara	No	No	Bw	Yes	Yes	No	No	--	No	No	--	--	--	--	No usable toilet		
	Raighar	Yes	No	Bw	Yes	Yes	10	No	*	Yes	Yes	15	Yes	*	Yes	Yes	52	54
JNV	Kathiguda	Yes	Yes	Bw	Yes	Yes	18	Yes	***	Yes	Yes	18	Yes	***	Yes	Yes	12	09

Bw: Bore well

*** Good ** Manageable * Poor

Table 1.1.2 : School-wise Availability of Child-friendly and Safety Facilities by School Type
(Ramp & rail, slides & swings, playground, fire safety)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in classrooms	Fire safety
EMRS	140	Only to a few blocks	Nil	Inadequate	Only for a few games	No	Inadequate
SC & ST	190	Only to a few blocks	Nil	Inadequate	Immensely inadequate	No	Inadequate
JNV	25	Only to a few blocks	Nil	Inadequate	Only for a few games	inadequate	Inadequate

Table 1.1.3: School-wise Availability of Boundary Wall, Garden, Kitchen Garden and School Gate

School	Boundary Wall	Garden	School gate
EMRS: Bhawanipur	Yes	M	Yes
EMRS: Hirli	Yes	M	Yes
SC & ST: Balisankara	Yes	NA	Yes
SC & ST: Raighar	Yes	M	Yes
JNV: Khatiguda	Yes	M	Yes

M: Manageable NA: Not Available

- The major source of drinking water in all schools was bore well. Regrettably, drinking water was not adequate in one of the EMRS and one of the ST & SC schools. Furthermore, drinking water safety was a major concern in ST & SC schools. Soap was provided at hand wash points but detergent was not supplied as per the requirements of students in ST & SC schools.
- Approximate number of children per toilet in EMRS was alright, except that they were not maintained as per hygienic standards and some of them remained non-functional at times because of delay in repair work. The situation in JNV was much better while that in ST & SC schools was not at all satisfactory. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV. In the absence of functional toilets in one of the ST & SC schools, almost all children were going out into the open field or nearby forest areas for toilet work.
- All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.

- Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Each school had entrance gate, boundary wall but due attention was not paid to raising and maintaining gardens and kitchen gardens, the primary reason for which was water scarcity. The water problem can be largely compensated by proper water harvesting measures on which the school authorities had not been trained.
- Power supply was a major concern for the schools because there were frequent power cuts particularly in Bhawanipur EMRS and ST & SC schools in Balisankara and Raighar. On an average, power failure was reported for about 4-5 hours in Bhawanipur and for about 10-12 hours in ST & SC schools. In case of power cuts, power supply was done through generators owned by the school except in Balisakara where the generator was non-functional as it was not properly maintained and in Raighar where generator was not available.
- While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.

1.2 Hostel Infrastructure and Facilities

Tables given below present information on hostel infrastructure and facilities (Table 1.2.1), availability of different types of rooms and their conditions (Table 1.1.2), water and sanitation facilities in hostels (Table 1.2.3), child-friendly and safety facilities (Table 1.2.4) and presence of hostel boundary wall, garden and kitchen garden (Table 1.2.5).

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels by School Type

School type	School	Hostel	Student strength		Condition of the hostel			Accommodation space per student	
			No in school	% staying in hostel	Safety	Leaking	Light & ventilation	App. sq. ft. per student	Adequacy
EMRS	Bhawanipur	Boys	210	98.5 %	Average	leaking	poor	22	Inadequate
		Girls	207	99.0 %	Average	leaking	Poor	22	Inadequate
	Hirli	Boys	207	100 %	Average	leaking	Poor	22	Inadequate
		Girls	209	99.5 %	Average	leaking	Poor	22	Inadequate
SC & ST	Balisankara	Boys	62	98 %	Poor	Leaking	Poor	12	Highly inadequate
		Girls	512	78.3 %	Poor	leaking	Poor	11	Highly inadequate
	Raighar	Boys	456	55.9 %	Poor	leaking	poor	11	Highly inadequate
		Girls	299	36.5 %	Poor	leaking	Poor	10	Highly inadequate
JNV	Khatiguda	Boys	254	100 %	Good	No	Good	63	Adequate
		Girls	155	100 %	Good	No	Good	58	Adequate

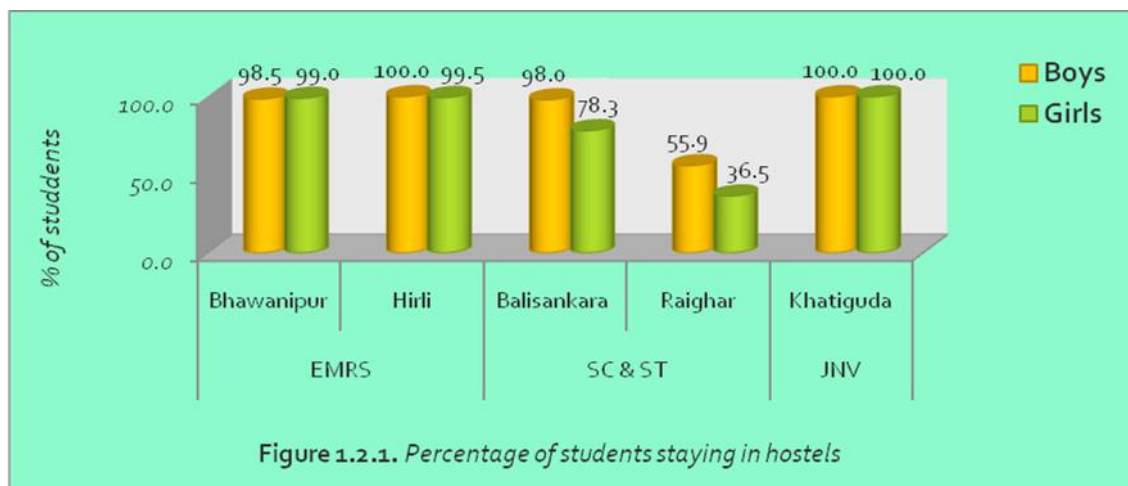


Table 1.2.2: Availability and Condition of Different Types of Rooms In Boys' and Girls' Hostels

Types of rooms	EMRS				SC & ST				JNV	
	Bhawanipur		Hirli		Balisankara		Raighar		Khatiguda	
	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond
Superintendent's room /quarters	Y	M	Y	M	N	---	N	---	Y	G
Dining room	Y	G	Y	G	N	---	N	---	Y	G
Living room	Y	M	Y	M	Y	P	Y	P	Y	G
Kitchen room	Y	M	Y	M	Y	P	Y	P	Y	G
Store room	Y	P	Y	P	Y	P	Y	P	Y	G
CCA room	Y	M	Y	Y	N	---	N	---	Y	M
Sick room	---	---	---	---	N	---	N	---	Y	M
Prayer room	Y	M	Y	M	N	---	N	---	---	---
Auditorium / assembly	---	---	---	---	N	---	N	---	---	---
Security room	---	---	---	---	N	---	N	---	Y	M

Y: Yes N: No G: Good, M: Manageable, P: Poor

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
		adequate	Major source	adequate	Adequate	Flow of water to toilets	No functional	Cleanliness and condition	Soap & accessories available	Used by all children	
EMRS: Bhawanipur	Boys	Yes	Bw	No	No	M	48	**	Yes	Yes	05
	Girls	Yes	Bw	No	No	M	48	**	Yes	Yes	05

EMRS: Hirli	Boys	Yes	Bw	No	No	M	16	**	Yes	Yes	13
	Girls	Yes	Bw	No	No	M	20	**	Yes	Yes	11
SC & ST: Balisankara	Boys	Yes	Bw	No	No	P	03	*	No	No	20
	Girls	Yes	Bw	No	No	P	14	*	No	No	29
SC & ST: Raighar	Boys	Yes	Bw	No	No	P	10	*	No	No	26
	Girls	Yes	Bw	No	No	P	15	*	No	No	08
JNV: Kathiguda	Boys	Yes	Bw	Yes	Yes	G	22	***	Yes	Yes	12
	Girls	Yes	Bw	Yes	Yes	G	20	***	Yes	Yes	08

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities

Bw: Bore well ***Good ** Manageable * Poor

**Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities
(Ramp & rail, slides & swings, playground, fire safety)**

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in hostel rooms	Fire safety
EMRS	25	Nil	Nil	Nil	Only for a few games	No	inadequate
SC & ST	102	Nil	Nil	Nil	Immensely inadequate	No	No
JNV	22	Nil	Nil	Nil	Only for a few games	No	inadequate

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden and Kitchen Garden

School	Boundary Wall in girls' hostel	Garden	Kitchen Garden
EMRS: Bhawanipur	No	Poor	Poor
EMRS: Hirli	No	Poor	Poor
SC & ST: Balisankara	No	Poor	Poor
SC & ST: Raighar	No	Poor	Poor
JNV: Khatiguda	No	Poor	Poor

M: Manageable NA: Not Available

- * Nearly 100% of students in EMRS and JNV stayed in hostels while about 40% of students in Raighar and 20% of students in Balisankara ST & SC schools did not stay in hostels. In ST & SC schools, greater percentage of girls as compared to boys came from nearby villages and attended school as day-scholars (Figure 1.2.1).
- * For those students who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor as many of them were sleeping on the floor or sharing beds with others in rooms without proper light and ventilation and in many instances not having fans. Many rooms had leaking roofs and accommodation hardly met safety and child-friendly

parameters. With about 10-12 square feet of space per boarder, particularly for girls, the space was highly inadequate. The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.

- * Needless to mention that all schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since a few teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.
- * Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity.
- * The toilet condition and cleanliness was poor in ST & SC schools, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.
- * Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- * Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- * Power supply was a major concern in the school and hostels because there were frequent power cuts particularly in Bhawanipur EMRS and ST & SC schools in Balisankara and Raigarh. Solar lanterns were provided to all EMRS and ST & SC schools which were inadequate. The furniture supply in hostels was inadequate. In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.

1.3 Financial Support

Table 1.3.1 reveals that on an average only 70% to 80% of the funds allocated to EMRS during 2014-15 was spent while spending in JNV reached close to 100% mark. The average spending in the ST & SC schools was about 80% to 85%. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay,

if any, need to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

Table 1.3.1: Receipt and Use of Funds by Schools in Odisha during 2014-2015

School		Total fund received	Utilized	% utilized	Department providing funds
EMRS	Bhawanipur	Rs. 1,73,09,247	Rs. 1,45,09,691	84 %	MoTA , GOI under Article 275(1)
	Hirli	Rs. 1,55,08,658	Rs. 1,12,02,184	72 %	
SC & ST	Balisankara	Rs. 1,02,15,372	Rs. 92,20,454	90 %	ST & SC Development Deptt, Odisha
	Raighar	Rs. 83,44,690	Rs. 69,96,750	76 %	
JNV	Khatiguda	Rs. 2,12,10,000	Rs. 2,09,37,000	99 %	MHRD, GOI under Article 275(1)



Shishu Mahostav in EMRS Bhawanipur

Chapter 2

PROFILE OF TEACHING AND NON-TEACHING STAFF

Teacher motivation and engagement with students impacts the quality of educational climate of the schools. Their nature of employment, training status, salary structure and service conditions determine to a large extent their attitude and motivation towards education. This section presents the profiles of teaching and non-teaching staff (Tables 2.1.2 & 2.1.3), employment status and service benefits (Tables 2.2.1 & 2.2.2).

2.1 Profile of Teaching and Non-Teaching Staff

The sanctioned posts and vacancy positions of the teaching and non-teaching staff are given in Table 2.1.1. The percentage of vacancy positions by school type is plotted in Figure 2.1.1.

Table 2.1.1: Sanctioned Posts and Vacancy Positions of Teaching and Non-Teaching Staff

School		Position	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst.	Librarian	Accountant/UDC	Head clerk/ OS	Clerk/LDC	Peon	Night watchman/ Sweeper	Warden/ Catering Asst.	Matron	Staff Nurse	CCA
EMRS	Bhawanipur	SP	1	--	8	12	1	4	1	1	--	1	1	2	1	1	--	8
		Vac	0	--	3	1	0	1	0	0	--	0	0	0	0	--	--	1
	Hirli	SP	1	--	9	9	1	2	1	1	--	1	1	2	1	--	--	8
		Vac	0	--	2	3	0	0	0	0	--	0	0	0	0	--	--	2
SC & ST	Balisankara	SP	1	--	8	7	1	2	1	--	--	1	4	2	--	--	--	5
		Vac	0	--	0	3	0	2	0	--	--	1	0	0	--	--	--	0
	Raighar	SP	1	--	7	7	1	2	--	--	--	1	2	1	--	--	--	6

		Vac	0	--	1	6	0	0	--	--	--	0	0	0	--	--	--	1
JNV	Khatiguda	SP	1	1	7	13	2	1	1	1	1	1	1	1	1	1	1	7
		Vac	0	1	0	1	0	0	1	1	0	0	0	0	0	1	0	0

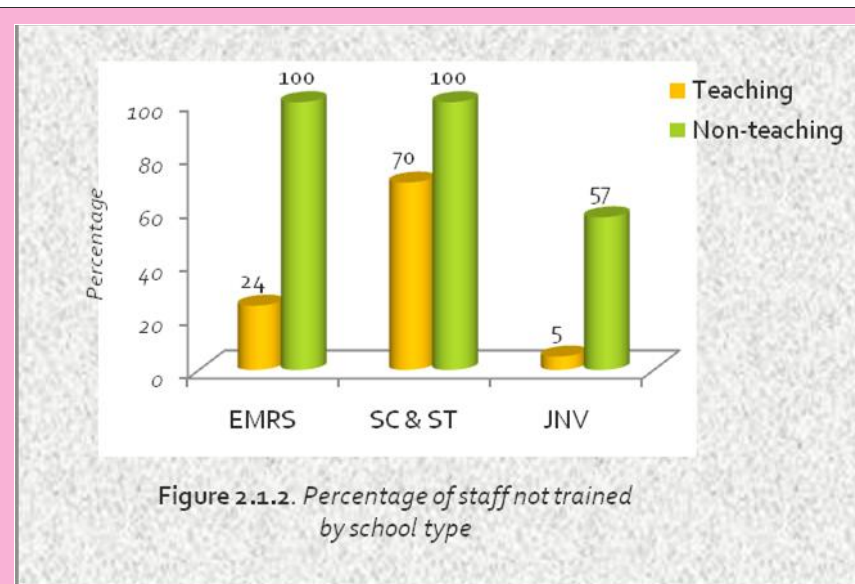
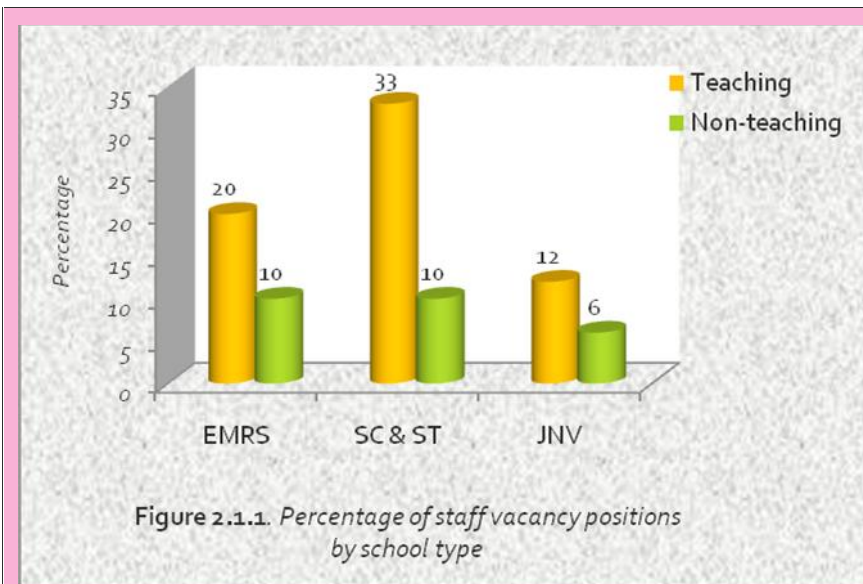
SP: Sanctioned Post Vac: Vacancy

Table 2.1.2: Profile of the Teaching Staff

School		No of Teachers in Position	Pupil-Teacher Ratio in School	Category			Training Status		Length of Teaching Experience		
				ST	SC	Gen	Trained	Untrained	0-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	Bhawanipur	17	1 : 24.5	2	4	11	13	4	4	8	5
	Hirli	14	1 : 29.7	2	1	11	12	2	6	4	4
SC & ST	Balisankara	12	1 : 47.8	--	2	10	4	8	9	--	3
	Raighar	8	1 : 94.3	1	1	6	2	6	6	--	2
JNV	Khatiguda	18	1 : 22.7	2	--	16	17	1	9	5	4

Table 2.1.3: Profile of the Non-Teaching Staff

School		No of Non-Teaching Staff in Position	Category			Training status		Length of experience		
			ST	SC	Gen	Trained	Untrained	0-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	Bhawanipur	14	5	1	8	--	14	5	6	3
	Hirli	12	8	--	4	--	12	4	8	--
SC & ST	Balisankara	10	4	2	4	--	10	3	3	4
	Raighar	8	8	--	--	--	8	4	3	1
JNV	Khatiguda	14	1	1	12	6	8	11	2	1



- * Analysis of vacancy positions by school type indicated that 20% of the teaching and 10% of the non-teaching positions were lying vacant in EMRS compared to 33% and 10% in ST & SC schools and 12% and 6% in JNV (Figure 2.1.1).
- * The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools, which was about 2 to 3 times of the state norm. The PTRs in EMRS and JNV were good and were as per state norm.
- * There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities. About 24% of teachers in EMRS, 70% in ST & SC schools and 6% in JNV were not trained (Figure 2.1.1). Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience.
- * Among the non-teaching staff, there were more employees from the ST community compared to those from the SC or general category. All the non-teachers in EMRS and ST & SC schools and 57% of non-teachers in JNV did not receive any formal training as required in their respective jobs (Figure 2.1.2). Nearly 50% of non-teaching staff has less than 5 years of experience on the job.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

Tables 2.1.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

Table 2.2.1: Nature of Employment of the Teaching Staff and Service Benefits

School		No of Non-Teaching Staff in Position	Nature of Employment			Gross Monthly Emoluments/Salary in Rupees (Range)						
			Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst/Asst teacher	Librarian
EMRS	Bhawanipur	17	Nil	17	100%	35,000	---	13,900 to 22,240	13,500 to 21,600	13,500	14,850 – 21,600	13,500
	Hirli	14	Nil	14	100%	35,000	--	13,900 to 22,240	13,500 to 21,600	13,500	--	13,500
SC & ST	Balisankara	12	6	6	50%	47,090	--	12,500 (consolidated)	23,391 to 41,855	--	--	--
	Raighar	8	2	6	75%	44,795	--	12,500 (consolidated)	44,070	24,681	--	--
JNV	Khatiguda	18	13	5	28%	66,989	--	26,100 to 52,000	25,403 to 50,088	44,034 to 47,465	--	45,690

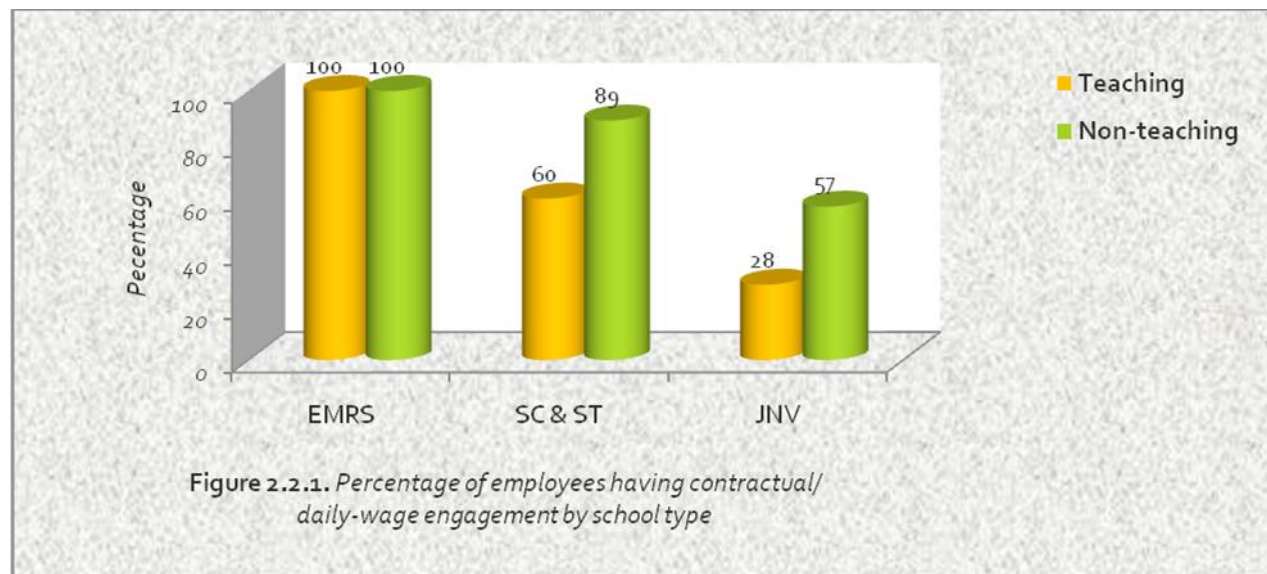
Table 2.2.2: Nature of Employment of the Non-teaching Staff and Service Benefits

School		Nature of Employment		Gross Monthly Emoluments/Salary in Rupees (Range)									
		Regular	Contractual	Head Clerk / Office Superintendent	Accountant/ UDC	Clerk/ LDC	Librarian/ Lab Asst.	Warden	Peon Art	Night watchman / Sweeper	CCA	Matron/ Catering Asst.	Staff Nurse
EMRS	Bhawanipur	---	14	---	10,000	7,540	13,500	5,200	6,438	6,438	5,780	7,500	---
	Hirli	---	12	---	10,000	7,500	13,500	---	6,438	6,438	5,780	10,000	---
SC & ST	Balisankara	0	10	---	---	---	20,120	---	---	5,780	6,891	---	---
	Raighar	2	6	---	---	---	---	---	19,851	5,780	5,780	---	---
JNV	Khatiguda	6	8	37,364	32,314	21,298	---	---	---	---	20,576	28,746	44,070

Note: The contractual non-teaching staffs in JNV were employed on daily-wage basis.



Students were participating in co-curricular activities in EMRS Bhawanipur



- * Astonishingly and regrettably, there were no service conditions for EMRS teaching and non-teaching staff. All the teaching staff in EMRS and 60% in ST & SC schools were employed on contractual basis and 28% of teachers in JNV were employed on daily-wages (Figure 2.2.1).
- * There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV receiving respectively about 1.5 times and twice of the emoluments given to principals of EMRS. The teachers of ST & SC schools and JNV across all levels also received 1.5 times and twice of the gross monthly emoluments of teachers in EMRS, respectively (Table 2.2.1). The noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff (Table 2.2.2).
- * Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality processes and outcomes.

2.3 Capacity Building of Teaching and Non-teaching Staff

Capacity building training was given to teachers of EMRS for content knowledge enrichment and teaching practices by SCSTRTI, OMTES and RMSA but the duration was not adequate. The ST & SC school teachers received training by SCSTRTI, RMSA and SSA as per Government's schedule. The JNV teachers received capacity building training organized by Navodaya Vidyalaya Samiti. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

The non-teaching staff of EMRS and ST & SC schools received hardly any training. The accountants in EMRS received training from the financial advisor of OMTES during 2014-15. Candidates having accounts-related computer skills were been appointed in EMRSs. All other non-teaching staff including clerks and CCA were not trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostel was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

EMRS was established with a vision to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.



Cooked food in EMRS Hirli



EMRS Hirli

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

The educational programme instituted in rural and tribal locations are expected to create a community demand for admitting children in these schools which would be reflected in the form of increased number of students seeking admissions though successive years. There needs to be more students from ST and SC categories in these schools and those admitted should complete the educational cycle. This chapter discusses the status of schools in respect of students seeking admission and retained in schools (Tables 3.1.1 to 3.2.2), students attending schools and completing educational cycle (Tables 3.3.1 & 3.3.2) and student dropouts over successive years (Table 3.4.1).

3.1 Student Admission

Table 3.1.1 lists the number of children seeking admission to different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission are given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

Table 3.1.1: Number of Candidates Applied and Number of Students Enrolled At Entry Points in Classes VI and XI during the Last Five Years
(NA: Number Applied; NE: Number Enrolled)

School		At Entry point to Class VI							At Entry point to Class XI						
			2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	
EMRS	Bhawanipur	NA	--	--	457	520	517	^a 13.1%	334	259	267	440	248	-26.3%	
		NE	57	53	58	60	60		51	60	61	61	60		
	Hirli	NA	436	417	423	597	565	29.6%	129	243	280	267	372	188.4%	
		NE	60	60	60	62	61		60	60	61	62	60		
SC & ST	Balisankara	NA	145	99	98	131	126	-13.2%	No higher-secondary during the period				135	218	^b 61.5%
		NA	88	70	70	78	102						62	64	
	Raighar	NE	250	250	250	280	270	8.0%					275	369	^b 34.2%
		NA	85	72	93	103	92						64	64	
JNV	Khatiguda	NA	1978	2474	2466	2594	2623	32.6%	58	63	78	89	83	43.1%	
		NE	37	71	76	78	75		28	33	28	39	33		

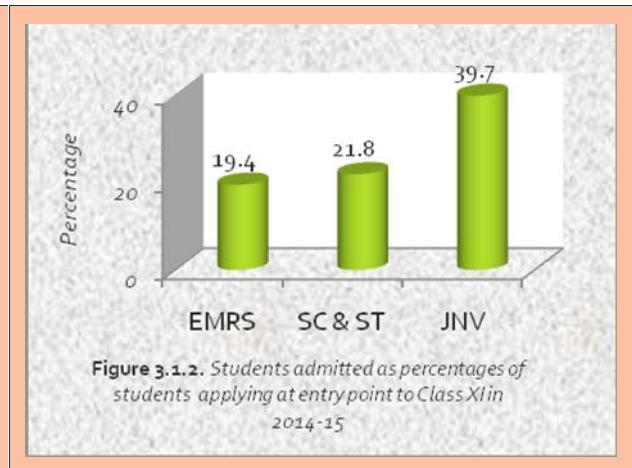
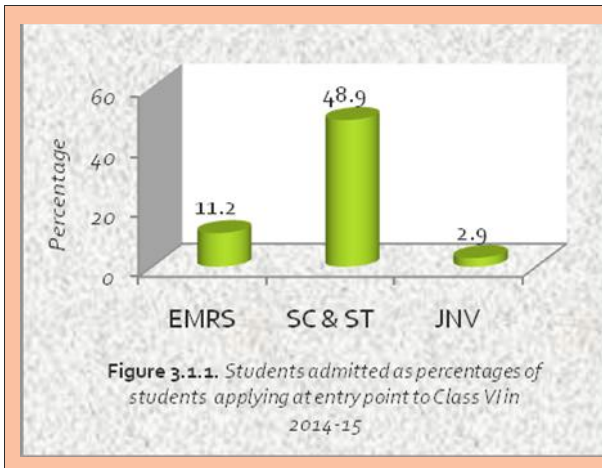
^a increment w.r.t to 2012-13

^b increment with respect to 2013-14

Table 3.1.2. Percentage Increase in Applications for Admission and Student Enrolment as Percentages of Applications for Admission

	At entry point to Class VI		At entry point to Class XI	
	% increase in Applications in 2014 w.r.t to 2012-13	Students admitted in 2014-15 as percentage of applications received the same year	% increase in Applications in 2014 w.r.t to 2012-13	Students admitted in 2014-15 as percentage of applications received the same year
EMRS	23.0	11.2	13.3	19.4
SC & ST	13.8	48.9	^a 43.1	21.8
JNV	6.4	2.9	43.1	39.7

^a Percentage increment in ST & SC schools was taken w.r.t. 2013-14 as there were no higher secondary admissions in 2012-13.



- * The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools. The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 23% for EMRS, 13.8% for ST & SC schools and 6.4% for JNV. The demand for admission to all types of schools increased over the years.
- * Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 11.2, 48.9 and 2.9 for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- * Percentages of increase in applications for entry at Class XI in 2014-15 were 13.3% for EMRS, 43.1% for ST & SC schools and 43.1% for JNV. Students seeking admission in different types of schools increased. While 19.4% of those seeking admission to Class XI in EMRS were admitted, 21.8% were admitted in ST & SC schools and 39.7% were admitted in JNV.

3.2 Student Strength in Schools

Table 3.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 3.2.2 and plotted in Figure 3.2.1.

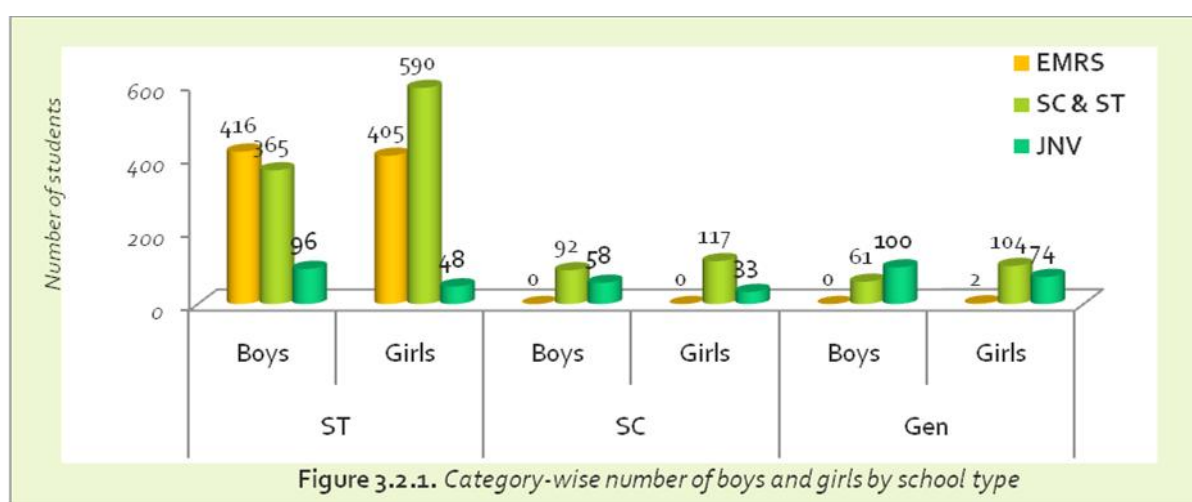
Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms And Classroom Space per Student (in sq. ft.)

School			VI	VII	VIII	IX	X	XI	XII	Total
EMRS	Bhawanipur	N of students	59	63	58	58	61	60	58	417
		N of Classrooms	02	02	02	02	02	01	01	12
		Per student floor space (in sq. ft.)	12.1							
	Hirli	N of students	56	62	60	56	60	60	62	416
		N of Classrooms	02	02	02	02	02	01	01	12
		Per student floor space (in sq. ft.)	13.5							
SC & ST	Balisankara	N of students	102	100	88	79	79	64	62	574
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	6.9							
	Raighar	N of students	92	100	113	186	136	64	64	755
		N of Classrooms	02	02	02	02	02	02	01	12
		Per student floor space (in sq. ft.)	5.8							
JNV	Kathiguda	N of students	75	75	73	73	37	33	36	409
		N of Classrooms	02	02	02	02	02	01	01	12
		Per student floor space (in sq. ft.)	20.3							

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type

School		ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
<i>Elementary Classes (VI to VIII)</i>											
EMRS	Bhawanipur	90	90	180	--	--	--	--	--	--	180
	Hirli	88	89	177	--	--	--	--	01	01	178
SC & ST	Balisankara	--	244	244	--	29	29	--	17	17	290
	Raighar	168	69	237	25	11	36	14	18	32	305
JNV	Kathiguda	65	32	97	37	17	54	41	31	72	223
<i>Secondary Classes (IX & X)</i>											
EMRS	Bhawanipur	59	59	118	--	--	--	--	01	01	119

	Hirli	58	58	116	--	--	--	--	--	--	116
SC & ST	Balisankara	--	130	130	--	16	16	--	12	12	158
	Raighar	103	54	157	46	37	83	36	46	82	322
JNV	Kathiguda	25	07	32	14	12	26	33	26	59	117
<i>Higher Secondary Classes (XI & XII)</i>											
EMRS	Bhawanipur	60	58	118	--	--	--	--	--	--	118
	Hirli	61	61	122	--	--	--	--	--	--	122
SC & ST	Balisankara	49	48	97	08	11	19	05	05	10	126
	Raighar	45	45	90	13	13	26	06	06	12	128
JNV	Kathiguda	06	09	15	07	04	11	26	17	43	69
Total		877	1053	1930	150	150	300	161	180	341	2571



- * The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 12 to 14 sq. ft., while that in ST & SC schools was 6-7 sq. ft. and in JNV about 20-21 sq. ft. Average number of students per classroom was approximately 30-35 in EMRS and JNV, and 60-65 in ST & SC schools.
- * While children from SC, ST and general categories were in ST & SC schools, and JNV, EMRS was primarily meant for students from the ST community. This is reflected in the differential category-wise student strength in different types of schools (Figure 3.2.1).

3.3 Student Attendance

Student attendance and retention in the school to complete the educational cycle are important indicators to reveal how the school is catering to student needs and the awareness level of the community to encourage their children to be in the system. Table 3.3.1 and Figures 3.3.1 and 3.3.2 present information on student attendance and Table 3.3.2 indicates percentages of students completing the educational cycle.

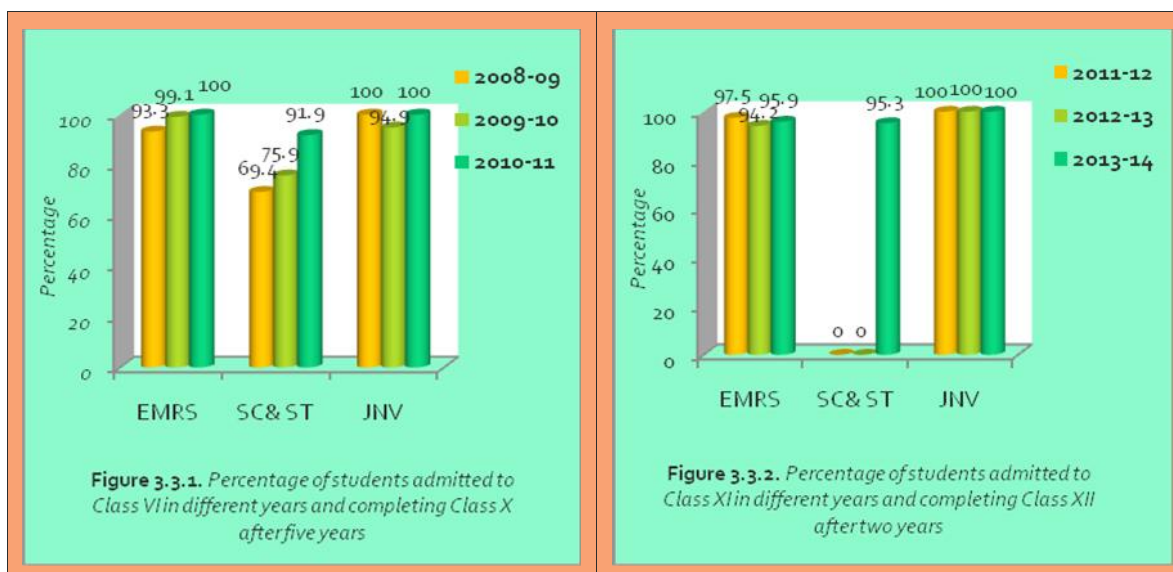
Table 3.3.1: Percentage of Average Student Attendance during the Last Month (March, 2015)

School		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	Bhawanipur	98	98.5	99	99	98.5	98	98.5	98.5
	Hirli	94	98	98.5	99	98.7	98	99	97.8
SC & ST	Balisankara	95.5	97.5	95.5	98	98	97	95.5	96.7
	Raighar	98	96.5	94	94.5	97	96	97.5	96.2
JNV	Khatiguda	99.5	100	99.5	99	99.5	100	98.5	99.6

Table 3.3.2: Number of Students Admitted at Entry Points (classes VI and XI) And Completing the Educational Cycle

Students admitted to Class VI completing Class X										
School		No. of students admitted in VI in 2008-09	N of students completing Class X after 5 years	% completing educational cycle in 2012-12	No. of students admitted in VI in 2009-10	N of students completing Class X after 5 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2010-11	N of students completing Class X after 5 years	% completing educational cycle in 2014-15
EMRS	Bhawanipur	60	53	88.3	60	60	100	60	60	100
	Hirli	60	59	98.3	60	59	98.3	60	60	100
SC & ST	Balisankara	101	70	69.3	87	78	89.7	88	79	89.7
	Raighar	105	73	69.5	104	67	64.4	85	80	94.1
JNV	Khatiguda	41	41	100	39	37	94.9	37	37	100
Students admitted to Class XI completing Class XII										
School		No. of students admitted in XI in 20011-12	N of students completing Class XII after 2 years	% completing educational cycle in 20112-13	No. of students admitted in VI in 2012-13	N of students completing Class XII after 2 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2013-14	N of students completing Class XII after 2 years	% completing educational cycle in 2014-15
EMRS	Bhawanipur	60	59	98.3	60	57	95.0	60	55	91.7
	Hirli	60	58	96.7	61	57	93.4	62	62	100
SC & ST	Balisankara	No Higher-Secondary during this period						64	62	96.8
	Raighar	No Higher-Secondary during this period						64	60	93.8
JNV	Khatiguda	35	35	100	29	29	100	39	39	100

Note. In EMRSs, students shifted to other schools in JNVs. In ST & SC schools, students either shifted to other schools including JNVs or dropped out of the school. Estimation of students who left school was not done by teachers.



Note: Higher-secondary classes started in ST & SC schools in 2013-14 and the percentage figure shown for ST & SC schools in 2013-14 indicates the percentage of students scheduled to appear in Class XII examination.

- * Student attendance in all types of schools was satisfactory.
- * Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 100% in EMRS, 92% in ST & SC schools and 100% in JNV. The percentage in ST & SC schools fell short of 100% because some students shifted to other schools or dropped out of the system. During earlier years, students completing the educational cycle also fell short of 100% in EMRS. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 96% in EMRS, 95% in ST & SC schools and 100% for JNV.
- * Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15.

3.4 Student Retention /Drop-out

The number of students dropping out or being pushed out of the system during the last five years across types of schools are presented in Table 3.4.1 and plotted in Figure 3.4.1.

Table 3.4.1 : Class-wise Total Number of Students dropping out of School by School Type during 2011-

15

School	Year	Elementary			Secondary		Higher secondary		Total
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	01	---	---	---	---	---	---	01-
	2011-12	---	---	---	---	---	---	---	---
	2012-13	03	02	---	---	---	---	---	05
	2013-14	01	---	---	---	---	---	---	01
	2014-15	03	01	---	01	---	01	---	06

SC & ST	2010-11	07	06	17	26	03	---	---	59
	2011-12	12	06	07	44	07	---	---	76
	2012-13	07	03	10	18	31	---	---	69
	2013-14	10	06	09	28	01	---	---	54
	2014-15	05	10	02	30	02	04	---	53
JNV	2010-11	---	---	---	---	---	---	---	--
	2011-12	---	---	---	---	---	---	---	---
	2012-13	---	---	---	---	---	---	---	---
	2013-14	---	---	---	---	---	---	---	---
	2014-15	---	---	---	---	---	---	---	---

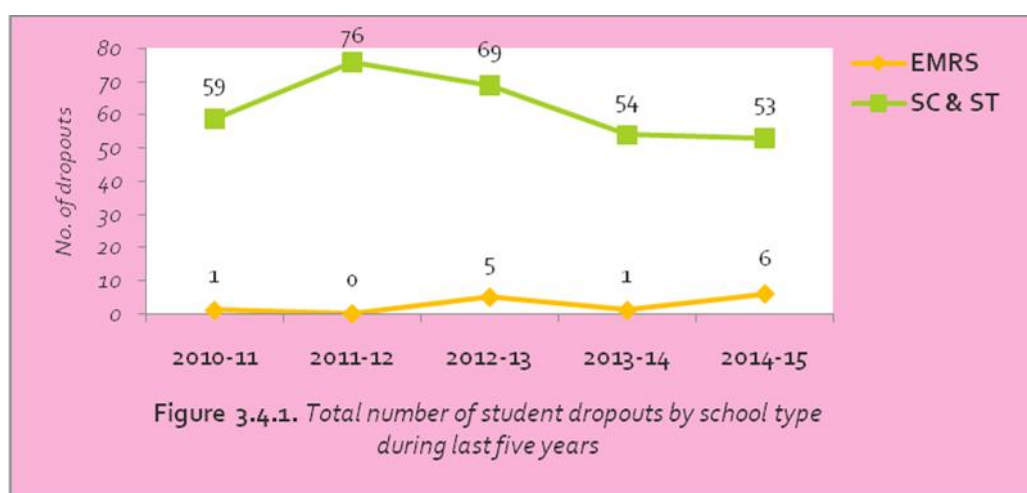


Figure 3.4.1. Total number of student dropouts by school type during last five years

Note: Students dropping out of a school possibly sought admissions in other schools for which information was not available. JNV could not supply information on student dropout.

- * Noticeably more number of students dropped out of ST & SC schools compared to EMRS. More students dropped out at the elementary stage compared to secondary and higher-secondary stages, particularly in ST & SC schools. These drop out cases may not viewed as instances of students completely leaving the schools system; rather a substantial number of students shifted to others schools or got admitted to JNV or EMRS. The information in respect of students staying out of the school system was not available with the school authorities.



Academic Block in EMRS Bhawanipur

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

The educational climate in schools influences in a large measure the learning attainment level of students. The instructional environment prevailing in the school and classrooms impacts students' motivation and engagement in learning. In order to maximize the chances that student potentials would translate into achievements, textbooks need to be supplied to all students in time, TLMs and TLES must be liberally used in classroom teaching and be easily accessible to students, the teaching-learning process must be student-driven and interactive and student assessment should be dynamic than static. Provisions must be created to address the special learning requirements of children who fall behind. To maintain fairness in student evaluation, they should be evaluated on a continuous basis using a variety of methods, techniques and sources so that their achievement in all domains can be captured. We did ascertain the teaching-learning environment prevailing in schools the outcomes of which are presented in this chapter.

4.1 School and Classroom Environment

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and Classroom Environment by School Type

Parameter	EMRS	SC & ST	JNV
<i>Physical environment and cleanliness</i>			
Building white washed	Manageable	Poor	Good
Cleanliness of campus	Manageable	Manageable	Manageable
Cleanliness of classrooms	Good	Good	Good
Dustbins in classroom	Yes	No	Yes
Campus beautification	Manageable	Poor	Manageable
<i>Health and Safety features</i>			
First-aid box	Yes	Yes	Yes
Fire safety	Inadequate	Inadequate	Inadequate
Children's hygienic habits	Good	Manageable	Good
Monthly health check up	Infrequent	Infrequent	Frequent
Garbage disposal pit	Inadequate	Inadequate	Inadequate
Proper drainage system	Inadequate	No	Inadequate
<i>Instructional features</i>			
Information board	Partly done	Partly done	Partly done
Wall magazine	Not updated	Not updated	Not updated
Wall activities	Poor	Poor	Poor
TLM corner in classrooms	No	No	No
Library cum reading room	Manageable	No	Good
Games and sports equipments	Inadequate	Inadequate	Inadequate
Suggestion box	Not used	Not used	Not used

- * The school campus and classrooms appeared to be clean in all types of schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools.
- * While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of not having adequate garbage disposal pit and proper drainage system.
- * In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.

4.2 Teaching-Learning Process, Materials and Equipments

Textbooks, TLMs and teaching-learning process are the throughputs in educational institutions that help student potentials translate into achievements. This section presents information regarding the availability of textbooks to students (Table 4.2.1; Figure 4.2.1) and teachers' and students' behaviours in the classroom during the course of teaching (Table 4.2.2).

**Table 4.2.1: Class-wise Percentage of New Textbooks Distributed to Students
As against Requirement on the basis of Student Enrolment**

School		New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
EMRS	Bhawanipur	No. required	540	540	585	590	580	812	770	4417
		% distributed	100	100	100	100	100	100	100	100
	Hirli	No. required	540	540	540	660	660	600	600	4140
		% distributed	100	89	94	95	100	90	94	93.5
SC & ST	Balisankara	No. required	816	800	704	948	948	Class XI & XII were not functioning during 2014-15		4216
		% distributed	100	100	100	24.8	24.8			66.2
	Raighar	No. required	624	656	783	936	992			3991
		% distributed	81.7	87.7	79.2	49.3	49.6			66.6
JNV	Kathiguda	No. required	876	1027	936	902	370	396	407	4914
		% distributed	100	100	100	100	100	100	100	100
Class-wise percentage of textbook distribution by school type										
EMRS			100	94.5	97.2	97.4	100	91.8	97.4	96.5
SC & ST			92.1	94.4	89.0	37.0	37.5	---	---	63.5
JNV			100	100	100	100	100	100	100	100

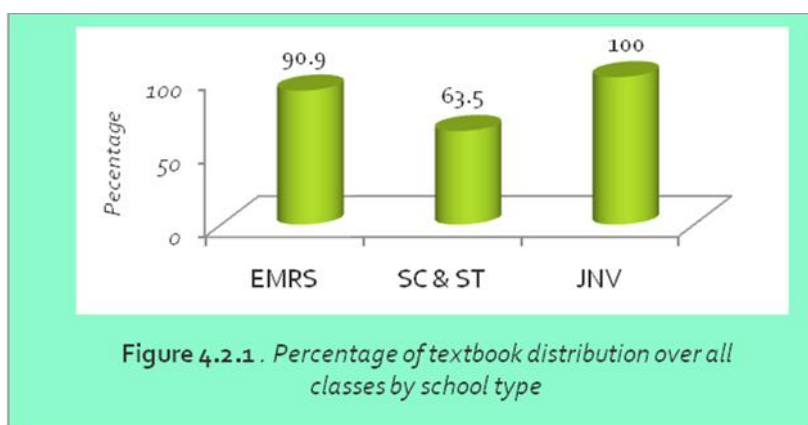


Table 4.2.2: Teaching-Learning Process and Teacher-Student Behaviour in Schools by School Type

Parameter	EMRS	SC & ST	JNV
<i>Teaching-learning Process</i>			
Seating arrangement and use of classroom space	Good	Manageable	Good
Adequacy of lesson plan/note	Not maintained	Not maintained	Not maintained
Teaching through activity-based methods	No	No	Partly done
Regular correction of students'	No	No	Partially done
Home assignments given	Good	Average	Good
Project assignments	Poor	No	Good
Use of e-content in SMART classes	No	No	Good
Effective use of laboratories	Average	Poor	Good
Using libraries effectively	Average	No	Good
Courses completed as per schedule	Yes	Yes	Yes
Time table structured and displayed	Yes	Yes	Yes
Academic calendar prepared and displayed	Yes	Yes	Yes
SDP prepared	Yes	Yes	Yes
<i>Teacher behaviour in classrooms</i>			
Topic presentation focused and organized	Average	Average	Good
Demonstrates during teaching	Poor	Poor	Manageable
Using blackboard appropriately	Yes	Yes	Yes
Using TLMs while teaching	Poor	Poor	Manageable
Initiating group learning	Poor	Poor	Poor
Encouraging students to ask questions	Manageable	Manageable	Manageable
Giving academic feedback to students	Manageable	Manageable	Manageable
Threatening	No	No	No
<i>Student behaviour in classrooms</i>			

Students actively listen and participate	Average	Average	Good
Ask questions and express ideas	Manageable	Poor	Good
Students' use of TLMs	No	No	Poor
Students respond and answer	Manageable	Manageable	Good

- * While 96.5% of the required number of textbooks was distributed in EMRS, JNV registered a figure of 100% distribution of textbooks. The distribution of textbooks in ST & SC schools was not satisfactory as only 63.5% of students' textbook requirement was met.
- * In all types of schools, courses were completed as per syllabi and in time, time table and academic calendars were prepared, SDPs were prepared and students were given home assignments. Lesson plans were not properly prepared and maintained in all types of schools.
- * The status of EMRS did not turn out to be satisfactory in respect of activity-based teaching, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools in respect of these school-related activities.
- * The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLM use during teaching and initiating group-based learning was not satisfactory. The situation in JNV was slightly better but far from being excellent.
- * The nature for student engagement in classroom teaching was less active. Their behaviours in classrooms were more or less teacher-directed. Their participation in classroom learning was minimal in ST & SC schools, manageable in EMRS and slightly better in JNV.

Availability of TLMs and TLEs. Though schools are provided with grants for TLMs and TLEs which are purchased by the teachers, they were not purchased with a proper plan to cater to students' need and course requirements. They were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.

4.3 Student Development Activities

Besides classroom teaching, students also need activities for their personal and career development. Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools and JNV on those activities.

Table 4.3.1: Student Development Activities by School Type

Activities	EMRS	SC & ST	JNV
Remedial coaching as per student need	Partially	No	Done
Counselling for behavioural problems	No	No	No

Career counselling	Inadequate	Inadequate	Inadequate
Identifying and developing student talents	No	No	No
Coaching for professional courses	Partially given	No	Partially done
Self-defence training	Yes	No	Yes
life skills training	Partly done	Partly done	Partly done
Coaching for sports and games competitions	Good	Good	Good
Training for musical and artistic talents	Good	Good	Good
Training on vocational and work education	No	No	No
Training students as social change agents	No	No	No

- * Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS.
- * The ST & SC schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.

4.4 Student Evaluation Practices

The students are evaluated in half-yearly and yearly examinations and also in their respective classes at different phases during the instructional period by respective teachers. We wanted to ascertain how CCE has been adhered to in assessing student performance. Table 4.4.1 presents schools' adoption of CCE along important parameters.

Table 4.4.1: Student Evaluation Practices as per CCE by School Type

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Using summative evaluations	Satisfactory	Satisfactory	Satisfactory
Using formative evaluations	Unsatisfactory	Unsatisfactory	Satisfactory
Assessing through oral questions	Satisfactory	Satisfactory	Satisfactory
Assessing through observations	Unsatisfactory	Unsatisfactory	Satisfactory
Using self and peer-assessment	Unsatisfactory	Unsatisfactory	Unsatisfactory
Using parental assessment	Unsatisfactory	Unsatisfactory	Unsatisfactory
Using group assessment	Unsatisfactory	Unsatisfactory	Unsatisfactory
Assessing socio-personal qualities	Unsatisfactory	Unsatisfactory	Satisfactory
Maintaining student portfolios and anecdotal records	Unsatisfactory	Unsatisfactory	Unsatisfactory
Using checklists and rating scales	Unsatisfactory	Unsatisfactory	Unsatisfactory
Cumulative progress card for each child maintained	Unsatisfactory	Unsatisfactory	Satisfactory

Identifying individual strengths	Unsatisfactory	Unsatisfactory	Unsatisfactory
Quality of feedback to students	Unsatisfactory	Unsatisfactory	Satisfactory
Remedial coaching on the basis of CCE	Unsatisfactory	Unsatisfactory	Satisfactory

- * Adoption of CCE along most of the parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- * In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.
- * Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students.
- * In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying the individual strengths of students.



Students' Active participation in sports activities in EMRS Bhawanipur



Students were receiving silver medal in Junior National Level Hockey in Rohtak Haryana, EMRS,
Hirli

Chapter 5

RESIDENTIAL CLIMATE IN HOSTELS

One of the objectives of EMRS is to support the construction of infrastructure that facilitates the educational, physical and cultural needs of students. Students spent about 14-16 hours a day in hostels and therefore, the residential climate in the hostel impacts students' motivation, attitude and educational attainment. Hostel provides a platform for intensive interactions among students in both curricular and co-curricular areas enabling them to connect school learning with real-life knowledge. While formal learning occurs in school setup, it is in hostels that students engage themselves in self-paced learning to practice the lessons learnt supported by peer interactions. It is therefore essential that the features of hostel climate be assessed to the extent that they address the physical, cultural and academic needs of students.

5.1 Residential Environment in Hostels

The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Residential Environment in Students' Hostels

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
<i>Physical environment and cleanliness</i>			
Building whitewashed	Manageable	Poor	Good
Cleanliness of hostel campus	Manageable	Poor	Good
Cleanliness of hostel rooms	Manageable	Manageable	Good
Light and ventilation in hostel rooms	Unsatisfactory	Unsatisfactory	Satisfactory
Garbage disposal pit	Inadequate	Inadequate	Inadequate
Dustbin in hostel rooms	Yes	Yes	Yes
Proper drainage system	Inadequate	Inadequate	Inadequate
Beautification of hostel campus	Unsatisfactory	Unsatisfactory	Unsatisfactory
<i>Health and safety measures</i>			
First-aid box	Yes	Yes	Yes
Fire safety	Inadequate	Inadequate	Inadequate
Children's hygienic habits	Good	Manageable	Good
Health check up	Irregular	Irregular	Regular
Health cards issued	Partially	Partially	Partially
ANM/Health worker available	No	No	Yes
<i>Co-curricular and cultural activities</i>			
Using suggestion box	Not used	Not used	Not used
Wall magazine	Not updated	No	Not updated

House system functional	Yes	No	Yes
Cultural activities	Satisfactory	Satisfactory	Satisfactory
Inner house competitions	Satisfactory	No	Satisfactory
Play and indoor games equipment	Inadequate	Inadequate	Inadequate
Annual function	Done	Done	Done
Stationeries supplied	Yes	Yes	Yes
Mess committee's functional efficiency	Unsatisfactory	No	Unsatisfactory
Hostel locked during school hours and remedial coaching	No	No	Yes

- * On parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness while light and ventilation in rooms, provision of garbage disposal pit and drainage system and attempt to beautify the hostel campus were on the weaker side. Most of the conditions in ST & SC schools were unsatisfactory or inadequate. The JNV was better in many respects except that garbage clearance management and school campus beautification were not at the expected level.
- * First-aid boxes were available in hostels of all types of schools, but fire safety measures were inadequate in all. Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.
- * In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box, wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.
- * The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.

5.2 Hostel Kitchen and Food

Hygienic kitchen environment, quality of food and safety are the key elements in any residential accommodation set up. Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: Hygienic Environment of Kitchen and Quality of Food

Parameter	EMRS	SC & ST	JNV
<i>Kitchen environment and cleanliness</i>			
Kitchen building whitewashed	Manageable	Poor	Good
Cleanliness of kitchen floor	Manageable	Poor	Good
Cleanliness of kitchen equipment and utensils	Manageable	Manageable	Good

Cleanliness of dining room	Poor	Poor	Good
Light and Ventilation	Unsatisfactory	Unsatisfactory	Satisfactory
Hand washing points	Inadequate	Inadequate	Adequate
Cleanliness of hand wash points	Manageable	Poor	Satisfactory
Cleanliness of store room	Manageable	Manageable	Manageable
Smokeless cooking	No	No	Yes
Kitchen waste clearance and management	Poor	Poor	Manageable
Proper drainage system for kitchen	Inadequate	Inadequate	Inadequate
<i>Safety features</i>			
Fire safety for the kitchen	No	No	Yes
Safety stand for plates	No	No	Yes
Aqua guard points for safe drinking water	No	No	Adequate
Hygienic cooking	Manageable	Unsatisfactory	Satisfactory
<i>Quality of meals and supervision</i>			
Approved menu chart displayed	Yes	No	Yes
Meals served according to menu chart	No	No	Yes
Quality of meal	Unsatisfactory	Unsatisfactory	Satisfactory
Teachers on duty / mess committee supervision	No	No	yes
Procurement procedure duly followed	No	No	Yes
Serving of food supervised teachers	No	No	Yes

- * On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- * The fire and health-related safety measures in EMRS and ST & SC hostels was poor while the safety measures were better in JNV.
- * The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1 Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 through 6.1.9 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-3 on 'Method and Procedure'. It may be mentioned here the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

Table 6.1.1: Mean Achievement Level of Class VIII Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	54	9.73 (2.95)	38.92	53	10.35 (3.25)	41.40	53	10.16 (3.42)	40.64	51	7.54 (2.27)	30.16
SC & ST	44	6.49 (3.38)	25.96	47	8.11 (2.99)	32.45	47	6.78 (2.50)	27.12	44	6.59 (2.03)	26.36
JNV	33	13.64 (4.56)	54.56	36	12.08 (4.48)	48.32	36	10.69 (3.42)	42.76	33	11.52 (3.16)	46.08

* In all the four subjects, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools (Table 6.1.1).

* It may, however, be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in ST & SC schools scored in the range of only 25% to 35% across four subject areas, while those in EMRS scored in the range of 30% to 40%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 40% to 54 % across the four subject areas.

Table 6.1.2:Category-wise Mean Achievement Level of Class VIII Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	54	9.73 (2.95)	38.93	53	10.35 (3.24)	41.41	53	10.16 (3.42)	40.65	51	7.54 (2.27)	30.16
SC & ST	29	6.57 (3.61)	26.28	33	7.14 (3.43)	28.56	33	8.30 (2.87)	33.20	29	6.27 (2.00)	25.08
JNV	14	14.79 (4.12)	59.16	14	12.64 (4.29)	50.57	14	11.36 (3.20)	45.43	14	12.00 (3.33)	48.00
SC Students												
EMRS	No SC students											
SC & ST	8	5.13 (2.66)	20.53	9	6.43 (1.67)	25.72	9	7.55 (1.24)	30.20	8	6.75 (3.44)	27.00
JNV	5	15.20 (5.07)	60.80	6	12.67 (3.33)	50.68	6	9.66 (3.45)	38.64	5	13.60 (2.70)	54.40
General Category Students												
EMRS	No General students											
SC & ST	6	6.67 (1.51)	26.68	6	5.84 (0.98)	23.35	6	7.30 (1.38)	29.20	6	6.83 (1.47)	27.33
JNV	16	11.94 (4.27)	47.76	16	10.75 (4.87)	43.00	16	10.50 (3.69)	42.00	16	10.63 (2.82)	42.50

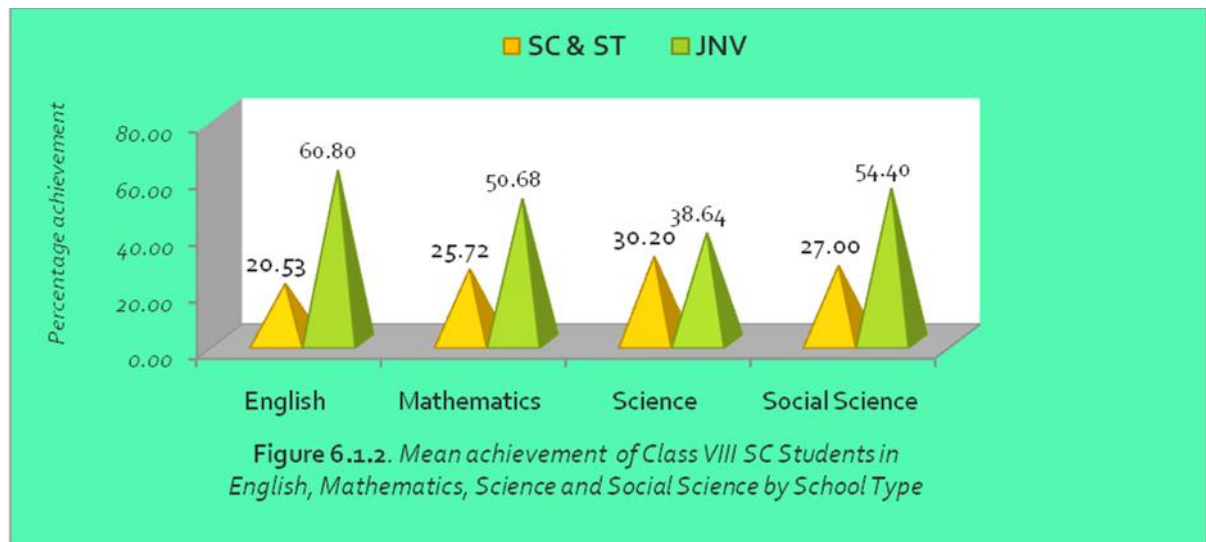
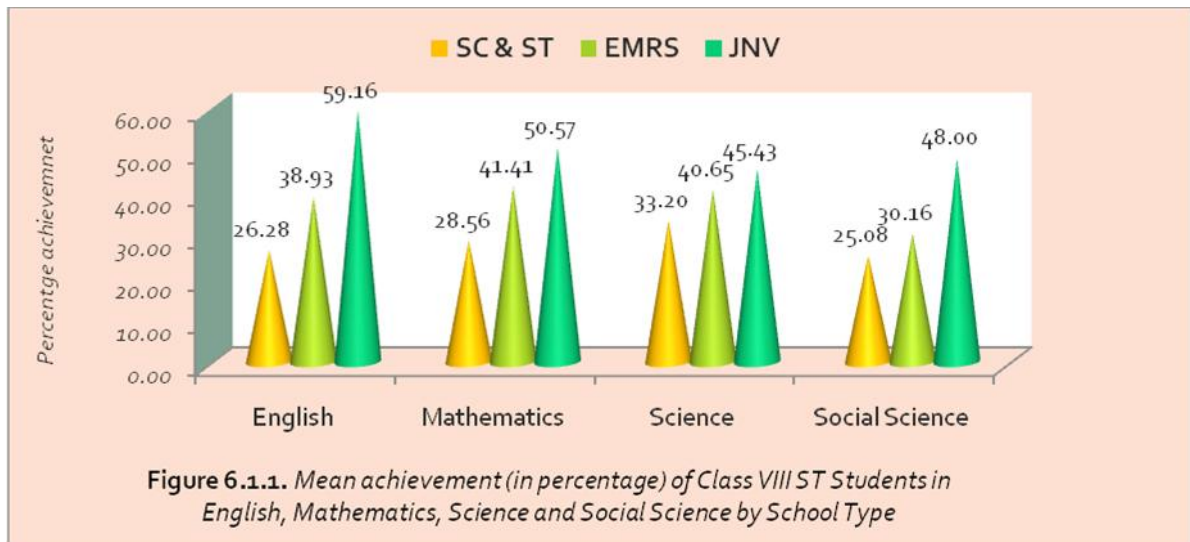


Table 6.1.3: 't' Values Showing Group Comparisons across School Types in respect of Achievement Level of Class VIII ST Students in Different Subject Areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. ST & SC	9.73	81	4.04**	10.35	84	4.31**	10.16	84	2.71**	7.54	78	2.59**
EMRS vs. JNV	9.73	66	4.32**	10.35	65	1.86	10.16	65	1.23	7.54	63	4.71**
ST & SC vs. JNV	6.57	41	6.38**	7.14	45	4.25**	8.30	45	3.08**	6.27	41	5.94**

*Significant at .05 level; ; Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) revealed that the ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with a maximum gap being noticed in English language attainment. It was only in Mathematics and Science that noticeable differences were not observed between the ST students in EMRS and JNV.
- * The performance of ST students in ST & SC schools and EMRS was poor while in JNV, it was relatively better. The ST students in ST & SC schools performed in the range of 25% to 33% while their performance in EMRS was within 30% to 41% and in JNV in the range of 45% to 60%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- * There were no SC students in EMRS. The performance of SC students in ST & SC schools was slightly poorer compared to that of ST students while SC students performed almost at an equal level with ST students in the JNV (Figure 6.1.2). The performance of general category students in either ST & SC schools or JNV was not at par with SC students in their respective institutions.

Table 6.1.4: Mean Achievement Level of Class X Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	53	15.99 (2.93)	63.93	55	8.26 (2.73)	33.04	55	9.89 (3.03)	39.56	52	10.34 (2.65)	41.36
SC & ST	43	8.71 (2.96)	34.84	40	7.60 (2.73)	30.41	40	6.82 (3.30)	27.27	40	10.40 (2.65)	41.60
JNV	34	17.71 (3.17)	70.84	35	14.20 (3.86)	56.80	54	15.74 (3.31)	62.95	54	15.75 (3.31)	63.00

- * The performance of students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 27% to 41%, while those in EMRS showed attainment in the range of 33% to 64%. The students in JNV performed in the range of 57% to 71% (Table 6.1.4).
- * The performance of EMRS students in English was better compared to their performance in other subjects in which their performance was judged to be poor. The students in SC and ST schools performed poorly in all subject areas. Students in JNV scored highest in English followed by Social Science, Science and Mathematics.

Table 6.1.5: Category-wise Mean Achievement Level of Class X Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	53	15.99 (2.97)	63.96	55	8.26 (2.73)	33.04	53	9.89 (3.03)	39.56	53	10.34 (2.65)	41.36
SC & ST	23	8.68 (3.06)	34.72	26	6.69 (2.69)	26.76	23	6.61 (2.14)	26.44	23	9.96 (2.64)	39.84
JNV	12	16.58 (3.75)	66.32	11	14.09 (4.15)	56.36	12	14.18 (3.76)	56.72	12	14.75 (4.03)	59.00
SC Students												
EMRS	No SC students											
SC & ST	10	9.80 (2.14)	39.20	9	7.48 (2.79)	29.92	9	8.43 (3.39)	33.72	10	11.00 (1.94)	44.00
JNV	6	19.33 (2.83)	77.32	4	13.75 (2.08)	55.00	4	13.75 (3.30)	55.00	6	16.50(2.43)	66.00
General Category Students												
EMRS	No General students											
SC & ST	6	9.71 (3.15)	38.84	5	8.20 (5.59)	32.80	5	8.40 (3.36)	33.60	6	10.14 (3.67)	40.57
JNV	16	17.44 (3.67)	69.76	20	14.35 (3.66)	57.40	20	12.58 (3.99)	50.32	16	16.06 (3.09)	64.25

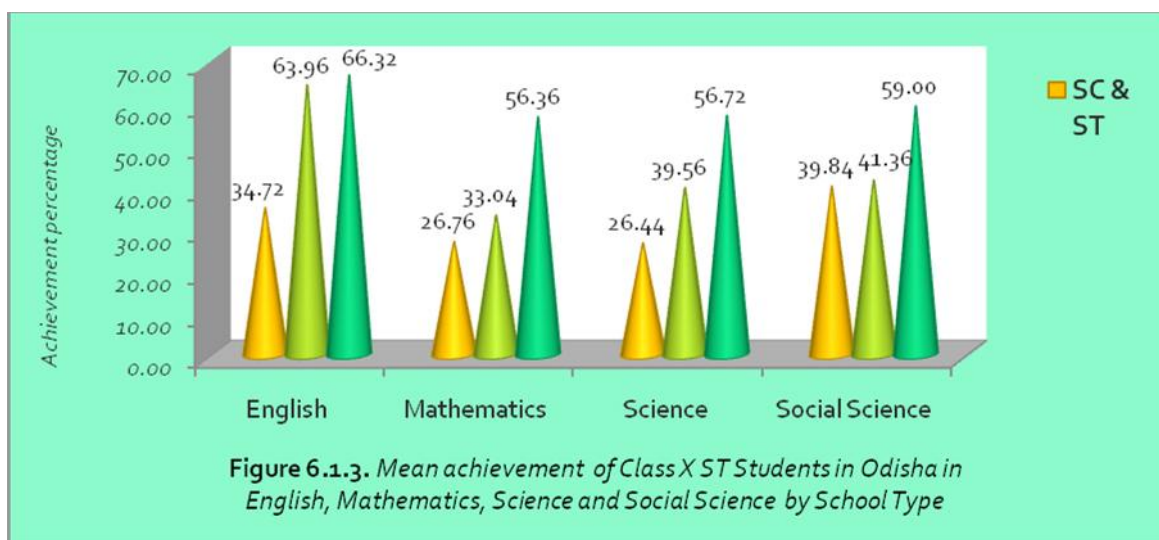


Figure 6.1.3. Mean achievement of Class X ST Students in Odisha in English, Mathematics, Science and Social Science by School Type

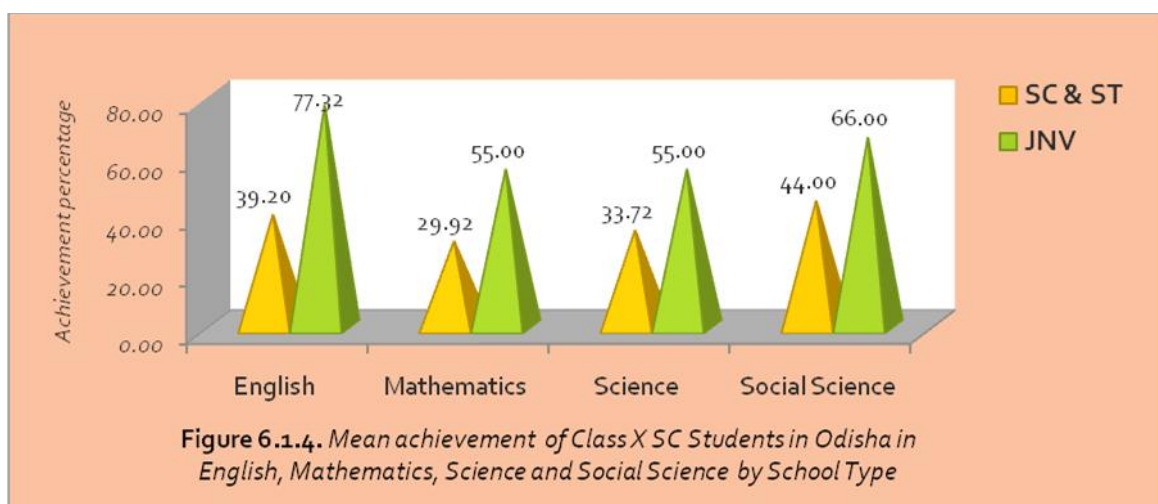


Figure 6.1.4. Mean achievement of Class X SC Students in Odisha in English, Mathematics, Science and Social Science by School Type

Table 6.1.6: 't' values Showing Group Comparisons across School Types in respect of Achievement Level of Class X ST Students in Different Subject Areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. ST & SC	15.99	74	9.73**	8.26	79	2.44*	9.89	74	5.38**	10.34	74	0.58
	8.68			6.69			6.61			9.96		
EMRS vs. JNV	15.99	63	0.52	8.26	64	4.47**	9.89	63	3.69**	10.34	63	3.62**
	16.58			14.09			14.18			14.75		
ST & SC vs. JNV	8.68	33	6.29**	6.69	35	5.45**	6.61	33	6.45**	9.96	33	5.91**
	16.58			14.09			14.18			14.75		

; Significant at .05 level

; Significant at .01 level

- * Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools (Table 6.1.5; Figure 6.1.3).
- * t-values indicated that it was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- * On an overall basis, SC students in ST & SC schools and JNV performed at par with ST students in their respective institutions except in English and Social Science in which performance of SC students in JNV was better than that of ST students (Figure 6.1.4). The general category students performed at par with SC students in JNV as well as in ST & SC schools.

Table 6.1.7: Mean Achievement Level of Class XII Students in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	51	12.60 (4.09)	42.10	51	7.88 (2.71)	26.27	52	7.62 (2.29)	25.41	51	9.52 (2.90)	31.73	61	7.72 (2.45)	25.73
SC & ST	58	9.85 (3.22)	32.83	57	7.78 (2.62)	25.94	57	7.94 (2.82)	26.47	58	10.28 (2.77)	34.27	61	8.05 (2.79)	26.83
JNV	28	17.00 (3.36)	56.67	28	11.11 (3.11)	37.03	28	8.14 (2.69)	27.14	23	12.74 (3.31)	42.47	28	11.07 (2.99)	36.90

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS and SC&ST schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.
- * The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 57% (Table 6.1.7).

Table 6.1.8: Category-wise Mean Achievement Level of Class XII Students in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	51	12.60 (4.09)	42.00	51	7.88 (2.71)	26.27	52	7.62 (2.29)	25.40	51	9.52 (2.90)	31.73	61	7.72 (2.45)	25.73
SC & ST	36	9.65 (3.07)	32.11	32	7.92 (2.60)	26.40	35	7.40 (2.70)	24.67	38	10.28 (2.87)	34.27	35	7.67 (2.94)	25.57
JNV	10	16.40 (4.43)	54.67	8	10.25 (2.44)	34.17	8	8.50 (2.73)	28.33	7	10.43 (2.94)	34.77	9	10.11 (3.44)	33.70
SC Students															
EMRS	No SC students														
SC & ST	12	9.50 (2.43)	31.67	9	8.23 (2.49)	27.44	11	8.71 (2.79)	29.03	10	10.75 (2.35)	35.83	13	8.50 (2.27)	28.33
JNV	5	11.60 (1.58)	38.67	6	11.67 (2.66)	38.90	5	7.80 (1.79)	26.00	5	11.60 (1.58)	38.67	6	9.00 (2.19)	30.00
General Category Students															
EMRS	No General students														
SC & ST	10	9.80 (3.79)	32.67	18	8.04 (2.34)	26.81	12	8.56 (2.23)	28.53	10	10.20 (2.66)	34.00	13	6.78 (2.76)	22.60
JNV	12	17.17 (2.86)	57.23	14	11.36 (3.67)	37.87	15	8.40 (2.92)	28.00	11	14.73 (3.04)	49.10	13	12.00 (2.19)	40.00



School Gate in EMRS Hirli

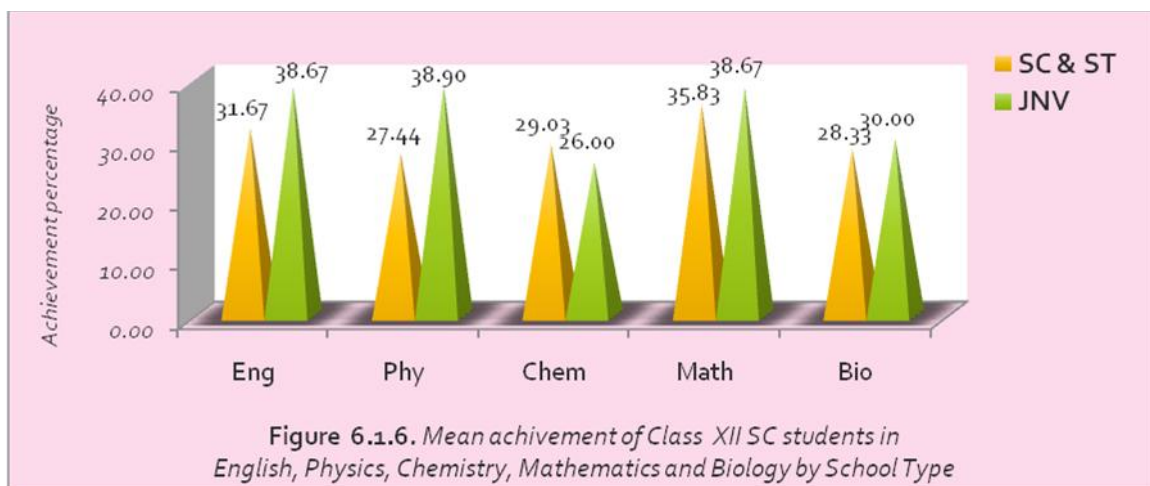
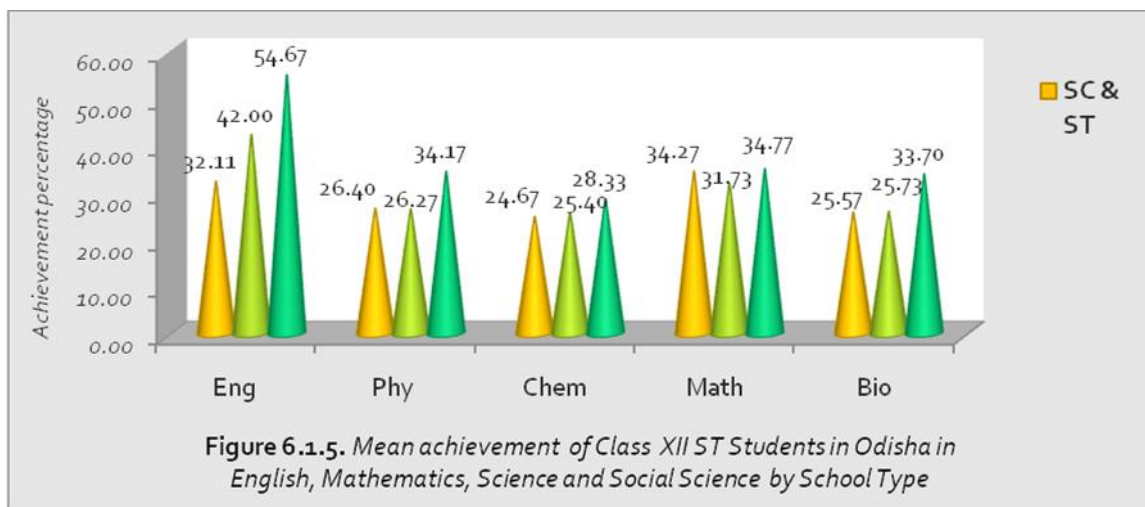


Table 6.1.9: t' values Showing Group Comparisons across School Types in respect of Achievement Level of Class XII ST Students in Different Subject Areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. ST & SC	12.60 9.65	85	3.84**	7.88 7.92	81	0.70	7.62 7.40	85	0.40	9.52 10.28	87	1.23	7.72 7.67	94	0.09
EMRS vs. JNV	12.60 16.40	59	2.51*	7.88 10.25	57	2.52*	7.62 8.50	58	0.87	9.52 10.43	56	0.76	7.72 10.11	68	1.92
ST & SC vs. JNV	9.65 16.40	44	4.53**	7.92 10.25	38	2.38*	7.40 8.50	41	1.03	10.28 10.43	43	0.12	7.67 10.11	42	1.95

; Significant at .05 level

:: Significant at .01 level

- * Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).
- * t-values revealed noticeable difference between ST students in EMRS and those in ST & SC schools only in English (Table 6.1.9; Figure 6.1.5). Even the ST students in JNV did not maintain their initial advantage over the ST students in ST & SC schools in three subject areas – Chemistry, Mathematics and Biology. Differences were significant only in English and Physics. The ST students in EMRS performed at par with ST students in JNV in Chemistry, Mathematics and Biology and fell short of them in English and Physics. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- * The trend was almost the same for SC and general students in JNV & ST & SC schools (Figure 6.1.6). The performance differences narrowed down with JNV maintaining a slight advantage in only English and Physics.

On an overall basis, it can be said that in respect of students' educational attainment in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.

In view of the fact, students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because

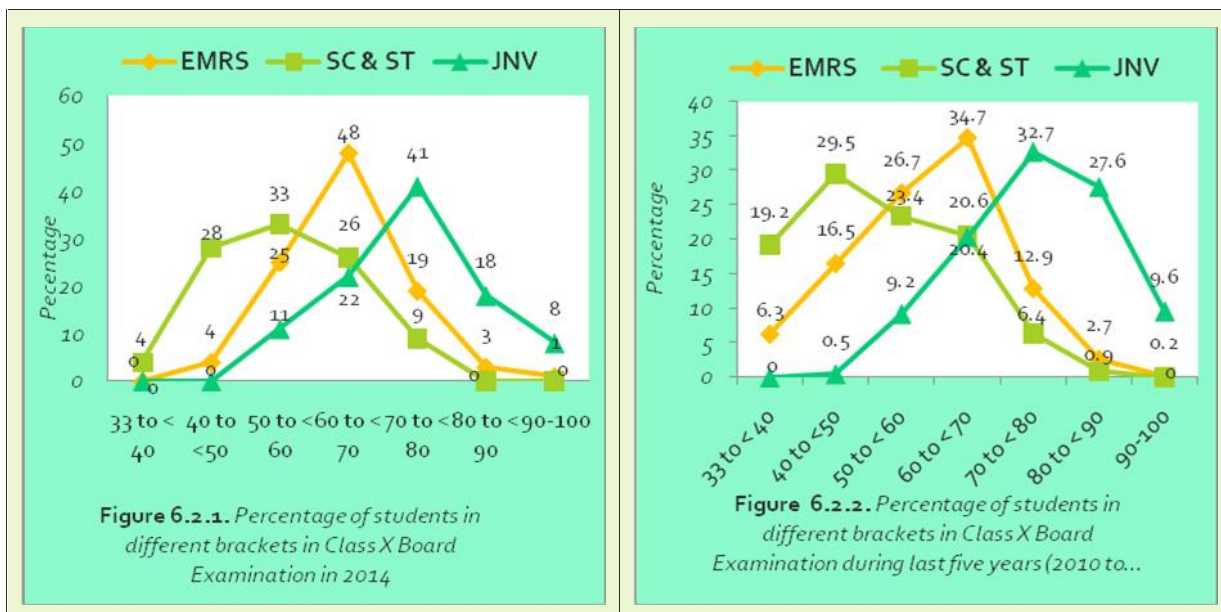
students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

6.2 Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type during the Last Five Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board Examination						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	114	112	98	10	31	26	23	09	01	---
	SC & ST	104	94	90	25	31	24	09	04	07	---
	JNV	39	39	100	---	---	8	26	33	28	05
2011	EMRS	114	111	97	15	23	30	20	11	1	---
	SC & ST	144	134	93	36	37	16	08	03	---	---
	JNV	38	38	100	---	---	03	22	42	26	07
2012	EMRS	112	111	99	08	20	27	31	12	02	---
	SC & ST	156	156	100	12	40	33	10	04	01	---
	JNV	41	41	100	---	---	10	12	32	29	17
2013	EMRS	120	120	100	---	06	24	48	15	07	---
	SC & ST	268	234	87	27	19	11	33	09	01	---
	JNV	41	41	100	---	02	15	22	17	34	10
2014	EMRS	120	120	100	---	04	25	48	19	03	01
	SC & ST	238	238	100	04	28	33	26	09	---	---
	JNV	37	37	100	---	---	11	22	41	18	08
TOTAL	EMRS	580	574	99	6.3	16.5	26.7	34.7	12.9	2.7	0.2
	SC & ST	910	856	94	19.2	29.5	23.4	20.6	6.4	0.9	---
	JNV	196	196	100	0.0	0.5	9.2	20.4	32.7	27.6	9.6



- * More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 90% of marks. 4% of ST & SC School students got less than 40% and none of them got above 80%. In JNV, none of the students got less than 50% and 8% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 70% to 80% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 40% to 50% for ST & SC schools, 50% to 60% for EMRS and 60% to 70% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- * During the last five years, none of the students of JNV, 6% of students of EMRS and 19% of the students of ST & SC schools scored below 40%, while 9% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.

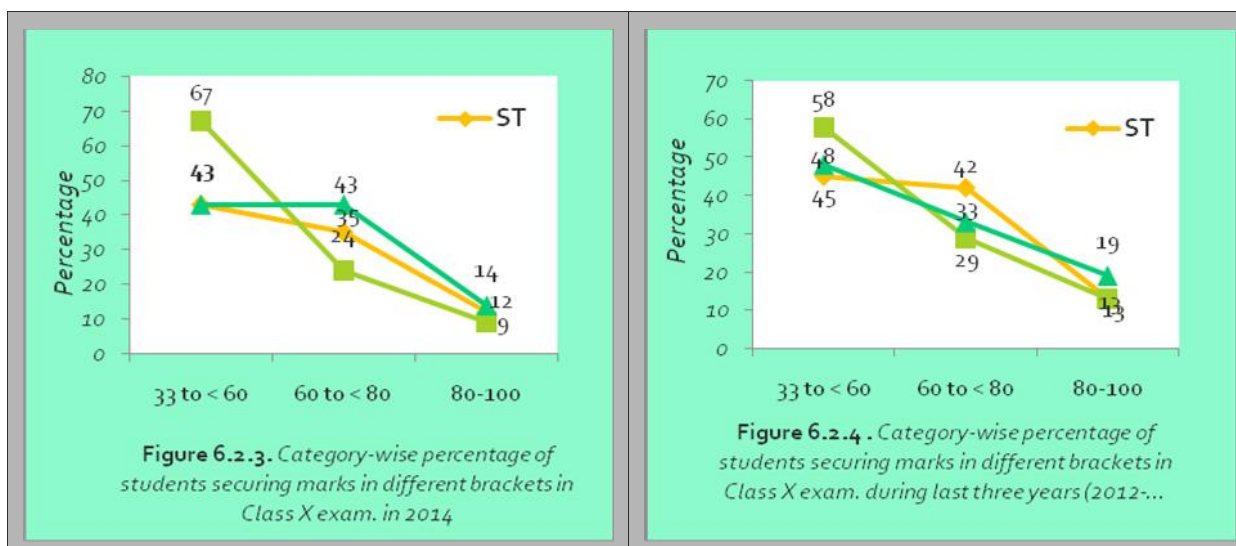
The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted in Figure 6.2.3 for the year 2014 and in Figure 6.2.4 for a period of three years from 2010 to 2014.

**Table 6.2.2: Category-wise Student Performance in Class X Board Examination
In the Sampled Schools during the Last Three Years (2012-2014)**

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board Examination		
					33-less than 60	60-less than 80	80-100
2012	ST	236	235	99.5	61	33	06
	SC	38	38	100	50	34	16
	General	35	35	100	40	26	34
2013	ST	323	306	95	34	55	11
	SC	56	46	82	57	30	13
	General	50	43	86	60	26	14
2014	ST	294	46	100	43	35	12
	SC	46	46	100	67	24	09
	General	56	56	100	43	43	14
Total	ST	853	835	98	45	42	13
	SC	140	130	93	58	29	13
	General	141	134	95	48	33	19



Students of EMRS, Hirli in Computer Class



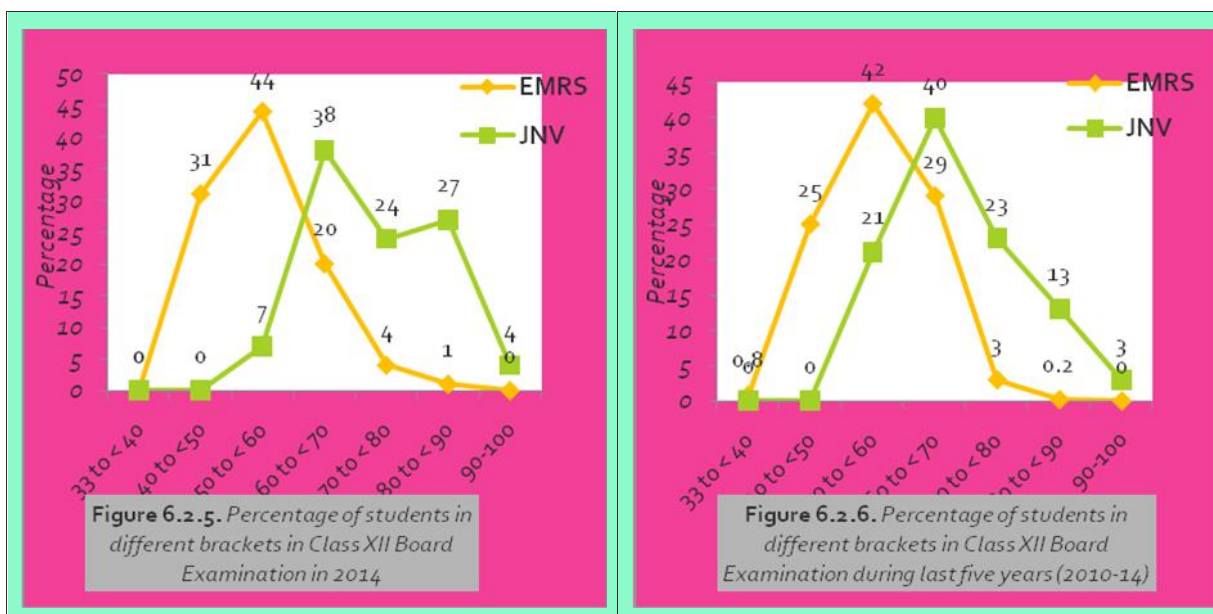
- * Analysis of performance of ST, SC and general students in all types of schools in Class X board examination in 2014 revealed that the SC and general students performed almost at an equal level and both groups performed better than ST students. The SC, ST and general students scoring above 80% were 14%, 9% and 12% respectively while 67% of SC students, 43% of ST students and 43% of general students scored below 60% (Figure 6.2.3).
- * The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014 (Figure 6.2.4).

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Figures 6.2.5 and 6.2.6 show students' performance trend for 2014 and for the five-year period from 2010 to 2015, respectively.

Table 6.2.3: Student Performance in Class XII Board Examination in relation to School Type during the Last Five Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class XII Board Examination						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	95	76	80	04	48	40	08	---	---	---
	JNV	27	23	85	---	---	22	57	13	08	---
2011	EMRS	83	72	87	---	19	53	28	---	---	---
	JNV	28	24	86	---	---	21	41	17	17	04
2012	EMRS	112	110	98	---	22	43	33	2	---	---
	JNV	28	27	93	---	---	33	33	26	08	---
2013	EMRS	115	114	99	01	09	32	51	07	---	---
	JNV	35	31	89	---	---	23	36	29	06	06
2014	EMRS	118	110	93	---	31	44	20	4	01	---
	JNV	29	29	100	---	---	07	38	24	27	04
TOTAL	EMRS	523	482	92	0.8	25	42	29	03	0.2	---
	JNV	147	134	92	---	---	21	40	23	13	03

Note. Class XII students in ST & SC schools will appear in the Board examination in 2015-16 for the first time.



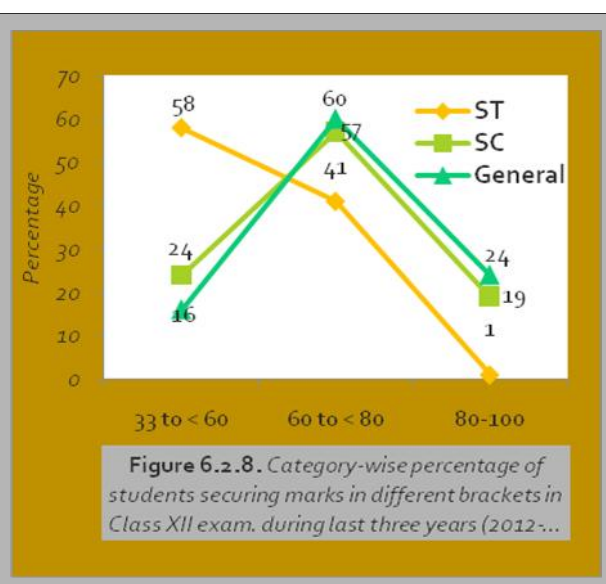
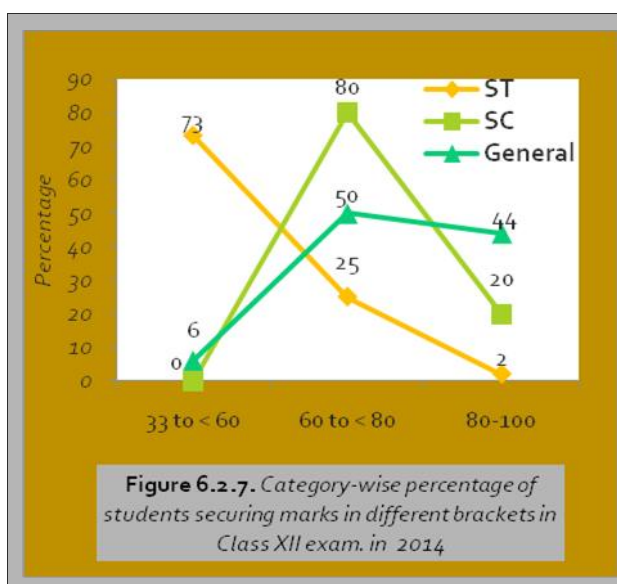
- * Maximum number of students scored in 50% to 60% bracket in EMRS and in 60% to 70% bracket in JNV in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 80%, 31% of JNV students scored above 80% of whom 4% scored above 90%. There was approximately 10% gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 50% to 60% bracket and maximum number of JNV students scored in the 60% to 70% bracket. None of the EMRS students scored below 40% and none of the JNV students scored below 60%, while less than 1% of EMRS students scored above 80% and 16% of JNV students scored above 80% of whom 3% scored above 90%. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 and are plotted in Figure 6.2.7 for the year 2014 and in Figure 6.2.8 for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Board Examination in the Sampled Schools during the Last Three Years (2012-2014)

Year	School Type	No appeared	No passed	% of pass	% of students securing marks in Class XII Board Examination		
					33-less than 60	60-less than 80	80-100
2012	ST	122	120	98	55	45	----
	SC	08	08	100	38	50	12-
	General	10	09	90	22	67	11
2013	ST	126	125	99	40	59	01

	SC	10	08	80	25	50	25
	General	14	12	86	25	67	12
2014	ST	126	118	94	73	25	02
	SC	05	05	100	---	80	20
	General	16	16	100	06	50	44
Total	ST	374	363	97	58	41	01
	SC	23	21	91	24	57	19
	General	40	37	93	16	60	24



- * In class XII Board examination in 2014, 6% of ST students across all types of schools scored below 60%, while 73% of SC students and none of the general students scored below 60%.
- * 20% of ST students, 2% of SC students and 44% of general students scored above 80%. Maximum number of ST and general students scored in 60% to 80% bracket, while maximum number of SC students scored in 33% to 66% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students (Figure 6.2.7).
- * Considering the Class XII Board examination results over the last three years (2012-14), the ST and general students performed at an equal level and both groups performed noticeably better than the SC students (Figure 6.2.8).

6.3 Student Participation in Co-curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of Boys and Girls Participating in Co-Curricular And Sports Activities by School Type

Activity	EMRS		SC & ST		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
<i>Co-Curricular activities</i>						
Drawing	07	09	03	10	58	73
Singing	16	21	---	02	09	32
Sewing/ Knitting	---	10	02	03	---	---
Dancing	48	43	03	03	24	81
Painting	05	05	05	07	68	65
Instrumental music	04	04	---	---	09	08
Debate/ Eloquence	09	09	05	07	83	87
Writing Skill	14	12	02	04	73	78
G.K. / Quiz	43	33	05	07	20	33
Drama	13	35	09	12	23	48
<i>Games and Sports</i>						
Football	28.	16	17	02	46	16
Volleyball	22	8	14	02	83	71
Basketball	---	---	---	---	46	40
Kho-Kho	23	23	---	04	95	95
Badminton	12	08	03	01	41	36
Kabbadi	21	18	18	10	90	73
Skipping	---	28	---	07	70	95
Athletics	53	43	05	07	14	14
Karate	17	17	---	---	---	32
Archery	01	02	---	03	---	---
Handball	12	22	---	---	---	---

- * It may be observed that more girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- * The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students

participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: Percentage of Students Participating in Social activities by School Type

	NCC	Scout	NSS	Shramdan	Social awareness campaign	Social service in villages
EMRS	09	08	07	93	06	06
ST & SC	---	03	---	83	---	---
JNV	---	04	13	100	25	20

- * 9% of EMRS students were in NCC, 8% in Scouts and 7% in NSS, while 3% of ST & SC students were in Scouts and NCC and NSS were not adopted in ST & SC schools. Among JNV students, 4% adopted Scouts and 13% were in NSS. *Shramdan* was carried in all types of schools with maximum student participation in the range of 80% to 100% (Table 6.3.2).
- * 6% of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV were 25% and 20% respectively. These activities were missing in ST & SC schools.

6.4 Performance in National Talent Search Tests

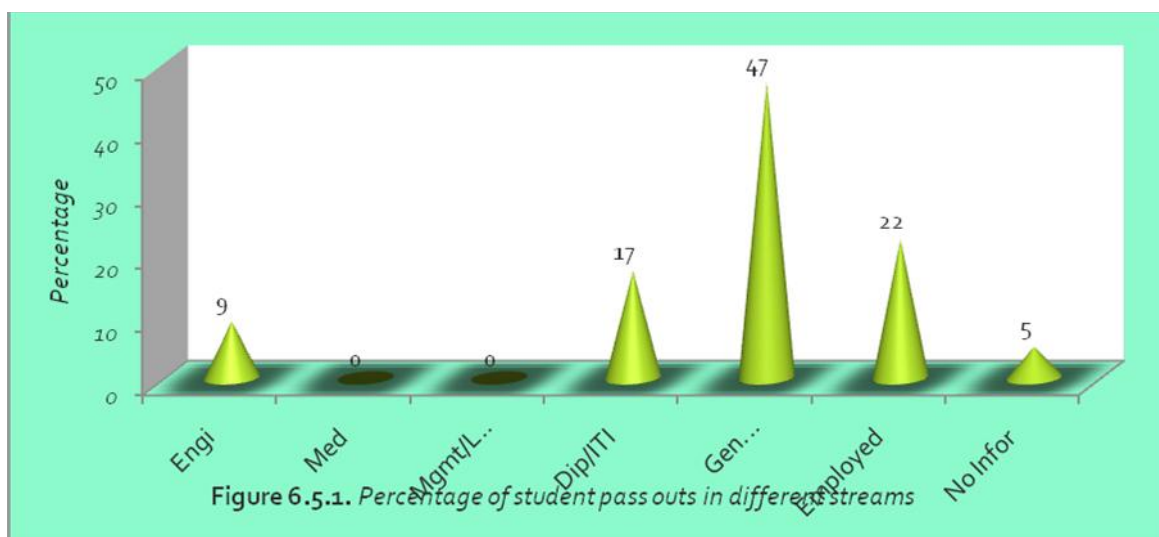
None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

6.5 Success Indicators of School Pass Outs

Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training. The data in respect of the pass outs from EMRS over the last three years (2012-14) are available in Table 6.5.1 which are plotted in Figure 6.5.1. The JNV did not keep any record of student pass outs, while the first batch of students in ST & SC schools are yet to appear in Class XII examination.

Table 6.5.1: School Pass-outs Admitted to Different Courses and taking up Employment

Year	No of pass outs	Engineering	Medical	Management/Law	Diploma/ITI	General courses	No taking up employment	Information not available (no.)	
EMRS	2012	08 (7%)	---	---	14 (13%)	55 (50%)	26 (24%)	07 (6%)	
	2013	08 (7%)	---	---	22 (19%)	57 (50%)	25 (22%)	02 (2%)	
	2014	14 (13%)	---	---	20 (18%)	46 (42%)	24 (22%)	06 (5%)	
Total	334	30 (9%)	---	---	56 (17%)	158 (47%)	75 (22%)	15 (5%)	
SC & ST	The higher-secondary schools in two sampled ST & SC schools started functioning recently								
JNV	Information was not available as record of student pass outs were not maintained								



- * Over the last three years, 47% of EMRS students took up general courses in the arts, science and commerce streams in general colleges, while 9% went for Bachelor level courses in Engineering and 17% went for Diploma / ITI courses. 22% of pass outs took up employment; many of them were working as teachers in primary schools.
- * None of the student pass outs went for medical or management or law courses. Information was not available in respect of 5% of pass outs.
- * That 95% of student pass outs (56% in Bachelor level general or technical courses, 22% in employment and 17% in diploma courses) progressed in their life in some way or the other reveals positive indications concerning the EMRS programme. But student preparation in EMRS to take up more valued professional courses such as medical or management was not satisfactory.

Chapter 7

SCHOOL-COMMUNITY LINKAGE

For the community to own the school and strengthen it with support, monitoring and supervision, it is important to establish a strong school-community link to be primarily initiated by the school. Children’s knowledge is situated in the local culture and therefore, community knowledge should be brought into schools by initiating community participation in schools’ curricular and co-curricular programmes. According to NCF, 2005 school learning must be connected with real-life life knowledge. Furthermore, school as a learning center must also impact the awareness level of the community and engage in making substantial contributions to community welfare. Since school-community linkage is of paramount importance as a sustainability measure for grassroots-level educational intervention, we assessed the level of interaction between the school and the community on some major parameters, the findings in respect of which are presented in this chapter.

7.1 Functioning of SMC and Other School Committees

The involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Table 7.1.1 lists out the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA Participation in School Activities

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
<i>SMC participation</i>			
Regular meeting of SMC	Infrequent	Infrequent	Infrequent
Implementing resolutions of SMC	Average	Average	Average
Involvement in developing SDP	Very Poor	Very Poor	Very Poor
Monitoring student attendance and drop out	Not at all	Not at all	Not at all
Monitoring student progress	Not at all	Not at all	Not at all
Participation in school’s co-curricular activities	Below Average	Poor	Below Average
Participation in preparing TLMs	Not at all	Not at all	Not at all
Supervising hostels	Poor	Poor	Poor
Supervising quality of meals	Poor	Poor	Poor
Monitoring utilization of funds	Not at all	Not at all	Not at all
Liaisoning with other agencies for school development	Not at all	Not at all	Not at all
<i>MTA participation</i>			
Regular meeting of MTA	Very Poor	Very Poor	Very Poor

Monitoring student attendance and drop out	Not at all	Not at all	Not at all
Participation in school's co-curricular activities	Poor	Poor	Poor
Working for the safety of girls	Not at all	Not at all	Not at all
Monitoring Meena cabinet and Meena Manch	Not at all	Not at all	Not at all
Coordinating with SHG for catering to girls' hygienic requirements	Not at all	Not at all	Not at all

- * The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- * SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals, monitoring utilization of funds or in establishing coordination with other agencies. Their participation in preparing TLMs was non-existent and in co-curricular activities, very poor.
- * The MTA meetings were very infrequent and were also held as a matter of formality. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff.

7.2 Teachers' Interaction with Community

Table 7.2.1 reveals how teaching staff treat and interact with community members.

Table 7.2.1 : Teachers' Interaction with Parents and Community Members

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Dealing with community members when they visit school	Good	Good	Good
Personal contact with community members	Below Average	Below Average	Below Average
Sharing of students' results with parents	Average	Average	Average
Influencing the community cognitive behavior	Poor	Poor	Poor

- * The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level,

belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

MONITORING AND SUPERVISION

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Following programme implementation at the grassroots-level, several contextual parameters would provide learning experiences for changing its nature and make it more suitable to adapt to field-realities. If properly monitored, lessons would be learnt to keep the stakeholders focused on programme objectives and to assess the nature of support required to strengthen the programme. The monitoring of the school and its activities can be done by educational authorities and community members. This chapter presents the frequency and nature of monitoring of the schools by important stakeholders.

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Table 7.3.1 reports frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of Monitoring and Supervision of the School and the Hostel by Educational Administrators and Community members during the 2014-15

Supervision	School			Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
By educational administrators	13	12	04	13	14	04	13	04	13
By community members	0	0	0	0	0	0	0	0	0

- * During a span of one year, educational administrators (mostly District Social Welfare Officers) visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- * The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 and 7.4.2 provide information on class visits and hostel visits by the principals.

Table 7.4.1: Frequency of Class Visits by the Principal

<i>Supervision</i>	<i>Month</i>	<i>EMRS</i> <i>(N of teachers = 31)</i>	<i>SC & ST</i> <i>(N of teachers = 20)</i>	<i>JNV</i> <i>(N of teachers = 18)</i>
Frequency of class visits	<i>Aug, 2014</i>	10	08	05
	<i>Sep, 2014</i>	13	08	06
	<i>Jan, 2015</i>	07	08	04
	<i>Feb, 2015</i>	11	08	07
No. of teachers whose classes have been visited	<i>Aug, 2014</i>	15	08	11
	<i>Sep, 2014</i>	12	07	10
	<i>Jan, 2015</i>	16	06	12
	<i>Feb, 2015</i>	14	08	13
No. of teachers whose classes have not been visited	<i>Aug, 2014</i>	16	12	07
	<i>Sep, 2014</i>	18	13	08
	<i>Jan, 2015</i>	15	14	06
	<i>Feb, 2015</i>	17	12	05

Table 7.4.2: Frequency of Hostel Visits by the Principal

<i>Month</i>	<i>Boys' Hostel</i>			<i>Girls' Hostel</i>		
	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
<i>Aug, 2014</i>	08	09	03	08	09	02
<i>Sep, 2014</i>	08	07	04	08	07	02
<i>Jan, 2015</i>	08	10	03	08	10	03
<i>Feb, 2015</i>	08	08	04	08	08	03

- * Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 15-17 teachers. The number of class visits in ST & SC schools and JNV was comparatively less.
- * The principals in EMRS visited boys' and girls' hostels about twice a week. The same was also true for ST & SC schools. The frequency of hostel visits by the principal of JNV was comparatively less and on enquiry it was known that superintendents were doing their jobs with the principal being informed almost on a regular basis.
- * The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

The feedback and suggestions of important stakeholders regarding a programme are important for evaluating the effectiveness of an intervention. Besides the outcome indicators such as educational attainment and progress of students in a school system, stakeholders' perception of the school's functioning provides indications regarding the strengths and deficiencies of newly implemented intervention and measures for strengthening it. We have obtained, through interview, the feedback and suggestion of important stakeholders such as the teaching and non-teaching staff, students, educational administrators and community members which are narrated in this chapter.

8.1 Teachers' Perception and Feedback

Thirteen teachers of EMRS, 12 teachers of ST & SC schools and 6 teachers of JNV were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on hostel and toilet cleanliness, activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counseling services for students, capacity building of teaching and non-teaching staff. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counseling students and maintaining record of success rate of school pass outs.

Table 8.1.1: Modal Responses of Teachers on Important School Functioning Parameters Obtained through Interview

	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Satisfactory (need to be maintained)	<ul style="list-style-type: none"> * Course completion as per syllabus * Regular correction of students' work * Remedial coaching * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Using summative evaluations * Home assignments and projects to students * Gender and social equity in school and hostels * Dealing with student health problems 	<ul style="list-style-type: none"> * Course completion as per syllabus * Correction of students' work * Using summative evaluations * Home assignments to students * Gender and social equity in school and hostels * Dealing with student health problems 	<ul style="list-style-type: none"> * Course completion as per syllabus * Regular correction of students' work and remedial coaching * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Home assignments and projects to students and using summative evaluations * Gender and social equity in school and hostels * Dealing with student health problems * Learning atmosphere in hostels * Sharing student progress with parents * Teachers preparing lesson plan and diary * Effective use of labs and use of library by students * Yoga and classes on art and aesthetics * Security and safety of boarders * Infrastructure facilities for boarders * Quality and safety of drinking water
Average (need to be strengthened)	<ul style="list-style-type: none"> * Teachers preparing lesson plan and diary * Activity-based teaching and use of TLMs * Effective use of labs * Use of library by students * Yoga and classes on art and aesthetics * Sharing student progress with parents 	<ul style="list-style-type: none"> * Teachers preparing lesson plan and diary * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Security and safety of boarders * Preparing students to contribute to family well 	<ul style="list-style-type: none"> * Activity-based teaching and use of TLMs * Using e-content in SMART classes * Using formative evaluations as per CCE * Toilet cleanliness and use * Quality of food in hostels * Organizing activities like gardening, plantation etc.

	<ul style="list-style-type: none"> * Coaching for professional courses * Infrastructure facilities for boarders * Learning atmosphere in hostels * Quality and safety of drinking water * Quality of food in hostels * Security and safety of boarders * Preparing students to contribute to family well being 	being	<ul style="list-style-type: none"> * Organizing social service camps * Environmental cleanliness in hostels * Sharing written progress card of students with parents * Coaching for professional courses * Preparing students to contribute to family well being * Capacity building of teaching and non-teaching staff
Unsatisfactory (need substantial improvement)	<ul style="list-style-type: none"> * Environmental cleanliness in hostels * Toilet cleanliness and use * Maintaining cumulative progress report of students and student profile * Using CCE and planning remedial coaching * Sharing written progress card of students with parents * TLM corner in classes and students using TLMs * Using e-content in SMART classes * Using formative evaluations as per CCE * Assessing students in co-curricular activities * Assessing socio-personal qualities * Using self-, peer- and group-assessment * Assessing students' talent in specific areas * Innovative teaching-learning activities * Organizing activities like gardening, plantation, woodwork, tailoring etc. * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Organizing social service camps 	<ul style="list-style-type: none"> * Activity-based teaching and use of TLMs * Effective use of labs * Use of library by students * Yoga and classes on art and aesthetics * Coaching for professional courses * Teachers preparing lesson plan and diary * Maintaining cumulative progress report of students and student profile * Sharing written progress card of students with parents * TLM corner in classes and students using TLMs * Using formative evaluations as per CCE * Assessing students in co-curricular activities * Assessing socio-personal qualities * Using self-, peer- and group-assessment * Assessing students' talent in specific areas * Innovative teaching-learning activities * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Organizing social service camps 	<ul style="list-style-type: none"> * Maintaining cumulative progress report of students and student profile * Using CCE for planning remedial coaching * TLM corner in classes and students using TLMs * Assessing students in co-curricular activities as per CCE * Assessing socio-personal qualities * Using self-, peer- and group-assessment * Assessing students' talent in specific areas * Innovative teaching-learning activities * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Maintaining linkage with community and inviting community participation * Drainage system in hostels * Keeping record of academic/professional career of pass outs

	<ul style="list-style-type: none"> * Maintaining linkage with community and inviting community participation * Capacity building of teaching and non-teaching staff * Keeping record of academic/professional career of pass outs 	<ul style="list-style-type: none"> * Infrastructure facilities for boarders * Environmental cleanliness in hostels * Learning atmosphere in hostels * Quality of food in hostels * Quality and safety of drinking water * Toilet cleanliness and use * Maintaining linkage with community and inviting community participation * Capacity building of teaching and non-teaching staff * Keeping record of academic/professional career of pass outs 	
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Academic Block, EMRS Hirli -A Frontal View

8.2 Perception and Feedback of Non-teaching Staff

The modal responses obtained from the non-teaching staff through interview pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: Modal responses of Non-Teachers Obtained through Interview

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Suitable conditions for performing duties	S	S	HS
Involvement in co-curricular activities	A	A	A
Relation with principals and teachers	A	S	S
Relation with students	S	S	S
Relation with parents/ community members	A	S	A
Receiving capacity building training	HU	HU	S

The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Their relationship with students, teachers and community was better in ST & SC schools than in EMRSs. They were unhappy that attempts were not taken to provide capacity building training to the non-teaching staff in EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.

The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

The service conditions and benefits of staff are critical issues for employee motivation. Tables 8.3.1 and 8.3.2 present the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with

their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

Table 8.3.1: Modal Responses of Teachers to Staff Service Conditions and Benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	Bhawanipur	Hirli	Balisankara	Raighar	Khatiguda
Salary/remuneration to the teaching staff	U	U	S	S	S
Salary/remuneration to the non-teaching staff	U	U	A	A	S
Service conditions of teachers	HU	U	A	A	S
Service conditions of non-teachers	U	U	A	A	S
Prospect for promotion	U	HU	A	U	S
Incentive plan for teachers	U	U	U	U	HS
Quarters inside campus	U	U	HU	HU	S
Incentive plan for non-teachers	U	U	U	U	A
Incentive plan for students	S	S	S	S	HS

Table 8.3.2: Modal Responses of Non-Teaching Staff to Staff Service Conditions and Benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	Bhawanipur	Hirli	Balisankara	Raighar	Khatiguda
Salary/remuneration to the non-teaching staff	U	HU	S	S	S
Service conditions of non-teaching staff	U	HU	S	S	S
Prospect for promotion	U	HU	S	S	S
Quarters inside campus	HU	S	HU	U	HS
Incentive plan for non-teachers	HU	HU	HU	HU	A

8.4 Students' Perception and Feedback

Students are the central characters in any teaching-learning environment. Their perception and feedback are important for developing school practices because all infrastructure and educational inputs and throughputs are meant for them. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment

Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health checkup facilities and hostel accommodation. Students in ST & SC schools also experienced the same deficiencies. It was astonishing to note that students were not provided with mosquito nets in spite of the fact their environment was more unhygienic. JNV fared much better in most of these parameters.

Table 8.4.1: Percentage of Students Responding Positively to the Following School and Hostel Parameters Obtained through Interview

<i>Parameter</i>	<i>EMRS (N = 22)</i>	<i>SC & ST (N = 20)</i>	<i>JNV (N = 10)</i>
<i>School and Hostel environment</i>			
Like the school	100 %	95 %	100 %
Conducive hostel infrastructure and accommodation	68 %	45 %	95 %
Classroom and lab furniture adequate	90 %	85 %	100 %
Lab furniture adequate	55 %	35 %	90 %
Good quality food	60 %	35 %	95 %
Good drinking water	82 %	80 %	95 %
Health checkup facilities available	40 %	20 %	85 %
Hostel environment is clean	64 %	25 %	95 %
Toilets and bathrooms are clean	32 %	20 %	90 %
Mosquito net provided	100 %	10 %	100 %
<i>Curricular and Co-curricular activities</i>			
Teachers are supportive of students	96 %	95 %	100 %
Adequate supply of textbooks	100 %	80 %	100 %
Adequate supply of learning materials	36 %	20 %	90 %
Quality of teaching	72 %	70 %	90 %
Activity-based teaching done and TLMs used	23 %	20 %	55 %
Home assignments given	96 %	40 %	100 %
Projects given	45 %	10 %	95 %
Student work corrected regularly	55 %	40 %	80 %
Regular supervised study and remedial classes	72 %	10 %	85 %
Laboratories effectively used	86 %	15 %	90 %

Allowed to ask questions freely	91 %	90 %	90 %
Co-curricular activities promoted	91 %	50 %	95 %
Scope for games and sports	82 %	45 %	80 %
Participation at district and state level encouraged	91 %	75 %	90 %
<i>Student participation</i>			
Student suggestions are solicited in school functioning	23 %	10 %	15 %
Student participate in mess management	45 %	40 %	70 %

Curricular and Co-curricular activities

Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.

Student participation

In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however, some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs

The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers.

There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues.

Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participated in debates and drawing competitions at different levels but most of the cultural and co-curricular activities were done at the behest of the teachers with students taking very little initiative. Teachers were cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools.

Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving 40 students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers.

Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving 14 students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings.

On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Only one PRI member was available for interview in the JNV who did not enough knowledge to respond truthfully to the interview questions. His responses were very general and were based on guesses than on direct experiences. Hence his response protocol is not analyzed here further.

Table 8.5.1: Modal responses of Community Members on Facilities Extended to Children and Their Interaction with School Staff

<i>Parameter</i>	<i>EMRS (N = 11)</i>	<i>SC & ST (N = 10)</i>
<i>Facilities for children</i>		
Cleanliness of school environment	Yes	No
Cleanliness of hostel rooms and environment	No	No
Safety and security of hostels	No	No
Supply of free textbooks	Yes	Yes
Textbooks given before academic session	No	No
Children helped to solve academic problems	Yes	No
Children's results shared with parents	Yes	No
Children prepared to face competitive examinations	No	No
Quality of meals reasonably good	Yes	No
Cultural activities involving children	Yes	No
Opportunities for games and sports	Yes	No
Children's health problems duly attended	Yes	Yes
Non-discriminatory treatment to students	Yes	Yes
<i>Interaction with school and staff</i>		
Members' grievances properly received by staff	Yes	No
Teachers behave well with members	Yes	Yes
Member associated with school planning	No	No
Community contributes to school development	No	No

8.6 Views of Educational Administrators

Views of the Additional District Magistrate (ADM) and the Project Administrator (PA), ITDA, Nawarangpur and that of the Project Administrator, ITDA, and Sundargarh were available in respect of EMRSs at Hirli and Bhawanipur and ST & SC schools at Balisankara and Raigarh. They

expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

8.7 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 8.7.1 for feedback from each category of stakeholders).

Programme strengths (need to be maintained). Good school and hostel infrastructure; Residential facilities for students; Favorable PTR; Supply of free textbooks and uniforms and learning materials; Scope for games, sports and co-curricular activities; Engagement of qualified staff; Special attention and coaching to students; Gender and Social equity.

Concerns (need special attention). Poor salary and service conditions of the staff; Poor hostel maintenance and cleanliness; Water, power and toilet problems; Poor community involvement in school activities; Lack of regular health worker; Teacher-directed rather than student-initiated activities; Poor attention to build capacities of teachers

Suggestions (need to be implemented). Regular employment, proper salary and service conditions of staff; Solving water and power crises; Regular maintenance of hostel building and proper drainage system; Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit; Special measures for improving students' language proficiency; Capacity building of teaching and non-teaching staff; Student involvement in school practices and mess management; Strengthening school-community link.



Students in the Prayer Class, EMRS Bhawanipur

Table 8.7.1: Strengths and Difficulties of EMRS Programme Pointed out by Stakeholders and Their Suggestions for Strengthening EMRS

<i>Stakeholder</i>	<i>Strengths</i>	<i>Difficulties</i>	<i>Suggestions</i>
Principal	<ul style="list-style-type: none"> * Remedial and supervised study * Opportunity for students to participate in district level events * Spreading education with focus on the tribal community * Special coaching to students for entry into professional courses 	<ul style="list-style-type: none"> * Inadequate salary for the teachers and non-teachers * Vacant faculty positions * Contractual teacher engagement * Lack of transparent transfer policy * Water crisis during summer months * Erratic power supply, frequent load shedding * Lack of ANM leading to improper health care of students 	<ul style="list-style-type: none"> * Filling up vacancy positions * Regular faculty employment with proper scale of pay and proper service condition * Transferring the old teachers * Orientation and regular capacity building training to teachers * Orienting teachers to implement CCE * Installation of overhead water tank and measures to solve water crisis * More community involvement in school development activities
Teachers	<ul style="list-style-type: none"> * Coaching to students for medical and engineering and for Math Olympiad * Regular literary and sports activities and competitions * Residential facilities for students and for some staff * Emphasis on co-curricular activities * Remedial coaching for weak students * Student discipline and respect for teachers * Almost 100% students passing terminal examinations * Students learning to live together and share 	<ul style="list-style-type: none"> * Weak remuneration and incentive plan for teachers * Inadequate lab equipments * Inadequate teaching-learning materials * Higher per-teacher workload because of teacher vacancy * Student difficulty pertaining to English language instruction at entry point in Class VI * Poor hostel maintenance and inadequate staff quarters * Vacancy created by teachers leaving the job because of poor service condition and poor remuneration * Insufficient SMART class facility 	<ul style="list-style-type: none"> * Regular employment for teaching and non-teaching staff with proper scale of pay and service condition * Granting for funds for TLMs * Regular SMC meeting and more community involvement * Yoga, music and art teaching be paid serious attention * Training teachers to implement CCE * Strengthening library and more reference books for students * Staff-nurse/ health worker needed * Bridge course to fresh Class VI students on English language * Raising boundary wall in girls' hostels for their safety and security
Hostel Superintendent	<ul style="list-style-type: none"> * Students learn good health and hygiene habits * NSS, NCC and Scout guide programmes and activities 	<ul style="list-style-type: none"> * Water crisis in hostels particularly during summer months * Safety and security problems for girls * No night watchman/security guards in hostels * Frequent power cuts affecting with students' study * No vehicle to meet emergency health problems of inmates 	<ul style="list-style-type: none"> * Separate boundaries for girls' hostels * Engagement of ANM for hostels * Installation of overhead water tank and measures to solve water crisis * Orientation training to hostel staff on their roles and responsibilities * Regular maintenance of hostel buildings * Adequate furniture to hostel students for study * Vehicle for meeting emergency health problems of inmates
Students	<ul style="list-style-type: none"> * Likable school and hostel environment * Games and sports activities for students 	<ul style="list-style-type: none"> * Leaking hostel roof and broken window glass 	<ul style="list-style-type: none"> * Hostel building and toilets to be properly maintained with adequate light and fan points

	<ul style="list-style-type: none"> * Provision of textbooks for students * Cooperative teachers 	<ul style="list-style-type: none"> * Poorly maintained and damaged toilets and poor drainage system * Insufficient water for bathing, cleaning and drinking * Poor quality food * Inadequate fans and light points * No activity based learning and infrequent yoga classes * No student participation in hostel and mess management * Student feedback and suggestions not solicited * No parent consultations on school and hostel issues * School laboratories not fully functional * No counselling to students to deal with personal and interpersonal problems * No large and proper play ground * Library services are not good * No study tours and excursions * Mild punishment given to discipline students 	<ul style="list-style-type: none"> * Water problem to be solved * Student participation in hostel and mess management * Counselling services to students * More teacher-parent interactions to deal with student issues * Study tours, Excursions and science exhibitions to be organized * Aqua-guard/Water purifier in hostels * Written progress reports to be given to students * English language laboratory to improve students language proficiency * Different fields for different types of sports
Community Members	<ul style="list-style-type: none"> * SMC and PTA constituted and members told about their roles and responsibilities * Free textbooks and uniforms to children * Good school environment * No student discrimination * Teacher-community interaction relatively good * Parental concerns attended by the school * Feeling good about having a school in their community * Parent/community members' grievances heard * Children's health problems attended by teachers 	<ul style="list-style-type: none"> * Water and toilet problems in hostels * Poor community awareness of SMC functioning and school activities * Poor community contribution to school * Irregular staff attendance * Weak supervision and monitoring by authorities * Teachers leaving the school because of poor service condition * No guest room for parents coming from a distance to stay overnight 	<ul style="list-style-type: none"> * More academic help by teachers to students * More community participation in school activities * Quality teaching staff required * Regularization of the school staff * Raising hostel compound particularly for girls * Creating provision of coaching for professional courses by reputed institutes * Water and power problem requires serious attention * Written progress report of children to be shared with parents * Regular health check-up and health and security staff for hostels * Filling up vacant staff positions * Training to CCA for maintaining hygienic standards * Spoken English classes for students * Connecting the school to highways by proper road
Educational Administrators	<ul style="list-style-type: none"> * Offering a good educational opportunity to the tribal community 	<ul style="list-style-type: none"> * Constraints of fund to address all important requirements 	<ul style="list-style-type: none"> * Staff regularization is evident * Focusing on teacher-parent meetings to foster community

	<ul style="list-style-type: none"> * Educationally qualified staff * Provision of relatively good infrastructure * Residential facilities for students 	<ul style="list-style-type: none"> * Poor staff initiative to connect school to the community * Water, power and toilet problems * Kitchen condition and food quality 	<p>linkage</p> <ul style="list-style-type: none"> * Water and power problem to be attended * Buildings and toilets to be repaired * Capacity building training for teachers * Improving food quality
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Students in Evening Prayer, EMRS Bhawanipur

Chapter 9

SUMMARY FINDINGS AND OBSERVATIONS

9.1 School and Hostel Infrastructure Facilities

- Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. All the buildings provided safe habitations for students except that the EMRS and ST & SC schools required regular maintenance and white washing. The EMRS and ST & SC schools did not fare well on hygienic parameters.
- The EMRS had library facilities but no adequate reading room. The conditions of labs, library and reading rooms were better in EMRS and JNV as compared to that of ST & SC schools. On most of the important infrastructure parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.
- Regrettably, water scarcity was a major problem in one of the EMRS and one the ST & SC schools. Furthermore, drinking water safety was a major concern in ST & SC schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.
- All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required. Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.
- Each school had entrance gate, boundary wall but due attention was not paid to raising and maintaining gardens and kitchen gardens, the primary reason for which was water scarcity. The water problem can be largely compensated by proper water harvesting measures on which the school authorities had not been trained.
- Power supply was a major concern in one EMRS and two ST & SC schools. On an average, power failure was reported for about 4-5 hours in EMRS and for about 10-12 hours in ST & SC schools. In case of power cuts, power supply was done through generators owned by the school except in ST & SC schools because the generator was non-functional in one ST & SC School and not available in the other. While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.
- Nearly 100% of students in EMRS and JNV stayed in hostels while about 30% of students in ST & SC schools did not stay in hostels. For those who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor as many of them were sleeping on the floor or sharing beds with others in rooms without proper light and ventilation and in many instances not having fans. Many rooms had leaking roofs, and accommodation hardly met safety and child-friendly parameters. The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.
- All schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring

and supervision of hostels. Since a few teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.

- Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. The toilet condition and cleanliness was poor in ST & SC hostels, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.
- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- Solar lanterns were provided to all EMRS and ST & SC schools which were inadequate. The furniture supply in hostels was inadequate. In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.
- On an average, EMRS could spend only 70% to 80% of the funds allocated during 2014-15 against nearly 100% spending by JNV and spending in the range of 80% to 85% by ST & SC schools. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

9.2 Staff Profile and Service Condition

- Twenty-percent of the teaching and 10% of the non-teaching positions were lying vacant in EMRS compared to 33% and 10% in ST & SC schools and 12% and 6% in JNV.
- The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools, which was about 2 to 3 times of the state norm. The PTRs in EMRS and JNV were good and were as per state norm.
- There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities.
- About 24% of teachers in EMRS, 70% in ST & SC schools and 6% in JNV were not trained. Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience. Teachers in EMRS and teachers in ST & SC schools and JNV in contractual employment were in the habit of leaving their respective schools when better employment opportunities were available.
- All the non-teachers in EMRS and ST & SC schools and more than half of non-teachers in JNV did not receive any formal training as required in their respective jobs. Nearly 50% of non-teaching staff had less than 5 years of experience on the job.
- Astonishingly and regrettably, there was no service condition for EMRS teaching and non-teaching staff. All the teaching staff in EMRS and 60% in ST & SC schools were employed on contractual basis and 28% of teachers in JNV were employed on daily-wages.
- There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV respectively receiving about 1.5 times and twice of the

emoluments given to principals of EMRS. The teachers of ST & SC schools and JNV across all levels also received 1.5 times and twice of the gross monthly emoluments of teachers in EMRS, respectively. These noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff.

- Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality processes and outcomes.
- Capacity building training was given to teachers of EMRS for content knowledge enrichment and teaching practices but the duration was not adequate. The ST & SC school teachers received training as per Government's schedule. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.
- The non-teaching staff of EMRS and ST & SC schools received hardly any training. The clerks and CCA had not been trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostels was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.
- The EMRS vision is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

9.3 Student Enrolment and Retention

- The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 23% for EMRS, 13.8% for ST & SC schools and 6.4% for JNV. The demand for admission to all types of schools increased over the years.
- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 11.2, 48.9 and 2.9 for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- Percentages of increase in applications for entry at Class XI in 2014-15 were 13.3% for EMRS, 43.1% for ST & SC schools and 43.1% for JNV. Students seeking admission in different types of schools increased. While 19.4% of those seeking admission to Class XI in EMRS were admitted, 21.8% were admitted in ST & SC schools and 39.7% were admitted in JNV.
- The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 12 to 14 sq. ft., while that in ST & SC schools was 6-7 sq. ft. and in JNV about 20-21 sq. ft. Average number of students per classroom was approximately 30-35 in EMRS and JNV, and 60-65 in ST & SC schools.
- Student attendance in all types of schools was satisfactory. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 100% in EMRS, 92%

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in ST & SC schools and 100% in JNV. The percentage in ST & SC schools fell short of 100% because some students shifted to other schools or dropped out of the system. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 96% in EMRS, 95% in ST & SC schools and 100% for JNV.

- Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15. The information in respect of students staying out of the school system was not available with the school authorities.

9.4 School and Hostel Educational Climate

- The school campus and classrooms appeared to be clean in all types of schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools.
- While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.
- In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.
- While 96.5% of the required number of textbooks was distributed in EMRS, JNV registered a figure of 100% distribution of textbooks. The distribution of textbooks in ST & SC schools was not satisfactory as only 63.5% of students' textbook requirement was met.
- The status of EMRS did not turn out to be satisfactory in respect of preparation of lesson plan, activity-based teaching, group-based learning, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools in respect of these school-related activities. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor.
- Mostly TLMs and TLEs which were purchased by the teachers; they were not purchased with a proper plan to cater to students' need and course requirements and were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.
- Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS. The ST & SC schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.
- Adoption of CCE along most of parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating

scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.

- Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students. In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying student talents.
- Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.
- In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box, wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.
- The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.
- On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

9.5 Students' Educational Attainment

- In all the four subjects (English, Mathematics, Science and Social Science), Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- The performance of students from all the three types of schools was not in the satisfactory range. Class VIII students in ST & SC schools scored in the range of only 25% to 35% across four subject areas, while those in EMRS scored in the range of 30% to 40%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 40% to 54% across the four subject areas.
- The ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in English language attainment. The ST students in ST & SC schools performed in the range of 25% to 33% while their performance in EMRS was within 30% to 41% and in JNV in the range of 45% to 60%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- The performance of Class X students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 27% to 41%, while those in EMRS showed attainment in the range of 33% to 64%. The students in JNV performed in the range of 57% to 71%.

- Class X ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools. It was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant
- Though Class XII students in JNV were better than their grade-mates in EMRS and ST & SC schools, the performance gap between students of ST & SC schools, EMRS and JNV narrowed down though JNV students performed better than others.
- The performance level of Class XII students of ST & SC schools was poorer in all subjects – English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 57%. Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.
- On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average. In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.
- In Class X Board examination, more percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 90% of marks. 4% of ST & SC School students got less than 40% and none of them got above 80%. In JNV none of the students got less than 50% and 8% of students got above 90%.
- The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 70% to 80% bracket.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 40% to 50% for ST & SC schools, 50% to 60% for EMRS and 60% to 70% for JNV. The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- During the last five years, none of the students of JNV, 6% of students of EMRS and 19% of the students of ST & SC schools scored below 40%, while 9% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.
- The SC and general students performed almost at an equal level and both groups performed better than ST students. The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.
- In Class XII Board examinations in 2014, maximum number of students scored in 50% to 60% bracket in EMRS and in 60% to 70% bracket in JNV. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 80% and 31% of JNV students scored above 80% of whom 4% scored above 90%. There was

approximately 10% gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.

- The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 50% to 60% bracket and maximum number of JNV students scored in the 60% to 70% bracket. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.
- In class XII Board examination in 2014, maximum number of ST and general students scored in 60% to 80% bracket, while maximum number of SC students scored in 33% to 66% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.
- Over the last three years, 47% of EMRS students took up general courses in the arts, science and commerce streams in general colleges, while 9% went for Bachelor level courses in Engineering and 17% went for Diploma / ITI courses. 22% of pass outs took up employment; many of them were working as teachers in primary schools.
- None of the student pass outs went for medical or management or law courses. Information was not available in respect of 5% of pass outs.
- That 95% of student pass outs (56% in Bachelor level general or technical courses, 22% in employment and 17% in diploma courses) progressed in their life in some way or the other reveals positive indications concerning the EMRS programme. But student preparation in EMRS to take up more valued professional courses such as medical or management was not satisfactory.

9.7 Student Participation in Co-curricular and Social Activities

- More girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.
- Nine percent of EMRS students were in NCC, 8% in Scouts and 7% in NSS, while 3% of ST & SC students were in Scouts and NCC and NSS were not adopted in ST & SC schools. Among JNV students, 4% adopted Scouts and 13% were in NSS. *Shramdan* was carried in all types of schools with maximum student participation in the range of 80% to 100%.

- Six percent of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV were 25% and 20% respectively. These activities were missing in ST & SC schools.

9.8 School-Community Linkage

- The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC and MTA members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals or monitoring utilization of funds. Their participation in preparing TLMs was non-existent and in schools' co-curricular activities, very poor.
- The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

9.9 School Monitoring and Supervision

- During the span of last one year, District Social Welfare Officers visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits by authorities to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.
- Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 15-17 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively less. Hostel visits were done by the principals about twice a week. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

9.10 Stakeholders' Feedback and suggestions

Teaching and Non-teaching staff

- Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of

education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counselling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counselling students and maintaining record of success rate of school pass outs.

- Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favourable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.
- In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements. The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.
- The non-teaching staff members of EMRS and ST & SC schools were unhappy that attempts were not taken to provide capacity building training to them. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

Student feedback

- Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV.
- Pertaining to the hostels, the major issues of concern for EMRS students were scarcity of water for daily-routine work, cleanliness of toilets and hostel environment, light, ventilation and accommodation facilities, water accumulation around hostel because of improper drainage system, poor repair and maintenance work, quality of food, health check-up facilities and indoor sports activities. Some expressed fear of bragging in schools and hostels. Students in ST & SC schools also experienced the same deficiencies to a greater degree. It was astonishing to observe that students in ST & SC hostels were not provided with mosquito nets in spite of the fact that their environment was more unhygienic. The students in JNV had a more favourable perception of school and hostel environment and facilities. JNV fared better on most of these parameters.
- Students perceived teachers to be supportive of them and nice to their parents. The major issues inviting unfavourable feedback from EMRS students pertained to inadequate supply of

learning materials, lack of TLM use and activity-based teaching, access to computers, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes.

- Students' perception of provisions in ST & SC schools was more unfavourable. There was nearly a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback from Community Members

- Most of the community members in relation to EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About one-third of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. They were not directly involved in school planning and were aware that they did not have any contribution towards the school in the form of labour, service or funds.
- The community members' responses in respect of SC and ST schools were less favourable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Views of Educational Administrators

- The District level educational administrators (ADM and PA, ITDA) expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health check-up were necessary for proper policy implementation. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

- All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 13.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 13.7.1 for feedback from each category of stakeholders).

9.11 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

<i>Programme strengths</i> (Need to be maintained).	<i>Concerns</i> (Need special attention).	<i>Suggestions</i> (Need to be implemented).
<ul style="list-style-type: none"> * Good school and hostel infrastructure * Residential facilities for students * Favourable PTR * Supply of free textbooks and uniforms and learning materials * Scope for games, sports and co-curricular activities * Engagement of qualified teaching staff * Special attention and coaching to student * Gender and Social equity. 	<ul style="list-style-type: none"> * Poor salary and service conditions of the staff * Poor hostel maintenance and cleanliness * Water, power and toilet problems * Poor community involvement in school activities * Lack of regular health worker * Teacher-directed rather than student-initiated activities * Poor attention to build capacities of teachers * Adoption of CCE in student assessment 	<ul style="list-style-type: none"> * Regular employment, proper salary and service conditions of staff * Solving water and power crises; Regular maintenance of hostel building and proper drainage system * Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit * Special measures for improving students' language proficiency * Capacity building of teaching and non-teaching staff * Student involvement in school practices and mess management * Strengthening school-community link.

Section 5

Impact of Ekalavya Model Residential Schools in Enhancing the Educational Attainment of ST Children

(MADHYA PRADESH REPORT)

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4	2.1.2	<i>Percentage of staff not trained by school type</i>
5	2.2.1	<i>Percentage of employees having contractual/daily-wage engagement by school type</i>
6	3.1.1	<i>Students admitted as percentages of students applying at entry point to Class VI in 2014-15</i>
7	3.1.2	<i>Students admitted as percentages of students applying at entry point to Class XI in 2014-15</i>
8	3.2.1	<i>Category-wise number of boys and girls by school type</i>
9	3.3.1	<i>Percentage of students admitted to Class VI in different years and completing Class X after five years</i>
10	3.3.2	<i>Percentage of students admitted to Class XI in different years and completing Class XII after two years</i>
11	3.4.1	<i>Total number of student dropouts by school type during last five years</i>
12	4.2.1	<i>Percentage of textbook distribution over all classes by school type</i>
13	6.1.1	<i>Mean achievement (in percentage) of Class VIII ST Students in English, Mathematics, Science and Social Science by School Type</i>
14	6.1.2	<i>Mean achievement of Class VIII SC Students in English, Mathematics, Science and Social Science by School Type</i>
15	6.1.3	<i>Mean achievement of Class X ST Students in Odisha in English, Mathematics, Science and Social Science by School Type</i>
16	6.1.4	<i>Mean achievement of Class X SC Students in Odisha in English, Mathematics, Science and Social Science by School Type</i>
17	6.1.5	<i>Mean achievement of Class XII ST Students in Odisha in English, Mathematics, Science and Social Science by School Type</i>
18	6.1.6	<i>Mean achievement of Class XII SC students in English, Physics, Chemistry, Mathematics and Biology by School Type</i>
19	6.2.1	<i>Percentage of students in different brackets in Class X Board Examination in 2014</i>
20	6.2.2	<i>Percentage of students in different brackets in Class X Board Examination during last five years (2010 to 2014)</i>
21	6.2.3	<i>Category-wise percentage of students securing marks in different brackets in Class X exam. in 2014</i>
22	6.2.4	<i>Category-wise percentage of students securing marks in different brackets in Class X exam. during last three years (2012-2014)</i>
23	6.2.5	<i>Percentage of students in different brackets in Class XII Board Examination</i>

- in 2014*
- 24 6.2.6 *Percentage of students in different brackets in Class XII Board Examination during last five years (2010-14)*
- 25 6.2.7 *Category-wise percentage of students securing marks in different brackets in Class XII exam. in 2014*
- 26 6.2.8 *Category-wise percentage of students securing marks in different brackets in Class XII exam. during last three years (2012-14)*
- 27 6.5.1 *Percentage of student pass outs in different streams*

Chapter 1

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 School Infrastructure and Facilities

Non-availability of minimum school and hostel infrastructure facilities in school had, in the past, been a major cause of drop out among a large chunk of students. But in the context of EMRS, ST & SC schools and JNV there are lot of space for students which give stress on giving opportunity to the children to enjoy the life in the lap of natural surroundings than only learning to read and write. The approximate average school campus area for EMRS, ST & SC and JNV are 22 acres, 30 acres and 13 acres, respectively. The built-up area for the EMRS and ST & SC schools and hostels for students run into 90,000 to 100, 000 sq. ft. and for the JNV to about 140, 000 sq. ft. A high quality school provides hygienic and clean toilets having adequate running water supply and wash basins with liquid soaps. From the table given below relating to water and sanitation facilities in school (Table 1.1.1).It is observed that the major source of drinking water in all schools was bore well. Drinking water was adequate in all the schools. Safe drinking water was provided in all the schools. Soaps and detergents were supplied as per the requirements of students in all the schools.

Approximate number of children per toilet in EMRS varied from 40 to 73 which are better than ST & SC schools where the approximate number was more than 150. The approximate number of children per toilet was 36 in JNV. JNV presented a better picture in case of toilets facilities provided to children.

Approximate number of children per hand wash point was 118 in EMRS, 137 in SC& ST schools whereas in JNV 54 children used one hand wash point in an average which was better than EMRS and ST & SC schools as presented in the following table 1.1.2. A high quality school has separate toilets for girls and also separate toilets for physically handicapped boys and physically handicapped girls. All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required (Table 1.1.2).

Table 1.1.1: School wise Availability of Water and Sanitation Facilities (Madhya Pradesh)

School	Drinking water			Hand wash		Toilet for Boys					Toilet for Girls				No. of children per toilet		
	Adequate	Safety	Major source	Soap available	Hand washed before and after meal	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	Boys	Girls
EMRS SANDWA	YES	YES	BW	YES	YES	02	NO	**	YES	YES	02	NO	YES	YES	YES	72	73

	NARAINALA	YES	YES	BW	YES	YES	03	YES	**	YES	YES	03	YES	YES	YES	YES	40	40
SC & ST	SANDWA	YES	YES	BW	YES	YES	03	YES	**	NO	YES	03	YES	YES	YES	YES	218	223
	RAMPUR	YES	YES	BW	YES	YES	01	YES	**	YES	YES	01	YES	YES	YES	YES	16	153
JNV	ALIRAJPUR	YES	YES	BW	YES	YES	09	YES	***	YES	YES	06	YES	YES	YES	YES	36	36

Bw: Bore well *** Good ** Manageable * Poor

Table 1.1.2: School-wise Availability of Child-friendly and Safety Facilities (Madhya Pradesh) (ramp & rail, slides & swings, playground)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in classrooms	Fire safety
EMRS	118	ONLY TO A FEW BLOCKS	NIL	Inadequate	Immensely Inadequate	NO	Inadequate
SC & ST	137	ONLY TO A FEW BLOCKS	NIL	Inadequate	Immensely Inadequate	NO	Inadequate
JNV	54	ONLY TO A FEW BLOCKS	NIL	Inadequate	Only For A Few Games	NO	Inadequate

- A high quality school provides quality and inclusive physical education classes every day. It does not have a holiday for physical education. All persons in the school participate in these programmes. The school believes that a healthy mind requires a healthy body. It is observed from the above table 1.1.2 that play-grounds for different sports and games as per student needs were immensely inadequate in EMRS and ST & SC schools. In JNV playground was available only for few games. Attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. The building of the school may not be costly but it must ensure safety measures for all children. Whereas it is observed that fire safety measures were inadequate in all the schools and attention was not paid to have classrooms with double doors which may cause problems in time of exigencies. Each school had entrance gate, boundary wall but due attention was not been paid to raising and maintaining gardens and kitchen gardens in EMRS and SC& ST schools, the primary reason for which was water scarcity. In JNV gardens were maintained as per manageable condition in comparison to EMRS and ST & SC schools (Table 1.1.3).

Table 1.1.3: School-wise Availability of Boundary Wall, Garden, Kitchen Garden and School Gate (Madhya Pradesh)

School	Boundary Wall	Garden	School gate
EMRS: SANDWA	YES	NA	YES

EMRS: NARAINALA	YES	NA	YES
SC & ST: SANDWA	YES	NA	YES
SC & ST: RAMPUR	YES	NA	YES
JNV: ALIRAJPUR	YES	M	YES

M: Manageable NA: Not Available

1.2 Hostel Infrastructure and Facilities

Tables given below present information on hostel infrastructure and facilities (Table 1.2.1), availability of different types of rooms and their conditions (Table 1.2.2), water and sanitation facilities in hostels (Table 1.2.3), child-friendly and safety facilities (Table 1.2.4) and presence of hostel boundary wall, garden and kitchen garden (Table 1.2.5). Nearly 100% of students in EMRS, JNV and ST & SC schools stayed in hostels except in one ST & SC schools where 13 % boys and 22 % girls stayed in hostels. In ST & SC schools, greater percentage of boys came from nearby villages and attended school as day-scholars (Figure 1.2.1). Light and ventilation facilities in EMRS were manageable in EMRS and ST & SC schools. Light and ventilation facilities were good in JNV. No rooms had leaking roofs in any of the schools. The hostel condition was safe in EMRS and JNV whereas accommodation hardly met safety and child-friendly parameters in ST & SC schools. With about 17-22 square feet of space per boarder, particularly for girls, the space was inadequate in EMRS except in one EMRS where the space per student was 24 square feet. Accommodation space per student was slightly better in ST & SC schools in comparison to ST & SC schools. The infrastructure and accommodation facilities were better in JNV, average in EMRS and even inadequate in one of the SC&ST schools. (Table 1.2.1).

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels (Madhya Pradesh)

School type	School		Student strength		Condition of the hostel			Accommodation space per student	
			No in school	% staying in hostel	safety	leaking	Light & ventilation	Sq. ft. per student (app.)	Adequacy
EMRS	SANDWA	BOYS	145	100	Average	NO	Manageable	17	Inadequate
		GIRLS	147	100	Average	NO	Manageable	11	Inadequate
	NARAINALA	BOYS	147	100	Average	NO	GOOD	24	adequate
		GIRLS	150	100	Average	NO	GOOD	22	Inadequate
SC & ST	SANDWA	BOYS	656	14	Poor	NO	Manageable	18	Inadequate
		GIRLS	670	22	Poor	NO	Manageable	33	adequate
	RAMPUR	BOYS	163	100	Average	NO	Manageable	25	adequate
		GIRLS	153	100	Good	NO	GOOD	40	adequate
JNV	ALIRAJPUR	BOYS	322	100	Good	NO	GOOD	42	adequate
		GIRLS	215	100	Good	NO	GOOD	40	Adequate

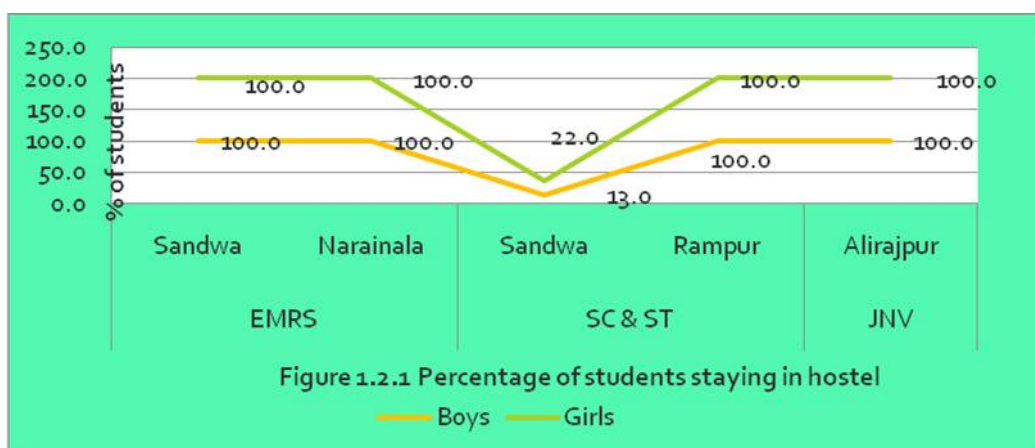


Table 1.2.2: Availability and condition of different types of rooms in boys' and girls' hostels by school type

Types of rooms	EMRS				SC & ST				JNV	
	SANDWA		NARAINALA		SANDWA		RAMPUR		ALIRAJPUR	
	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond
Superintendent's room /quarters	Y	M	Y	G	Y	M	Y	G	Y	G
Dining room	No	-	Y	M	No	-	Y	M	Y	G
Living room	Y	M	Y	M	Y	P	Y	M	Y	G
Kitchen room	Y	P	Y	M	Y	M	Y	M	Y	M
Store room	Y	P	Y	M	Y	P	Y	M	Y	M
CCA room	No	-	No	-	No	-	No	-	No	-
Sick room	No	-	No	-	No	-	No	-	No	-
Prayer room	No	-	No	-	No	-	No	-	No	-
Auditorium / assembly	No	-	No	-	No	-	No	-	No	-
Security room	No	-	No	-	No	-	Y	M	Y	M

Y: Yes, G: Good, M: Manageable, P: Poor

- Table 1.2.2 indicates that all schools had superintendent's room /quarters, living room, kitchen rooms, store rooms but did not have dining room, rooms for CCA, sick room, prayer room, auditorium, security room.

- Drinking water was adequate for all boarders in all hostels. Adequate water for bathing was available in all schools except in one of the EMRS and ST & SC schools. But In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. Water facilities into toilets and bathroom were adequate in JNV. (Table 1.2.3)
- The toilet condition and cleanliness was manageable for boys in ST & SC schools and in EMRS but poor for girls. The toilet condition was good for both boys and girls in JNV. The ratio of children to toilets was not satisfactory in EMRS and ST & SC schools for girls but manageable for boys. The ratio of children to toilets was satisfactory in JNV. (Table 1.2.3)

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities (Madhya Pradesh)

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
		Adequate	Major source	Adequate	Adequate	Flow of water to toilets	No functional	Cleanliness and condition	Soap & accessories available	Used by all children	
EMRS:	Boys	YES	TW	NO	NO	NO	04	**	YES	YES	36
	Girls	YES	SW	YES	NO	NO	02	**	YES	YES	73
EMRS:	Boys	YES	BW	YES	YES	M	16	**	YES	YES	09
	Girls	YES	BW	YES	YES	M	06	*	YES	YES	25
SC & ST:	Boys	YES	TW	NO	NO	NO	03	**	YES	YES	30
	Girls	YES	SW	YES	NO	NO	03	*	YES	YES	50
SC & ST:	Boys	YES	BW	YES	YES	G	10	**	YES	YES	16
	Girls	YES	BW	YES	YES	G	10	**	YES	YES	15
JNV:	Boys	YES	BW	YES	YES	G	48	***	YES	YES	07
	Girls	YES	BW	YES	YES	G	36	***	YES	YES	06

BW: Bore well *** Good ** Manageable * Poor

Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities (Madhya Pradesh) (ramp & rail, slides & swings, playground)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in hostel rooms	Fire safety
EMRS	39	NIL	NIL	NIL	Immensely Inadequate	NO	NO
SC & ST	35	NIL	NIL	NIL	Immensely Inadequate	NO	NO
JNV	38	NIL	NIL	NIL	Only For A Few Games	NO	Inadequate

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden, Kitchen Garden (Madhya Pradesh)

School	Boundary Wall in girls hostel	Garden	Kitchen Garden
EMRS: SANDWA	YES	NA	NA
EMRS: NARAINALA	YES	NA	NA
SC & ST: SANDWA	M	NA	NA
SC & ST: RAMPUR	YES	NA	NA
JNV: ALIRAJPUR	YES	M	NA

M: Manageable NA: Not Available

- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV. Hostels in all types of schools have boundary walls but did not have proper garden or kitchen garden.

1.3 Financial Support

- The table 1.3.1 indicates that 68% to 74 % of the funds allocated to EMRS was spent during the year 2014-15 while spending in JNV reached 99% utilization. The average spending in the SC& ST schools was about 86% to 99 %. As per revised guideline of MoTA (2010), the Ministry's support to the States/ UTs for the EMRSs programme and its expansion is subject to the States/UTs ensuring high quality of management and running of the schools. Quality management indicates timely and smooth transition of funds allocated from the State Government/UT Administration to the management societies/schools; ensuring the recruitment of the desired number of teachers; ensuring the provision of medical facilities to staff and students; clean and hygienic surroundings and food for the children and providing a healthy, happy environment for the academic and overall development of the

children. If the progress in the EMRSs is seen to be poor as a direct result of poor management and lack of adherence to standards the States/ UTs concerned would be unable to claim any more funds from the Ministry for this programme.

Table 1.3.1: Receipt and use of funds by schools in Madhya Pradesh during 2014-2015

School		Total fund received	Utilized	% utilized	Department providing funds
EMRS	SANDWA	10660651 /-	7208816 /-	68	MOTA,GOI UNDER ARTICLE 275(1)
	NARAINALA	9027012 /-	6724392 /-	74	
SC & ST	SANDWA	3945212 /-	3942212 /-	99.9	ST & SC Development Department
	RAMPUR	14830000 /-	12719146 /-	86	
JNV	ALIRAJPUR	33438000 /-	33233000 /-	99.38	JNV Samiti

Chapter 2

PROFILE OF TEACHING AND NON-TEACHING STAFF

A high quality school has highly motivated teachers. The profile of teaching and non-teaching staff determines the educational climate of the schools. This section presents profile of teaching and non-teaching staff, their nature of employment, service benefits and capacity building which are most essential for motivating the staff for contributing to the overall growth and development of children studying in schools.

2.1 Profile of Teaching and Non-Teaching Staff

Table 2.1.1 presents the sanctioned posts and vacancy positions of the teaching and non-teaching staff. Figure 2.1.1 indicates the percentage of vacancy positions by school type such as EMRS, SC&ST schools and JNV.

Table 2.1.1: Sanctioned Strength and Vacancy Position of Teaching and Non-Teaching Staff

School		Position	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst.	Librarian	Accountant	Head clerk	Clerk	Peon	Night watchman/ Sweeper	Warden/ Catering Asst.	Matron	Staff Nurse	CCA
EMRS	SANDWA	SP	01	-	10	12	01	03	-	-	-	01	03	03	-	-	-	06
		Vac	00	-	10*	00	01	03*	-	-	-	01	02	00	-	-	-	00
	NARAINALA	SP	01	-	10	11	01	03	-	-	-	01	03	02	-	-	-	06
		Vac	00	-	10*	02	00	03*	-	-	-	00	01	00	-	-	-	00
SC & ST	SANDWA	SP	01	-	15	14	01	-	-	-	-	01	05	01	-	-	-	06
		Vac	00	-	06	07	00	-	-	-	-	00	00	00	-	-	-	03

	RAMPUR	SP	01	-	10	09	02	03	-	01	-	01	03	02	-	-	-	12
		Vac	01	-	06	08	02	03	-	00	-	00	01	00	-	-	-	02
JNV	ALIRAJPUR	SP	01	01	09	13	02	01	01	01	01	01	00	02	01	02	01	04
		Vac	00	00	00	01	00	00	00	00	00	00	00	00	00	01	01	01

SP: Sanctioned Post, Vac: Vacancy, *teachers not appointed as students have not been admitted

Table 2.1.1 indicates that principals were in position in all the schools except in one of ST & SC schools. Vice principal post was vacant in EMRS and SC& ST schools. Vice principal was in position in JNV. No PGTs were appointed in EMRSs as XI classes had not yet been opened. In SC& ST schools 40 to 60 % PGT posts were vacant. In JNV all PGTs were in position. IN EMRSs 81% to 100% TGTs were in position. IN ST & SC schools 50% to 88% TGTs were in position. In JNV 92% TGTs were in position. PET post remained vacant most of the time in EMRS and SC&ST schools. Only in one EMRS and one ST & SC schools PETs were in position. In JNV PET was in position. Librarians, accountants, head clerks, warden, catering assistant, matron, staff nurse were not in position in EMRS. Librarians, head clerks, warden, catering assistant, matron, staff nurse were not in position in ST & SC schools. Librarians, accountants, head clerks, warden, catering assistant, matron were in position in JNV. Staff nurse was not in position in JNV. CCAs were in position in EMRSs. Fifty % to 91% CCAs were in position in ST & SC schools. Seventy five % CCAs were in position in JNV.

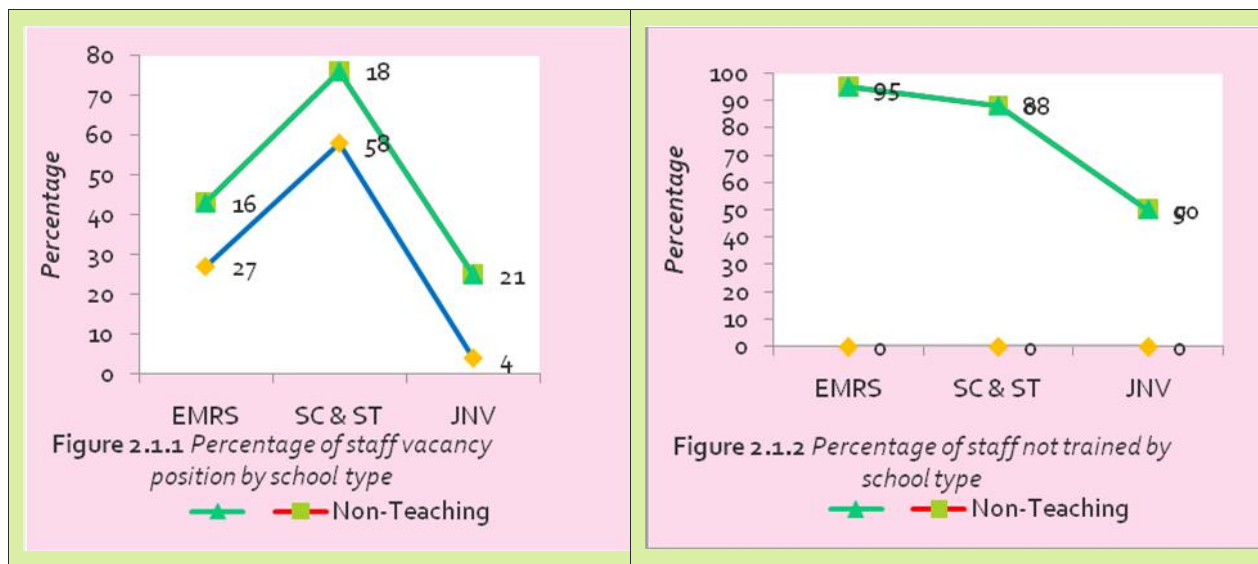
Table 2.1.2: Profile of the Teaching Staff

School		No of Teachers in Position	Pupil-Teacher ratio in School	Category			Training Status		Length of Teaching Experience		
				ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	SANDWA	13	1:22	03	01	09	13	-	09	-	04
	NARAINALA	11	1:22	-	-	11	11	-	04	03	04
SC & ST	SANDWA	20	1:66	16	02	02	20	-	-	03	17

	RAMPUR	08	1:40	-	-	08	08	-	-	-	08
JNV	ALIRAJPUR	25	1:21	01	06	18	25	-	-	12	13

Table 2.1.3: Profile of the Non-Teaching Staff

School		No of Non-Teaching Staff in Position	Category			Training status		Length of experience		
			ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	SANDWA	10	10	-	-	-	10	10	-	-
	NARAINALA	11	08	-	03	01	10	11	-	-
SC & ST	SANDWA	10	09	-	01	01	09	04	03	03
	RAMPUR	16	08	02	06	02	14	01	14	01
JNV	ALIRAJPUR	14	04	03	07	07	07	09	04	01



- Analysis of vacancy positions by school type indicated that 27% of the teaching and 16% of the non-teaching positions were lying vacant in EMRS compared to 58% and 18% in ST & SC schools. Only 4% teaching staff positions and 21% non-teaching staff positions were laying vacant in JNV (Figure 2.1.1).
- The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools. The PTRs in ST & SC schools varied from 1: 40 to 1:66. The PTRs in EMRS and JNV were in the range of 1:21 to 1:22. The PTRs in EMRS and JNV were good in comparison to SC&ST schools and were as per state norm.
- There was noticeably large number of gen category teachers in EMRS and JNV schools compared to those from the SC and ST communities. It is noticed that in one of the ST & SC schools most of the teachers were from ST communities, i.e. 16 out of 20.
- All teachers are trained in EMRS, JNV and SC& ST schools (Figure 2.1.1). IN JNV 52% of teachers were having more than 10 years of experience while in EMRS 30% to 36 % of teachers were having more than 10 years of experience. In SC& ST schools 85% to 100% teachers were having more than 10 years of experience. In one of the EMRS 69 % of teachers were less than 5 years of teaching experience.
- It is observed from the analysis of EMRS, JNV and SC&ST schools (table 2.1.3) majority of the non-teaching staff belong to ST community compared to those from the SC or general category.

- All non-teachers of EMRS and JNV were having less than 5 years of experience. 65 % of non-teaching staff in ST & SC schools were having 6-10 years of job experience.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

Tables 2.2.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

Table 2.2.1: Nature of employment of the teaching staff and service benefits

		No of Teaching Staff in Position	Nature of Employment			Gross monthly Emoluments/Salary in Rupees (Range)						
			Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst/Asst teacher	Librarian
EMRS	SANDWA	13	03	10	77	58475*	-	-	13500*	-	-	-
	NARAINALA	11	01	10	91	62227*	-	-	13500*	13500*	-	-
SC & ST	SANDWA	20	20	00	00	52385	-	9300 to 34800	9300 to 34800	9300 to 34800	-	-
	RAMPUR	08	08	00	00	-	-	9300 to 34800	4000 to 6500	-	-	-
JNV	ALIRAJPUR	25	25	00	00	84470	64962	9300 to 34800	9300 to 34800	9300 to 34800	5200 to 20200	9300 to 34800

Table 2.2.2: Nature of employment of the non-teaching staff and service benefits

		Nature of Employment		Gross monthly Emoluments/Salary (Range)									
		Regular	Contractual	Head Clerk	Accountant	Clerk	Librarian	Warden	Peon Art	watchman / Sweeper	CCA	Matron	Staff Nurse
EMRS	SANDWA	00	10	-	-	-	-	-	6239*	6239*	6239*	-	-
	NARAINALA	00	11	-	-	5200	-	-	4000*	4000*	4000*	-	-
SC & ST	SANDWA	05	05	-	-	5000*	-	-	5200 to 20200	4000*	4000*	-	-
	RAMPUR	16	-	-	5200 to 20200	5200 to 20200	-	-	4000*	4000*	4000*	-	-
JNV	ALIRAJPUR	13	01	-	5200 to 20200	5200 to 20200	9300 to 34800	-	-	5200 to 20200	5200 to 20200	7500*	-

Note: *The contractual non-teaching staffs in JNV were employed on daily-wage basis.*

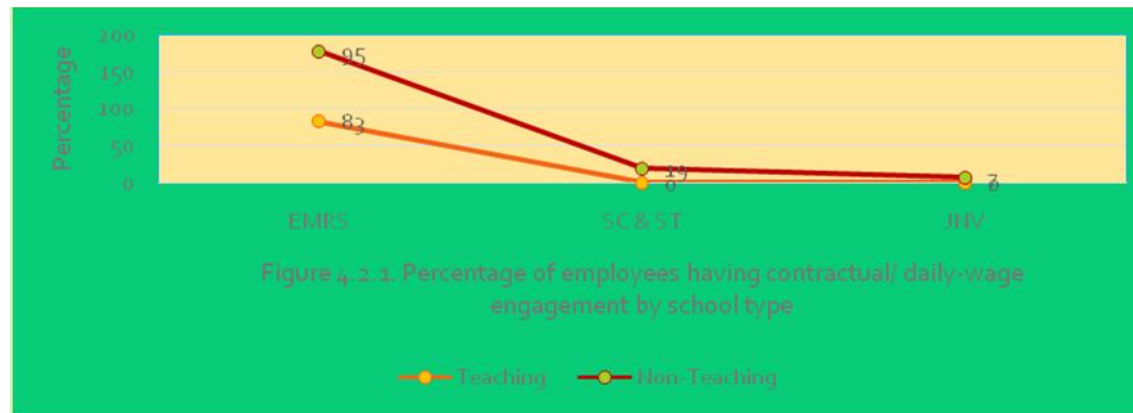


Figure 4.2.1. Percentage of employees having contractual/ daily-wage engagement by school type

- Eighty three percent of teaching staff and 95 % of non-teaching staff in EMRS were engaged on contractual basis. No teaching staffs in SC&ST schools and in JNV were engaged on contractual basis. Only 7 % non-teaching staff in JNV and 19 % in ST & SC schools were engaged on contractual basis. (Figure 4.2.1).
- It is reported from table 2.2.1 that the gross monthly remuneration of principal in EMRS and ST & SC School did not present much difference as the principals were getting salary of Rs. 58475/- to Rs. 62227/- per month and principals in ST & SC schools were getting salary of Rs. 52385/- per month. But the salary in case of JNV principal was on higher side as the principal was getting Rs. 84470/- per month. No vice principals were appointed in case of EMRSs and ST & SC schools. Vice principal was engaged in JNV in helping the academic as well as administrative matters of the school and was getting salary of Rs.64962 per month. No PGTs were appointed in EMRSs. The salary structure of PGTs in SC& ST schools and JNV did not project any difference. PGTs were getting the scale of pay as Rs.9300/- to Rs.34800/- in JNV and ST & SC schools. TGTs and PET in EMRSs were getting Rs. 13500/- as monthly emoluments which was lower than SC& ST TGTs and TGTs engaged in JNV which was a major factor for demotivating the EMRS teachers. No laboratory assistants were engaged in EMRS and ST & SC schools whereas JNV presented a better picture in case of engagements and monthly emoluments of laboratory assistants who maintained the laboratories in JNV. Laboratory assistants also termed as assistant teachers were getting the scale of pay of Rs. 5200/- to 20200/- in JNV. Similar case was noticed in case of engagements of librarians. Librarians were not engaged in EMRSs and ST & SC schools. Librarians were getting the scale of pay of Rs.9300 to Rs.34800 in JNV which helped to maintain and enrich the library of JNV in comparison to EMRSs and SC& ST schools (Table 2.2.1).
- Clerk, head clerk, accountants, warden, matron, staff nurse were not engaged in EMRSs. Only peon, night watchman/sweeper and CCAs were engaged in EMRSs on daily wage basis. Accountant, clerk, night watchman, sweeper, CCAs were engaged on regular basis in the pay scale of

Rs.5200/- to Rs.20200/- in JNV. Matron was also engaged in JNV. Accountants and clerks were engaged on regular basis in ST & SC schools basis in the pay scale of Rs.5200/- to Rs.20200/- (Table 2.2.2).



Students were taking dinner in EMRS Narainala



Students were attending morning assembly in EMRS Narainala

2.3 Capacity Building of Teaching and Non-teaching Staff

All teachers of EMRS, SC&ST schools and JNV received training whereas 95% of non-teachers in EMRS, 88% in ST & SC schools and 50 % of non-teachers in JNV did not receive any formal training as required in their respective jobs (Figure 2.1.2). The quality of initial teacher training programme very much depends on adequate amount of experience in teaching varieties of lessons in actual classroom situations over an acceptable duration. Teacher training makes teachers aware of the goals set by the school and accountability standards expected from them. If teachers are consulted in setting these standards, and are rewarded not only for high performance of their students in public examinations but also for their innovations and action researches that will help students overcome their social and emotional problems. Teachers in JNV were trained by Navodaya Vidyalaya Samiti. In EMRS and SC& ST schools teachers were trained by State Government.



School Building in EMRS Narainala



Research team was interacting with the staff of EMRS Narainala



Academic block in EMRS Narainala



Hostel Construction in EMRS Narainala

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

This chapter presents the status of schools in respect of students seeking admission and retained in schools (Tables 3.1.1 to 3.2.2), students attending schools and completing educational cycle (Tables 3.3.1 & 3.3.2) and student dropouts over successive years (Table 3.4.1).

3.1 Student Admission

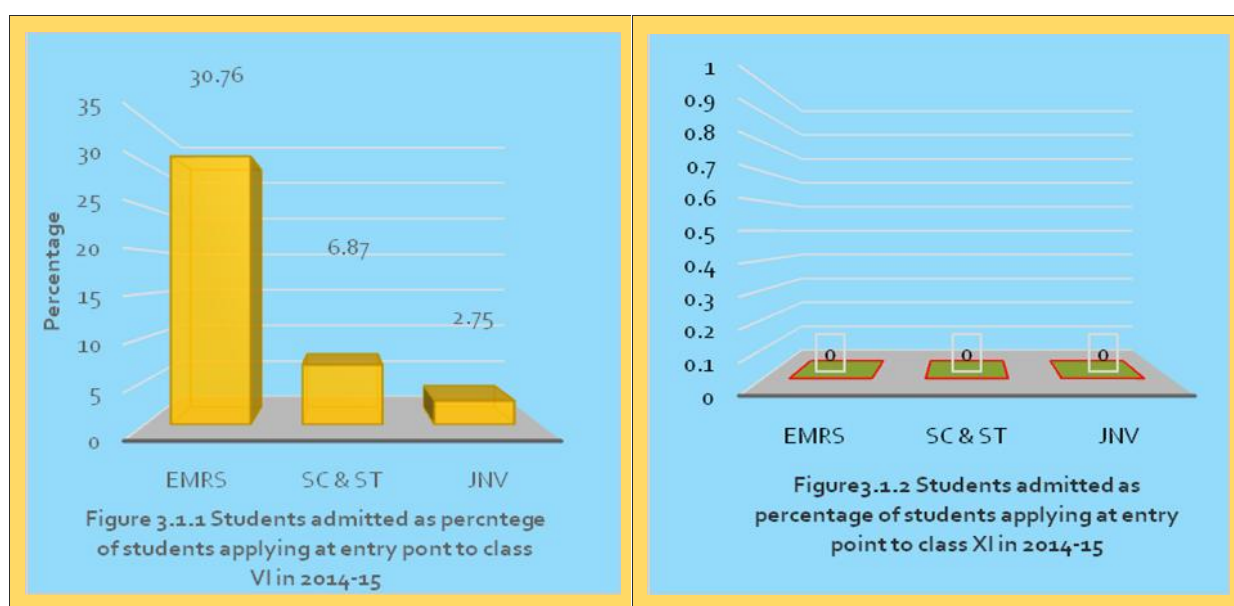
Table 3.1.1 lists the number of children seeking admission in different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission are given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

Table 3.1.1: Number of Candidates Applied and Number of students enrolled at entry points in Classes VI and XI during the last three Years (Madhya Pradesh)
(NA: Number Applied; NE: Number Enrolled)

School		At Entry point to Class VI							At Entry point to Class XI					
		2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	
EMRS	SANDWA	NA	-	NA	NA	NA	NA	NA	Classes XI & XII not opened					-
		NE	-	54	60	60	60							
	NARAINALA	NA	-	82	110	235	115	137	Classes XI & XII not opened					-
		NE	-	60	60	60	60							
SC & ST	SANDWA	NA	-	-	-	-	-	NA	-	NA	NA	NA	-	-
		NE	-	-	-	-	-		-	NA	NA	NA	-	
	RAMPUR	NA	547	440	1040	1092	785	43	-	NA	NA	NA	-	-
		NE	45	48	60	59	54		-	-	23	38	33	
JNV	ALIRAJPUR	NA	3653	1954	1913	2887	2907	-20	-	NA	NA	NA	-	-
		NE	80	80	80	80	80		-	-	62	66	-	

TABLE 3.1.2 *Percentage Increase in application for admission and student enrollment as percentages of application for admission*

School type	At entry point of Class VI		At entry point of Class VI	
	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year
EMRS	77	30.76	NA	NA
SC & ST	-24.51	6.87	NA	NA
JNV	51.96	2.75	NA	NA



- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 30.76, 6.87 and 2.75 for EMRS, ST & SC schools and JNV, respectively. There was more demand for EMRS followed by JNV and ST & SC schools. (Figure 3.1.1)
- The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools. The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 77% for EMRS, 24.51% for ST & SC schools and 51.96% for JNV. The demand for admission to all types of schools increased over the years. Class XI had not yet been opened in EMRS schools and in one of SC&ST schools. (Figure 3.1.2)

3.2 Student Strength in Schools

Table 3.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 3.2.2 and plotted in Figure 3.2.1.

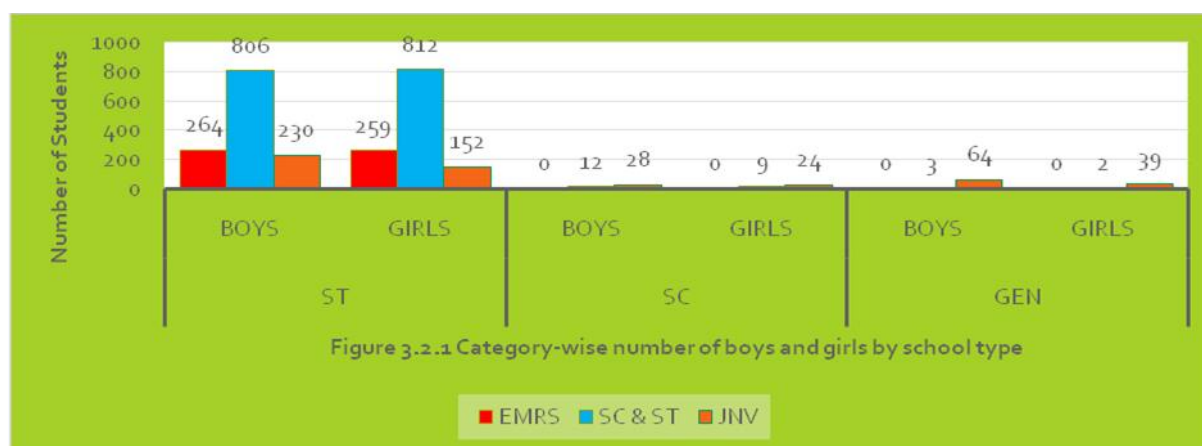
Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms and Classroom Space per Student (in sq. ft.) in Madhya Pradesh

School			VI	VII	VIII	IX	X	XI	XII	Total
EMRS	SANDWA	N of students	60	60	58	59	54	-	-	291
		N of Classrooms	02	02	02	02	02	-	-	10
		Per student floor space (in sq. ft.)	10							
	NARAINALA	N of students	56	60	60	60	57	-	-	293
		N of Classrooms	01	01	01	01	01	-	-	05
		Per student floor space (in sq. ft.)	10							
SC & ST	SANDWA	N of students	-	-	-	317	183	417	409	1326
		N of Classrooms	-	-	-	3	2	3	3	11
		Per student floor space (in sq. ft.)	04							
	RAMPUR	N of students	51	58	58	48	30	31	37	315
		N of Classrooms	02	02	02	01	01	01	01	10
		Per student floor space (in sq. ft.)	07							
JNV	ALIRAJPUR	N of students	79	76	75	76	77	88	66	537
		N of Classrooms	02	02	02	02	02	02	02	14
		Per student floor space (in sq. ft.)	11							

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type (Madhya Pradesh)

		ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Elementary Classes (VI to VIII)											
EMRS	SANDWA	90	88	178	-	-	-	-	-	-	178
	NARAINALA	90	90	180	-	-	-	-	-	-	180
SC & ST	SANDWA	-	-	-	-	-	-	-	-	-	-
	RAMPUR	87	82	169	-	-	-	-	-	-	169

JNV	ALIRAJPUR	90	82	172	14	11	25	23	10	33	230
Secondary Classes (IX & X)											
EMRS	SANDWA	54	59	113	-	-	-	-	-	-	113
	NARAINALA	30	30	60	-	-	-	-	-	-	60
SC & ST	SANDWA	223	267	490	06	03	09	01	00	01	500
	RAMPUR	41	38	79	-	-	-	-	-	-	79
JNV	ALIRAJPUR	64	42	106	06	04	10	21	16	37	153
Higher Secondary Classes (XI & XII)											
EMRS	SANDWA	-	-	-	-	-	-	-	-	-	-
	NARAINALA	-	-	-	-	-	-	-	-	-	-
SC & ST	SANDWA	418	392	810	06	06	12	02	02	04	826
	RAMPUR	37	33	70	-	-	-	-	-	-	70
JNV	ALIRAJPUR	76	28	104	08	09	17	20	13	33	154
Total		1300	1231	2531	40	33	73	67	41	108	2712



- The JNV schools catered to the needs of more students compared to EMRS and SC & ST schools. However ST & SC schools cater to the needs of more ST students in comparison to EMRS and JNV. (Figure 3.2.2)
- A rough calculation of the classroom floor space per student in EMRS was about 10 sq. ft., while that in ST & SC schools was 4-7 sq. ft. and in JNV about 11 sq. ft.
- Average number of students per classroom was approximately 27-30 in EMRS, 33-44 in JNV. Average number of students was good in EMRS than JNV. In ST & SC schools the range varied from 24-139.

3.3 Student Attendance

Table 3.3.1 presents information on student attendance and Table 3.3.2 indicates percentages of students completing the educational cycle.

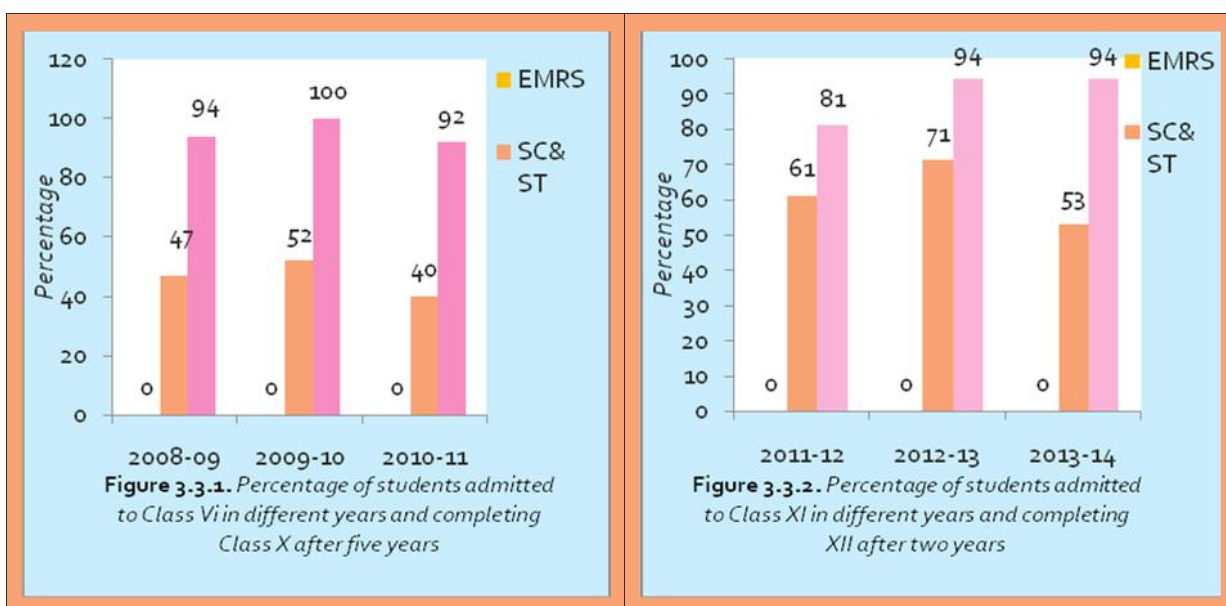
Table 3.3.1: Percentage of average student attendance during the last month (Madhya Pradesh)

		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	SANDWA	98	98	96	95	95	-	-	97
	NARAINALA	98	97	98	100	98	-	-	98
SC & ST	SANDWA	-	-	-	86	89	93	89	89
	RAMPUR	93	97	90	96	95	97	85	93
JNV	ALIRAJPUR	91	89	86	74	89	88	86	86

Table 3.3.2: Number of students admitted at entry points (classes VI and XI) and completing The educational cycle during the last three years

School		No. of students admitted in VI in 2008-09	N of students completing Class X after 5 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2009-10	N of students completing Class X after 5 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2010-11	N of students completing Class X after 5 years	% completing educational cycle in 2014-15
EMRS	SANDWA	School opened in Session 2011-12, As such Cycle has not been completed.								
	NARAINALA	School opened in Session 2011-12, As such Cycle has not been completed								
SC & ST	SANDWA	347	90	26	319	122	38	320	65	20
	RAMPUR	56	38	68	51	34	67	44	27	61
JNV	ALIRAJPUR	80	75	94	80	80	100	80	74	92
School		No. of students admitted in XI in 20011-12	N of students completing Class XII after 2 years	% completing educational cycle in 20112-13	No. of students admitted in VI in 2012-13	N of students completing Class XII after 2 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2013-14	N of students completing Class XII after 2 years	% completing educational cycle in 2014-15
EMRS:	SANDWA	Classes opened in the year 2011-12,As such Cycle has not been completed								
	NARAINALA	Classes opened in the year 2011-12,As such Cycle has not been completed								
SC & ST	SANDWA	313	190	61	295	177	60	409	109	27
	RAMPUR				23	19	83	38	30	79
JNV	ALIRAJPUR	59	48	81	62	58	94	66	62	94

Note: Higher-secondary classes opened in ST & SC schools in 2013-14 and the percentage figure shown for ST & SC schools



in 2013-14 indicates the percentage of students scheduled to appear in Class XII examination.

Student attendance in EMRS was more satisfactory than JNV and SC&ST schools. Student attendance in EMRS varied from 97 to 98 % whereas In ST & SC schools student attendance varied from 89 to 93%. In JNV the attendance of students was 86% which was at lower side in comparison to EMRS and SC& ST schools. (Table 3.3.1) EMRS schools opened in session 2011-12. Students admitted in class VI in 2011-12, thus educational cycle of reaching class X in EMRS had not yet been completed till 2014-15. EMRS schools opened in session 2011-12. Students admitted in class VI in 2011-12, thus educational cycle of reaching class X in EMRS had not yet been completed till 2014-15. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 92% in JNV schools and 40 % in ST & SC schools. (Figure 5.3.1) Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 94 % in JNV, 53 % in ST & SC schools. (Figure 5.3.2). Completion of educational cycle of students admitted in class VI by 40% to 52% in ST & SC schools cannot be considered satisfactory. The picture however was satisfactory in case of JNV schools (92% to 100%) in comparison to ST & SC schools. Similarly completion of educational cycle of students admitted in class XI by 53% to 71% in ST & SC schools was at lower side than JNV schools (81% to 94%).

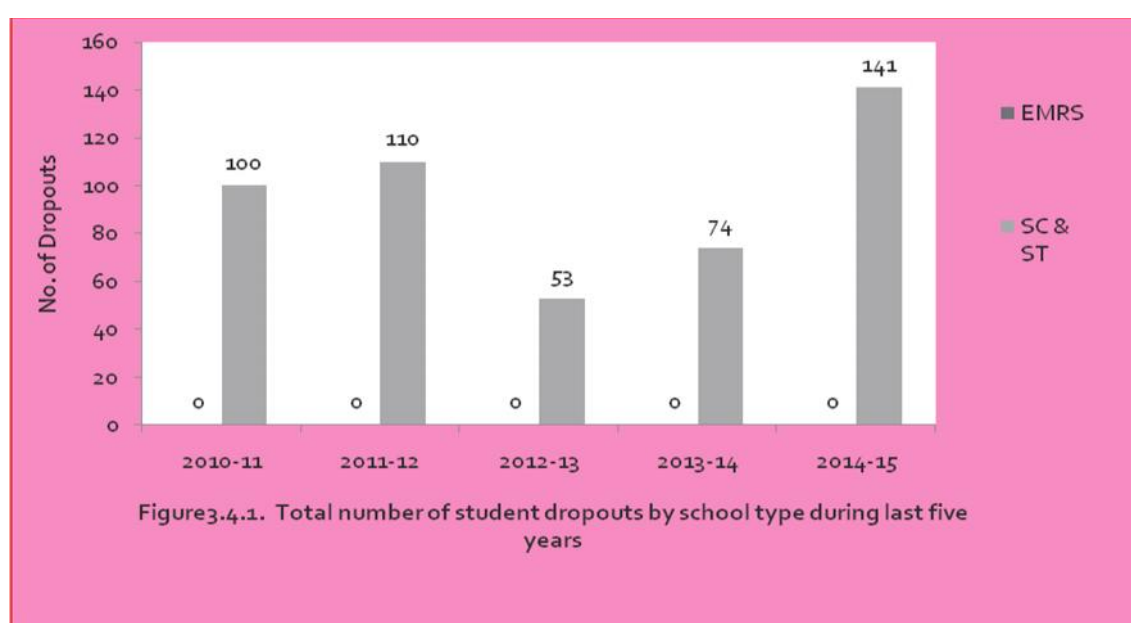
3.4 Student Retention /Drop-out

The number of students dropping out of the system during the last five years across types of schools are presented in Table 3.4.1 and plotted in Figure 3.4.1.

Table 3.4.1: Class-wise total Number of students dropping out of school by school type

School	Year	Elementary			Secondary		Higher secondary		Total (year-wise)
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	Classes opened in the year 2011-12, As such Cycle has not been completed							
	2011-12	Classes opened in the year 2011-12, As such Cycle has not been completed							
	2012-13	-	-	-	-	-	-	-	-
	2013-14	-	-	-	3-*	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-
	2010-11	-	-	-	100	-	-	-	-

SC & ST	2011-12	-	-	-	110	-	-	-	-
	2012-13	-	-	1*	53+	-	-	-	-
	2013-14	1*	1*	5*	74+	-	-	-	-
	2014-15	2*	1*	02+	139+	-	-	-	-
JNV	2010-11	8*		5*	1-*	-	-	-	-
	2011-12	1*	2*	3*	2-*	-	-	-	-
	2012-13	5*	-	-	-	-	-	-	-
	2013-14	3*	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-



Note: Students dropping out of a school possibly sought admissions in other schools for which information was not available.

More students dropped out at the secondary stage compared to elementary and higher-secondary stages, particularly in ST & SC schools. In EMRS and JNV negligible number of students dropped out of the system. However in EMRS only during 2013-14, 3 students dropped out from Xth class where as in JNV during 2010-11 eight students from class VI, 5 students from class VIII and one student from class IX dropped out of the system. Similarly during 2011-12 one to three students dropped out from class VI to IX. Three to eight students dropped out from class VI from 2010-11 to 2013-2014 in JNV. In 2014-15 no students had dropped out from EMRS and JNV. The information in respect of students staying out of the school system was not available with the school authorities (Table 3.4.1).

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

Student learning and achievement are greatly impacted by school's instructional climate which includes school and classroom physical environment, teaching-learning process and materials, student development activities and procedures of student evaluation. These aspects are discussed in this chapter.

4.1 School and Classroom Environment

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and classroom environment

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Building white washed	Manageable	Manageable	Good
Cleanliness of campus	Manageable	Manageable	Good
Cleanliness of classrooms	Manageable	Manageable	Good
Dustbins in classroom	No	No	Manageable
Proper drainage system	No	No	Inadequate
First-aid box	Manageable	Manageable	Yes
Fire safety	No	No	Inadequate
Garbage disposal pit	Manageable	Inadequate	Inadequate
Children's hygienic habits	Manageable	Manageable	Good
Information board	No	Partly Done	Manageable
Wall magazine	No	No	Good
Wall activities	Manageable	Manageable	Yes
TLM corner in classrooms	No	No	No
Library cum reading room	Manageable	Manageable	Good
Games equipments	Inadequate	Inadequate	Manageable
Monthly health check up	Inadequate	Inadequate	Average
Campus beautification	Manageable	Poor	Manageable
Suggestion box used	No	No	No

- * It is evident from Table No 4.1.1 that buildings are whitewashed in EMRS, JNV and SC and ST schools. Cleanliness of campus and cleanliness of classroom were manageable in EMRS and SC and ST schools. JNV had maintained cleanliness in classroom and hostels. Dustbins were not provided inside the classrooms in EMRS and JNV, but are available in ST & SC schools. Proper drainage system was not available in all the schools. First aid box was available in all the schools. Fire safety measures had not been undertaken in all the schools. Garbage disposal pit was adequate in EMRS. JNV and ST & SC schools suffered on account of having adequate garbage disposal pit. EMRS, SC& ST and JNV schools maintained hygienic habits of children. Monthly health check-up of students was not done in EMRS and ST & SC schools.
- * Information board was not available in EMRS. Information board was available in JNV but not completely maintained in ST & SC schools. Wall magazine, TLM corner in the classroom, suggestion box were not available in EMRS and ST & SC schools. JNV maintained wall magazine, wall activities in order to express the hidden creative talents in the children.

- * All schools were having library-cum-reading room. But JNV had maintained it well. Games and equipments were inadequate in EMRS and ST & SC schools as per students need whereas manageable games and equipments were available in JNV as per students need.

4.2 Teaching-Learning Process, Materials and Equipments

This section presents information regarding the availability of textbooks to students (Table 4.2.1; Figure 4.2.1) and teachers' and students' behaviours in the classroom during the course of teaching (Table 4.2.2).

Table 4.2.1: Class-wise percentage of new textbooks distributed to students as against requirement on the basis of student enrolment (Madhya Pradesh)

School		New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
EMRS	SANDWA	No. required	600	580	649	540	-	-	-	2369
		% distributed	100	100	100	100	-	-	-	100
	NARAINALA	No. required	600	600	660	660	-	-	-	2520
		% distributed	100	100	100	100	-	-	-	100
SC & ST	SANDWA	No. required	-	-	-	1902	1098	2085	2045	7130
		% distributed	-	-	-	100	100	100	100	100
	RAMPUR	No. required	357	406	406	336	210	198	222	2135
		% distributed	100	100	100	100	100	100	100	100
JNV	ALIRAJPUR	No. required	675	675	730	790	740	770	936	5316
		% distributed	100	100	100	100	100	100	100	100
Class-wise percentage of textbook distribution by school type										
EMRS			100	100	100	100	100	100	100	100
SC & ST			100	100	100	100	100	100	100	100
JNV			100	100	100	100	100	100	100	100



Table 4.2.2: Teaching-learning process and teacher-student behavior in schools

Parameter	EMRS	SC & ST	JNV
Teaching-learning Process			
Seating arrangement and use of classroom space	Good	Manageable	Good
Adequacy of lesson plan/note	Manageable	Not maintained	Manageable
Teaching through activity-based methods	No	No	Good
Correction of students'	Partly Done	Manageable	Partly Done
Home assignments given	Manageable	Poor	Good
Project assignments	Manageable	Manageable	Good
Use of e-content in SMART classes	No	No	Good
Effective use of laboratories	Manageable	Poor	Good
Using libraries effectively	Manageable	Manageable	Good
Courses completed as per schedule	Yes	Yes	Yes
Time table structured and displayed	Yes	Yes	Yes
Academic calendar prepared and displayed	Manageable	Yes	Yes
SDP prepared	Yes	Yes	Yes
Teacher behaviour in classrooms			
Topic presentation focused and organized	Manageable	Manageable	Good
Demonstrates during teaching	Manageable	Poor	Good
Using blackboard appropriately	Yes	Yes	Yes
Using TLMs while teaching	Poor	Poor	Manageable
Initiating group learning	Poor	Poor	Manageable
Encouraging students to ask questions	Manageable	Manageable	Manageable
Giving academic feedback to students	Good	Manageable	Good
Threatening	No	No	No
Student behaviour in classrooms			
Students actively listen and participate	Manageable	Manageable	Good
Ask questions and express ideas	Manageable	Poor	Manageable
Students' use of TLMs	No	No	No
Students respond and answer	Manageable	Poor	Good

- * All the schools registered a figure of 100% distribution of textbooks. The distribution of textbooks in all the schools was satisfactory. Laboratories were used in EMRS but JNV students more effectively used laboratories. Whereas in ST & SC schools laboratories were not used by students. JNV Students used libraries more effectively than EMRS.
- * Teaching-learning process was better in JNV in comparison to EMRS and ST & SC schools. However EMRS projected a better picture of teaching-learning process than ST & SC schools. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLM use during teaching and initiating group-based learning was not satisfactory. The situation in JNV was slightly better but far from being excellent.
- * The nature for student engagement in classroom teaching was less active. Their behaviours in classrooms were more or less teacher-directed. Their participation in classroom learning was minimal in ST & SC schools, manageable in EMRS and slightly better in JNV.
- * *Availability of TLMs and TLEs.* They were not available in classrooms for ready use by the teacher while teaching. Students hardly got opportunities to handle the TLMs themselves.

4.3 Student Development Activities

Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools and JNV on those activities.

Table 4.3.1: Student development activities

Activities	EMRS	ST & SC	JNV
Remedial coaching as per student need	No	No	Good
Counselling for behavioural problems	Manageable	Poor	manageable
Career counselling	No	In adequate	Manageable
Identifying and developing student talents	Good	Manageable	good
Coaching for professional courses	No	No	good
Self-defence training	No	No	Yes
life skills training	Partly done	No	Partly done
Coaching for sports and games competitions	Manageable	No	Good
Training for musical and artistic talents	No	No	Manageable
Training on vocational and work education	No	No	No
Training students as social change agents	Poor	Manageable	No

- * It is evident from the above table that students' talents were identified and developed in EMRS and JNV. Remedial coaching as per student need, career counselling, coaching for professional courses, Self-defence training, training for musical and artistic talents, training on vocational and work education were not evident to some degree in EMRS, but counselling for behavioural problems and coaching for sports and games competitions were manageable in EMRS.
- * Similarly remedial coaching as per student need, counselling for behavioural problems, career counselling, coaching for professional courses, self-defence training, life skills training, coaching for sports and games competitions, training for musical and artistic talents, training on vocational and work education were not evident in ST & SC schools. The SC& ST schools appeared to be weak on many fronts in comparison to EMRS and JNV in terms of student development activities. However the picture in JNV in respect of the student development activities was slightly better than that of EMRS except training on vocational and work education and training students as social change agents.

4.4 Student Evaluation Practices

Table 4.4.1 presents schools' adoption of CCE along important parameters.

Table 4.4.1: Student Evaluation Practices as per CCE

Parameter	EMRS	SC & ST	JNV
Using summative evaluations	Satisfactory	Satisfactory	Satisfactory
Using formative evaluations	Satisfactory	Unsatisfactory	Satisfactory
Assessing through oral questions	Average	Average	Satisfactory
Assessing through observations	Average	Unsatisfactory	Satisfactory
Using self and peer-assessment	Average	Unsatisfactory	Satisfactory
Using parental assessment	Unsatisfactory	Unsatisfactory	Unsatisfactory
Using group assessment	Unsatisfactory	Unsatisfactory	Average
Assessing socio-personal qualities	Unsatisfactory	Average	Satisfactory
Maintaining student portfolios and anecdotal records	Unsatisfactory	Unsatisfactory	Unsatisfactory
Using checklists and rating scales	Unsatisfactory	Unsatisfactory	Satisfactory
Cumulative progress card for each child maintained	Unsatisfactory	Unsatisfactory	Satisfactory
Identifying individual strengths	Unsatisfactory	Unsatisfactory	Unsatisfactory
Quality of feedback to students	Unsatisfactory	Unsatisfactory	Satisfactory
Remedial coaching on the basis of CCE	Unsatisfactory	Unsatisfactory	Satisfactory

- * It is reported from the above table that student evaluation practices as per continuous and comprehensive evaluation were not properly followed on most of the parameters mentioned above (table no 4.4.1) in EMRS and ST & SC schools. Summative and formative evaluations were done in EMRS and JNV as per CCE. Student portfolios and anecdotal records were not maintained in any of the schools. Only in EMRS students' assessments were done through oral questions, observations and by the use of self and peer assessments. Whereas in ST & SC schools students were assessed only through oral questions and summative evaluations were done at the end of each session in ST & SC schools. In respect of the methods of assessment in JNV, assessing through oral questions, assessing through observations, self and peer-assessment on the basis of CCE were done to some extent. Assessing socio-personal qualities of students, maintaining cumulative progress card for each child, remedial coaching on the basis of CCE, and providing feedback to the students about their performance were done in JNV.

Chapter 5

RESIDENTIAL CLIMATE IN HOSTELS

5.1 Residential Environment in Hostels

The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Residential environment in students' Hostels

Parameter	EMRS	SC & ST	JNV
Building whitewashed	Manageable	Manageable	Good
Cleanliness of hostel campus	Manageable	Manageable	Good
Cleanliness of hostel rooms	Manageable	Manageable	Good
Light and ventilation in hostel rooms	Manageable	Manageable	Satisfactory
Garbage disposal pit	Inadequate	Inadequate	Inadequate
Proper drainage system	Inadequate	Inadequate	Inadequate
First-aid box	Yes	Yes	Yes
Fire safety	Inadequate	No	Inadequate
Dustbin in hostel rooms	No	No	Manageable
Children's hygienic habits	Good	Manageable	Good
Using suggestion box	Not used	No	Not used
Wall magazine	No	No	No
House system functional	No	No	Yes
Cultural activities	Manageable	Manageable	Manageable
Inter house competitions	Manageable	No	Manageable
Annual function	Done	Done	Done
Stationeries supplied	Yes	Yes	yes
Play and indoor games equipment	Inadequate	Inadequate	Manageable
Health check up	Irregular	Irregular	Irregular
Health cards issued	No	No	No
ANM/Health worker available	No	No	No
Mess committee's functional efficiency	Unsatisfactory	No	Unsatisfactory
Beautification of hostel campus	Unsatisfactory	Unsatisfactory	Unsatisfactory
Hostel locked during school hours and remedial coaching	Yes	Yes	yes

- * Residential environment in students' hostels were good in JNV in comparison to EMRS and ST & SC schools. However it is noticed that on parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness. Light and ventilations were found in EMRS hostels. EMRS buildings were whitewashed. But garbage disposal pit was not

available in EMRS and drainage system was also not proper in EMRS. Similar cases were noticed in terms of hostel environment maintenance in ST & SC schools. On parameters of physical environment and cleanliness JNV projected a better picture of hostel cleanliness in comparison to EMRS.

- * On parameters of health and safety measures most of the conditions in EMRS and ST & SC schools were unsatisfactory or inadequate. But children's hygienic habits were developed in EMRS. First aid box was used in all the schools. Fire safety measures were taken in JNV. Fire safety measures were inadequate in EMRS and ST & SC schools. Dustbins were provided in JNV hostel rooms which were not found in EMRS and ST & SC hostels. Suggestions box was not provided in any of the hostels in all the schools. Wall magazines were not maintained in any of the hostels in all the schools of EMRS, ST & SC and JNV. House systems were not functional in EMRS and ST & SC schools but JNV developed house system in hostels. Health cards were not issued to the students in EMRS, JNV and ST & SC schools. ANM/health workers were not available in EMRS, ST & SC and JNV schools.
- * On parameters of co-curricular and cultural activities, only annual functions were done with sincerity in all the schools whereas other dimensions required improvement. It is noticed from the above table no 5.1.1 that cultural activities were not organised in EMRS and ST & SC schools.
- * Mess committees were not functioning effectively in EMRS, ST & SC and JNV schools. JNV, EMRS and ST & SC did not present a beautiful hostel campus as evident from table no 5.1.1. But it is noticed that hostels were locked during school hours and during conduct of remedial coaching.

5.2 Hostel Kitchen and Food

Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: Hygienic environment of kitchen and quality of food

Parameter	EMRS	SC & ST	JNV
Kitchen building whitewashed	Manageable	Manageable	Manageable
Cleanliness of kitchen floor	Manageable	Manageable	Good
Cleanliness of kitchen equipment and utensils	Manageable	Manageable	Good
Cleanliness of dining room	Manageable	Poor	Good
Light and Ventilation	Unsatisfactory	Unsatisfactory	Good
Fire safety for the kitchen	No	No	Yes
Proper drainage system for kitchen	Inadequate	Inadequate	Inadequate
Cleanliness of hand wash points	Manageable	Manageable	Manageable
Cleanliness of store room	Manageable	Manageable	Good
Safety stand for plates	No	No	No
Hand washing points	Inadequate	Inadequate	Adequate
Aqua guard points for safe drinking water	Manageable	No	Adequate

Kitchen waste clearance and management	Poor	Poor	Manageable
Smokeless cooking	No	No	Yes
Hygienic cooking	Manageable	Unsatisfactory	Satisfactory
Approved menu chart displayed	Yes	No	Yes
Meals served according to menu chart	Manageable	No	Manageable
Quality of meal	Unsatisfactory	Unsatisfactory	Satisfactory
Teachers on duty / mess committee supervision	Yes	No	Yes
Procurement procedure duly followed	No	No	Yes
Serving of food supervised teachers	Partly	No	Yes

- * JNV projected a better model of hygienic environment in kitchen. On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable and slightly better than ST & SC hostels. ST & SC schools need improvement for maintaining quality of food and hygienic environment of kitchen in residential hostels of the schools.
- * Kitchen building was whitewashed in EMRS, ST & SC and JNV schools. Kitchen floor was clean in JNV in comparison to EMRS and ST & SC schools. Even kitchen equipments and utensils were cleaner and looked hygienic in JNV than EMRS and ST & SC schools. Dining room was neat and clean in JNV in comparison to EMRS whereas dining room was not well maintained in ST & SC schools. Light and ventilation facilities in kitchen were available in JNV whereas proper ventilations were not found in either EMRS hostel kitchen or ST & SC hostel kitchen. ST & SC hotel kitchen light facilities were poor in comparison to EMRS hostel kitchens. But EMRS kitchens also require proper light and ventilation facilities like JNV hostel kitchens. Hand wash points were available in EMRS, ST & SC and JNV in manageable conditions.
- * Store room was clean in JNV and was in manageable condition in EMRS and ST & SC schools. Safety stand for plates were not available in EMRS, ST & SC and JNV. Hand washing points were adequate in EMRS but inadequate in EMRS and ST & SC schools. Aqua guard points for safe drinking water were available in JNV. It is observed from table 5.2.1 that aqua guard points for safe drinking water was available in EMRS but in manageable condition i.e. not properly functioning mode. Aqua guards need repair and maintenance from time to time. Once these are installed in the schools, nobody is there to take care of these aquaguards. In ST & SC schools no aqua guard points for safe drinking water was available in ST & SC schools.
- * Kitchen waste clearance and management was not proper in EMRS and ST & SC schools. Kitchen waste clearance and management was only in manageable condition in JNV. Smokeless cooking was not available in EMRS and ST & SC schools. However smokeless cooking was available in JNV. Cooking was more hygienic in JNV in comparison to EMRS Whereas ST & SC schools hygienic cooking was not done. Menu charts were displayed in EMRS and JNV. Meals served according to the menu chart in EMRS and JNV. Quality of meal was satisfactory in JNV. Quality of meal needs improvement in EMRS and ST & SC schools as evident from table 5.2.1. Mess supervision committee was formed in EMRS and JNV whereas it is not found in ST & SC schools. Teachers were on duty for mess supervision and served food in EMRS and JNV. Procurement procedures were not duly followed in EMRS and SC and

ST schools. Procurement procedures were followed in JNV for maintaining better transparency in the procurement system.



Students were participating in morning assembly In EMRS Narainala



Students were participating in morning assembly In EMRS Narainala

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1 Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-4 on 'Method and Procedure'. It may be mentioned here the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

Table 6.1.1: Mean Achievement Level of Class VIII Students in Madhya Pradesh in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	60	8.57 2.41	34.28	60	9.52 2.78	38.08	60	7.62 2.72	30.48	60	8.58 2.49	34.32
SC & ST	60	5.2 2.62	20.8	60	5.68 1.92	22.72	60	5.87 2.4	23.48	60	5.97 2.16	23.88
JNV	30	15.33 3.89	61.32	30	10.67 3.70	42.68	30	8.83 3.32	35.32	30	12.07 3.30	48.28

* In all the four subjects Mathematics, Science, social Science and English, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools (Table 6.1.1).

* It may however be mentioned that the performance of students from all the three types of schools in class VIII was not in the satisfactory range as students in ST & SC schools scored in the range of only 20% to 23 % across four subject areas, while those in EMRS scored in the range of 30% to 38%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 35% to 61 % across the four subject areas.

Table 6.1.2: Category-wise Mean Achievement Level of Class VIII Students in Madhya Pradesh in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	60	8.57 2.41	34.28	60	9.52 2.78	38.08	60	7.62 2.72	30.48	60	8.58 2.49	34.32
SC & ST	60	5.2 2.62	20.8	60	5.68 1.92	22.72	60	5.87 2.4	23.48	60	5.97 2.16	23.88
JNV	28	8.64 3.41	34.56	26	10.61 2.73	42.44	11	8.89 3.27	35.56	28	8.21 1.89	32.84
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	3	10 1	40	4	12.75 1.26	51	4	11 0.82	44	5	8 2.12	32
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	2	10 -	40	1	11 -	44	1	10 -	40			

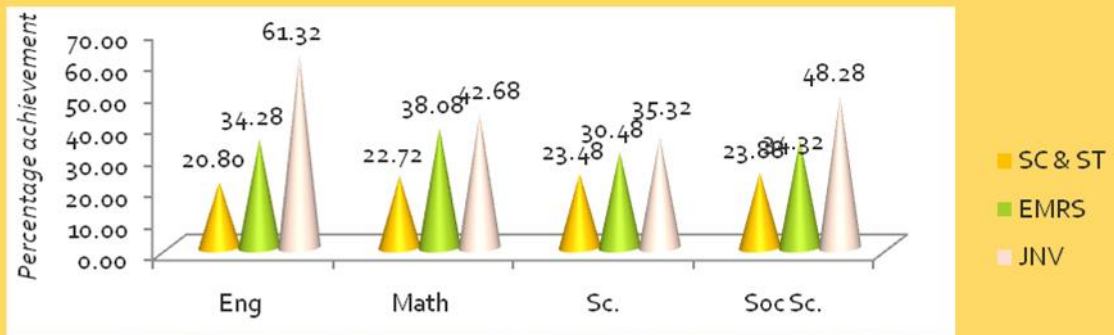


Figure 6.1.1. Mean Achievement of Class VIII ST Students in Madhya Pradesh English, Mathematics, Science and Social Science by School Type

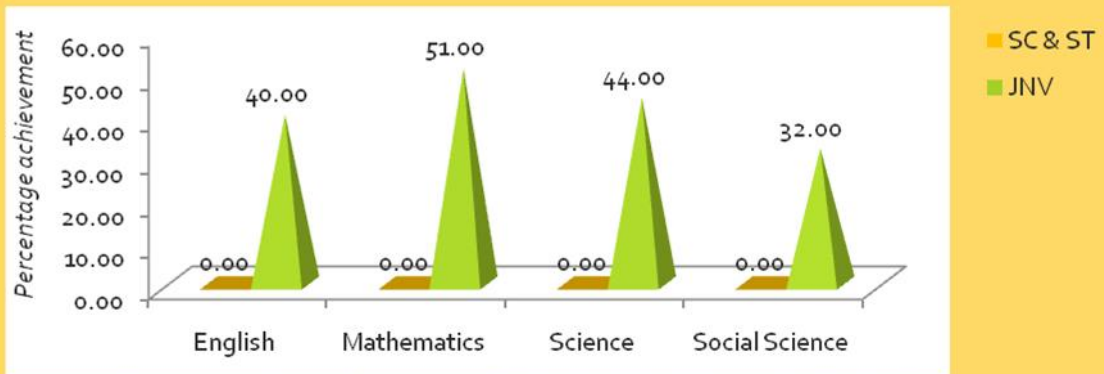


Figure 6.1.2. Mean Achievement of Class VIII SC Students in Madhya Pradesh English, Mathematics, Science and Social Science by School Type

Table 6.1.3: 't' values showing group comparisons across school types in respect of achievement level of Class VIII ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	Df	T
EMRS Vs. ST & SC	8.57 5.2	118	8.80**	9.52 5.68	118	7.33**	7.62 5.87	118	3.74**	8.58 5.97	118	6.13**
EMRS Vs. JNV	8.57 8.64	84	1.69*	9.52 10.61	86	0.09*	7.62 8.89	69	1.21*	8.58 8.21	86	0.77*
ST & SC Vs. JNV	5.2 8.64	84	8.36**	5.68 10.61	86	4.73**	5.87 8.89	69	2.92**	5.97 8.21	86	4.94**

; Significant at .05 level

**Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) reported that VIIIth class EMRS ST Students and ST students from ST & SC schools differed significantly in English, Mathematics, science and social science subjects. Similarly ST students from JNV and ST & SC schools differ significantly in English, Mathematics, science and social science. But ST Students from EMRS and JNV schools did not differ significantly in English, Mathematics, science and Social Science. JNV ST students performed better than EMRS ST Students in English, Mathematics and Science except in Social Science where EMRS ST Students performed better than JNV ST Students in the subject of social science in class VIIIth.
- * The ST students in class VIII in ST & SC schools performed in the range of 20% to 24% while their performance in EMRS was within 30% to 39% and in JNV in the range of 32% to 43%

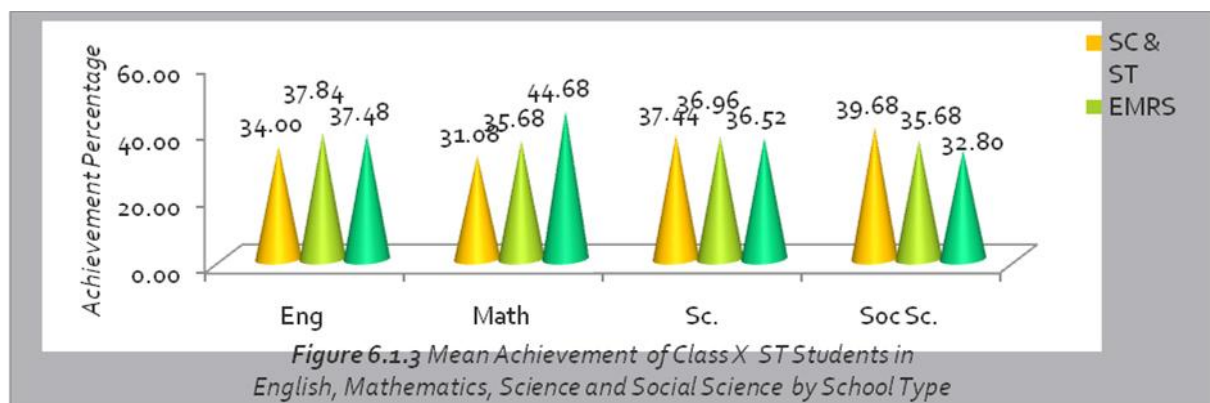
Table 6.1.4: Mean Achievement Level of Class X Students in Madhya Pradesh in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	60	9.46 2.22	37.84	60	8.92 2.44	35.68	60	9.24 2.85	36.96	60	8.92 2.29	35.68
SC & ST	60	8.5 2.49	34	60	7.77 2.07	31.08	60	9.36 2.45	37.44	60	9.92 2.76	39.68
JNV	30	9.37 2.83	37.48	30	11.17 2.32	44.68	30	9.13 3.02	36.52	30	8.2 1.91	32.8

- * The performance of students in class X in JNV in the subject Maths was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 31% to 40%, while those in EMRS showed attainment in the range of 35% to 38%. The students in JNV performed in the range of 32% to 49% (Table 6.1.4).
- * The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed poorly in English & Maths subject areas. Students in JNV & EMRS scored highest in English followed by Social Science, Science and Mathematics.

Table 6.1.5: Category-wise Mean Achievement Level of Class X Students in Madhya Pradesh in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	60	9.46 2.22	37.84	60	8.92 2.44	35.68	60	9.24 2.85	36.96	60	8.92 2.29	35.68
SC & ST	60	8.5 2.49	34	60	7.77 2.07	31.08	60	9.36 2.45	37.44	60	9.92 2.76	39.68
JNV	25	15.6 3.51	62.4	21	9.38 3.38	37.52	25	9 2.96	36	22	11 2.67	44
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	6	14 4.64	56	4	8.75 5.12	35	6	8.17 4.62	32.67	3	12 1	48
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	4	16 4.89	64	6	12.33 4.46	49.32	4	11.5 4.20	46	6	15.67 3.61	62.68



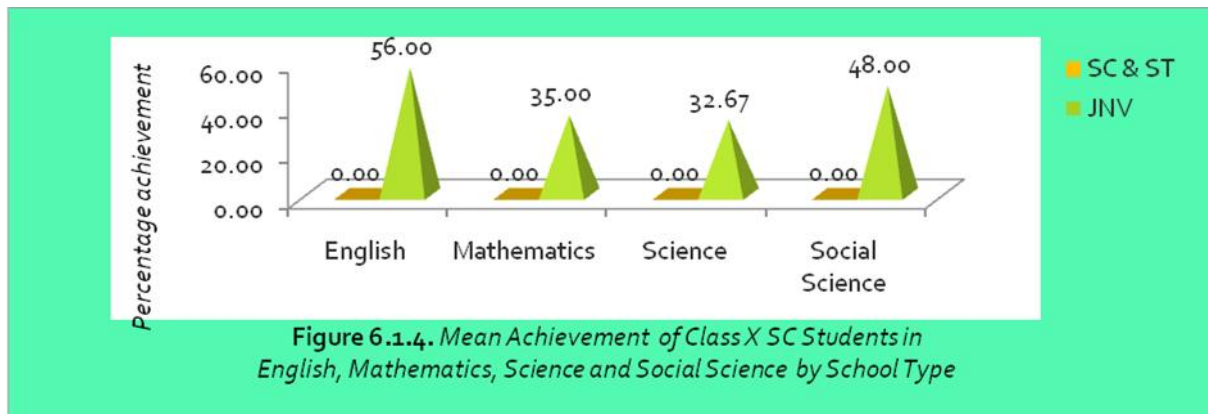


Table 6.1.6: 't' values showing group comparisons across school types in respect of achievement level of Class XST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS Vs. ST & SC	9.46	118	2.23	8.92	118	2.78	9.24	118	0.25	8.92	118	2.16
	8.5			7.77			9.36			9.92		
EMRS Vs. JNV	9.46	83	8.09	8.92	79	0.57	9.24	83	0.34	8.29	80	3.24
	15.6			9.38			9			11		
ST & SC Vs. JNV	8.5	83	9.19	7.77	79	2.05	9.36	83	0.53	9.92	80	1.60
	15.6			9.38			9			11		

; Significant at .05 level

:: Significant at .01 level

- * Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS in English, Maths & Social science, who were also better than ST students in ST & SC schools (Table 6.1.5; Figure 6.1.3). ST students of ST & SC School were better in science than ST students of JNV & EMRS.
- * t-values indicated that it was only in English language EMRS and JNV and in English between JNV and ST & SC schools that performance differences of ST children were significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- * There were no SC and General students admitted in EMRS and ST & SC schools. The SC students of JNV were not equal with general students. General students were highly better than SC students.

Table 6.1.7: Mean Achievement Level of Class XII Students in Madhya Pradesh in English, Mathematics, Physics, Chemistry and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	30	8.73 2.38	29.1	30	10.6 2.01	35.33	30	7.3 2.44	24.33				30	9.57 1.85	31.9
SC & ST	52	8.95 2.41	29.83	52	9.14 1.65	30.46	52	7.91 1.77	26.33	1	9 -	30	51	9.4 1.92	31.33
JNV	30	15.67 4.19	52.23	30	10.93 3.58	36.43	30	7.53 3.04	25.1	17	14.70 5.68	49	22	11.95 3.98	39.83

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS and ST & SC schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.
- * The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 57% (Table 6.1.7).

Table 6.1.8: Category-wise Mean Achievement Level of Class XII Students in Madhya Pradesh in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	30	8.73 2.38	29.1	30	10.6 2.01	35.33	30	7.3 2.44	24.33				30	9.57 1.85	31.9
SC & ST	52	8.95 2.41	29.83	52	9.14 1.65	30.46	52	7.91 1.77	26.33	1	9 -	30	51	9.4 1.92	31.33
JNV	24	15.37 4.33	51.23	22	10.68 3.59	35.6	19	9.68 2.50	32.27	12	14 5.11	46.67	16	12.13 4.46	40.43

SC Students															
EMRS	No SC students														
SC & ST	No SC students														
JNV	2	12.5 2.12	41.67	2	9 -	30	1	5 -	16.67				2	15 9.89	50
General Category Students															
EMRS	No General students														
SC & ST	No General students														
JNV	7	16.43 3.10	53.34	7	12.14 3.72	40.47	9	8.56 4	28.53	5	16.4 7.23	14.67	4	11 2.94	36.67

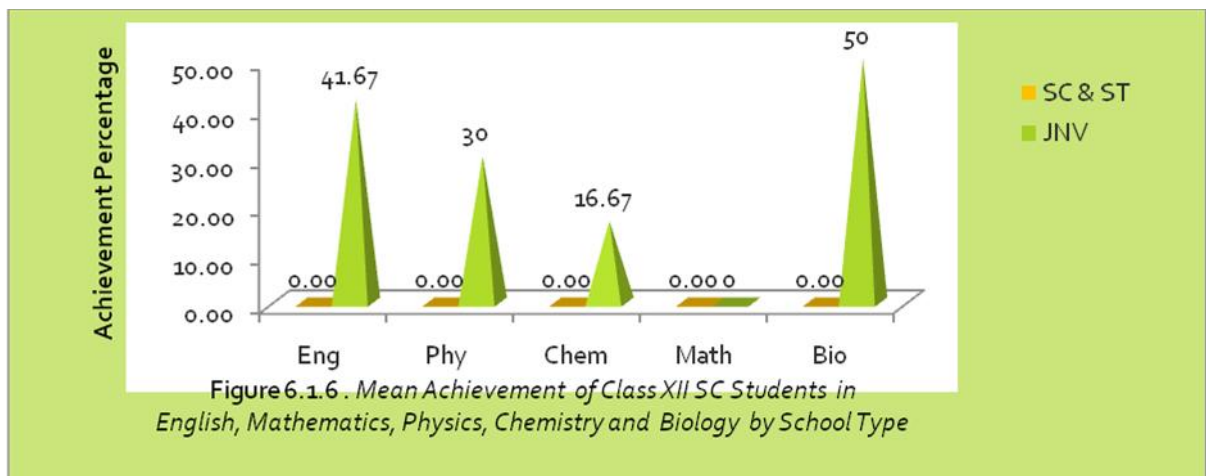
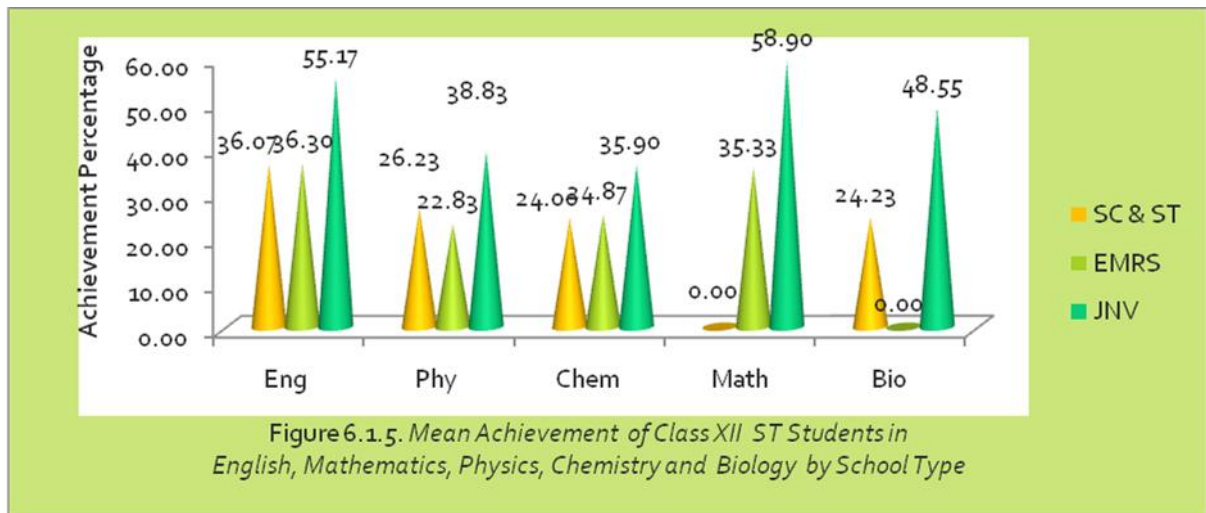


Table 6.1.9: 't' values showing group comparisons across school types in respect of achievement level of Class XIIST students in different subject areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS Vs. ST & SC	8.73 8.95	80	0.40	10.6 9.14	80	0.86	7.3 7.91	80	1.20	- 9	- -	- -	9.57 9.4	79	0.39
EMRS Vs. JNV	8.73 15.37	52	6.74	10.6 10.68	50	0.09	7.3 9.68	37	3.31	- 14	- -	- -	9.57 12.13	44	2.20
ST & SC Vs. JNV	8.95 15.37	74	6.79	9.14 10.68	72	0.84	7.91 9.68	69	2.84	9 14	11	3.39	9.4 12.13	65	2.38

; Significant at .05 level

:: Significant at .01 level

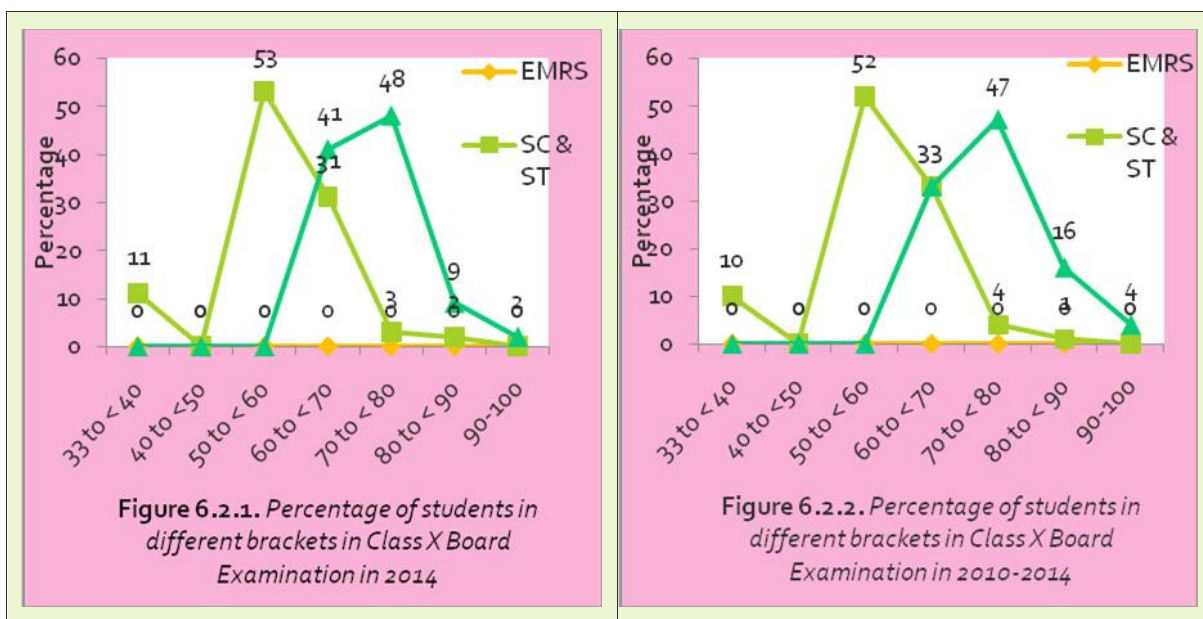
- * Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).
- * t-values revealed noticeable difference between ST students in EMRS and those in ST & SC schools only in English (Table 6.1.9; Figure 6.1.5). The ST students in JNV maintained their initial advantage over the ST students in ST & SC schools in all subject areas. Differences were significant only in English, Chemistry, Maths, and Biology. There were no SC students in EMRS & ST & SC School.
- * On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC school students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.
- * On the whole the performance of students in ST & SC schools was poor in few subjects of those in EMRS, below average and of those in JNV, above average.
- * In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

6.2 Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type in Madhya Pradesh during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school' opened in the year 2011-12 only.									
	SC & ST	178	81	46	07	-	61	32	-	-	-
	JNV	72	72	100	-	-	-	33	49	13	05
2011	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school' opened in the year 2011-12 only.									
	SC & ST	160	61	38	20	-	48	32	-	-	-
	JNV	66	66	100	-	-	-	29	45	22	04
2012	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school opened in the year 2011-12 only.									
	SC & ST	162	108	67	02	-	51	35	08	04	-
	JNV	72	72	100	-	-	-	37	40	19	04
2013	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school' opened in the year 2011-12 only.									
	SC & ST	290	128	44	10	-	46	35	06	03	-
	JNV	75	75	100	-	-	-	26	49	20	05
2014	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school' opened in the year 2011-12 only.									
	SC & ST	284	156	55	11	-	53	31	03	02	-
	JNV	80	80	100	-	-	-	41	48	09	02
TOTAL	EMRS	Students have neither appeared in Class-X nor in Class-XII as yet as the school' opened in the year 2011-12 only.									
	SC & ST	1074	534	50	10	-	52	33	04	01	-
	JNV	365	365	100	-	-	-	33	47	16	04



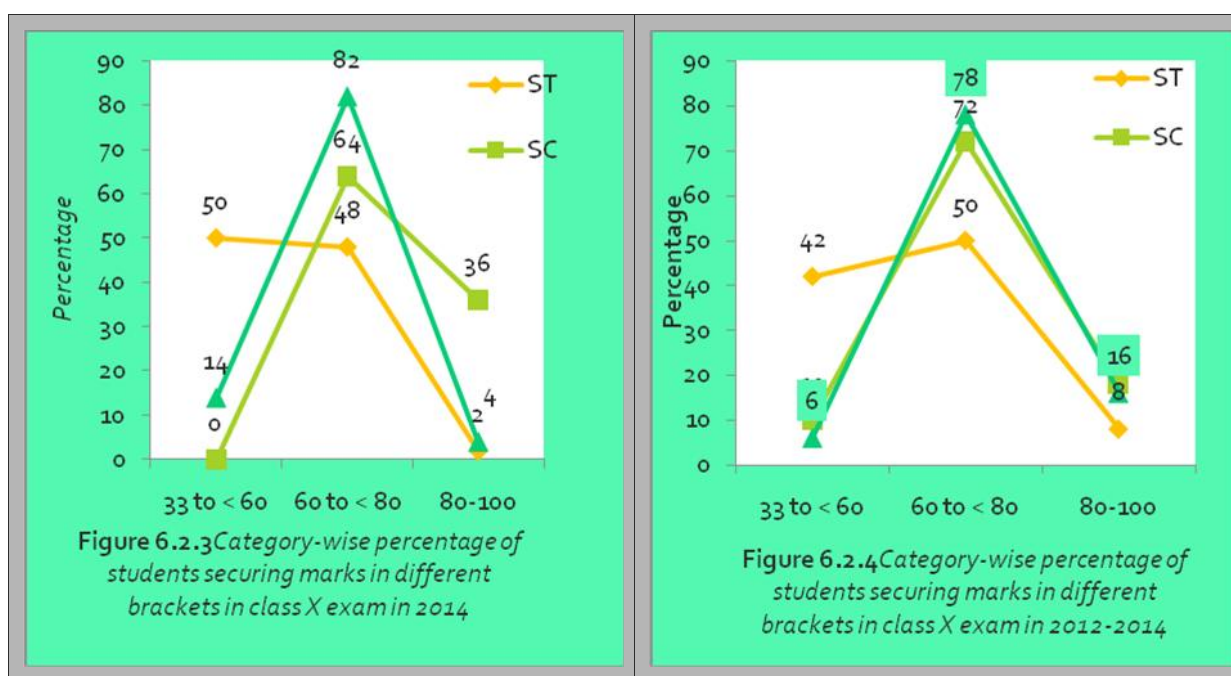
- * More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students appeared in examination. 20% of ST & SC school students got less than 40% and none of them got above 90%. In JNV none of the students got less than 60% and 2% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket in JNV, maximum students scored in the 80% to 90% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 50% to 60% for ST & SC schools and 70% to 80% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- * During the last five years, none of the students of JNV and 20% of the students of ST & SC schools scored below 40%, while 4% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.

The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted in Figure 6.2.3 for the year 2014 and in Figure 6.2.4 for a period of three years from 2010 to 2014.

Table 6.2.2: Category-wise Student Performance in Class X board Examination in the sampled schools in Madhya Pradesh during the Last Three Years (2012-2014)

Year	Category	No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	206	154	75	36	53	11
	SC	17	15	88	13	80	07

	General	11	11	100	-	73	27
2013	ST	335	175	52	40	50	10
	SC	12	10	83	20	70	10
	General	18	18	100	-	78	22
2014	ST	323	200	62	50	48	02
	SC	15	14	93	-	64	36
	General	26	22	85	14	82	04
Total	ST	864	529	61	42	50	08
	SC	44	39	89	10	72	18
	General	55	51	93	06	78	16



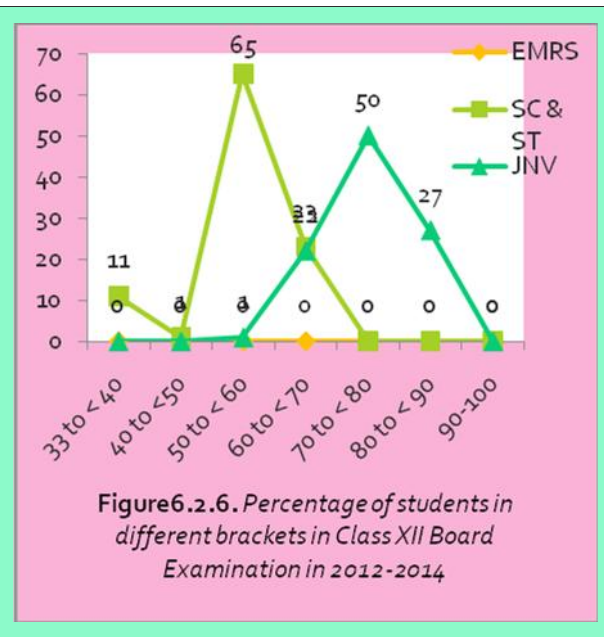
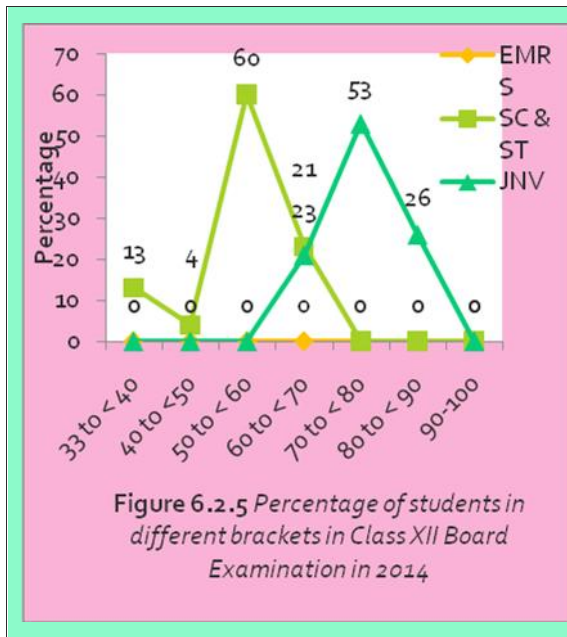
- * Analysis of performance of ST, SC and general students in all types of schools in Class X board examination in 2014 revealed that the SC and general students performed 93% & 85% results and both groups performed better than ST students. 62% ST, 93% SC and 85% general students passed in the examination 2014.
- * The performance trend of ST, SC and general students over the last three years (2012-14) was not same as was observed in 2014 (Figure 6.2.4). 61% ST, 89% SC, 93% general students completed the degree.

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Figures 6.2.5 and 6.2.6 show students' performance trend for 2014 and for the five-year period from 2010 to 2015, respectively.

Table 6.2.3: Student Performance in Class XII Board Examination in relation to School Type in Madhya Pradesh during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class XII Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	SC & ST	159	96	60	02	-	68	30	-	-	-
	JNV	49	46	94	-	-	04	20	48	28	-
2011	SC & ST	171	70	41	06	-	74	20	-	-	-
	JNV	61	59	97	-	-	-	25	42	33	-
2012	SC & ST	270	141	52	13	-	65	22	-	-	-
	JNV	41	39	95	-	-	-	26	51	23	-
2013	SC & ST	310	190	61	16	-	64	20	-	-	-
	JNV	59	48	81	-	-	-	21	58	21	-
2014	SC & ST	278	196	71	13	04	60	23	-	-	-
	JNV	62	58	94	-	-	-	21	53	26	-
TOTAL	SC & ST	1188	693	92	11	01	65	23	-	-	-
	JNV	272	250	92	-	-	01	22	50	27	-

N: B-No student of EMRS has appeared Class XII examination



* Maximum number of students scored in 50% to 60% bracket in ST & SC School and in 70% to 80% bracket in JNV in class XII Board examination in 2014. None from JNV scored below 50%, while only 27% of JNV students scored above 80%. There was approximately 20% gap in

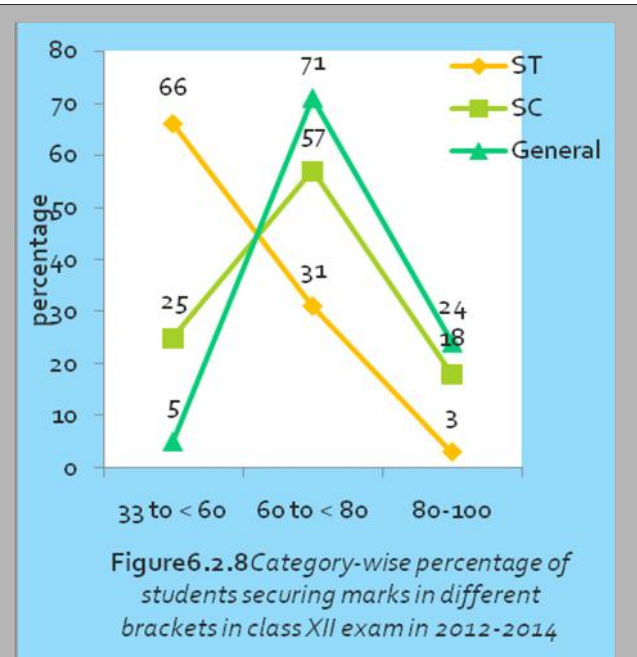
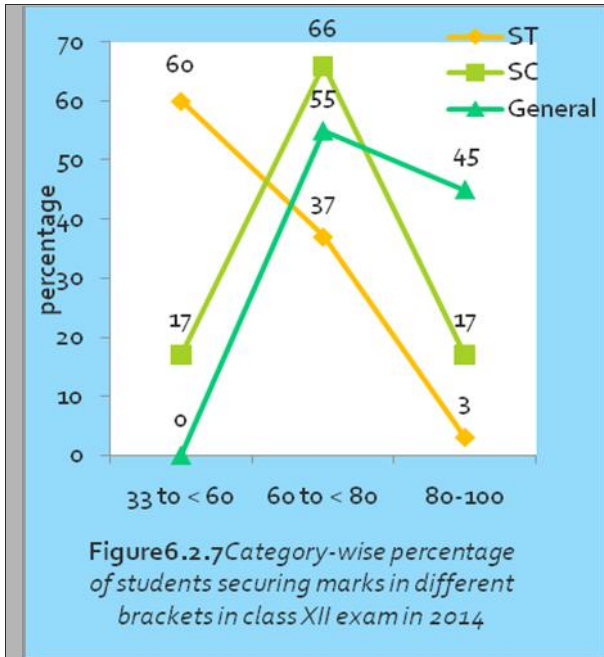
students' scores in Class XII examination between SC & ST and JNV students favouring the latter. EMRSs were not opened during the period.

- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of ST & SC students scored in 50% to 60% bracket and maximum number of JNV students scored in the 70% to 80% bracket. None of the JNV students scored below 50%, while 27 % students scored above 80%. Considering the results of last five years, there was a gap of about 20% in student performance level between EMRS and JNV favouring the latter (6.2.3)

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 and are plotted in Figure 6.2.7 for the year 2014 and in Figure 6.2.8 for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Terminal Examination in the sampled schools in Madhya Pradesh during the Last Three Years (2012-2014)

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	281	156	56	69	28	03
	SC	13	11	85	09	63	28
	General	17	13	76	08	77	15
2013	ST	335	216	64	69	27	04
	SC	09	05	56	80	20	-
	General	25	17	68	06	76	18
2014	ST	311	231	74	60	68	03
	SC	16	12	75	07	04	01
	General	13	11	85	-	08	03
Total	ST	927	603	65	66	31	03
	SC	38	28	74	25	57	18
	General	55	41	75	05	71	24



- * In class XII Board examination in 2014, 60% of ST students across all types of schools scored below 60%, while 25% of SC students and 5% of the general students scored below 60%.
- * 03% of ST students, 01% of SC students and 3% of general students scored above 80%. Maximum number of ST and general students scored in 60% to 80% bracket, while maximum number of SC students scored in 33% to 60% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students (Figure 6.2.7).
- * Considering the Class XII Board examination results over the last three years (2012-14), 66% of ST, 25% SC & 05 % general students were in 33% to 60% bracket where as 03% ST students, 18% SC students and 24% general students were in 80-100% bracket.

6.3 Student Participation in Co-curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of boys and girls participating in Co-Curricular and Sports activities by School Type (Madhya Pradesh)

Activity	EMRS		SC & ST		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
Co-Curricular activities						
Drawing	65	54	08	08	30	47
Singing	23	34	06	05	07	21
Sewing/ Knitting	-	-	-	-	-	-

Dancing	57	61	09	09	08	15
Painting	23	23	20	20	3	4
Instrumental music	10	03	-	-	2	-
Debate/ Eloquence	8	7	18	21	19	23
Writing Skill	30	14	27	28	-	-
G.K. / Quiz	34	34	04	04	10	13
Drama	17	13	05	03	-	-
Games and Sports						
Football	25	22	10	-	04	07
Volleyball	-	-	06	-	03	02
Basketball	-	-	-	-	12	-
Kho-Kho	25	25	10	13	03	05
Badminton	-	-	-	-	-	-
Kabbadi	42	37	11	12	04	07
Skipping	-	-	-	-	-	-
Athletics	27	20	12	12	05	05
Karate	-	-	-	-	-	-
Archery	-	-	-	-	09	14
Handball	08	00	-	-	-	-
Social activities						
NCC	-	-	-	-	25	25
Scout	-	-	-	-	16	16
NSS	-	-	-	-	35	35
Red cross	-	-	-	-	-	-
Shramdan	-	-	-	-	55	56
Social awareness campaign	-	-	-	-	-	-
Socials service in villages	-	-	-	-	-	-

- * It may be observed that more boys than girls participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- * The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the

society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: Percentage of boys and girls participating in Social activities by School Type (Madhya Pradesh)

	NCC	Scout	NSS	Shramdan	Social awareness campaign	Social service in villages
EMRS	-	-	-	-	-	-
SC & ST	-	-	-	-	-	-
JNV	50	32	70	111	-	-

* Among JNV students, 32% adopted Scouts and 70% were in NSS, 50 % were in NCC and *Shramdan* was carried in only JNV schools with maximum student participation in the range of 80% to 100% (Table 6.3.2).

6.4 Performance in National Talent Search Tests

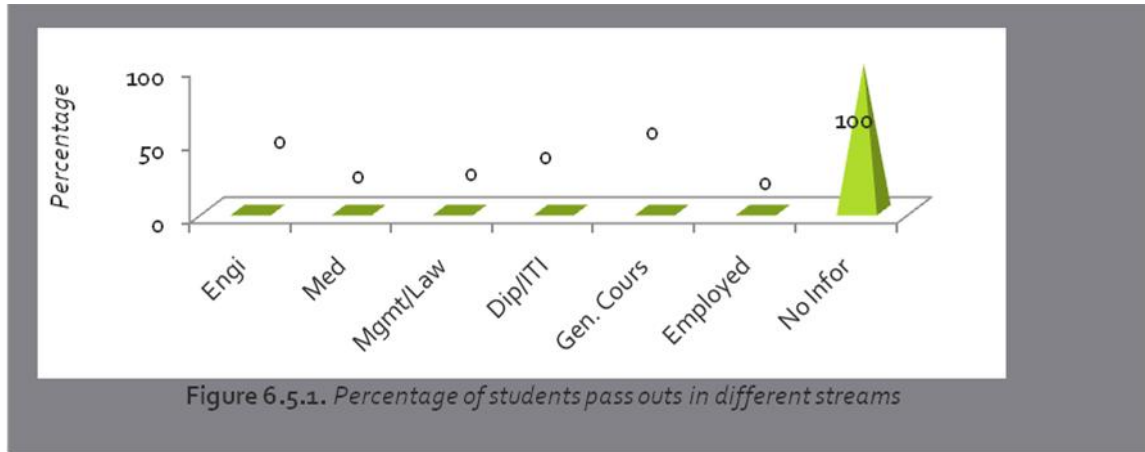
None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching.

6.5 Success Indicators of School Pass Outs

Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training. The JNV and EMRS did not keep any record of student pass outs, while the first batch of students in ST & SC schools are yet to appear in Class XII examination.

Table 6.5.1 Success indicators of school pass outs

Year	No of pass outs	Engineering	Medical	Management/Law	Diploma/ITI	General courses	No taking up employment	Information not available (no.)
EMRS	2012	No record is maintained in the School.						100
	2013							
	2014							
SC & ST	2012							
	2013							
	2014							
JNV	2012							
	2013							
	2014							



The students of JNV were placed highly in society being selected to IIT, Medical & Higher courses. They also performed better in competitive examinations compared to other types of schools. There was a mad rush for JNV in the social realm. The students of JNV took place over ST/SC schools and EMRSs in respect of post job placements and were obviously considered better. The ST and SC students prosecuting studies in JNV were also better than the ST & SC students of EMRSs and Tribal Department schools. Possibly inclusive education was responsible parameter for better performance of such students over their category counterparts.

Chapter 7

SCHOOL-COMMUNITY LINKAGE

7.1 Functioning of SMC and Other School Committees

Table 7.1.1 presents the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA participation in school activities

Parameter	EMRS	SC & ST	JNV
SMC participation			
Regular meeting of SMC	No	Frequent	No
Implementing resolutions of SMC	No	Poor	No
Involvement in developing SDP	No	Poor	Poor
Monitoring student attendance and drop out	Average	Poor	Average
Monitoring student progress	Not at all	Not at all	Not at all
Participation in school's co-curricular activities	Average	Poor	average
Participation in preparing TLMs	No	No	No
Supervising hostels	Poor	Manageable	Poor
Supervising quality of meals	Poor	Poor	Manageable
Monitoring utilization of funds	No	No	No
Liasoning with other agencies for school development	No	No	No
MTA not Functioning			
Regular meeting of MTA			
Monitoring student attendance and drop out			
Participation in school's co-curricular activities			
Working for the safety of girls			
Monitoring Meena cabinet and Meena Manch			
Coordinating with SHG for catering to girls' hygienic requirements			

- * An SMC works toward achieving proper and smooth functioning of a school, by catering to its infrastructure needs, mid-day meal programs and ensuring a better learning environment for children. But it is observed from the above table that regular school management committee meetings were not held in either EMRS or KNV. However ST & SC School did conduct school management committee meetings but the involvement of SMC in developing SDP, monitoring student attendance and drop out, implementing resolutions of SMC was found to be negligible.
- * SMC participation in EMRS, JNV and ST & SC School was found to be poor, average or manageable. SMC monitors the functioning of school, prepares and recommends School Development Plan, monitors the utilization of grants received from State Government or

local authority, ensures the enrolment and continued attendance of all the children from the neighbourhood, brings to the notice of the local authorities any deviation from the rights of the child, in particular mental and physical harassment of children, denial of admission, and timely provision of free entitlement. But it is noticed from the above table monitoring student attendance and drop out by SMC was done in EMRS and JNV but the involvement of SMC in monitoring student attendance was average. Whereas in ST & SC schools SMC's involvement in monitoring students attendance was very poor.

- * SMC in JNV, EMRS and ST & SC schools did not supervising quality of meals, nor even monitor utilization of funds. Liaoning with other agencies for school development was found to be negligible in all the schools. However participation in school's co-curricular activities by SMC was found to be average in EMRS and JNV. ST & SC schools the participation of SMC was very poor.
- * It is reported from table no 7.1.1 that MTA was not functioning in EMRS, JNV and ST & SC schools.

7.2 Teachers' Interaction with Community

Table 7.2.1 examined how teaching staff treat and interact with community members.

Table 7.2.1: Teachers' interaction with parents and community members

Parameter	EMRS	SC & ST	JNV
Dealing with community members when they visit school	Good	Good	Good
Personal contact with community members	Very poor	Poor	Very poor
Sharing of students' results with parents	Satisfactory	Poor	Satisfactory
Influencing the community cognitive behavior	Average	Poor	Average

- * The teachers in EMRS, JNV and ST & SC schools show interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. But teachers did not have any personal contact with the teachers. Teacher's interaction with parents and community members was satisfactory in EMRS and JNV in comparison to ST & SC schools where it was found to be poor on most of the parameters.

MONITORING AND SUPERVISION

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Table 7.3.1 reveals the frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of monitoring and supervision of the school and the Hostel by Educational Administrators and Community members during the 2014-15 (Madhya Pradesh)

Supervision	School			Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
By educational administrators	-	01	02	03	02	01	03	02	01
By community members	-	-	-	-	-	-	-	-	-

- * During a span of one year, educational administrators (mostly C.I/ D.I /District Welfare Officers) visited ST & SC schools about once a month and JNV twice a month. Educational administrators did not visit EMRS School not even once in a month. Visit to school is indicated as academic inspection, class supervision, giving feedback and suggestive measures for remedial teaching etc. However educational administrators visited boys' hostels in EMRS thrice a month, twice in ST & SC School boy hostels and once JNV boys' hostels. Similarly girls' hostel visit was also very less in EMRS, ST & SC schools and JNV as thrice a month in EMRS, twice a month in ST & SC schools and once I JNV girls' hostels respectively.
- * The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 and 7.4.2 provide information on class visits and hostel visits by the principals.

Table 7.4.1: Supervision of class visits by the Principal

Supervision	Month	EMRS	SC & ST	JNV
		(N of teachers = 24)	(N of teachers = 26)	(N of teachers = 23)
Frequency of class visits	Aug, 2014	05	11	04
	Sep, 2014	05	08	08
	Jan, 2015	08	06	10
	Feb, 2015	03	04	06
No. of teachers whose classes	Aug, 2014	12	17	12

have been visited	Sep, 2014	17	16	18
	Jan, 2015	13	16	18
	Feb, 2015	12	12	10
No. of teachers whose classes have not been visited	Aug, 2014	12	09	11
	Sep, 2014	07	10	05
	Jan, 2015	11	10	05
	Feb, 2015	12	14	13

Table 7.4.2: Frequency of hostel visits by the principal

Month	Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
Aug, 2014	05	07	07	05	07	07
Sep, 2014	06	10	09	06	10	09
Jan, 2015	05	06	10	05	06	10
Feb, 2015	08	05	06	08	05	06

- * The above table presents that the frequency of hostel visits by the principal in JNV was better in comparison to EMRS and ST & SC schools. The principal visited EMRS boy's hostel i.e. 5 times in the month of August and 8 times in the month of February whereas in JNV principal visited 10 times the boys' hostel in the month of January. In ST & SC school's principal visited boys' and girls' hostel most in the month of September i.e. 10 times in a month. In EMRS principal's visit was limited to the range of 5-8 times in a month, in ST & SC schools 5-10 times in a month and in JNV 6-10 times in a month.

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

8.1 Teachers' Perception and Feedback

Thirteen teachers of EMRS, 12 teachers of ST & SC schools and 6 teachers of JNV were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

- * Teacher views on school functioning parameters revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. The table 8.1.1 presents that EMRS focused on course completion as per syllabus, regular correction of students' work, remedial coaching, home assignments and projects to students, gender and social equity in school and hostels, provision for self-assessment, organizing games and sports and co-curricular activities, organizing literacy activities, debates and competitions and summative evaluations whereas ST & SC School focussed on course completion as per syllabus, correction of students' work, using summative evaluations, home assignments to students, gender and social equity in school and hostels, organizing games and sports and co-curricular activities, organizing literacy activities, debates and competitions, health problems. Most of the parameters of EMRS and JNV were same as per teachers' views. In addition to the below mentioned parameters for EMRS and ST & SC schools JNV focussed on gender and social equity in school and hostels, learning atmosphere in hostels, sharing student progress with parents, teachers preparing lesson plan and diary, effective use of labs, use of library by students, classes on art and aesthetics, security and safety of boarders, Infrastructure facilities for boarders, quality and safety of drinking water.
- * The factors which required to be strengthened in EMRS as evident from the table given below were environmental cleanliness in hostels, toilet cleanliness, maintaining cumulative progress report of students and student profile, use of CCE and planning remedial coaching, sharing written progress card of students with parents, TLM corner in classes and students using TLMs, using e-content in SMART classes, formative evaluations as per CCE, assessing students in co-curricular activities, assessing socio-personal qualities, self- peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-learning activities, organizing activities like gardening, plantation, woodwork, tailoring etc., consultations with other teachers and subject experts, counselling for student behaviour problems, organizing social service camps, maintaining linkage with community and inviting community participation, capacity building of teaching and non-teaching staff, keeping record of academic/professional career of pass outs.
- * It is analysed from the table given below that the factors which required to be strengthened in ST & SC schools as suggested by teachers were activity-based teaching and use of TLMs, effective use of labs, use of library by students, yoga and classes on art and aesthetics, coaching for professional courses, teachers preparing lesson plan and diary, maintaining cumulative progress report of students and student profile, sharing written progress card of students with parents, TLM corner in classes and students using TLMs, using formative evaluations as per CCE, assessing students in co-curricular activities, assessing socio-personal qualities, using self-, peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-

learning activities, consultations with other teachers and subject experts, counselling for student behaviour problems, organizing social service camps, infrastructure facilities for boarders, environmental cleanliness in hostels, learning atmosphere in hostels, quality of food in hostels, quality and safety of drinking water, toilet cleanliness and use, maintaining linkage with community and inviting community participation, capacity building of teaching and non-teaching staff and keeping record of academic/professional career of pass outs.

* It is observed from that the factors which required to be strengthened in JNV as indicated by teachers were maintaining cumulative progress report of students and student profile, using CCE for planning remedial coaching, TLM corner in classes and students using TLMs, assessing students in co-curricular activities as per CCE, assessing socio-personal qualities, using self-, peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-learning activities, consultations with other teachers and subject experts, counselling for student behaviour problems, maintaining linkage with community and inviting community participation, drainage system in hostels and keeping record of academic/professional career of pass outs.

Table 8.1.1: Modal responses of teachers on important school functioning parameters obtained through interview

	EMRS	SC & ST	JNV
Satisfactory (need to be maintained)	<ul style="list-style-type: none"> * Course completion as per syllabus * Regular correction of students' work * Remedial coaching * Home assignments and projects to students * Gender and social equity in school and hostels * Provision for self-assessment * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Using summative evaluations 	<ul style="list-style-type: none"> * Course completion as per syllabus * Correction of students' work * Using summative evaluations * Home assignments to students * Gender and social equity in school and hostels * De Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Using summative evaluations * along with student health problems 	<ul style="list-style-type: none"> * Course completion as per syllabus * Regular correction of students' work * Remedial coaching * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Using summative evaluations * Home assignments and projects to students * Gender and social equity in school and hostels * Dealing with student health problems * Learning atmosphere in hostels * Sharing student progress with parents * Teachers preparing lesson plan and diary * Effective use of labs * Use of library by students * Classes on art and aesthetics

			<ul style="list-style-type: none"> * Security and safety of boarders * Infrastructure facilities for boarders *Quality and safety of drinking
Average (need to be strengthened)	<ul style="list-style-type: none"> * Teachers preparing lesson plan and diary * Sharing student progress with parents * Coaching for professional courses * Infrastructure facilities for boarders * Learning atmosphere in hostels * Quality and safety of drinking water * Quality of food in hostels * Security and safety of boarders * Preparing students to contribute to family well being 	<ul style="list-style-type: none"> * Teachers preparing lesson plan and diary * Organizing games and sports and co-curricular activities * Organizing literacy activities, debates and competitions * Security and safety of boarders * Preparing students to contribute to family well being * Infrastructure facilities for boarders 	<ul style="list-style-type: none"> * Activity-based teaching and use of TLMs * Using e-content in SMART classes * Using formative evaluations as per CCE * Toilet cleanliness and use * Quality of food in hostels * Organizing activities like gardening, plantation etc. * Organizing social service camps * Environmental cleanliness in hostels * Sharing written progress card of students with parents * Coaching for professional courses * Preparing students to contribute to family well being * Capacity building of teaching and non-teaching staff
Unsatisfactory (need substantial improvement)	<ul style="list-style-type: none"> * Environmental cleanliness in hostels * Toilet cleanliness and use * Maintaining cumulative progress report of students and student profile * Using CCE and planning remedial coaching * Sharing written progress card of students with parents 	<ul style="list-style-type: none"> * Activity-based teaching and use of TLMs * Effective use of labs * Use of library by students * Yoga and classes on art and aesthetics * Coaching for professional courses * Teachers preparing lesson plan and diary * Maintaining cumulative progress report of students and student profile 	<ul style="list-style-type: none"> * Maintaining cumulative progress report of students and student profile * Using CCE for planning remedial coaching * TLM corner in classes and students using TLMs * Assessing students in co-curricular activities as per CCE * Assessing socio-personal qualities * Using self-, peer- and group-assessment

	<ul style="list-style-type: none"> * TLM corner in classes and students using TLMs * Using e-content in SMART classes * Using formative evaluations as per CCE * Assessing students in co-curricular activities * Assessing socio-personal qualities * Using self-, peer- and group-assessment * Assessing students' talent in specific areas * Innovative teaching-learning activities * Organizing activities like gardening, plantation, woodwork, tailoring etc. * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Organizing social service camps * Maintaining linkage with community and inviting community participation * Capacity building of teaching and non-teaching staff * Keeping record of academic/professional career of pass outs 	<ul style="list-style-type: none"> * Sharing written progress card of students with parents * TLM corner in classes and students using TLMs * Using formative evaluations as per CCE * Assessing students in co-curricular activities * Assessing socio-personal qualities * Using self-, peer- and group-assessment * Assessing students' talent in specific areas * Innovative teaching-learning activities * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Organizing social service camps * Infrastructure facilities for boarders * Environmental cleanliness in hostels * Learning atmosphere in hostels * Quality of food in hostels * Quality and safety of drinking water * Toilet cleanliness and use * Maintaining linkage with community and inviting community participation * Capacity building of teaching and non-teaching staff * Keeping record of academic/professional career of pass outs 	<ul style="list-style-type: none"> * Assessing students' talent in specific areas * Innovative teaching-learning activities * Consultations with other teachers and subject experts * Counselling for student behaviour problems * Maintaining linkage with community and inviting community participation * Drainage system in hostels * Keeping record of academic/professional career of pass outs
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8.2 Perception and Feedback of Non-teaching Staff

The perception and feedback of non-teaching staff pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: Model responses of non-teachers obtained through interview
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS	SC & ST	JNV
Suitable conditions for performing duties	S	S	HS
Involvement in co-curricular activities	A	A	S
Relation with principals and teachers	S	HS	HS
Relation with students	S	S	HS
Relation with parents/ community members	S	S	HS
Receiving capacity building training	HU	U	U

- * Non-teaching employees in JNV were highly satisfied on conditions prevailing in schools for performing duties. They were having good relationship with principals, teachers, students, parents and community members. Their involvement in co-curricular activities was satisfactory.
- * Non-teaching employees in EMRS were satisfied with the conditions prevailing in schools for performing duties. Their involvement in co-curricular activities was average in EMRS. The non-teaching staffs of EMRS were interacting with principals, teachers, students, parents and community members to some extent. The relationship was found to be satisfactory with the members of the school in EMRS.
- * In ST & SC schools the same situation prevailed as in EMRS as presented in the above table. Capacity building of non-teaching staff was not thought of in EMRS, ST & SC and JNV schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

Tables 8.3.1 and 8.3.2 presents the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Table 8.3.1: Model responses of teachers corresponding to Staff service conditions and benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	SANDWA	NARAINALA	SANDWA	RAMPUR	ALIRAJPUR
Salary/remuneration to the teaching staff	A	U	A	A	S
Salary/remuneration to the non-teaching staff	U	A	U	U	S
Service conditions of teachers	U	U	S	S	S
Service conditions of non-teachers	U	U	A	U	S
Prospect for promotion	U	U	HS	S	A
Incentive plan for teachers	U	U	S	S	A

Quarters inside campus	U	A	HU	U	S
Incentive plan for non-teachers	U	U	HU	U	A
Incentive plan for students	S	S	S	S	S

- * It is presented that EMRS teachers were not satisfied with the service conditions, salary/remuneration to the teaching staff, prospect for promotion, incentive plan for teachers, quarters inside campus. They EMRS teachers were not satisfied with the service conditions of non-teaching staff, salary/remuneration to the non-teaching staff, and prospect for promotion. Only EMRS teachers were satisfied with incentive plan for students.
- * ST & SC school teachers were also not satisfied with the salary/remuneration to the non-teaching staff, quarters inside campus, incentive plan for non-teachers. They were satisfied with service conditions of teachers, incentive plan for teachers, and incentive plan for students.
- * JNV presented a satisfactory picture of staff service conditions and benefits in comparison to EMRS and ST & SC schools.
- * From the table given below, it is observed that non-teaching staff in EMRS and ST & SC schools were not satisfied with their salary/remunerations, incentive plan, service conditions, prospect for promotion, and provision of quarters inside campus. In JNV non-teaching staff were highly satisfied with the staff service conditions and benefits.

Table 8.3.2: Model responses of non-teaching staff corresponding to Staff service conditions and benefits

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	SANDWA	NARAINALA	SANDWA	RAMPUR	ALIRAJPUR
Salary/remuneration to the non-teaching staff	U	U	U	U	HS
Service conditions of non-teaching staff	U	U	U	U	HS
Prospect for promotion	U	U	A	U	H
Quarters inside campus	U	U	U	U	HS
Incentive plan for non-teachers	U	U	U	U	U

8.4 Students' Perception and Feedback

This section presents students' perception and feedback. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment: Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health checkup facilities and hostel accommodation. Students in ST & SC schools also experienced the same deficiencies. JNV fared much better in most of these parameters.

Table 8.4.1: Percentage of students responding positively to the following School and hostel parameters obtained through Interview

Parameter	EMRS (N = 20)	SC & ST (N = 19)	JNV (N = 19)
School and Hostel environment			
Like the school	100	100	100
Conducive hostel infrastructure and accommodation	40	30	40
Classroom and lab furniture adequate	50	80	100
Lab furniture adequate	30	20	60
Good quality food	60	30	20
Good drinking water	50	35	100
Health checkup facilities available	30	30	35
Hostel environment is clean	35	30	55
Toilets and bathrooms are clean	40	30	80
Mosquito net provided	100	100	100
Curricular and Co-curricular activities			
Teachers are supportive of students	70	60	50
Adequate supply of textbooks	100	100	100
Adequate supply of learning materials	100	50	100
Quality of teaching	60	40	100
Activity-based teaching done and TLMs used	20	20	50
Home assignments given	30	40	70
Projects given	30	40	60
Student work corrected regularly	40	35	60
Regular supervised study and remedial classes	40	30	80
Laboratories effectively used	30	30	70
Allowed to ask questions freely	60	30	80
Co-curricular activities promoted	60	70	90
Scope for games and sports	30	35	90
Participation at district and state level encouraged	70	20	100
Student participation			
Student suggestions are solicited in school functioning	20	30	30
Student participate in mess management	50	25	35

Curricular and Co-curricular activities: Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.

Student participation: In all categories of schools student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs: The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers. There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues. Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 45 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Only one PRI member was available for interview in the JNV who did not enough knowledge to respond truthfully to the interview questions. His responses were very general and were based on guesses than on direct experiences. Hence his response protocol is not analyzed here further.

Table 8.5.1: Model responses of community members on facilities extended
To children and their interaction with school staff

	EMRS (N =04)	SC & ST (N =04)
<i>Facilities for children</i>		
Cleanliness of school environment	Yes	Yes
Cleanliness of hostel rooms and environment	Yes	Yes
Safety and security of hostels	Yes	Yes
Supply of free textbooks	Yes	Yes
Textbooks given before academic session	Yes	Yes
Children helped to solve academic problems	Yes	Yes
Children's results shared with parents	Yes	No
Children prepared to face competitive examinations	No	No
Quality of meals reasonably good	No	No
Cultural activities involving children	Yes	Yes
Opportunities for games and sports	No	No

Children's health problems duly attended	Yes	No
Non-discriminatory treatment to students	Yes	Yes
<i>Interaction with school and staff</i>		
Members' grievances properly received by staff	No	No
Teachers behave well with members	Yes	Yes
Member associated with school planning	No	No
Community contributes to school development	No	No

8.6 Views of Educational Administrators

Views of the Additional District Magistrate (ADM) and the Project Administrator (PA), ITDA, Assistant Commissioner expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

8.7 Programme Strengths, Concerns and Suggestions: Stakeholders' Feedback on EMRS

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 8.7.1 for feedback from each category of stakeholders).

Programme strengths (*need to be maintained*). Good school and hostel infrastructure; Residential facilities for students; Favorable PTR; Supply of free textbooks and uniforms and learning materials; Scope for games, sports and co-curricular activities; Engagement of qualified staff; Special attention and coaching to students; Gender and Social equity.

Concerns (*need special attention*). Poor salary and service conditions of the staff; Poor hostel maintenance and cleanliness; Water, power and toilet problems; Poor community involvement in school activities; Lack of regular health worker; Teacher-directed rather than student-initiated activities; Poor attention to build capacities of teachers

Suggestions (*need to be implemented*). Regular employment, proper salary and service conditions of staff; Solving water and power crises; Regular maintenance of hostel building and proper drainage system; Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit; Special measures for improving students' language proficiency; Capacity building of teaching and non-teaching staff; Student involvement in school practices and mess management; Strengthening school-community link.

Table 8.7.1: Strengths and difficulties of EMRS programme pointed out by stakeholders and their suggestions for strengthening EMRS

Stakeholder	Strengths	Difficulties	Suggestions
Principal	<ul style="list-style-type: none"> • EMRS offers the opportunity to tribal students to get education in English medium. • EMRS provide education with all facilities at par with Navodaya Vidyalaya. • Student’s evaluation is continuous and comprehensive and co-curricular activities are also a part of the study /evaluation. • Every year special coaching classes are conducted to prepare students for NTSE and NMMS examinations. • Educational tour is the part of the study 	<ul style="list-style-type: none"> • No provision of staff nurse and doctor. • Stipend provided to the students is not enough to compensate the monthly cost of the food. • Insufficiency of regular teaching and supporting staffs. 	<ul style="list-style-type: none"> • There should be provision for one staff nurse and one visiting doctor in the school set-up. • Food charges per student like JNV should be provided separately. • Regular teaching and supporting staffs should be appointed immediately. • Water facilities
Teachers	<ul style="list-style-type: none"> • Education in CBSE pattern with both Hindi and English medium. • Opportunity to improve the moral, physical and mental level of the tribal students. • Different activities like debate competition, writing competition etc. are conducted. So competition spirit among the students is developed. • EMRS helps to discover and developing the inner qualities of the students. • In the school activities like sports and game different cultural activities are organised. 	<ul style="list-style-type: none"> • No facilities for professional coaching. • No training for non-teaching staffs. • No training programme for teaching staffs is conducted. • Students are very weak in English subject and are not confident. • Getting very poor salary. • No service condition for teachers. • No summer vacation given to teachers. • In adequate TLM 	<ul style="list-style-type: none"> • Make the students to converse with English so that to improve the English spoken status of the students. • Activities should be arranged to develop the students English knowledge and confident in it. • Regular pay scale with service condition. • Appointment of permanent teachers for the school. • Smart class rooms, Audio-visual aids. • Musical instruments • After every five year promotion policy should be given to the teacher. • Adequate TLM should be supplied.

Hostel Superintendent	<ul style="list-style-type: none"> • Hostel warden and hostel worker are familiar to students. • Well-equipped living rooms. • In hostel all type of facilities available to the student 	<ul style="list-style-type: none"> • No permanent security guard cook and sweeper. • No Staff nurse appointed. • No water supply. • No training for non-teaching staffs. • No appointment of hostel warden and superintendent. • There is no ambulance for the school. • Visiting doctor facilities. 	<ul style="list-style-type: none"> • Facilities for water should be made in immediate basis. • Staff nurse appointment. • Posting of regular hostel superintendent, security guard, peon, water man and cook. • Facilities for drinking water. • One ambulance vehicle is required as the school is situated in remote area and no communication facilities are there. • Training should be given to the hostel superintendent and teaching staff. • One visiting doctor facilities should be done.
Students	<ul style="list-style-type: none"> • Teachers are friendly and teach well. • Library facilities. 	<ul style="list-style-type: none"> • No sufficient playground. • No library facilities in the school. • No good quality of meal. • No good black board. • School have no computer lab, practical lab and no remedial coaching classes. • Hostel living rooms are not sufficient. 	
Community Members	Teaching, Fooding, Environment	Infrastructure facilities	Infrastructure should be done immediately
Educational Administrators			Regular employee should be posted Provision for Staff Nurse like JNV

Chapter 9

SUMMARY OF FINDINGS AND OBSERVATIONS

9.1 School and Hostel Infrastructure Facilities

- Non-availability of minimum school and hostel infrastructure facilities in school had, in the past, been a major cause of drop out among a large chunk of students. But in the context of EMRS, ST & SC schools and JNV there are lot of space for students which give stress on giving opportunity to the children to enjoy the life in the lap of natural surroundings than only learning to read and write. The approximate average school campus area for EMRS, ST & SC and JNV are 20 acres, 32 acres and 14 acres, respectively. The built-up area for the EMRS and ST & SC schools and hostels for students run into 90,000 to 100, 000 sq. ft. and for the JNV to about 140, 000 sq. ft.
- The major source of drinking water in all schools was bore well. Drinking water was adequate in all the schools. Safe drinking water was provided in all the schools. Soaps and detergents were supplied as per the requirements of students in all the schools.
- Approximate number of children per toilet in EMRS varied from 40 to 73 which are better than ST & SC schools where the approximate number was more than 150. The approximate number of children per toilet was 36 in JNV. JNV presented a better picture in case of toilets facilities provided to children.
- Approximate number of children per hand wash point was 118 in EMRS, 137 in SC& ST schools whereas in JNV 54 children used one hand wash point in an average which was better than EMRS and ST & SC schools
- All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets
- Play-grounds for different sports and games as per student needs were immensely inadequate in EMRS and ST & SC schools. In JNV playground was available only for few games. Attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. The building of the school may not be costly but it must ensure safety measures for all children. Whereas it is observed that fire safety measures were inadequate in all the schools and attention was not paid to have classrooms with double doors which may cause problems in time of exigencies. Each school had entrance gate, boundary wall but due attention was not been paid to raising and maintaining gardens and kitchen gardens in EMRS and SC& ST schools, the primary reason for which was water scarcity. In JNV gardens were maintained as per manageable condition in comparison to EMRS and ST & SC schools.
- Nearly 100% of students in EMRS, JNV and ST & SC schools stayed in hostels except in one ST & SC schools where 13 % boys and 22 % girls stayed in hostels. In ST & SC schools, greater percentage of boys came from nearby villages and attended school as day-scholars.
- Light and ventilation facilities in EMRS were manageable in EMRS and ST & SC schools. Light and ventilation facilities were good in JNV. No rooms had leaking roofs in any of the schools. The hostel condition was safe in EMRS and JNV whereas accommodation hardly met safety and child-friendly parameters in ST & SC schools.
- EMRS except in one EMRS where the space per student was 24 square feet. Accommodation space per student was slightly better in ST & SC schools in comparison to

ST & SC schools. The infrastructure and accommodation facilities were better in JNV, average in EMRS and even inadequate in one of the SC&ST schools.

- All schools had superintendent's room /quarters, living room, kitchen rooms, store rooms but did not have dining room, rooms for CCA, sick room, prayer room, auditorium, and security room.
- Drinking water was adequate for all boarders in all hostels. Adequate water for bathing was available in all schools except in one of the EMRS and ST & SC schools. But In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. Water facilities into toilets and bathroom were adequate in JNV
- The toilet condition and cleanliness was manageable for boys in ST & SC schools and in EMRS but poor for girls. The toilet condition was good for both boys and girls in JNV. The ratio of children to toilets was not satisfactory in EMRS and ST & SC schools for girls but manageable for boys. The ratio of children to toilets was satisfactory in JNV.
- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV. Hostels in all types of schools have boundary walls but did not have proper garden or kitchen garden.
- Sixty eight percentage to seventy four percentage of the funds allocated to EMRS was spent during the year 2014-15 while spending in JNV reached 99% utilization. The average spending in the SC& ST schools was about 86% to 99 %. As per revised guideline of MoTA (2010), the Ministry's support to the States/ UTs for the EMRSs programme and its expansion is subject to the States/UTs ensuring high quality of management and running of the schools. Quality management indicates timely and smooth transition of funds allocated from the State Government/UT Administration to the management societies/schools; ensuring the recruitment of the desired number of teachers; ensuring the provision of medical facilities to staff and students; clean and hygienic surroundings and food for the children and providing a healthy, happy environment for the academic and overall development of the children. If the progress in the EMRSs is seen to be poor as a direct result of poor management and lack of adherence to standards the States/ UTs concerned would be unable to claim any more funds from the Ministry for this programme.

9.2 Staff Profile and Service Condition

- Principals were in position in all the schools except in one of ST & SC schools. Vice principal post was vacant in EMRS and SC& ST schools. Vice principal was in position in JNV. No PGTs were appointed in EMRSs as XI classes had not yet been opened. In SC& ST schools 40 to 60 % PGT posts were vacant. In JNV all PGTs were in position. IN EMRSs 81% to 100% TGTs were in position. IN ST & SC schools 50% to 88% TGTs were in position. In JNV 92% TGTs were in position. PET post remained vacant most of the time in EMRS and SC&ST schools. Only in one EMRS and one ST & SC schools PETs were in position. In JNV PET was in position. Librarians, accountants, head clerks, warden, catering assistant, matron, staff nurse were not in position in EMRS. Librarians, head clerks, warden, catering assistant, matron, staff nurse were not in position in ST & SC schools. Librarians, accountants, head clerks, warden, catering assistant, matron were in position in JNV. Staff nurse was not in position in JNV. CCAs were in

position in EMRSs. Fifty % to 91% CCAs were in position in ST & SC schools. Seventy five % CCAs were in position in JNV.

- Twenty seven percent of the teaching and Sixteen percent of the non-teaching positions were lying vacant in EMRS compared to 58% and 18% in ST & SC schools. Only 4% teaching staff positions and 21% non-teaching staff positions were lying vacant in JNV.
- The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools. The PTRs in ST & SC schools varied from 1: 40 to 1:66. The PTRs in EMRS and JNV were in the range of 1:21 to 1:22. The PTRs in EMRS and JNV were good in comparison to SC&ST schools and were as per state norm.
- There was noticeably large number of gen category teachers in EMRS and JNV schools compared to those from the SC and ST communities. It is noticed that in one of the ST & SC schools most of the teachers were from ST communities i.e. 16 out of 20.
- All teachers are trained in EMRS, JNV and SC& ST schools. In JNV 52% of teachers were having more than 10 years of experience while in EMRS 30% to 36 % of teachers were having more than 10 years of experience. In SC& ST schools 85% to 100% teachers were having more than 10 years of experience. In one of the EMRS 69 % of teachers were less than 5 years of teaching experience.
- Majority of the non-teaching staff in all the schools belong to ST community compared to those from the SC or general category.
- All non-teachers of EMRS and JNV were having less than 5 years of experience. 65 % of non-teaching staff in ST & SC schools were having 6-10 years of job experience.
- Eighty three percent of teaching staff and 95 % of non-teaching staff in EMRS were engaged on contractual basis. No teaching staffs in SC&ST schools and in JNV were engaged on contractual basis. Only 7 % non-teaching staff in JNV and 19 % in ST & SC schools were engaged on contractual basis.
- The gross monthly remuneration of principal in EMRS and ST & SC School did not present much difference as the principals were getting salary of Rs. 58475/- to Rs. 62227/- per month and principals in ST & SC schools were getting salary of Rs. 52385/- per month. But the salary in case of JNV principal was on higher side as the principal was getting Rs. 84470/- per month. No vice principals were appointed in case of EMRSs and ST & SC schools. Vice principal was engaged in JNV in helping the academic as well as administrative matters of the school and was getting salary of Rs.64962 per month. No PGTs were appointed in EMRSs.
- The salary structure of PGTs in SC& ST schools and JNV did not project any difference. PGTs were getting the scale of pay as Rs.9300/- to Rs.34800/- in JNV and ST & SC schools. TGTs and PET in EMRSs were getting Rs. 13500/- as monthly emoluments which was lower than SC& ST TGTs and TGTs engaged in JNV which was a major factor for demotivating the EMRS teachers. No laboratory assistants were engaged in EMRS and ST & SC schools whereas JNV presented a better picture in case of engagements and monthly emoluments of laboratory assistants who maintained the laboratories in JNV. Laboratory assistants also termed as assistant teachers were getting the scale of pay of Rs. 5200/- to 20200/- in JNV. Similar case was noticed in case of engagements of librarians. Librarians were not engaged in EMRSs and ST & SC schools. Librarians were getting the scale of pay of Rs.9300 to Rs.34800 in JNV which helped to maintain and enrich the library of JNV in comparison to EMRSs and SC& ST schools.
- Clerk, head clerk, accountants, warden, matron, staff nurse were not engaged in EMRSs. Only peon, night watchman/sweeper and CCAs were engaged in EMRSs on daily wage basis. Accountant, clerk, night watchman, sweeper, CCAs were engaged on regular basis in the pay scale of Rs.5200/- to Rs.20200/- in JNV. Matron was also engaged in JNV. Accountants and

clerks were engaged on regular basis in ST & SC schools basis in the pay scale of Rs.5200/- to Rs.20200/-.

- All teachers of EMRS, SC&ST schools and JNV received training whereas 95% of non-teachers in EMRS, 88% in ST & SC schools and 50 % of non-teachers in JNV did not receive any formal training as required in their respective jobs.
- The quality of initial teacher training programme very much depends on adequate amount of experience in teaching varieties of lessons in actual classroom situations over an acceptable duration. Teacher training makes teachers aware of the goals set by the school and accountability standards expected from them. If teachers are consulted in setting these standards, and are rewarded not only for high performance of their students in public examinations but also for their innovations and action researches that will help students overcome their social and emotional problems. Teachers in JNV were trained by Navodaya Vidyalaya Samiti. In EMRS and SC& ST schools teachers were trained by State Government.

9.3 Student Enrolment and Retention

- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 30.76, 6.87 and 2.75 for EMRS, ST & SC schools and JNV, respectively. There was more demand for EMRS followed by JNV and ST & SC schools.
- The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools. The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 77% for EMRS, 24.51% for ST & SC schools and 51.96% for JNV. The demand for admission to all types of schools increased over the years. Class XI had not yet been opened in EMRS schools and in one of SC&ST schools.
- The JNV schools catered to the needs of more students compared to EMRS and SC& ST schools. However ST & SC schools cater to the needs of more ST students in comparison to EMRS and JNV.
- A rough calculation of the classroom floor space per student in EMRS was about 10 sq. ft., while that in ST & SC schools was 4-7 sq. ft. and in JNV about 11 sq. ft.
- Average number of students per classroom was approximately 27-30 in EMRS, 33-44 in JNV. Average number of students was good in EMRS than JNV. In ST & SC schools the range varied from 24-139.
- Student attendance in EMRS was more satisfactory than JNV and SC&ST schools. Student attendance in EMRS varied from 97 to 98 % whereas In ST & SC schools student attendance varied from 89 to 93%. In JNV the attendance of students was 86% which was at lower side in comparison to EMRS and SC& ST schools.
- EMRS schools opened in session 2011-12. Students admitted in class VI in 2011-12, thus educational cycle of reaching class X in EMRS had not yet been completed till 2014-15.
- EMRS schools opened in session 2011-12. Students admitted in class VI in 2011-12, thus educational cycle of reaching class X in EMRS had not yet been completed till 2014-15. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X was 92% in JNV schools and 40 % in ST & SC schools.
- Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 94 % in JNV, 53 % in ST & SC schools. Completion of educational cycle of students admitted in class VI by 40% to 52% in ST & SC schools cannot be considered satisfactory. The picture however was satisfactory in case of JNV schools (92% to 100%) in

comparison to ST & SC schools. Similarly completion of educational cycle of students admitted in class XI by 53% to 71% in ST & SC schools was at lower side than JNV schools (81% to 94%).

- More students dropped out at the secondary stage compared to elementary and higher-secondary stages, particularly in ST & SC schools. IN EMRS and JNV negligible number of students dropped out of the system. However in EMRS only during 2013-14, 3 students dropped out from Xth class where as in JNV during 2010-11 eight students from class VI, 5 students from class VIII and one student from class IX dropped out of the system. Similarly during 2011-12 one to three students dropped out from class VI to IX. Three to eight students dropped out from class VI from 2010-11 to 2013-2014 in JNV. In 2014-15 no students had dropped out from EMRS and JNV. The information in respect of students staying out of the school system was not available with the school authorities.

9.4 School and Hostel Educational Climate

- Buildings are whitewashed in EMRS, JNV and SC and ST schools. Cleanliness of campus and cleanliness of classroom were manageable in EMRS and SC and ST schools. JNV had maintained cleanliness in classroom and hostels. Dustbins were not provided inside the classrooms in EMRS and JNV, but are available in ST & SC schools. Proper drainage system was not available in all the schools. First aid box was available in all the schools. Fire safety measures had not been undertaken in all the schools. Garbage disposal pit was adequate in EMRS. JNV and ST & SC schools suffered on account of having adequate garbage disposal pit. EMRS, SC& ST and JNV schools maintained hygienic habits of children. Monthly health check-up of students was not done in EMRS and ST & SC schools.
- Information board was not available in EMRS. Information board was available in JNV but not completely maintained in ST & SC schools. Wall magazine, TLM corner in the classroom, suggestion box were not available in EMRS and ST & SC schools. JNV maintained wall magazine, wall activities in order to express the hidden creative talents in the children.
- All schools were having library-cum-reading room. But JNV had maintained it well. Games and equipments were inadequate in EMRS and ST & SC schools as per students need whereas manageable games and equipments were available in JNV as per students need.
- All the schools registered a figure of 100% distribution of textbooks. The distribution of textbooks in all the schools was satisfactory. Laboratories were used in EMRS but JNV students more effectively used laboratories. Whereas in ST & SC schools laboratories were not used by students. JNV Students used libraries more effectively than EMRS.
- Teaching-learning process was better in JNV in comparison to EMRS and ST & SC schools. However EMRS projected a better picture of teaching-learning process than ST & SC schools. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLM use during teaching and initiating group-based learning was not satisfactory. The situation in JNV was slightly better but far from being excellent.
- The nature for student engagement in classroom teaching was less active. Their behaviours in classrooms were more or less teacher-directed. Their participation in classroom learning was minimal in ST & SC schools, manageable in EMRS and slightly better in JNV.
- *TLMs* were not available in classrooms for ready use by the teacher while teaching. Students hardly got opportunities to handle the *TLMs* themselves.

- Students' talents were identified and developed in EMRS and JNV. Remedial coaching as per student need, career counselling, coaching for professional courses, Self-defence training, training for musical and artistic talents, training on vocational and work education were not evident to some degree in EMRS, but counselling for behavioural problems and coaching for sports and games competitions were manageable in EMRS.
- Similarly remedial coaching as per student need, counselling for behavioural problems, career counselling, coaching for professional courses, self-defence training, life skills training, coaching for sports and games competitions, training for musical and artistic talents, training on vocational and work education were not evident in ST & SC schools. The SC& ST schools appeared to be weak on many fronts in comparison to EMRS and JNV in terms of student development activities. However the picture in JNV in respect of the student development activities was slightly better than that of EMRS except training on vocational and work education and training students as social change agents.
- Student evaluation practices as per continuous and comprehensive evaluation were not properly followed on most of the parameters in EMRS and ST & SC schools. Summative and formative evaluations were done in EMRS and JNV as per CCE. Student portfolios and anecdotal records were not maintained in any of the schools. Only in EMRS students' assessments were done through oral questions, observations and by the use of self and peer assessments. Whereas in ST & SC schools students were assessed only through oral questions and summative evaluations were done at the end of each session in ST & SC schools. In respect of the methods of assessment in JNV, assessing through oral questions, assessing through observations, self and peer-assessment on the basis of CCE were done to some extent. Assessing socio-personal qualities of students, maintaining cumulative progress card for each child, remedial coaching on the basis of CCE, and providing feedback to the students about their performance were done in JNV.
- Residential environment in students' hostels were good in JNV in comparison to EMRS and ST & SC schools. However it is noticed that on parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness. Light and ventilations were found in EMRS hostels. EMRS buildings were whitewashed. But garbage disposal pit was not available in EMRS and drainage system was also not proper in EMRS. Similar cases were noticed in terms of hostel environment maintenance in ST & SC schools. On parameters of physical environment and cleanliness JNV projected a better picture of hostel cleanliness in comparison to EMRS.
- On parameters of health and safety measures most of the conditions in EMRS and ST & SC schools were unsatisfactory or inadequate. But children's hygienic habits were developed in EMRS. First aid box was used in all the schools. Fire safety measures were taken in JNV. Fire safety measures were inadequate in EMRS and ST & SC schools. Dustbins were provided in JNV hostel rooms which were not found in EMRS and ST & SC hostels. Suggestions box was not provided in any of the hostels in all the schools. Wall magazines were not maintained in any of the hostels in all the schools of EMRS, ST & SC and JNV. House systems were not functional in EMRS and ST & SC schools but JNV developed house system in hostels. Health cards were not issued to the students in EMRS, JNV and ST & SC schools. ANM/health workers were not available in EMRS, ST & SC and JNV schools.
- On parameters of co-curricular and cultural activities, only annual functions were done with sincerity in all the schools whereas other dimensions required improvement. Cultural activities were not organized in EMRS and ST & SC schools.

- Mess committees were not functioning effectively in EMRS, ST & SC and JNV schools. JNV, EMRS and ST & SC did not present a beautiful hostel campus. Hostels were locked during school hours and during conduct of remedial coaching.
- JNV projected a better model of hygienic environment in kitchen. On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable and slightly better than SC & ST hostels. ST & SC schools need improvement for maintaining quality of food and hygienic environment of kitchen in residential hostels of the schools.
- Kitchen building was whitewashed in EMRS, ST & SC and JNV schools. Kitchen floor was clean in JNV in comparison to EMRS and ST & SC schools. Even kitchen equipments and utensils were cleaner and looked hygienic in JNV than EMRS and ST & SC schools. Dining room was neat and clean in JNV in comparison to EMRS whereas dining room was not well maintained in ST & SC schools. Light and ventilation facilities in kitchen were available in JNV whereas proper ventilations were not found in either EMRS hostel kitchen or ST & SC hostel kitchen. ST & SC hostel kitchen light facilities were poor in comparison to EMRS hostel kitchens. But EMRS kitchens also require proper light and ventilation facilities like JNV hostel kitchens. Hand wash points were available in EMRS, ST & SC and JNV in manageable conditions.
- Store room was clean in JNV and was in manageable condition in EMRS and ST & SC schools. Safety stand for plates were not available in EMRS, ST & SC and JNV. Hand washing points were adequate in EMRS but inadequate in EMRS and ST & SC schools. Aqua guard points for safe drinking water were available in JNV. Aqua guard points for safe drinking water was available in EMRS but in manageable condition i.e. not properly functioning mode. Aqua guards need repair and maintenance from time to time. Once these are installed in the schools, nobody is there to take care of these aquaguards. In ST & SC schools no aqua guard points for safe drinking water was available in ST & SC schools.
- Kitchen waste clearance and management was not proper in EMRS and ST & SC schools. Kitchen waste clearance and management was only in manageable condition in JNV. Smokeless cooking was not available in EMRS and ST & SC schools. However smokeless cooking was available in JNV. Cooking was more hygienic in JNV in comparison to EMRS Whereas ST & SC schools hygienic cooking was not done. Menu charts were displayed in EMRS and JNV. Meals served according to the menu chart in EMRS and JNV. Quality of meal was satisfactory in JNV. Quality of meal needs improvement in EMRS and ST & SC schools. Mess supervision committee was formed in EMRS and JNV whereas it is not found in ST & SC schools. Teachers were on duty for mess supervision and served food in EMRS and JNV. Procurement procedures were not duly followed in EMRS and SC and ST schools. Procurement procedures were followed in JNV for maintaining better transparency in the procurement system.

9.5 Students' Educational Attainment

- In all the four subjects Mathematics, Science, social Science and English, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- It may however be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in Class VIII in ST & SC schools scored in the range of only 20% to 23 % across four subject areas, while those in EMRS scored in the range of 30% to 38%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 35% to 61 % across the four subject areas.
- VIIIth class EMRS ST Students and ST students from ST & SC schools differed significantly in English, Mathematics, science and social science subjects. Similarly ST students from JNV and ST & SC schools differ significantly in English, Mathematics, science and social science. But ST Students from EMRS and JNV schools did not differ significantly in English, Mathematics, science and Social Science. JNV ST students performed better than EMRS ST Students and ST & SC School ST students in English, Mathematics and Science except in Social Science where EMRS ST Students performed better than JNV ST Students in the subject of social science in class VIIIth.
- Class VIIIth ST Students in ST & SC schools performed in the range of 20% to 24% while their performance in EMRS was within 30% to 39% and in JNV in the range of 32% to 43%.
- The performance of students in JNV in the subject Maths was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 31% to 40%, while those in EMRS showed attainment in the range of 35% to 38%. The students in JNV performed in the range of 32% to 49%.
- The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed poorly in English & Maths subject areas. Students in JNV & EMRS scored highest in English followed by Social Science, Science and Mathematics.
- ST students in JNV performed better than ST students in EMRS in English, Maths & Social science, who were also better than ST students in ST & SC schools. ST students of ST & SC School were better in science than ST students of JNV & EMRS.
- t-values indicated that it was only in English language, EMRS and JNV and also JNV and ST & SC schools ST children differ significantly. ST students of ST & SC School were better in science than ST students of JNV & EMRS. In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- There were no SC and general students admitted in EMRS and ST & SC schools. The SC students of JNV were not equal with general students. General students were highly better than SC students.
- The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools. However, the differences between EMRS and ST & SC schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.

- The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 57%.
- Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- There was noticeable difference between ST students in EMRS and those in ST & SC schools only in English. The ST students in JNV maintained their initial advantage over the ST students in ST & SC schools in all subject areas. Differences were significant only in English, Chemistry, Maths, and Biology. There were no SC students in EMRS & ST & SC School.
- On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.
- On the whole the performance of students in ST & SC schools was poor in few subjects of those in EMRS, below average and of those in JNV, above average.
- In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.
- More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students appeared in examination. 20% of ST & SC School students got less than 40% and none of them got above 90%. In JNV none of the students got less than 60% and 2% of students got above 90%.
- The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket in JNV, maximum students scored in the 80% to 90% bracket.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 50% to 60% for ST & SC schools and 70% to 80% for JNV. The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- During the last five years, none of the students of JNV and 20% of the students of ST & SC schools scored below 40%, while 4% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.
- Class X board examination result presents that the SC and general students performed 93% & 85% results and both groups performed better than ST students. 62% ST, 93% SC and 85% general students passed in the examination 2014.
- The performance trend of ST, SC and general students over the last three years (2012-14) was not same as was observed in 2014. 61% ST, 89% SC, 93% general students completed the degree.

- Maximum number of students scored in 60% to 70% bracket in EMRS and in 70% to 80% bracket in JNV in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 80%, 31% of JNV students scored above 80% of whom 4% scored above 90%. There was approximately 10% gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 50% to 60% bracket and maximum number of JNV students scored in the 60% to 70% bracket. None of the EMRS students scored below 40% and none of the JNV students scored below 60%, while less than 1% of EMRS students scored above 80% and 16% of JNV students scored above 80% of whom 3% scored above 90%. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.
- In class XII Board examination in 2014, 69% of ST students across all types of schools scored below 60%, while 58% of SC students and none of the general students scored below 60%.
- 01% of ST students, 8% of SC students and 27% of general students scored above 80%. Maximum number of ST and general students scored in 30% to 60% bracket, while maximum number of SC students scored in 33% to 60% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.
- Considering the Class XII Board examination results over the last three years (2012-14), the ST & SC students performed at an equal level general student were better than ST & SC students.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate.

9.7 Student Participation in Co-curricular and Social Activities

- It may be observed that more boys than girls participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.
- Among JNV students, 32% adopted Scouts and 70% were in NSS, 50 % were in NCC and *Shramdan* was carried in only JNV schools with maximum student participation in the range of 80% to 100%

9.8 Schools-Community Linkage

- An SMC works toward achieving proper and smooth functioning of a school, by catering to its infrastructure needs, mid-day meal programs and ensuring a better learning environment for children. But it is observed from the above table that regular school management committee meetings were not held in either EMRS or KNV. However ST & SC School did conduct school management committee meetings but the involvement of SMC in developing SDP, monitoring student attendance and drop out, implementing resolutions of SMC was found to be negligible.
- SMC participation in EMRS, JNV and ST & SC School was found to be poor, average or manageable. SMC monitors the functioning of school, prepares and recommends School Development Plan, monitors the utilization of grants received from State Government or local authority, ensures the enrolment and continued attendance of all the children from the neighbourhood, brings to the notice of the local authorities any deviation from the rights of the child, in particular mental and physical harassment of children, denial of admission, and timely provision of free entitlement. But it is noticed from the above table monitoring student attendance and drop out by SMC was done in EMRS and JNV but the involvement of SMC in monitoring student attendance was average. Whereas in ST & SC schools SMC's involvement in monitoring students attendance was very poor.
- SMC in JNV, EMRS and ST & SC schools did not supervising quality of meals, nor even monitor utilization of funds. Liaoning with other agencies for school development was found to be negligible in all the schools. However participation in school's co-curricular activities by SMC was found to be average in EMRS and JNV. ST & SC schools the participation of SMC was very poor.
- MTA was not functioning in EMRS, JNV and ST & SC schools.
- The teachers in EMRS, JNV and ST & SC schools show interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. But teachers did not have any personal contact with the teachers. Teacher's interaction with parents and community members was satisfactory in EMRS and JNV in comparison to ST & SC schools where it was found to be poor on most of the parameters.

9.9 School Monitoring and Supervision

- During a span of one year, educational administrators (mostly C.I/ D.I /District Welfare Officers) visited ST & SC schools about once a month and JNV twice a month. Educational administrators did not visit EMRS School not even once in a month. Visit to school is indicated as academic inspection, class supervision, giving feedback and suggestive measures for remedial teaching etc. However educational administrators visited boys' hostels in EMRS thrice a month, twice in ST & SC School boy hostels and once JNV boys' hostels. Similarly girls' hostel visit was also very less in EMRS, ST & SC schools and JNV as thrice a month in EMRS, twice a month in ST & SC schools and once I JNV girls' hostels respectively.
- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members.

- The frequency of hostel visits by the principal in JNV was better in comparison to EMRS and ST & SC schools. The principal visited EMRS boy's hostel i.e. 5 times in the month of August and 8 times in the month of February whereas in JNV principal visited 10 times the boys' hostel in the month of January. In ST & SC School's principal visited boys' and girls' hostel most in the month of September i.e. 10 times in a month. In EMRS principal's visit was limited to the range of 5-8 times in a month, in ST & SC schools 5-10 times in a month and in JNV 6-10 times in a month.

9.10 Stakeholders' Feedback and suggestions

- Teacher views on school functioning parameters revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. EMRS focused on course completion as per syllabus, regular correction of students' work, remedial coaching, home assignments and projects to students, gender and social equity in school and hostels, provision for self-assessment, organizing games and sports and co-curricular activities, organizing literacy activities, debates and competitions and summative evaluations whereas ST & SC School focussed on course completion as per syllabus, correction of students' work, using summative evaluations, home assignments to students, gender and social equity in school and hostels, organizing games and sports and co-curricular activities, organizing literacy activities, debates and competitions, health problems. Most of the parameters of EMRS and JNV were same as per teachers' views. In addition to the below mentioned parameters for EMRS and ST & SC schools JNV focussed on gender and social equity in school and hostels, learning atmosphere in hostels, sharing student progress with parents, teachers preparing lesson plan and diary, effective use of labs, use of library by students, classes on art and aesthetics, security and safety of boarders, Infrastructure facilities for boarders, quality and safety of drinking water.
- The factors which required to be strengthened in EMRS as evident from the table given below were environmental cleanliness in hostels, toilet cleanliness, maintaining cumulative progress report of students and student profile, use of CCE and planning remedial coaching, sharing written progress card of students with parents, TLM corner in classes and students using TLMs, using e-content in SMART classes, formative evaluations as per CCE, assessing students in co-curricular activities, assessing socio-personal qualities, self- peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-learning activities, organizing activities like gardening, plantation, woodwork, tailoring etc., consultations with other teachers and subject experts, counselling for student behaviour problems, organizing social service camps, maintaining linkage with community and inviting community participation, capacity building of teaching and non-teaching staff, keeping record of academic/professional career of pass outs.
- The factors which required to be strengthened in ST & SC schools as suggested by teachers were activity-based teaching and use of TLMs, effective use of labs, use of library by students, yoga and classes on art and aesthetics, coaching for professional courses, teachers preparing lesson plan and diary, maintaining cumulative progress report of students and student profile, sharing written progress card of students with parents, TLM corner in classes and students using TLMs, using formative evaluations as per CCE, assessing students in co-curricular activities, assessing socio-personal qualities, using self-, peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-learning activities, consultations with other teachers and subject experts,

counselling for student behaviour problems, organizing social service camps, infrastructure facilities for boarders, environmental cleanliness in hostels, learning atmosphere in hostels, quality of food in hostels, quality and safety of drinking water, toilet cleanliness and use, maintaining linkage with community and inviting community participation, capacity building of teaching and non-teaching staff and keeping record of academic/professional career of pass outs.

- The factors which required to be strengthened in JNV as indicated by teachers were maintaining cumulative progress report of students and student profile, using CCE for planning remedial coaching, TLM corner in classes and students using TLMs, assessing students in co-curricular activities as per CCE, assessing socio-personal qualities, using self-, peer- and group-assessment, assessing students' talent in specific areas, innovative teaching-learning activities, consultations with other teachers and subject experts, counselling for student behaviour problems, maintaining linkage with community and inviting community participation, drainage system in hostels and keeping record of academic/professional career of pass outs.
- JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counselling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counselling students and maintaining record of success rate of school pass outs.
- Non-teaching employees in JNV were highly satisfied on conditions prevailing in schools for performing duties. They were having good relationship with principals, teachers, students, parents and community members. Their involvement in co-curricular activities was satisfactory.
- Non-teaching employees in EMRS were satisfied with the conditions prevailing in schools for performing duties. Their involvement in co-curricular activities was average in EMRS. The non-teaching staffs of EMRS were interacting with principals, teachers, students, parents and community members to some extent. The relationship was found to be satisfactory with the members of the school in EMRS.
- In ST & SC schools the same situation prevailed as in EMRS as presented in the above table. Capacity building of non-teaching staff was not thought of in EMRS, ST & SC and JNV schools.
- EMRS teachers were not satisfied with the service conditions, salary/remuneration to the teaching staff, prospect for promotion, incentive plan for teachers, quarters inside campus. They EMRS teachers were not satisfied with the service conditions of non-teaching staff, salary/remuneration to the non-teaching staff, and prospect for promotion. Only EMRS teachers were satisfied with incentive plan for students.
- ST & SC School teachers were also not satisfied with the salary/remuneration to the non-teaching staff, quarters inside campus, incentive plan for non-teachers. They were satisfied

with service conditions of teachers, incentive plan for teachers, and incentive plan for students.

- JNV presented a satisfactory picture of staff service conditions and benefits in comparison to EMRS and ST & SC schools.
- Non-teaching staff in EMRS and ST & SC schools were not satisfied with their salary/remunerations, incentive plan, service conditions, prospect for promotion, and provision of quarters inside campus. In JNV non-teaching staff were highly satisfied with the staff service conditions and benefits.
- The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health check-up facilities and hostel accommodation. Students in ST & SC schools also experienced the same deficiencies. JNV fared much better in most of these parameters.
- Students perceived teachers to be supportive of them. The major issues inviting unfavourable feedback from EMRS students pertained to lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavourable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.
- Students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers. There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues. Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate

appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

- FGDs involving 40 students in ST & SC schools revealed an unfavourable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.
- FGDs involving 14 students in JNV revealed a favourable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favourable perception of school and hostel environment and facilities.
- Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labour, service or funds.
- Additional District Magistrate (ADM) and the Project Administrator (PA, ITDA) expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children.

9.11 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

<i>Programme Strengths (Need to be maintained)</i>	<i>Concerns (Need special attention)</i>	<i>Suggestions (Need to be implemented)</i>
<ul style="list-style-type: none"> * EMRS offers the opportunity to tribal students to get education in English medium. * EMRS provide education with all facilities at par with Navodaya Vidyalaya. * Student's evaluation is continuous and comprehensive and co-curricular activities are also a part of the study /evaluation. * Every year special coaching classes are conducted to prepare students for NTSE and NMMS examinations. * Educational tour is the part of the study * Education in CBSE pattern with both Hindi and English medium. * Opportunity to improve the moral, physical and mental level of the tribal students. * Different activities like debate competition, writing competition etc. are conducted. So competition spirit among the students is developed. * EMRS helps to discover and developing the inner qualities of the students. * In the school activities like sports and game different cultural activities are organised 	<ul style="list-style-type: none"> * No provision of staff nurse and doctor. * Stipend provided to the students is not enough to compensate the monthly cost of the food. * Insufficiency of regular teaching and supporting staffs. * No facilities for professional coaching. * No training for non-teaching staffs. * No training programme for teaching staffs is conducted. * Students are very weak in English subject and are not confident. * Getting very poor salary. * No service condition for teachers. * No summer vacation given to teachers. * In adequate TLM 	<ul style="list-style-type: none"> * There should be provision for one staff nurse and one visiting doctor in the school set-up. * Food charges per student like JNV should be provided separately. * Regular teaching and supporting staffs should be appointed immediately. * Water facilities * Make the students to converse with English so that to improve the English spoken status of the students. * Activities should be arranged to develop the students English knowledge and confident in it. * Regular pay scale with service condition. * Appointment of permanent teachers for the school. * Smart class rooms, Audio-visual aids. * Musical instruments * After every five year promotion policy should be given to the teacher. * Adequate TLM should be supplied * Facilities for water should be made in immediate basis. * Staff nurse appointment. * Posting of regular hostel superintendent, security guard, peon, water man and cook. * Facilities for drinking water. * One ambulance vehicle is required as the school is situated in remote area and no communication facilities are there. * Training should be given to the hostel superintendent and teaching staff. * One visiting doctor facilities should be done.

Section 6

Impact of Ekalavya Model Residential Schools in Enhancing Educational Attainment of ST Children

(GUJARAT REPORT)

Prepared

By

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Chapter I

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 School Infrastructure and Facilities

Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. The approximate average school campus area for EMRS, ST & SC and JNV are 20 acres, 10 acres and 30 acres, respectively. The built-up area for the EMRS 65,000 sq. ft. and ST & SC schools and hostels for students run into 15,000 sq. ft. and for the JNV to about 140,000 sq. ft. All the buildings provided safe habitations for students except that ST & SC schools required regular maintenance and white washing. The condition of the school and the hostel building in JNV were found to be at par with EMRS and both EMRS and JNV are better than ST & SC schools. The ST & SC schools did not fare well on hygienic parameters as toilets appeared not to have been maintained properly. Regrettably one of the ST & SC schools did not have usable toilets and students had to go to open field and nearby forest areas to attend to the call of nature.

None of the schools had common room for either boys or girls. While each of the five sampled schools (EMRS, ST & SC and JNV) had building spaces marked for the Principal's room, teachers' common room, office room, kitchen, store room and prayer space, there were no common rooms or auditorium for students. Each of the schools had physics, chemistry, zoology and botany and IT labs. The rooms marked for different labs did not function in the ST & SC schools. The English language lab was found only in JNV, Kharadi, Dahod. Library cum reading room and SMART classes were available in JNV only. On most of the important parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.

Tables given below provide information relating to water and sanitation facilities in school (Table 1.1.1), child-friendly and safety facilities (Table 1.1.2) and boundary wall, garden and school gate (Table 1.1.3).

Table 1.1.1: School wise Availability of Water and Sanitation Facilities (Gujarat)

School	Drinking water			Hand wash		Toilet for Boys					Toilet for Girls					No. of children per toilet		
	adequate	Safety	Major source	Soap available	Hand washed before and after meal	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	Boys	Girls	
EMRS	KHAREDI	Yes	Yes	BW	YES	YES	20	YES	YES	YES	YES	20	YES	YES	YES	YES	8	8
	MOTA	YES	YES	BW	YES	YES	10	YES	YES	YES	YES	10	YES	YES	YES	YES	20	20

SC & ST	MOHUVA	YES	YES	BW	YES	YES	10	YES	YES	YES	YES	-	-	-	-	-	15	-
	USARVAN	YES	YES	BW	YES	YES	12	YES	YES	NO	YES	-	-	-	-	-	16	-
JNV	KHAREDI	YES	YES	BW	YES	YES	14	YES	YES	YES	YES	06	YES	YES	YES	YES	19	23

Bw: Bore well *** Good ** Manageable * Poor

Table 1.1.2: School-wise Availability of Child-friendly and Safety Facilities (Gujarat) (ramp & rail, slides & swings, playground)

School	Approximate no. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in classrooms	Fire safety
EMRS	28	INADEQUATE	NIL	INADEQUATE	Only for a few game	NO	INADEQUATE
SC & ST	21	INADEQUATE	NIL	INADEQUATE	Only for a few game	NO	INADEQUATE
JNV	17	INADEQUATE	NIL	INADEQUATE	Only for a few game	NO	INADEQUATE

Table 1.1.3: School-wise Availability of Boundary Wall, Garden, Kitchen Garden and School Gate (Gujarat)

School	Boundary Wall	Garden	School gate
EMRS: KHAREDI	YES	POOR	YES
EMRS: MOTA	YES	POOR	YES
SC & ST: MAHUVA	YES	M	YES
SC & ST: USARVAN	YES	M	YES
JNV: KHAREDI	YES	M	YES

M: Manageable

- The major source of drinking water in all schools was bore well. Drinking water was adequate in all schools. Furthermore, safe drinking water was available in all schools. Soap was provided at hand wash points but detergent was not supplied as per the requirements of students in ST & SC schools.
- Approximate number of children per toilet in EMRS, JNV and ST & SC schools were alright except SC/ST, Dahod. They were not maintained as per hygienic standards and some of them remained non-functional at times because of delay in repair work. The situation in JNV &

EMRS was much better than ST & SC schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in Usarvan SC/ ST school.

- The schools fell short on child-friendly parameters except Mahuva where this aspect has been well addressed and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required.
- Teaching-learning and curricular transactions mostly in classrooms assumed much more importance and as such they were improperly balanced by games and sports activities.
- Schools also fell short of safety standards as attention was not paid to have classrooms with double doors and fire safety measures.
- Each school had entrance gate, boundary wall but due attention was not been paid to raising and maintaining gardens and kitchen gardens, the primary reason for which was water scarcity. The water problem can be largely compensated by proper water harvesting measures on which the school authorities have not been trained.
- Power supply was a major concern for the schools because there were frequent power cuts particularly in Kharedi EMRS and ST & SC schools in Mahuva and Usarvan. On an average, power failure was reported for about 4-5 hours in JNV, Kharedi and in ST & SC schools. In case of power cuts, power supply was done through generators owned by the school except in Usarvan.

1.2 Hostel Infrastructure and Facilities

Tables given below present information on hostel infrastructure and facilities (Table 1.2.1), availability of different types of rooms and their conditions (Table 1.1.2), water and sanitation facilities in hostels (Table 1.2.3), child-friendly and safety facilities (Table 1.2.4) and presence of hostel boundary wall, garden and kitchen garden (Table 1.2.5).

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels (Gujarat)

School type	School		Student strength		Condition of the hostel			Accommodation space per student	
			No in school	% staying in hostel	safety	leaking	Light & ventilation	Sq. ft. per student (app.)	Adequacy
EMRS	KHAREDI	BOYS	168	100	GOOD	NO	AVRAGE	38.57	ADEQUATE
		GIRLS	159	100	GOOD	NO	AVRAGE	35.19	ADEQUATE
	MOTA	BOYS	161	100	GOOD	NO	AVRAGE	38.57	ADWQUATE
		GIRLS	234	100	GOOD	NO	AVRAGE	35.19	ADEQUATE
SC & ST	MAHUVA	BOYS	139	100	AVRAGE	YES	POOR	18.09	INADEQUATE
		GIRLS	-	-	-	-	-	-	-
	USARVAN	BOYS	194	100	AVRAGE	YES	POOR	18.09	INADEQUATE
		GIRLS	-	-	-	-	-	-	-

JNV	KHAREDI	BOYS	267	100	GOOD	NO	GOOD	38.89	ADEQUATE
		GIRLS	140	100	GOOD	NO	GOOD	39.88	ADEQUATE

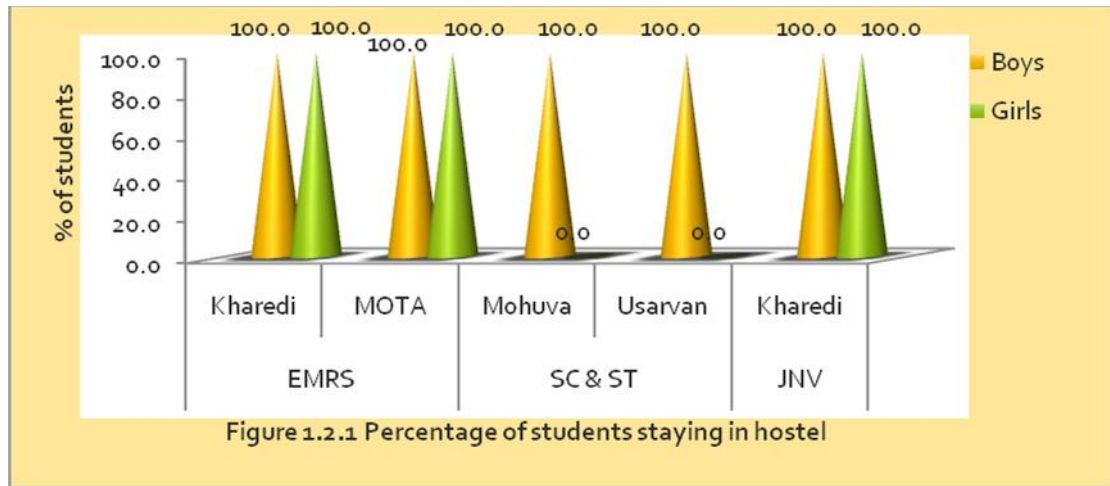


Table 1.2.2: Availability and condition of different types of rooms in boys' and girls' hostels by school type

Types of rooms	EMRS				SC & ST				JNV	
	KHAREDI		MOTA		MAHUVA		USARVAN		KHAREDI	
	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond
Superintendent's room /quarters	Y	G	Y	G	Y	M	Y	M	Y	G
Dining room	N	-	Y	G	Y	M	Y	M	Y	G
Living room	Y	G	Y	G	Y	M	Y	M	Y	G
Kitchen room	Y	M	Y	M	Y	M	Y	M	Y	G
Store room	Y	G	Y	G	Y	M	Y	M	Y	G
CCA room	N	-	N	-	N	-	N	-	Y	G
Sick room	Y	G	Y	G	N	-	N	-	Y	G
Prayer room	Y	G	Y	G	N	-	N	-	Y	G
Auditorium / assembly	N	-	N	-	N	-	N	-	Y	G
Security room	N	-	N	-	Y	G	Y	G	Y	M

Y: Yes N: No G: Good, M: Manageable, P: Poor

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities (Gujarat)

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
		adequate	Major source	adequate	Adequate	Flow of water to toilets	No functional	Cleanliness and condition	Soap & accessories available	Used by all children	
EMRS: KHAREDI	Boys	NO	SW	No	NO	M	36	**	YES	YES	16
	Girls	NO	SW	No	NO	M	36	**	YES	YES	18
EMRS: MOTA	Boys	YES	BW	YES	YES	M	16	**	YES	YES	16
	Girls	YES	BW	YES	YES	M	12	**	YES	YES	18
SC & ST: MAHUVA	Boys	YES	BW	YES	NO	P	4	*	YES	YES	34
	Girls	There were no girls' students.									
SC & ST: USARVAN	Boys	YES	BW	YES	NO	P	22	*	YES	YES	9
	Girls	There were no girls' students.									
JNV: KHAREDI	Boys	YES	BW	YES	YES	G	12	***	YES	YES	22
	Girls	YES	BW	YES	YES	G	12	***	YES	YES	12

Bw: Bore well

*** Good ** Manageable * Poor

Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities (Gujarat) (ramp & rail, slides & swings, playground)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in hostel rooms	Fire safety
EMRS	45	NIL	NIL	NIL	Only for few games	No	Inadequate
SC & ST	15	NIL	NIL	Partly available	NIL	No	Inadequate
JNV	42	NIL	NIL	NIL	Only for a few games	No	adequate

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden, Kitchen Garden (Gujarat)

School	Boundary Wall in girls' hostel	Garden	Kitchen Garden
EMRS: KHAREDI	Yes	P	NA
EMRS: MOTA	Yes	M	NA
SC & ST: MAHUVA	No girls hostel	M	NA
SC & ST: USARVAN	No girls hostel	P	NA
JNV: KHAREDI	Yes	M	M

M: Manageable NA: Not Available

- * Nearly 100% of students in EMRS, JNV stayed in hostels. In ST & SC schools there are day scholars. No girl students were admitted in ST & SC schools. (Figure 1.2.1).
- * For those students who stayed in ST & SC hostels, the infrastructure and accommodation facilities were comparatively less facilitating. Many rooms in SC/ ST Ashram School, Dahod had leaking roofs and accommodation hardly met safety and child-friendly parameters. The living space was better in EMRS & JNV, but with 09-18 square feet of space per boarder, particularly in ST & SC schools, the space was inadequate. JNV projected a much better picture compared to ST & SC schools and EMRSs. The residential facility in JNV is worth emulating.
- * Needless to mention that all schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.
- * Drinking water was adequate for all boarders in all hostels. The safe drinking water provision is quite hygienic in JNV, whereas the drinking water arrangement in EMRS & ST & SC schools requires more articulation to make it worth drinking.
- * The toilet condition and cleanliness was poor in ST & SC schools, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.
- * Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- * Hostels in all types of schools have boundary walls and no proper garden. There is no kitchen garden in any school. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.

- * Power supply was a major concern in the school and hostels because there were frequent power cuts particularly ST & SC schools in Usarvan. The furniture supply in hostels was inadequate. In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.

1.3 Financial Support

Table 1.3.1 reveals that on an average only 57% to 99% of the funds allocated to EMRS during 2014-15 was spent while spending in JNV and ST & SC schools reached close to 100% mark. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, need to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

Table 1.3.1: Receipt and use of funds by schools in Gujarat during 2014-2015

School		Total fund received	Utilized	% utilized	Department providing funds
EMRS	KHAREDI	13818000/-	7834076/-	57	MOTA,GOI UNDER ARTICLE 275(1)
	MOTA	17667434/-	17664656/-	99	
SC & ST	MAHUVA	13100420/-	13100420/-	100	TRIBAL WELFARE DEPT. GUJARAT
	USARVAN	1138170/-	1138170/-	100	
JNV	KHAREDI	26628000/-	26628000/-	100	MHRD, GOI

Chapter 2

PROFILE OF TEACHING AND NON-TEACHING STAFF

Teacher motivation and engagement with students impact the quality of educational climate of the schools. Their nature of employment, training status, salary structure and service conditions determine to a large extent their attitude and motivation towards education. This section presents the profiles of teaching and non-teaching staff (Tables 2.1.1 & 2.1.3), employment status and service benefits (Tables 2.2.1 & 2.2.2).

2.1 Profile of Teaching and Non-Teaching Staff

The sanctioned posts and vacancy positions of the teaching and non-teaching staff are given in Table 2.1.1. The percentage of vacancy positions by school type is plotted in Figure 2.1.2.

Table 2.1.1: Sanctioned Strength and Vacancy Position of Teaching and Non-Teaching Staff

School		Position	Principal	Vice-Principal	PGT	TGT/ Music/ Art	PET	Lab Asst.	Librarian	Accountant /JDC	Head clerk /OS	Clerk /LDC	Peon	Night watchman/ Sweeper	Warden/ Catering Asst.	Matron	Staff Nurse	CCA	
EMRS	KHAREDI	SP	01	-	05	03	-	-	-	01	-	01	01	01	-	-	-	03	
		Vac	00	-	00	00	-	-	-	-	01	-	00	00	00	-	-	-	00
	MOTA	SP	01	-	08	11	01	01	-	-	01	-	02	02	02	-	-	-	02
		Vac	00	-	00	00	00	00	00	-	00	-	00	00	00	-	-	-	00
SC & ST	MAHUVA	SP	01	-	05	03	-	01	-	-	-	02	01	02	-	-	-	02	
		Vac	00	-	00	00	-	01	-	-	-	-	-02	00	02	-	-	-	02
	USARVAN	SP	01	-	05	06	01	01	-	-	-	02	02	03	-	-	-	04	

		Vac	01	-	03	01	01	01	-	-	-	00	00	00	-	-	-	00
JNV	KHAREDI	SP	01	01	07	12	02	01	01	01	01	05	03	02	01	-	01	04
		Vac	00	01	00	00	00	01	00	01	01	02	03	00	00	-	00	00

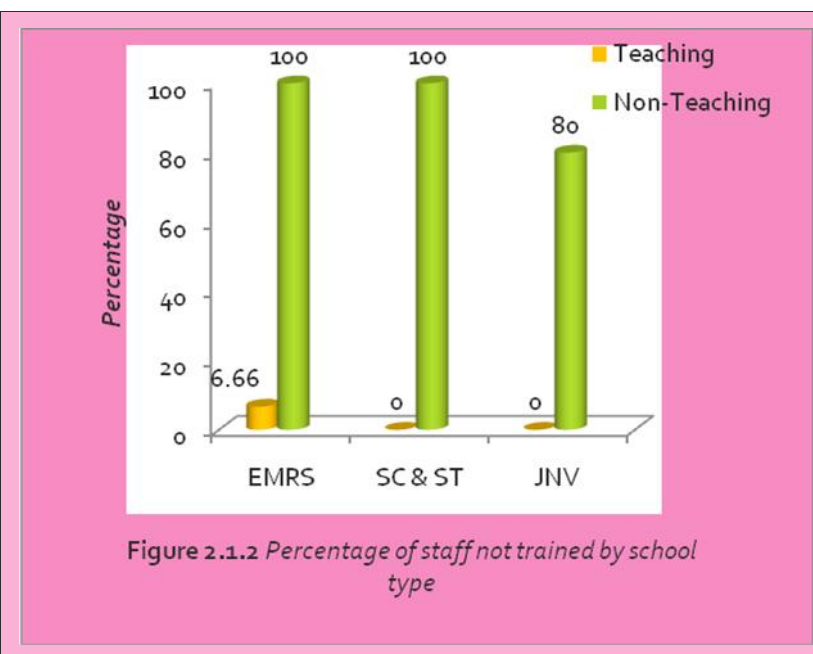
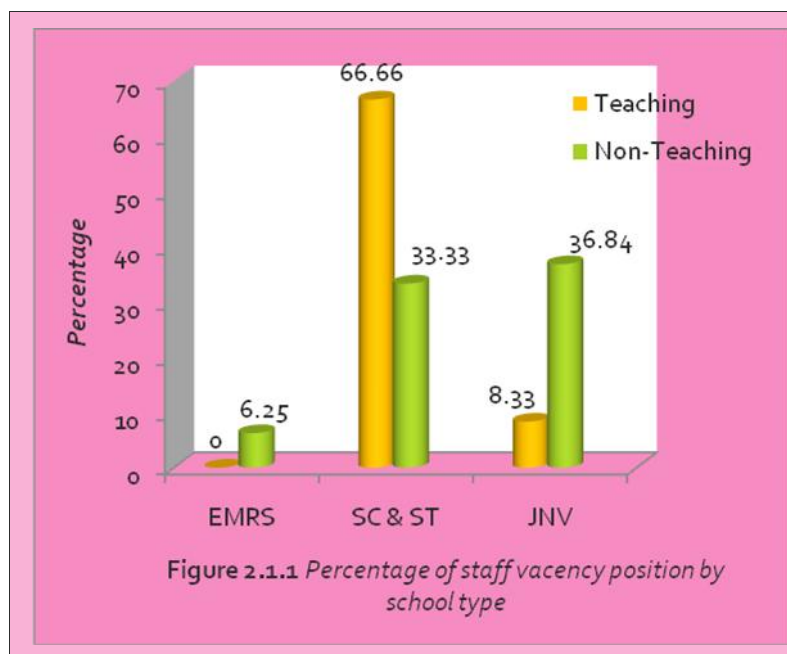
SP: Sanctioned Post, Vac: Vacancy
Table 2.1.2: Profile of the Teaching Staff

School		No of Teachers in Position	Pupil-Teacher ratio in School	Category			Training Status		Length of Teaching Experience		
				ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	KHAREDI	09	1:36	01	01	07	08	01	7	02	00
	MOTA	21	1:19	11	3	07	20	01	18	02	01
SC & ST	MAHUVA	04	1:35	01	00	03	04	00	1	01	02
	USARVAN	07	1:28	00	00	07	07	00	01	02	04
JNV	KHAREDI	22	1:19	00	03	19	22	00	06	04	12

Table 2.1.3: Profile of the Non-Teaching Staff

School		No of Non-Teaching Staff in Position	Category			Training status		Length of experience		
			ST	SC	Gen	Trained	Untrained	0-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	KHAREDI	03	02	01	-	00	03	03	00	00
	MOTA	03	02	00	01	00	03	00	03	00

SC & ST	MAHUVA	01	00	01	00	00	01	00	00	01
	USARVAN	08	06	01	01	00	08	02	03	03
JNV	KHAREDI	15	03	01	11	03	12	02	04	09



- * Analysis of vacancy positions by school type indicated that 0% of the teaching and 6.25% of the non-teaching positions were lying vacant in EMRS compared to 66.66% and 33.33% in ST & SC schools and 8.33 % and 36.84 % in JNV (Figure 2.1.1).
- * The pupil-teacher ratio (PTR) was noticeably very high for one ST & SC School (Mahuva), and one EMRS (Kharedi). The PTRs in one EMRS, one SC &ST School and JNV were good as per state norm.

- * There was noticeably large number of general category teachers in all types of schools except EMRS Mota. About 6.66% of teachers in EMRS were not trained (Figure 2.1.2). Nearly 70% of teachers in EMRS and SC &ST schools had less than 5 years of teaching experience and 55% of teachers in JNV had more than 10 years of teaching experience.
- * Among the non-teaching staff, 43% employees were from ST and General category and 14% employees were from SC community. All the non-teaching staff in EMRS and ST & SC schools had not been provided training but only 20% non-teaching in JNV had been provided training (Figure 2.1.3). Nearly 40% of non-teaching staff had more than 10 years of experience on the job.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

Tables 2.1.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

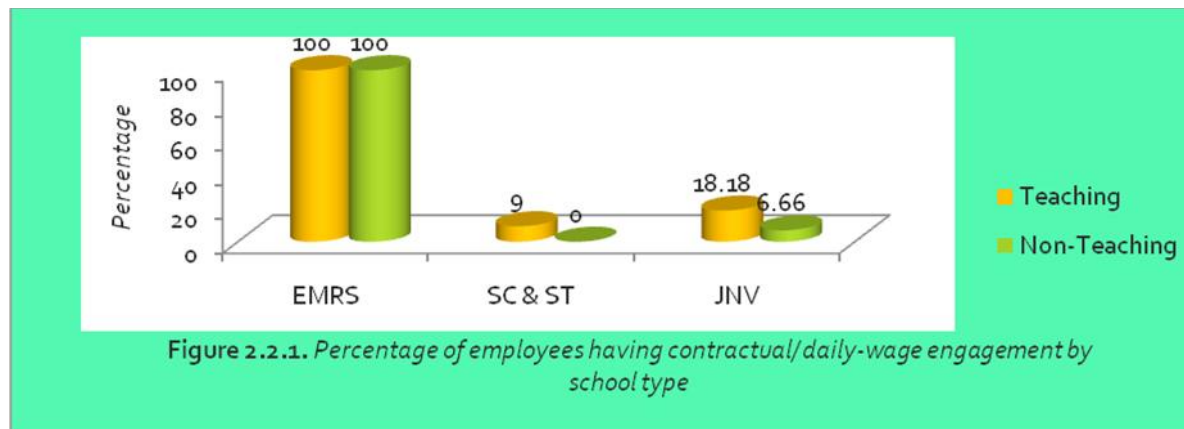
Table 2.2.1: Nature of employment of the teaching staff and service benefits

		No of Teaching Staff in Position	Nature of Employment			Gross monthly Emoluments/Salary in Rupees (Range)						
			Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/ Music/ Art	PET	Lab Asst/Asst teacher	Librarian
EMRS	<i>KHAREDI</i>	09	00	09	100	16500	00	8000	7500	-	-	-
	<i>MOTA</i>	21	-	21	100	16500	-	10000	7500	6000	-	-
SC & ST	<i>MAHUVA</i>	4	4	-	00	49807	-	-	33731	-	-	-
	<i>USARVAN</i>	7	6	1	14	50502	-	-	33809	-	-	-
JNV	<i>KHAREDI</i>	22	18	4	22	87810	-	58933	52676	47358	-	47534

Table 2.2.2: Nature of employment of the non-teaching staff and service benefits

		Nature of Employment		Gross monthly Emoluments/Salary (Range)									
		Regular	Contractual	Head Clerk	Accountant	Clerk	Librarian	Warden	Peon Art	Night watchman / Sweeper	CCA	Matron	Staff Nurse
EMRS	<i>KHAREDI</i>	-	03	-	-	6000	-	-	3000	3000	-	-	-
	<i>MOTA</i>	-	03	-	6000	5500	-	-	-	-	-	-	-
SC & ST	<i>MAHUVA</i>	01	-	-	-	-	-	-	21000	-	-	-	-
	<i>USARVAN</i>	08	-	-	43200	27645	-	-	22113	-	-	-	-
JNV	<i>KHAREDI</i>	14	01	23132	-	27515	47534	-	27724	-	22821	-	45857

Note: The contractual non-teaching staffs in JNV were employed on daily-wage basis.



- * Astonishingly and regrettably, there were no service conditions for EMRS teaching and non-teaching staff. All the teaching staff in EMRS and 9 % in ST & SC schools were employed on contractual basis and 18.18 % of teachers in JNV were employed on daily-wages (Figure 2.2.1).
- * There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV respectively. The emoluments given to principals of EMRS is $\frac{1}{3}$ of the principals of ST & SC schools and $\frac{1}{5}$ of principal of JNV. The teachers of ST & SC schools and JNV across all levels also received 4 times and seven times of the gross monthly emoluments of teachers in EMRS, respectively (Table 2.2.1). The noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff (Table 2.2.2).
- * Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality processes and outcomes.

2.3 Capacity Building of Teaching and Non-teaching Staff

Capacity building training is given to teachers of EMRS for content knowledge enrichment and teaching practices. The ST & SC School teachers received training as per Government's schedule. The JNV teachers received capacity building training organized by Navodaya Vidyalay Samiti. Except for the teachers of Navodaya Vidyalay, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

The non-teaching staff of EMRS and ST & SC schools received hardly any training as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostel was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

The vision of EMRS is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCAs of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they come up with grievances.

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

The educational programme instituted in rural and tribal locations are expected to create a community demand for admitting children in these schools which would be reflected in the form of increasing number students seeking admissions through successive years. There needs to be more students from ST and SC categories in these schools and those admitted should complete the educational cycle. This chapter discusses the status of schools in respect of students seeking admission and retained in schools (Tables 3.1.1 to 3.2.2), students attending schools and completing educational cycle (Tables 3.3.1 & 3.3.2) and student dropouts over successive years (Table 3.4.1).

3.1 Student Admission

Table 3.1.1 lists the number of children seeking admission in different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission are given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

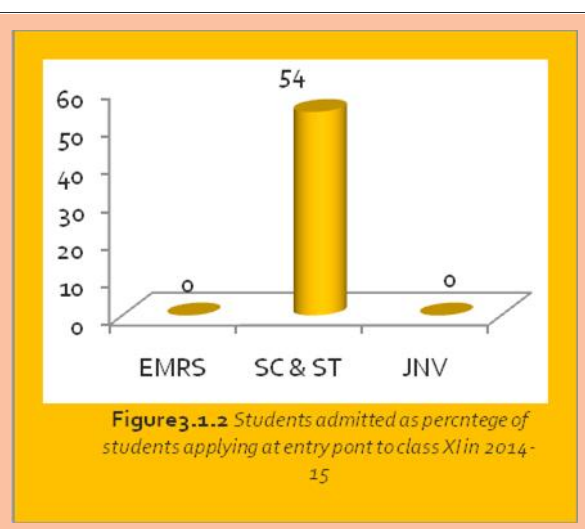
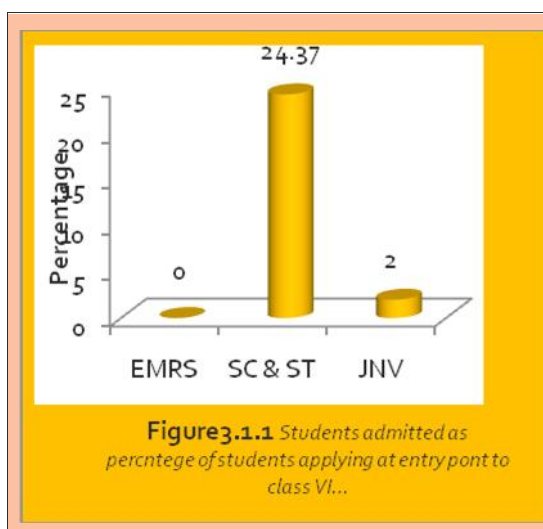
Table 3.1.1: Number of Candidates Applied and Number of students enrolled at entry points in Classes VI and XI during the last three Years (Gujarat)
(NA: Number Applied; NE: Number Enrolled)

School		At Entry point to Class VI							At Entry point to Class XI					
		2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	
EMRS	KHAREDEI	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NE	50	58	36	57	58	-	-	-	-	37	-	
	MOTA	NA	-	-	-	-	-	-	-	29	49	32	76	162
		NE	65	75	57	60	60	-	21	27	30	49		
SC & ST	MAHUVA	NA	175	180	210	155	205	17.14	75	80	73	77	49	-35
		NE	40	40	42	45	45	-	40	40	40	40	42	
	USARVAN	NA	103	137	146	264	275	167	87	89	62	87	97	11.49
		NE	43	62	65	76	72	-	57	39	30	34	37	
JNV	KHAREDEI	NA	2032	2134	1410	2683	3576	76	-	-	-	-	-	-
		NE	70	79	76	76	72	-	-	-	-	-	-	

NA - No. Applied, NE- No. Enrolled

TABLE 3.1.2 Percentage Increase in application for admission and student enrollment as percentages of application for admission.

School type	At entry point of Class VI		At entry point of Class XI	
	%increase in application in 2014-15 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year	%increase in application in 2014-15 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year
EMRS	-	-	-	-
SC & ST	35	24.37	8.14	54
JNV	153	2	-	-



- * The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools. The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were for EMRS, 35% for ST & SC schools and 153 % for JNV. The demand for admission to all types of schools increased over the years. The application for entrance tests of EMRS is done centrally for which the principal could not supply school specific information relating to number of application received in different years.
- * Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 305,275 and 3576 for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- * Percentages of increase in applications for entry at Class XI in 2014-15 were 16% for EMRS, 35% for ST & SC schools and 11.49% for JNV. Students seeking admission in different types of schools increased. While 54% of those seeking admission to Class XI in ST & SC were admitted.

3.2 Student Strength in Schools

Table 3.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 3.2.2 and plotted in Figure 3.2.1.

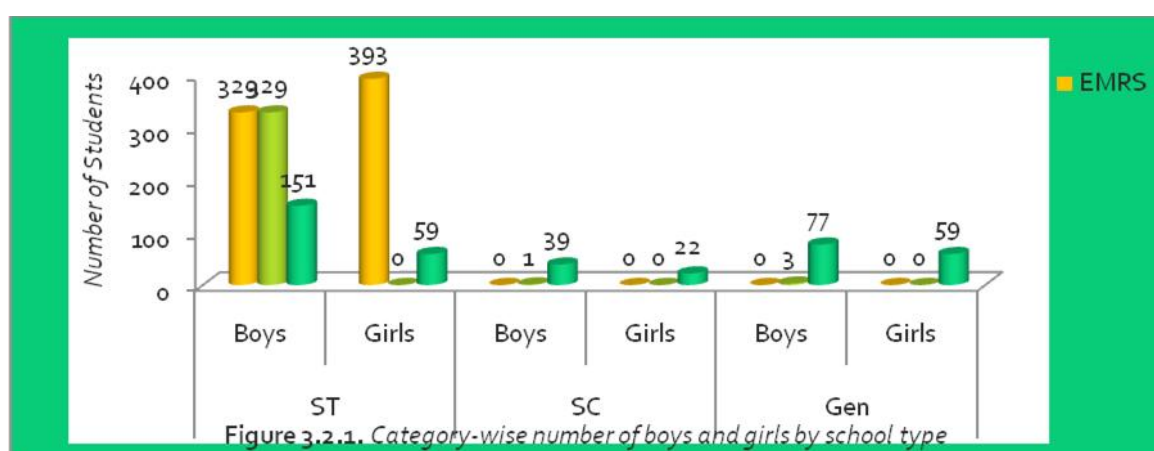
Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms and Classroom Space per Student (in sq. ft.) in Gujarat

School			VI	VII	VIII	IX	X	XI	XII	Total
EMRS	KHAREDI	N of students	58	60	60	60	52	37	-	327
		N of Classrooms	01	01	01	01	01	01	-	06
		Per student floor space (in sq. ft.)	15.3							
	MOTA	N of students	60	61	66	70	65	49	30	395
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	15.12							
SC & ST	MAHUVA	N of students	-	-	-	43	37	25	34	139
		N of Classrooms	-	-	-	01	01	01	01	04
		Per student floor space (in sq. ft.)	12.63							
	USARVAN	N of students	-	-	-	72	53	37	32	194
		N of Classrooms	-	-	-	02	02	01	01	06
		Per student floor space (in sq. ft.)	14.43							
JNV	KHAREDI	N of students	68	72	76	76	70	18	27	407
		N of Classrooms	02	02	02	02	02	01	01	12
		Per student floor space (in sq. ft.)	11.76							

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type (Gujarat)

		ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Elementary Classes (VI to VIII)											
EMRS	KHAREDI	89	89	178	-	-	-	-	-	-	178
	MOTA	95	92	187	-	-	-	-	-	-	187
SC & ST	MAHUVA	-	-	-	-	-	-	-	-	-	-
	USARVAN	-	-	-	-	-	-	-	-	-	-
JNV	KHAREDI	69	42	111	21	15	36	41	28	69	216
Secondary Classes (IX & X)											
EMRS	KHAREDI	58	54	112	-	-	-	-	-	-	112

	MOTA	66	63	129	-	-	-	-	-	-	129
SC & ST	MAHUVA	77	-	77	-	-	-	03	-	03	80
	USARVAN	125	-	125	-	-	-	-	-	-	125
JNV	KHAREDI	59	15	74	16	07	23	27	22	49	146
Higher Secondary Classes (XI & XII)											
EMRS	KHAREDI	21	16	37	-	-	-	-	-	-	37
	MOTA	-	79	79	-	-	-	-	-	-	79
SC & ST	MAHUVA	58	-	58	01	-	01	-	-	-	59
	USARVAN	69	-	69	-	-	-	-	-	-	69
JNV	KHAREDI	23	02	25	02	00	02	09	09	18	45
Total		809	452	1261	40	22	62	80	59	139	1462



- * The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 15.3 to 15.12 sq. ft., while that in ST & SC schools was 12.63 and 14.43 sq. ft. and in JNV about 11.76 sq. ft. Average number of students per classroom was approximately 54-56 in EMRS, 34 in JNV and 32-35 in ST & SC schools.
- * While children from SC, ST and general categories were in ST & SC schools and EMRS was primarily meant for students from the ST community. This is reflected in the differential category-wise student strength in different types of schools (Figure 3.2.1).

3.3 Student Attendance

Student attendance and retention in the school to complete the educational cycle are important indicators to reveal how the school is catering to student needs and the awareness level of the community to encourage their children to be in the system. Table 3.3.1 and Figures 3.1.1 and 3.1.2 present information on student attendance and Table 3.3.2 indicates percentages of students completing the educational cycle.

Table 3.3.1: Percentage of average student attendance during the last month (Gujarat)

		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	KHAREDI	96	94	93	99	99	89	-	95
	MOTA	98	95	98	98	96	96	99	97
SC & ST	MAHUVA	-	-	-	96	100	99	99	99
	USARVAN	-	-	-	98	97	96	99	97
JNV	KHAREDI	93	88	87	92	97	97	97	93

Table 3.3.2: Number of students admitted at entry points (classes VI and XI) and completing The educational cycle during the last three years

School		No. of students admitted in VI in 2008-09	N of students completing Class X after 5 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2009-10	N of students completing Class X after 5 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2010-11	N of students completing Class X after 5 years	% completing educational cycle in 2014-15
EMRS:	KHAREDI	49	47	96	56	48	86	50	42	84
	MOTA	57	54	95	63	52	83	65	59	91
SC & ST	MAHUVA	37	33	89	40	36	90	39	29	74
	USARVAN	62	51	82	65	55	85	67	38	57
JNV	KHAREDI	60	49	82	79	58	86	70	70	100
School		No. of students admitted in XI in 2011-12	N of students completing Class XII after 2 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2012-13	N of students completing Class XII after 2 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2013-14	N of students completing Class XII after 2 years	% completing educational cycle in 2014-15
EMRS:	KHAREDI	-	-	-	-	-	-	-	-	-
	MOTA	21	20	95	27	27	100	30	30	100
SC & ST	MAHUVA	34	29	85	10	10	100	35	26	74
	USARVAN	39	37	95	30	24	80	34	32	94
JNV	KHAREDI	27	25	93	29	27	93	26	25	96

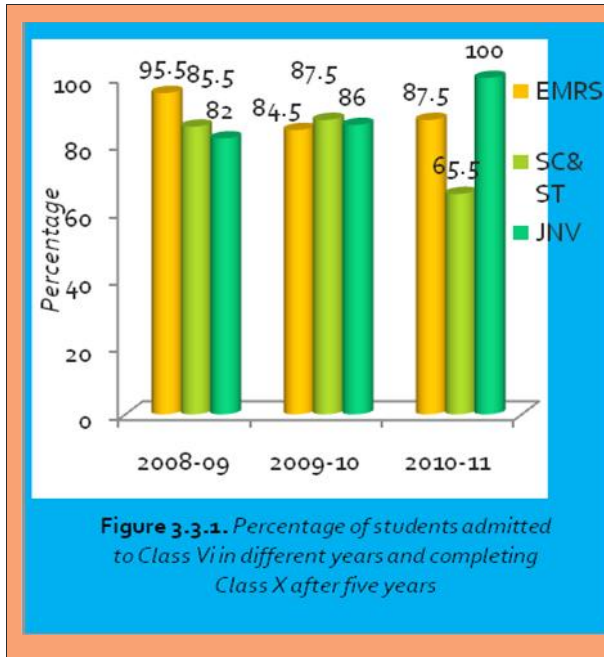


Figure 3.3.1. Percentage of students admitted to Class Vi in different years and completing Class X after five years

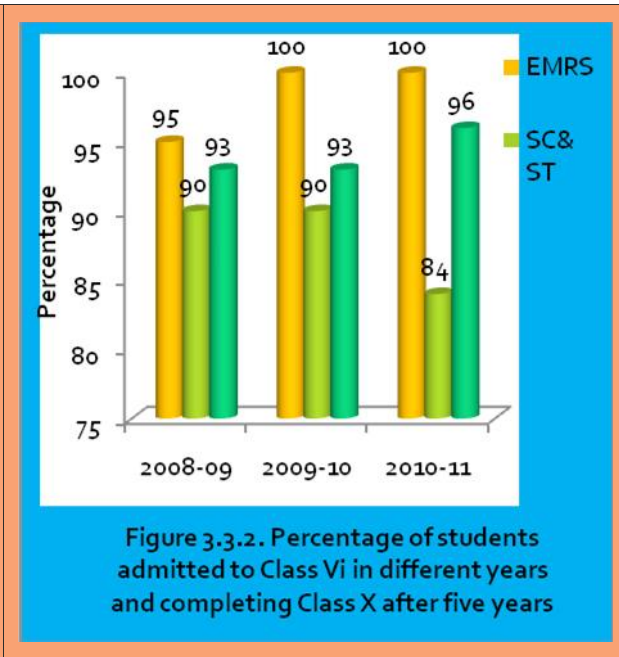


Figure 3.3.2. Percentage of students admitted to Class Vi in different years and completing Class X after five years

Note: Higher-secondary classes opened in ST & SC schools in 2013-14 and the percentage figure shown for ST & SC schools in 2013-14 indicates the percentage of students scheduled to appear in Class XII examination.

- * Student attendance in all types of schools was satisfactory.
- * Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in class X were 84% and 91% in EMRS, 74% and 57% in ST & SC schools and 100% in JNV. The percentage in ST & SC schools fell short of 100% because some students shifted to other schools or dropped out of the system. During earlier years, students completing the educational cycle also fell short of 100% in EMRS. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 100% in EMRS, 95% in ST & SC schools and 96% for JNV.
- * Completion of educational cycle by 84% to 91% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15.

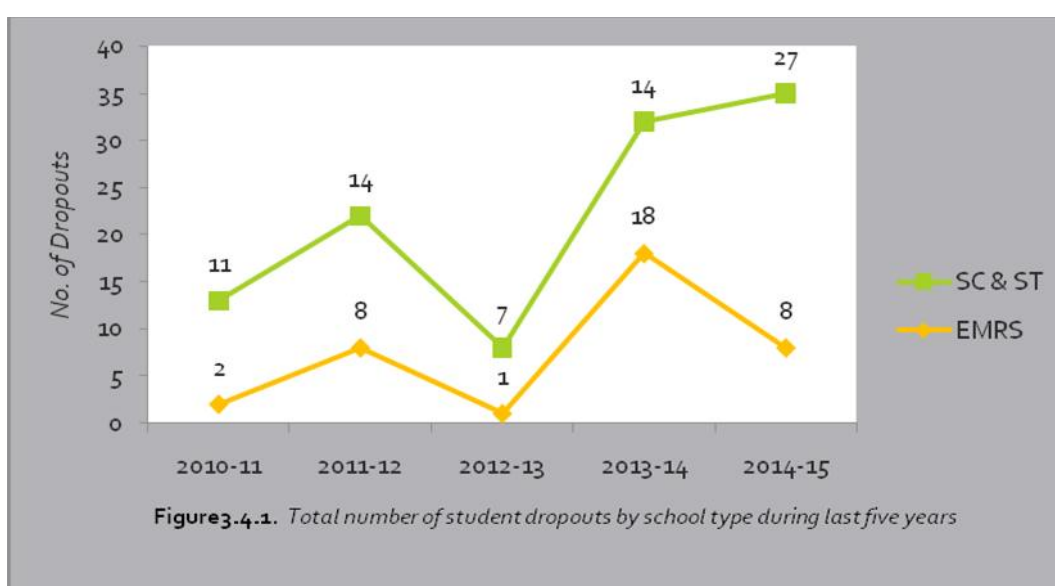
3.4 Student Retention /Drop-out

The number of students dropping out or being pushed out of the system during the last five years across types of schools are presented in Table 3.4.1 and plotted in Figure 3.4.1.

Table 3.4.1: Class-wise total Number of students dropping out of school by school type

School	Year	Elementary			Secondary		Higher secondary		Total (year-wise)
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	01	-	01	-	-	-	-	02
	2011-12	02	04	01	01	-	-	-	08
	2012-13	-	01	-	-	-	-	-	01

	2013-14	05	06	06	01	-	-	-	18
	2014-15	02	04	02	-	-	-	-	08
SC & ST	2010-11	-	-	-	08	-	03	-	11
	2011-12	-	-	-	05	-	09	-	14
	2012-13	-	-	-	04	-	03	-	07
	2013-14	-	-	-	09	-	05	-	14
	2014-15	-	-	-	24	-	03	-	27
JNV	2010-11	-	-	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-	-	-
	2012-13	-	-	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-



Note: Students dropping out of a school possibly sought admissions in other schools for which information was not available. JNV could not supply information on student dropout.

- * Noticeably more number of students drop out of ST & SC schools compared to EMRS. More students dropped out at the elementary stage compared to secondary and higher-secondary stages, particularly in ST & SC schools. These drop out cases may not viewed as instances of students completely leaving the schools system; rather a substantial number of students shifted to others schools or got admitted to JNV or EMRS. The information in respect of students staying out of the school system was not available with the school authorities.

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

Student learning and achievement are greatly impacted by school's instructional climate which includes school and classroom physical environment, teaching-learning process and materials, student development activities and procedures of student evaluation. These aspects are discussed in this chapter.

4.1 School and Classroom Environment

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and classroom environment by school type

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Building white washed	Manageable	MANAGEABLE	GOOD
Cleanliness of campus	GOOD	MANAGEABLE	GOOD
Cleanliness of classrooms	GOOD	MANAGEABLE	GOOD
Dustbins in classroom	YES	NO	YES
Proper drainage system	GOOD	MANAGEABLE	GOOD
First-aid box	YES	YES	YES
Fire safety	INADEQUATE	INADEQUATE	INADEQUATE
Garbage disposal pit	ADEQUATE	INADEQUATE	ADEQUATE
Children's hygienic habits	GOOD	MANAGEABLE	GOOD
Information board	Manageable	POOR	GOOD
Wall magazine	Manageable	POOR	GOOD
Wall activities	POOR	POOR	POOR
TLM corner in classrooms	NO	NO	NO
Library cum reading room	MANAGEABLE	POOR	MANAGEABLE
Games equipments	INADEQUATE	INADEQUATE	INADEQUATE
Monthly health check up	FREQUANTELY	FREQUANTELY	FREQUANTELY
Campus beautification	MANAGEABLE	POOR	MANAGEABLE
Suggestion box	MANAGEABLE	POOR	MANAGEABLE

- * The school campus and classrooms appeared to be clean in all types of schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in Ashram School, Kharewadi.
- * While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS, ST & SC schools, and JNV. All schools suffered on account of having adequate garbage disposal pit and proper drainage system except ST & SC schools.
- * In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading rooms were manageable in EMRS and JNV and not evident in ST & SC schools.

4.2 Teaching-Learning Process, Materials and Equipments

Textbooks, TLMs and teaching-learning process are the throughputs in educational institutions that help student potentials translate into achievements. This section presents information regarding the availability of textbooks to students (Table 4.2.1; Figure 4.2.1) and teachers' and students' behaviours in the classroom during the course of teaching (Table 4.2.2).

Table 4.2.1: Class-wise percentage of new textbooks distributed to students as against requirement on the basis of student enrolment (Gujarat)

School		New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
EMRS	KHAREDI	No. required	406	420	420	420	312	259	-	2237
		% distributed	100	100	100	100	100	100	-	100
	MOTA	No. required	785	434	427	469	483	661	343	3602
		% distributed	100	100	100	100	80	100	100	97
SC & ST	MAHUVA	No. required	-	-	-	420	301	180	125	1026
		% distributed	-	-	-	100	100	100	100	100
	USARVAN	No. required	-	-	-	576	371	185	180	1292
		% distributed	-	-	-	100	100	100	100	100
JNV	KHAREDI	No. required	748	792	912	988	770	216	351	4777
		% distributed	100	100	100	100	100	100	100	100
Class-wise percentage of textbook distribution by school type										
EMRS			100	100	100	100	90	100	100	99
SC & ST			-	-	-	100	100	100	100	100
JNV			100	100	100	100	100	100	100	100

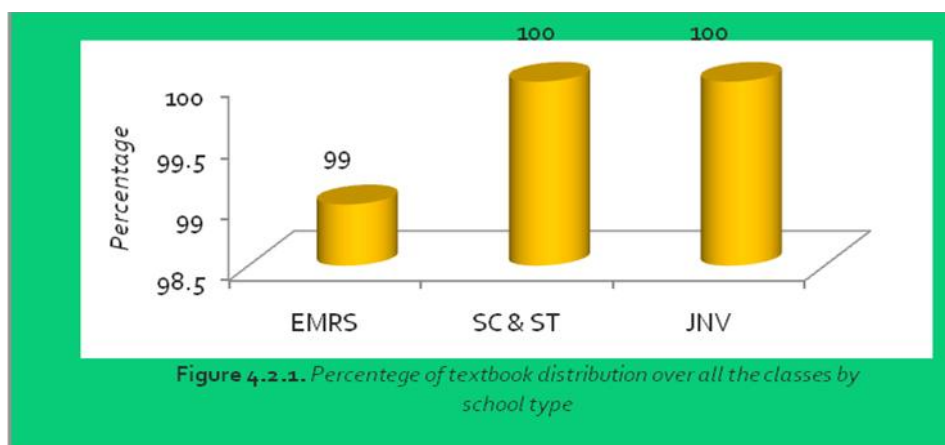


Figure 4.2.1. Percentage of textbook distribution over all the classes by school type

Table 4.2.2: Teaching-learning process and teacher-student behaviours in schools

Parameter	EMRS	SC & ST	JNV
Teaching-learning Process			
Seating arrangement and use of classroom space	GOOD	GOOD	GOOD
Adequacy of lesson plan/note	MANITAINED	NOY PROPERLY	MAINTAINED
Teaching through activity-based methods	NO	NO	PARTLY DONE
Correction of students' assignments	NOT PROPER	NOT PROPER	YES
Home assignments given	GOOD	AVRAGE	GOOD
Project assignments	AVRAGE	POOR	GOOD
Use of e-content in SMART classes	POOR	NO	GOOD
Effective use of laboratories	AVERAGE	POOR	GOOD
Using libraries effectively	AVERAGE	POOR	GOOD
Courses completed as per schedule	YES	YES	YES
Time table structured and displayed	YES	YES	YES
Academic calendar prepared and displayed	YES	YES	YES
SDP prepared	YES, PARTLY	YES, PARTLY	YES
Teacher behaviour in classrooms			
Topic presentation focused and organized	AVERAGE	POOR	GOOD
Demonstrates during teaching	AVERAGE	AVERAGE	GOOD
Using blackboard appropriately	YES	YES	YES
Using TLMs while teaching	POOR	POOR	PARTLY DONE
Initiating group learning	POOR	POOR	AVERAGE
Encouraging students to ask questions	GOOD	AVERAGE	GOOD
Giving academic feedback to students	AVERAGE	POOR	AVERAGE
Threatening	NO	NO	NO
Student behaviour in classrooms			
Students actively listen and participate	GOOD	GOOD	GOOD
Ask questions and express ideas	AVERAGE	AVERAGE	GOOD
Students' use of TLMs	NO	NO	NO
Students respond and answer	AVERAGE	POOR	GOOD

- * While 99% of the required number of textbooks was distributed in EMRS where as in JNV along with ST & SC schools 100% textbooks were distributed.
- * In all types of schools, courses were completed as per syllabi and in time. Time table and academic calendars were prepared. SDPs were prepared partly in EMRS and ST & SC schools. JNV prepared SDP. Students were given home assignments. Lesson plans were not properly prepared and maintained in ST & SC schools. It was done properly in JNV and EMRS.
- * The status of EMRS did not turn out to be satisfactory in respect of activity-based teaching, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST &

SC schools. JNV was relatively better because of activated Smart classes, use of e-content, Tele-teaching facility compared to other schools in respect of these school-related activities.

- * The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLM use during teaching and initiating group-based learning was not satisfactory. The situation in JNV was slightly better but far from being excellent.
- * The nature for student engagement in classroom teaching was less active. Their behaviours in classrooms were more or less teacher-directed. Their participation in classroom learning was minimal in ST & SC schools, manageable in EMRS and slightly better in JNV.

Availability of TLMs and TLEs. Though schools are provided with grants for TLMs and TLEs which are purchased by the teachers, they were not purchased with a proper plan to cater to students' need and course requirements. They were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.

4.3 Student Development Activities

Besides classroom teaching students also need activities for their personal and career development. Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools and JNV on those activities.

Table 4.3.1: Student development activities

Activities	EMRS	SC & ST	JNV
Remedial coaching as per student need	DONE	PARTLY DONE	DONE
Counselling for behavioural problems	PARTLY DONE	NO	PARTLY DONE
Career counselling	DONE	NO	DONE
Identifying and developing student talents	YES	NO	YES
Coaching for professional courses	NO	NO	PARTLY DONE
Self-defence training	RARELY	NO	RARELY
life skills training	YES	NO	YES
Coaching for sports and games competitions	PARTLY DONE	NO	PARTLY DONE
Training for musical and artistic talents	NO	NO	YES
Training on vocational and work education	NO	NO	YES
Training students as social change agents	NOT VISIBLE	NO	YES

- * Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills were very poor in EMRS and ST & SC schools where as a better position in JNV. Self-defence was evident to some degree in EMR and JNV. Career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was slightly better than that of EMRS.

The ST & SC schools had not followed any activity except that remedial coaching as per student need.

4.4 Student Evaluation Practices

The students are evaluated in half-yearly and yearly examinations and also in their respective classes at different phases during the instructional period by respective teachers. We wanted to ascertain how CCE has been adhered to in assessing student performance. Table 4.4.1 presents schools' adoption of CCE along important parameters.

Table 4.4.1: Student Evaluation Practices as per CCE

Parameter	EMRS	SC & ST	JNV
Using summative evaluations	SATISFACTORY	SATISFACTORY	SATISFACTORY
Using formative evaluations	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Assessing through oral questions	SATISFACTORY	SATISFACTORY	SATISFACTORY
Assessing through observations	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Using self and peer-assessment	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Using parental assessment	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Using group assessment	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Assessing socio-personal qualities	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Maintaining student portfolios and anecdotal records	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Using checklists and rating scales	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Cumulative progress card for each child maintained	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Identifying individual strengths	SATISFACTORY	SATISFACTORY	SATISFACTORY
Quality of feedback to students	SATISFACTORY	SATISFACTORY	SATISFACTORY
Remedial coaching on the basis of CCE	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY

- * Adoption of CCE along most of parameters was unsatisfactory in all types of schools except JNV. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period. It's results were not used in EMRS and ST & SC schools for remedial coaching. On the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV and taking care for use of its results.
- * In respect of the methods of assessment, oral as well as written questions used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through self/peer, parents and assessment of socio-personal qualities was unsatisfactory in JNV.
- * Group-based assessments and assessment of socio-personal qualities were not evident in EMRS, JNV and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students.

Chapter 5

RESIDENTIAL CLIMATE IN HOSTELS

5.1 Residential Environment in Hostels

One of the objectives of EMRS is to support the construction of infrastructure that facilitates the educational, physical cultural needs of students. Students spent about 14-16 hours a day in hostels and therefore, the residential climate in the hostel impacts students' motivation, attitude and educational attainment. The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Hostel environment or Boys' and Girls' Hostels

Parameter	EMRS	SC & ST	JNV
Building whitewashed	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of hostel campus	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of hostel rooms	MANAGEABLE	MANAGEABLE	GOOD
Light and ventilation in hostel rooms	MANAGEABLE	MANAGEABLE	GOOD
Garbage disposal pit	MANAGEABLE	MANAGEABLE	GOOD
Proper drainage system	POOR	POOR	MANAGEABLE
First-aid box	YES	YES	YES
Fire safety	INADEQUATE	INADEQUATE	ADEQUATE
Dustbin in hostel rooms	YES	YES	YES
Children's hygienic habits	MANAGEABLE	POOR	GOOD
Using suggestion box	POOR	NO	USED
Wall magazine	NOT REGULAR	NOT REGULAR	NOT REGULAR
House system functional	NO	NO	YES
Cultural activities	YES	YES	YES
Inner house competitions	NO	NO	YES
Annual function	YES	YES	YES
Stationeries supplied	YES	YES	YES
Play and indoor games equipment	INADEQUATE	INADEQUATE	INADEQUATE
Health check up	REGULAR	IRREGULAR	REGULAR
Health cards issued	NO	NO	YES
ANM/Health worker available	NO	NO	YES
Mess committee's functional efficiency	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Beautification of hostel campus	POOR	POOR	MANAGEABLE
Hostel locked during school hours and remedial coaching	YES	YES	YES

- * On parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness while light and ventilation in rooms, provision of garbage disposal pit and drainage system and attempt to beautify the hostel campus were on the weaker side. Most of the conditions in ST & SC schools were unsatisfactory or inadequate. The JNV was better in many respects except that garbage clearance management and school campus beautification were not at the expected level.
- * First-aid boxes were available in hostels of all types of schools, but fire safety measures were inadequate in ST & SC and EMRS schools but adequate in JNV. Health check-up schedule was irregular in ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were manageable in EMRS & ST & SC schools and good in JNV.
- * In EMRS and ST & SC schools, no house system was functional. Cultural activities and annual functions were held in those schools. Students hardly used suggestion box in EMRS, wall magazine was not updated in all schools and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.
- * The mess committees consisting of students were not functioning efficiently in any of the hostels across EMRS and ST & SC schools. It is functioning satisfactorily in JNV.

5.2 Hostel Kitchen and Food

Hygienic kitchen environment, quality of food and safety are the key elements in any residential accommodation set up. Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: *hygienic environment of kitchen and quality of food*

Parameter	EMRS	SC & ST	JNV
Kitchen building whitewashed	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of kitchen floor	GOOD	GOOD	GOOD
Cleanliness of kitchen equipment and utensils	GOOD	GOOD	GOOD
Cleanliness of dining room	MANAGEABLE	POOR	GOOD
Light and Ventilation	MANAGEABLE	POOR	GOOD
Fire safety for the kitchen	NO	NO	YES
Proper drainage system for kitchen	INADEQUATE	INADEQUATE	INADEQUATE
Cleanliness of hand wash points	MANAGEABLE	POOR	SATISFACTORY
Cleanliness of store room	YES	YES	YES
Safety stand for plates	YES	YES	YES
Hand washing points	INADEQUATE	INADEQUATE	INADEQUATE
Aqua guard points for safe drinking water	NO	NO	YES
Kitchen waste clearance and management	POOR	POOR	MANAGEABLE
Smokeless cooking	NO	NO	YES
Hygienic cooking	MANAGEABLE	UNSATISFACTORY	SATISFACTORY
Approved menu chart displayed	YES	NO	YES
Meals served according to menu chart	YES, AT TIMES	YES, MOSTLY	YES

	DEVIATED	DEVIATED	
Quality of meal	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Teachers on duty / mess committee supervision	NO	NO	YES
Procurement procedure duly followed	NO	NO	YES
Serving of food supervised by teachers	NO	NO	YES

- * On many parameters of kitchen environment and cleanliness, the condition in EMRS was good while that in ST & SC hostels was manageable and that in JNV was good. There was no smokeless cooking in EMRS and ST & SC schools and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and inadequate hand washing points, but the drainage system was not up to mark.
- * The fire and health-related safety measures in EMRS and ST & SC hostels was poor while the safety measures were better in JNV.
- * The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls are located on either side.

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1 Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 through 6.1.9 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-4 on 'Method and Procedure'. It may be mentioned here the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

Table 6.1.1: Mean Achievement Level of Class VIII Students in Gujarat in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	50	6.38 2.03	25.52	50	7.12 1.94	28.48	64	8.18 2.17	32.72	43	6 1.97	24
SC & ST	43	7.14 2.74	28.56	39	8.44 2.72	33.76	39	6.12 1.37	24.48	43	6.25 2.93	25
JNV	31	7.52 2.84	30.08	31	9.87 3.45	39.48	31	9.68 3.12	38.72	31	6.65 2.27	26.6

- * In all the four subjects, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the ST & SC schools students scored better than those in EMRS (Table 6.1.1).
- * It may however be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in EMRS schools scored in the range of only 24% to 33% across four subject areas, while those in ST & SC scored in the range of 24% to 34%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 26% to 40 % across the four subject areas.

Table 6.1.2:Category-wise Mean Achievement Level of Class VIII Students in Gujarat in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	50	6.38 2.03	25.52	50	7.12 1.94	28.48	64	8.18 2.17	32.72	43	6 1.97	24
SC & ST	43	7.14 2.74	28.56	39	8.44 2.72	33.76	39	6.12 1.37	24.48	43	6.25 2.93	25
JNV	17	7.76 3.27	31.04	18	10.06 3.90	40.22	18	9.67 2.68	38.68	17	6.35 2.21	25.4
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	3	8.67 3.79	34.68	6	10 1.89	40	6	11 3.69	44	3	6 2	24
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	11	6.55 1.86	26.2	7	9.29 3.59	37.16	7	8.57 3.74	34.28	11	7.55 2.33	30.2

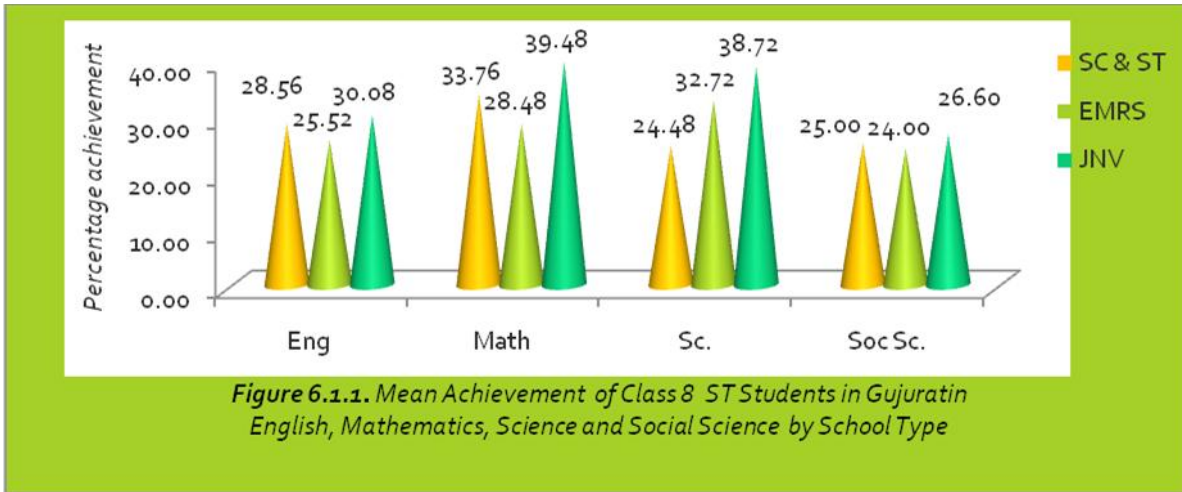


Figure 6.1.1. Mean Achievement of Class 8 ST Students in Gujarati, English, Mathematics, Science and Social Science by School Type

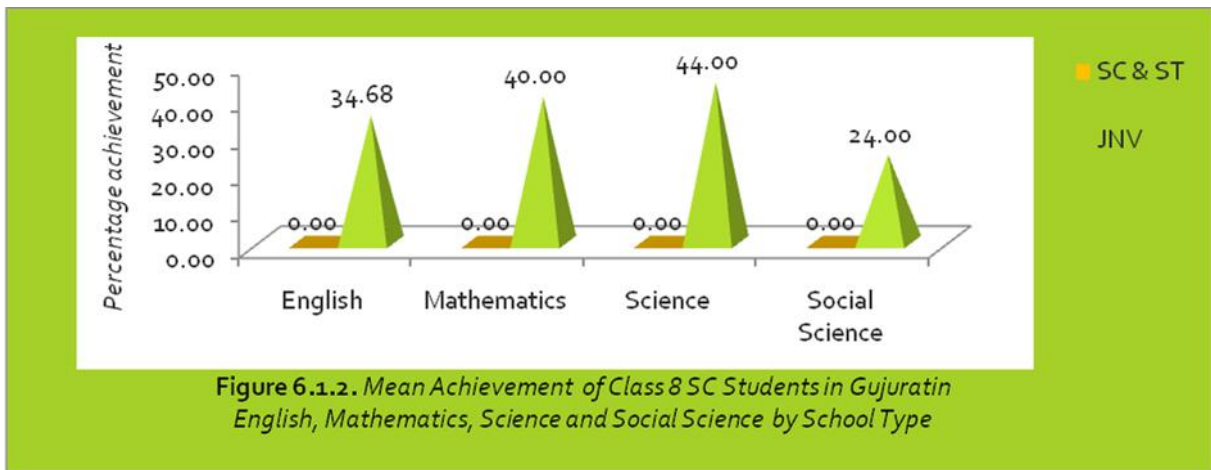


Figure 6.1.2. Mean Achievement of Class 8 SC Students in Gujarati, English, Mathematics, Science and Social Science by School Type

Table 6.1.3: 't' values showing group comparisons across school types in respect of achievement level of Class 8 ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	T	Mean	df	t	Mean	df	T
EMRS vs. SC & ST	6.38	91	1.5	7.12	87	2.56	8.18	101	5.91	6	84	0.46
	7.14			6.12			6.25					
EMRS vs. JNV	6.38	65	1.64	7.12	66	3.06	8.18	80	2.16	6	58	0.57
	7.76			10.06			9.67			6.35		
SC & ST vs. JNV	7.14	58	0.69	8.44	55	1.59	6.12	55	5.31	6.25	58	0.14
	7.76			10.06			9.67			6.35		

; Significant at .05 level; ; Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) revealed that the ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in English language attainment. It was only in Mathematics and Science that noticeable differences were not observed between the ST students in EMRS and JNV.
- * The performance of ST students in ST & SC schools and EMRS was poor while in JNV, it was relatively better. The ST students in ST & SC schools performed in the range of 25% to 33% while their performance in EMRS was within 30% to 41% and in JNV in the range of 45% to 60%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- * There were no SC students in EMRS. The performance of SC students in ST & SC schools was slightly poorer compared to that of ST students while SC students performed almost at an equal level with ST students in the JNV (Figure 6.1.2). The performance of general category students in either ST & SC schools or JNV was not at par with SC students in their respective institutions.

Table 6.1.4: Mean Achievement Level of Class X Students in Gujarat in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	50	12.8 2.42	51.2	54	8.48 2.43	33.92	54	8.49 1.80	33.96	50	10.84 2.42	43.36
SC & ST	47	8.74 2.68	34.96	50	7.42 2.51	29.68	49	8.71 2.4	34.84	47	8.8 2.55	35.52
JNV	37	15.27 3.66	61.08	37	12.49 4.50	49.96	37	10.62 3.48	42.48	37	10.97 3.34	43.88

- * The performance of students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 29% to 35%, while those in EMRS showed attainment in the range of 33% to 54%. The students in JNV performed in the range of 37% to 61% (Table 6.1.4).
- * The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed poorly in all subject areas. Students in JNV scored highest in English followed by Mathematics, Social Science and Science.

Table 6.1.5: Category-wise Mean Achievement Level of Class X Students in Gujarat in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	50	12.8 2.42	51.2	54	8.48 2.43	33.92	54	8.49 1.80	33.96	50	10.84 2.42	43.36
SC & ST	47	8.74 2.68	34.96	50	7.42 2.51	29.68	49	8.71 2.4	34.84	47	8.8 2.55	35.52
JNV	16	13.68 4.48	54.72	23	13.35 4.27	53.4	23	10.65 3.28	42.6	18	10.05 3.38	40.2
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	6	16.5 2.7	66	3	8.33 2.52	33.32	3	8 2	32	6	8.83 6.98	35.32
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	15	16.47 2.29	65.88	11	12.73 4.65	50.92	11	11.27 4.07	45.08	15	12.87 2.89	51.48

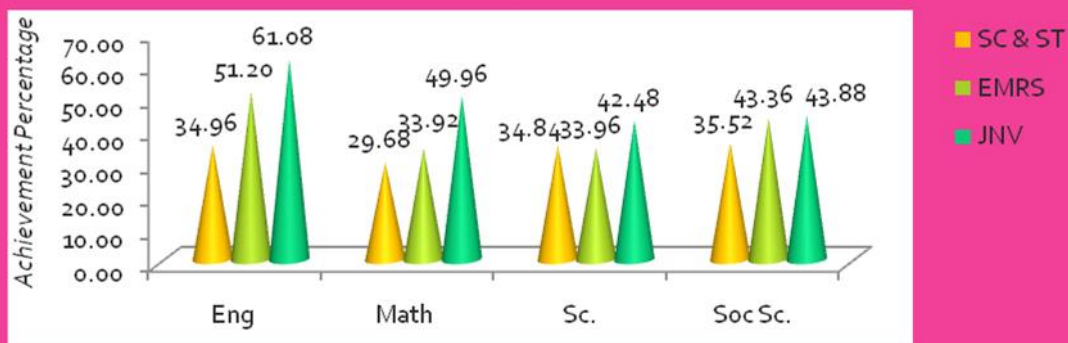


Figure 6.1.3. Mean Achievement of Class 8 ST Students in Gujarat in English, Mathematics, Science and Social Science by School Type

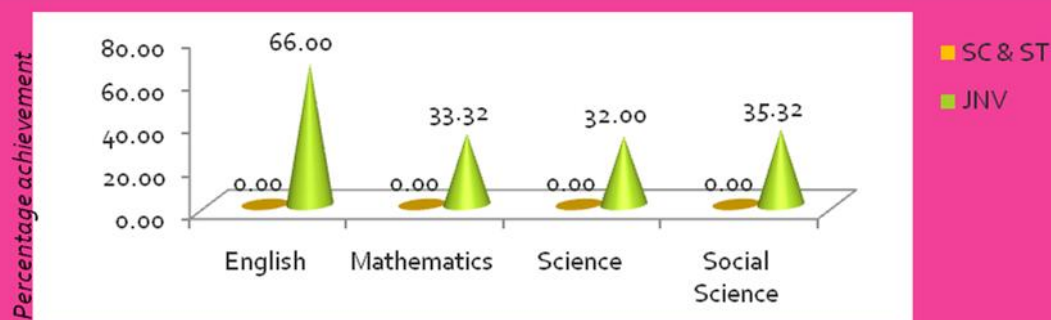


Figure 6.1.4. Mean Achievement of Class 10 SC Students in Gujarat in English, Mathematics, Science and Social Science by School Type

Table 6.1.6: 't' values showing group comparisons across school types in respect of achievement level of Class X ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS vs. ST & SC	12.8	95	7.82	8.48	102	2.18	8.49	101	0.52	10.84	95	4.04
	8.74			7.42			8.71			8.88		
EMRS vs. JNV	12.8	64	0.75	8.48	75	5.18	8.49	75	2.97	10.84	66	0.91
	13.68			13.35			10.65			10.05		
ST & SC vs. JNV	8.74	61	4.16	7.42	71	6.18	8.71	70	2.54	8.80	63	1.42
	13.68			13.35			10.65			10.05		

; Significant at .05 level

:: Significant at .01 level

- * Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools (Table 6.1.5; Figure 6.1.3).
- * t-values indicated that it was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- * On an overall basis, SC students in ST & SC schools and JNV performed at par with ST students in their respective institutions except in English and Social Science in which performance of SC students in JNV was better than that of ST students (Figure 6.1.4). The general category students performed at par with SC students of JNV in English only, whereas fall short of in other subjects.

Table 6.1.7: Mean Achievement Level of Class XII Students in Gujarat in English, Mathematics, Physics, Chemistry and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	41	13 3.7	43.34	38	8.79 2.54	29.3	37	8.25 1.96	27.50	24	13.50 3.26	45	32	9.78 2.25	32.6
SC & ST	41	10.15 3.04	33.83	42	8.67 2.23	28.9	42	9.35 2.18	31.17	42	13.68 2.44	45.6	15	8.47 2.33	28.24
JNV	17	15.18 3.39	50.6	17	8.71 3.26	29.03	17	9.24 2.59	30.8	8	11.63 5.15	38.77	10	12 2.87	40

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS and ST & SC schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.
- * The performance level of students of ST & SC schools was at par with EMRS in all subjects – English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 44% only in English and biology. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 50.6% (Table 6.1.7).

Table 6.1.8: *Category-wise Mean Achievement Level of Class XII Students in Gujarat in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15*

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	41	13 3.7	43.34	18	8.79 2.54	29.3	37	8.25 1.96	27.50	24	13.50 3.26	45	32	9.78 2.25	32.6
SC & ST	41	10.15 3.04	33.83	42	8.67 2.23	28.9	42	9.35 2.18	31.17	42	13.68 2.44	45.6	15	8.47 2.33	28.24
JNV	9	13.78 2.68	45.93	9	7.67 2.25	25.57	9	9.44 2.12	31.47	4	10 2.94	33.34	5	11 2.35	36.67
SC Students															
EMRS	No SC students														
SC & ST	No SC students														
JNV	1	21 -	70	1	6 -	20	1	8 -	26.67				1	17 -	56.67
General Category Students															
EMRS	No General students														
SC & ST	No General students														
JNV	7	6.14 3.39	53.8	7	10.43 3.74	34.77	7	9.14 3.28	30.57	4	13.25 6.80	44.17	4	12 2.71	40

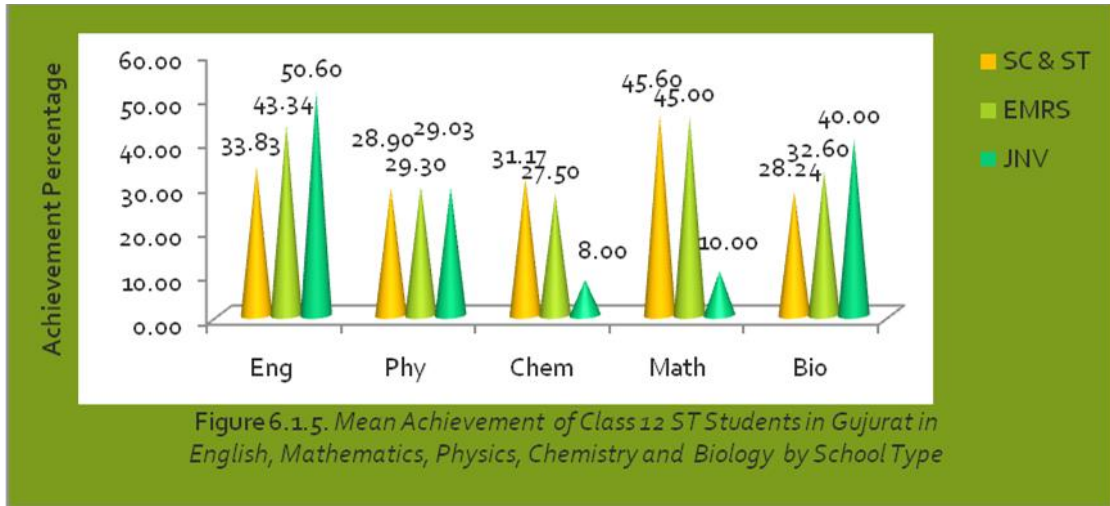


Figure 6.1.5. Mean Achievement of Class 12 ST Students in Gujarat in English, Mathematics, Physics, Chemistry and Biology by School Type

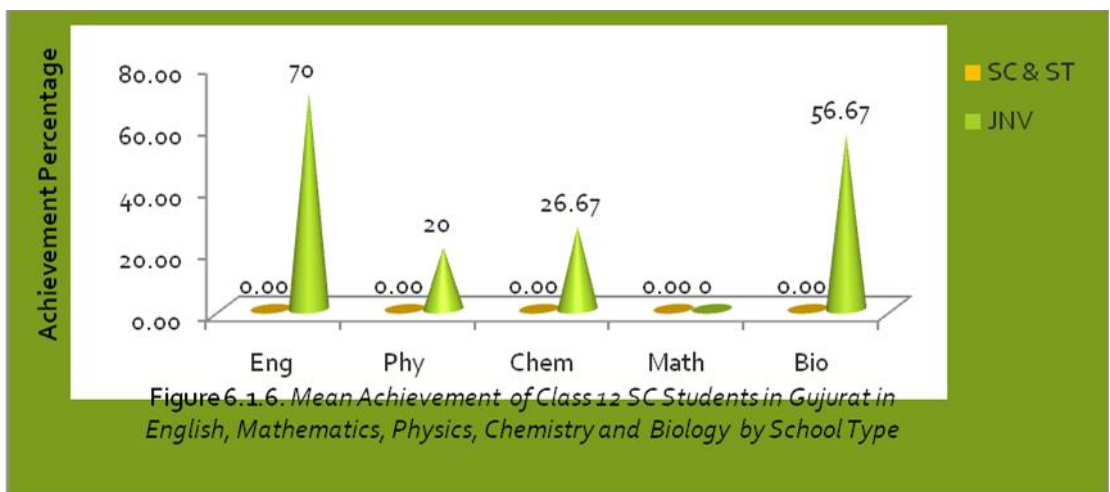


Figure 6.1.6. Mean Achievement of Class 12 SC Students in Gujarat in English, Mathematics, Physics, Chemistry and Biology by School Type

Table 6.1.9: 't' values showing group comparisons across school types in respect of achievement level of Class XIIST students in different subject areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS vs. ST & SC	13	80	3.81	8.79	58	0.17	8.25	77	0.73	13.50	64	0.23	9.78	45	1.82
	10.15			8.67			9.35			13.68			8.47		
EMRS vs. JNV	13	48	0.73	8.79	25	1.73	8.25	44	1.53	13.50	26	2.17	9.78	35	1.08
	13.78			7.67			9.44			10			11		
ST & SC vs. JNV	10.15	48	3.59	8.67	49	2.53	9.35	49	0.05	13.68	44	2.42	8.47	18	2.09
	13.78			7.67			9.44			10			11		

; Significant at .05 level

:: Significant at .01 level

- * Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).
- * t-values revealed noticeable difference between ST students in EMRS and those in ST & SC schools only in English (Table 6.1.9; Figure 6.1.5). Even the ST students in JNV did not maintain their initial advantage over the ST students in ST & SC schools in three subject areas – Chemistry, Mathematics and Biology. Differences were significant only in English and Physics. The ST students in EMRS performed at par with ST students in JNV in Chemistry, Mathematics and Biology and fell short of them in English and Physics. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- * The trend was almost the same for SC and general students in JNV & ST & SC schools (Figure 6.1.6). The performance differences narrowed down with JNV maintaining a slight advantage in only English and Physics.

On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.

In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

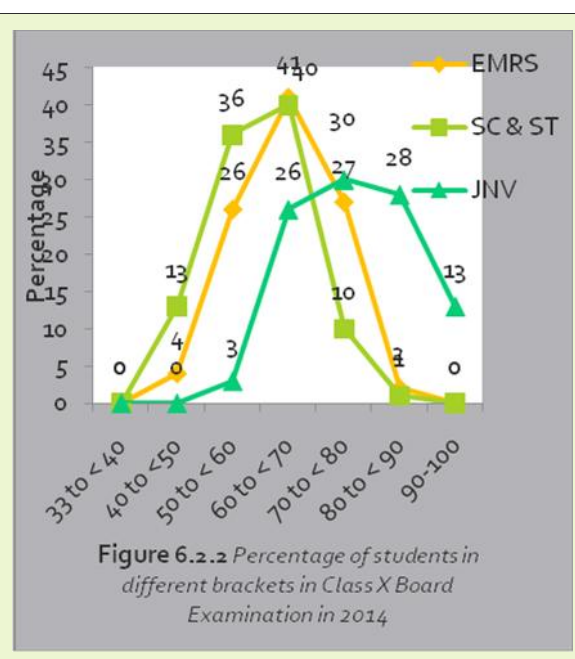
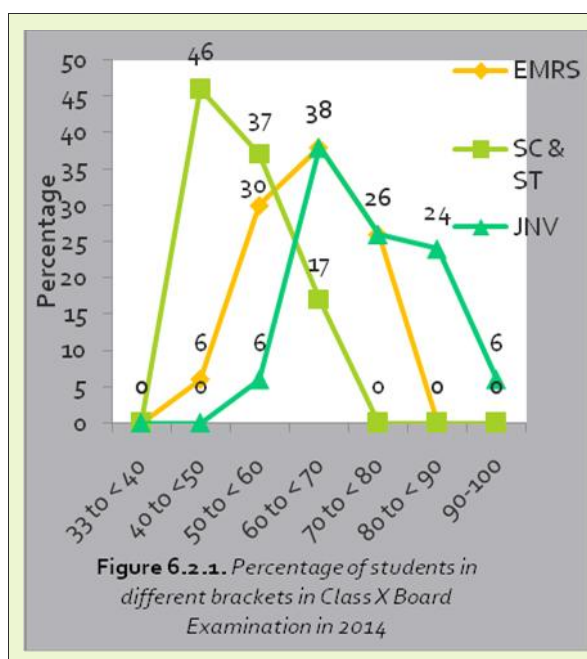
6.2 Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type in Gujarat during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	36	36	100	-	-	11	47	33	09	-
	SC & ST	68	66	97	-	12	23	38	24	03	-
	JNV	61	60	98	-	-	05	48	13	31	03
2011	EMRS	37	36	97	-	03	47	31	17	02	-

	SC & ST	75	75	100	-	10	47	39	04	-	-
	JNV	36	36	100	-	-	-	08	28	28	36
2012	EMRS	53	51	96	-	04	24	47	25	-	-
	SC & ST	91	84	92	-	02	32	52	12	02	-
	JNV	58	58	100	-	-	-	05	57	29	09
2013	EMRS	51	50	98	02	04	20	42	32	-	-
	SC & ST	96	91	95	-	02	39	49	09	01	-
	JNV	49	49	100	-	-	04	20	22	32	22
2014	EMRS	54	53	98	-	06	30	38	26	-	-
	SC & ST	90	67	74	-	46	37	17	-	-	-
	JNV	68	68	100	-	-	06	38	26	24	06
TOTAL	EMRS	231	226	98	-	04	26	41	27	02	-
	SC & ST	420	383	91	-	13	36	40	10	01	-
	JNV	272	271	99	-	-	03	26	30	28	13



- * More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 80% of marks. None of ST & SC School students got less than 40% and none of them got above 70%. In JNV none of the students got less than 50% and 8% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 60% to 70% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the

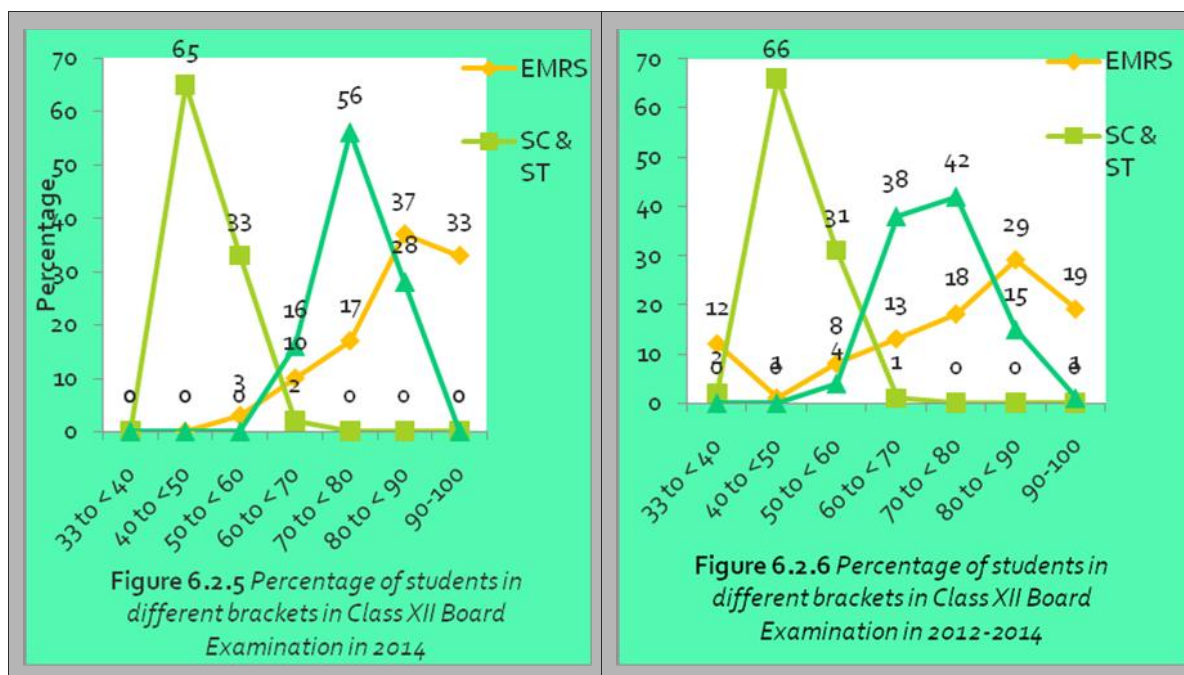
score brackets of 40% to 50% for ST & SC schools, 50% to 60% for EMRS and 60% to 70% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.

- * During the last five years, none of the students of JNV, 4% of students of EMRS and 13% of the students of ST & SC schools scored below 40%, while 13% of students of JNV, no student of EMRS and none from the SC & STs schools scored above 90%.

The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted in Figure 6.2.3 for the year 2014 and in Figure 6.2.4 for a period of three years from 2010 to 2014.

Table 6.2.2: Student Performance in Class XII Board Examination in relation to School Type in Gujarat during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class XII Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	-	-	-	-	-	-	-	-	-	-
	SC & ST	27	13	48	-	69	31	-	-	-	-
	JNV	38	38	100	-	-	16	50	26	08	-
2011	EMRS	-	-	-	-	-	-	-	-	-	-
	SC & ST	83	24	29	72	67	21	-	-	-	-
	JNV	35	35	100	-	-	-	51	43	06	-
2012	EMRS	21	20	95	35	-	-	05	25	20	15
	SC & ST	70	57	81	-	65	35	-	-	-	-
	JNV	44	44	100	-	-	-	27	53	18	02
2013	EMRS	27	27	100	07	04	19	22	15	26	07
	SC & ST	34	30	88	-	70	30	-	-	-	-
	JNV	25	25	100	-	-	04	40	32	20	04
2014	EMRS	30	30	100	-	-	03	10	17	37	33
	SC & ST	66	48	73	-	65	33	02	-	-	-
	JNV	25	25	100	-	-	-	16	56	28	-
TOTAL	EMRS	78	77	99	12	01	08	13	18	29	19
	SC & ST	280	172	61	02	66	31	01	-	-	-
	JNV	167	167	100	-	-	04	38	42	15	01



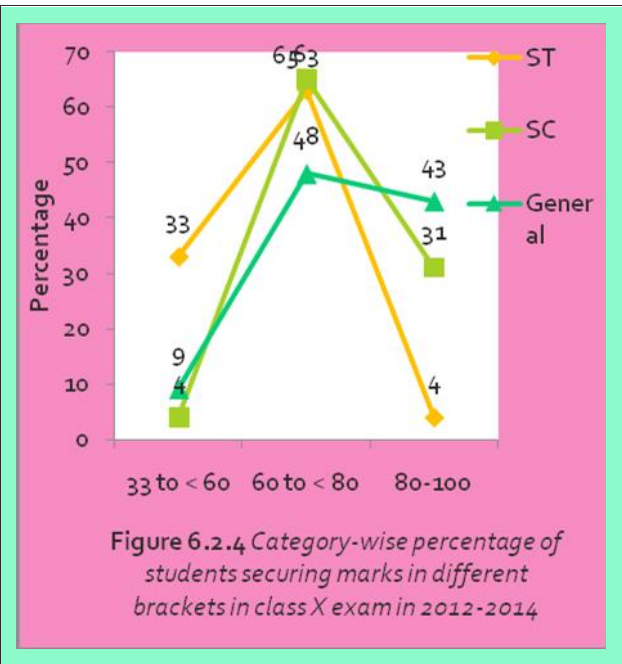
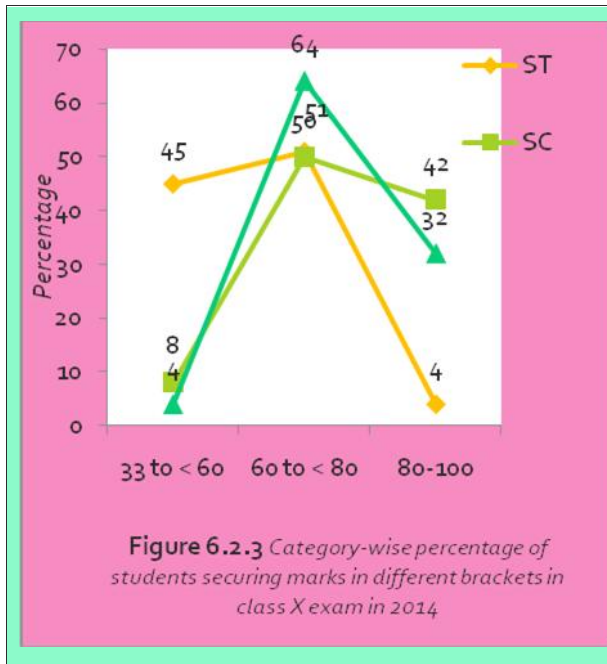
- * Analysis of performance of ST, SC and general students in all types of schools in Class XII board examination in 2014 revealed that the SC and general students performed almost at an equal level and both groups performed better than ST students. The SC, ST and general students scoring above 80% were 42%, 4% and 32% respectively while 8% of SC students, 45% of ST students and 4% of general students scored below 60% (Figure 6.2.3).
- * The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014 (Figure 6.2.4).

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Figures 6.2.5 and 6.2.6 show students' performance trend for 2014 and for the five-year period from 2010 to 2015, respectively.

Table 6.2.3: Category-wise Student Performance in Class X Board Examination in the sampled schools in Gujarat during the Last Three Years (2012-2014)

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	219	208	95	26	70	04
	SC	08	08	100	00	87	13
	General	27	27	100	11	41	48
2013	ST	214	208	98	27	67	06
	SC	06	06	100	17	66	17
	General	25	25	100	12	40	48
2014	ST	228	203	89	45	51	04
	SC	12	12	100	08	50	42
	General	25	25	100	04	64	32
Total	ST	661	623	94	33	63	04

	SC	26	26	100	04	65	31
	General	77	77	100	09	48	43

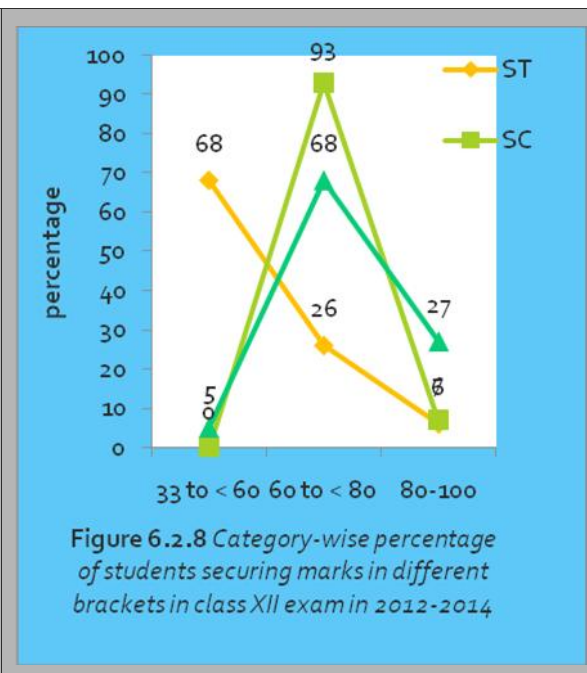
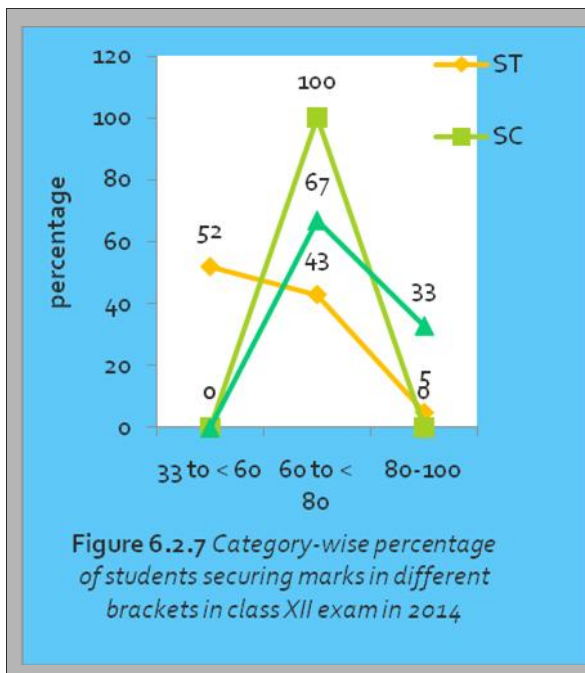


- * Maximum number of students scored in 60% to 70% bracket in EMRS and in 60% to 70% bracket in JNV in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while none of EMRS students scored above 80%, 30% of JNV students scored above 80% of whom 6% scored above 90%. There was huge gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 60% to 70% bracket and maximum number of JNV students scored in the 70% to 80% bracket. None of the EMRS students scored below 40% and none of the JNV students scored below 50%, while only 2% of EMRS students scored above 80% and 41% of JNV students scored above 80% of whom 13% scored above 90%. Considering the results of last five years, there was a huge gap in student performance level between EMRS and JNV favouring the latter.

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 and are plotted in Figure 6.2.7 for the year 2014 and in Figure 6.2.8 for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Terminal Examination in the sampled schools in Gujarat during the Last Three Years (2012-2014)

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	106	92	87	68	22	10
	SC	06	06	100	-	83	17
	General	23	23	100	04	78	18
2013	ST	70	67	94	71	27	02
	SC	04	04	100	-	100	-
	General	12	11	100	-	55	45
2014	ST	108	90	83	52	43	50
	SC	04	04	100	-	100	-
	General	09	09	100	-	67	33
Total	ST	284	218	87	68	26	06
	SC	14	14	100	-	93	07
	General	44	44	100	05	08	27



- * In class XII Board examination in 2014, 68% of ST students across all types of schools scored below 60%, while none of SC students and 5% of the general students scored below 60%.
- * 6% of ST students, 7% of SC students and 27% of general students scored above 80%. Maximum number of ST students scored in 33% to 60% bracket and general students scored in 80% to 100% bracket, while maximum number of SC students scored in 60% to 80% bracket. The SC and general students performed better than ST students and general students had a slight advantage over all category of students. (Figure 6.2.4).

- * Considering the Class XII Board examination results over the last three years (2012-14), the general students & SC students performed better than the ST students (Figure 6.2.4).

6.3 Student Participation in Co-curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of boys and girls participating in Co-Curricular and Sports activities by School Type (Gujarat)

Activity	EMRS		SC & ST		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
Co-Curricular activities						
Drawing	18	20	29	-	28	44
Singing	-	-	19	-	60	89
Sewing/ Knitting	-	-	-	-	-	-
Dancing	17	20	-	-	52	67
Painting	40	46	100	100	-	-
Instrumental music	-	-	26	47	-	-
Debate/ Eloquence	-	-	16	22	25	-
Writing Skill	17	48	48	89	73	-
G.K. / Quiz	20	49	24	30	45	-
Drama	-	-	48	59	18	-
Games and Sports						
Football	-	-	06	-	12	-
Volleyball	24	-	08	15	35	-
Basketball	-	-	10	11	-	-
Kho-Kho	33	46	14	26	55	-
Badminton	-	-	02	04	-	-
Kabbadi	38	45	10	19	38	-
Skipping	-	42	-	4	-	19
Athletics	20	23	06	07	55	-
Karate	-	-	20	22	-	-
Archery	-	-	04	-	-	-
Handball	-	-	-	-	-	-
Social activities						
NCC	-	-	-	-	-	-
Scout	-	-	-	-	-	-
NSS	-	-	-	-	-	-
Red cross	-	-	-	-	-	-
Shramdan	-	-	-	-	-	-
Social awareness campaign	-	-	-	-	-	-
Socials service in villages	-	-	-	-	-	-

- * It may be observed that more girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- * The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: *Percentage of boys and girls participating in Social activities by School Type (Gujarat)*

	NCC	Scout	NSS	Shramdan	Social awareness campaign	Social service in villages
EMRS	-	-	-	-	100	18
SC & ST	-	-	-	47	47	35
JNV	-	08	-	all	-	-

- * It is observed that not a single student of EMRS & SC & ST schools took part in NCC, Scout or NSS. While these students have participated in social awareness campaign & social service sector.

6.4 Performance in National Talent Search Tests

None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

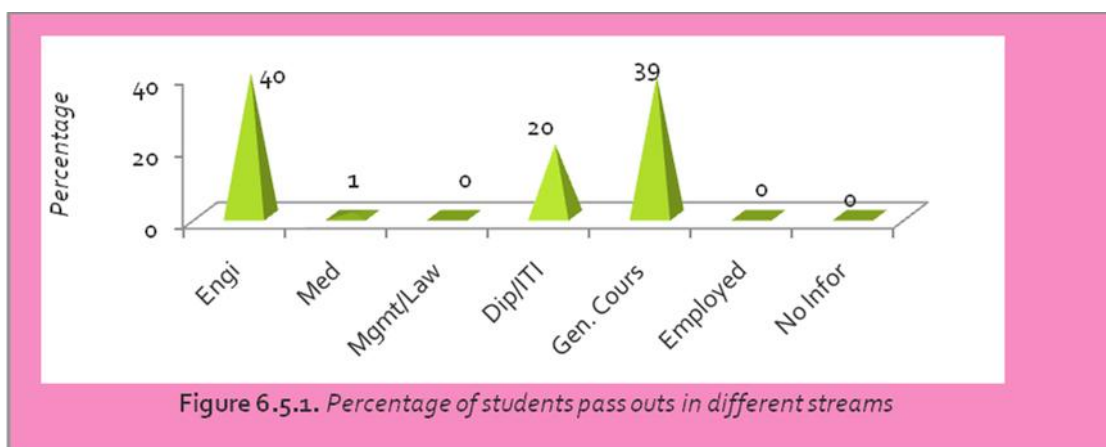
6.5. Success Indicators of School Pass Outs

Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training. The data in respect of the pass outs from EMRS over the last three years

(2012-14) are available in Table 6.4.1 which are plotted in Figure 6.4.2. The JNV did not keep any record of student pass outs, while the first batch of students in ST & SC schools are yet to appear in Class XII examination.

Table 6.5.1: Success indicators of school pass outs

Year	No of pass outs	Engineering	Medical	Management/Law	Diploma/ITI	General courses	No taking up employment	Information not available (no.)	
EMRS	2012	No record is maintained in the School.							
	2013								
	2014								
SC & ST	2012								
	2013								
	2014								
JNV	2012	44	21	-	-	08	15	-	-
	2013	25	13	-	-	03	09	-	-
	2014	25	05	01	-	08	13	-	-



- * Over the last three years, 40% of JNV students took up Engineering courses, 4% medical courses, 31% Diploma courses and 25% took general courses in the arts, science and commerce streams in general colleges.
- * No record is maintained at the level of EMRS or ST & SC schools. Tracking the child after study has not been thought of in EMRSs.

Chapter 7

SCHOOL-COMMUNITY LINKAGE

7.1 Functioning of SMC and Other School Committees

The involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Table 7.1.1 lists out the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA participation in school activities

Parameter	EMRS	SC & ST	JNV
SMC participation			
Regular meeting of SMC	NO	NO	NO
Implementing resolutions of SMC	AVERAGE	AVERAGE	GOOD
Involvement in developing SDP	AVERAGE	POOR	GOOD
Monitoring student attendance and drop out	AVERAGE	POOR	AVERAGE
Monitoring student progress	GOOD	POOR	GOOD
Participation in school's co-curricular activities	GOOD	POOR	AVERAGE
Participation in preparing TLMs	AVERAGE	POOR	AVERAGE
Supervising hostels	AVERAGE	AVERAGE	AVERAGE
Supervising quality of meals	POOR	POOR	AVERAGE
Monitoring utilization of funds	NOT AT ALL	NOT AT ALL	NOT AT ALL
Liaoning with other agencies for school development	-	-	
MTA participation			
Regular meeting of MTA	NO	NO	NO
Monitoring student attendance and drop out	NO	NO	NO
Participation in school's co-curricular activities	NO	NO	NO
Working for the safety of girls	NO	NO	NO
Monitoring Meena cabinet and Meena Manch	NO	NO	NO
Coordinating with SHG for catering to girls' hygienic requirements	NO	NO	NO

- * The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- * SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals, monitoring utilization of funds or in establishing coordination with other

agencies. Their participation in preparing TLMs or in co-curricular activities in the school was very poor.

- * The MTA meetings were very infrequent and were also held as a matter of formality. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff.

7.2 Teachers' Interaction with Community

Table 7.2.1 reveals how teaching staff treat and interact with community members.

Table 7.2.1: *Teachers' interaction with parents and community members*

Parameter	EMRS	SC & ST	JNV
Dealing with community members when they visit school	GOOD	GOOD	GOOD
Personal contact with community members	POOR	POOR	POOR
Sharing of students' results with parents	AVERAGE	POOR	AVERAGE
Influencing the community cognitive behavior	POOR	POOR	AVERAGE

- * The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

MONITORING AND SUPERVISION

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Table 7.3.1 reports frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of monitoring and supervision of the school and the Hostel by Educational Administrators and Community members during the 2014-15 (Gujarat)

Supervision	School			Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
By educational administrators	05	03	03	18	03	06	06	03	06
By community members	03	04	05	24	05	08	11	05	08

- * During a span of one year, educational administrators visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was comparatively more. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours in SC /ST schools and EMRSs.
- * The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 provides information on hostel visits by the principals. Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 15-17 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively less.

Table 7.4.1: Frequency of hostel visits by the principal

Month	Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
Aug, 2014	05	18	08	06	18	08
Sep, 2014	08	17	08	07	17	08
Jan, 2015	06	21	08	07	21	08
Feb, 2015	08	15	08	07	15	08

- * The frequency of hostel visits by the principal of JNV was comparatively less and on enquiry it was known that superintendents (MOD & Housemasters) were doing their jobs with the principal being informed almost on a regular basis.
- * The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

8.1 Teachers' Perception and Feedback

Thirteen teachers of EMRS, 12 teachers of ST & SC schools and 6 teachers of JNV were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on hostel and toilet cleanliness, activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counseling services for students, capacity building of teaching and non-teaching staff. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices being in contact with subject experts, counseling students and maintaining record of success rate of school pass outs.

Table 8.1.1: Modal responses of teachers on important school functioning parameters obtained through interview

	EMRS	SC & ST	JNV
Satisfactory (need to be maintained)	Preparing students to contribute to family wellbeing. Preparing students for contribution to the society. Preparing students for professional educational courses. Course completion as per syllabus	Course completion as per syllabus <i>Preparation of lesson plan and lesson diary.</i> <i>Motivating students to be sincere in their studies.</i> <i>Safety and security of the inmates.</i> <i>Infrastructure facilities as per inmates' need</i> <i>Environment cleanliness in the hostel.</i> <i>Learning atmosphere in the hostel.</i>	Preparing students to contribute to family wellbeing. Preparing students for contribution to the society. Prospect for future promotion. Incentive plans for students. Capacity building of the teaching staff. Keeping a record of students' success.

	<p>Innovative teaching-learning activities</p> <p>Using summative evaluations</p> <p>Using formative evaluations</p> <p><i>Preparation of lesson plan and lesson diary.</i></p> <p><i>Motivating students to be sincere in their studies.</i></p> <p><i>Safety and security of the inmates.</i></p> <p><i>Infrastructure facilities as per inmates' need</i></p> <p><i>Use of library by students.</i></p> <p><i>Using labs effectively.</i></p> <p><i>Use of e-content in SMART Class.</i></p> <p><i>Special attention to the slow learners (remedial).</i></p> <p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p>	<p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p>	<p>Course completion as per syllabus</p> <p>Innovative teaching-learning activities</p> <p>Using summative evaluations</p> <p>Using formative evaluations</p> <p><i>Preparation of lesson plan and lesson diary.</i></p> <p><i>Activity based learning methods used in transaction of lessons.</i></p> <p>Preparing students for public and private sector jobs.</p> <p><i>Motivating students to be sincere in their studies.</i></p> <p><i>Safety and security of the inmates.</i></p> <p><i>Infrastructure facilities as per inmates' need</i></p> <p><i>Use of library by students.</i></p> <p><i>Using labs effectively.</i></p> <p><i>Use of e-content in SMART Class.</i></p> <p><i>Special attention to the slow learners (remedial).</i></p> <p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p>
Average (need to be strengthened)	<p>Prospect for future promotion.</p> <p>Incentive plans for students.</p> <p>Capacity building of the teaching staff.</p> <p>Preparing students for public and private sector jobs.</p> <p><i>Learning atmosphere in the hostel.</i></p> <p>Use of checklist and rating scale.</p> <p>Sharing written progress card of students with parents</p>	<p>Preparing students to contribute to family wellbeing.</p> <p>Preparing students for contribution to the society.</p> <p>Preparing students for public and private sector jobs.</p>	<p>Quarters inside the campus.</p> <p>Preparing students for professional educational courses.</p> <p>Use of checklist and rating scale.</p> <p>Sharing written progress card of students with parents</p>
Unsatisfactory (need	<p>Learning atmosphere in school.</p> <p>Career counselling of students.</p>	<p>Remuneration to teaching and nonteaching staffs.</p> <p>Servicing condition of teaching and nonteaching</p>	<p>Remuneration to teaching and nonteaching staffs.</p> <p>Capacity building of the non-teaching staff</p>

substantial improvement)	<p><i>Support received from the Headmaster / Principal.</i></p> <p><i>Quarter inside campus.</i></p> <p><i>Transparency in management of hostel accounts.</i></p> <p><i>Remedial coaching as per CCE.</i></p> <p><i>Safety and security of inmates.</i></p> <p><i>Relation with smc/pta members.</i></p> <p><i>Servicing condition of teaching and nonteaching staffs.</i></p>	<p>staffs.</p> <p>Incentive plan for staffs and students.</p> <p>Capacity building of the teaching staff.</p> <p>Capacity building of the non-teaching staff.</p> <p><i>Preparing student for professional courses.</i></p> <p><i>Activity based learning methods used in transaction of lessons.</i></p> <p><i>Relation with SMC members.</i></p> <p><i>Relation with MTA members.</i></p> <p><i>Using Formative evaluations.</i></p> <p><i>Using Summative evaluations.</i></p> <p><i>Assessment through oral questions.</i></p> <p><i>Social service activities.</i></p>	
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8.2 Perception and Feedback of Non-teaching Staff

The modal responses obtained from the non-teaching staff through interview pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: *Modal responses of non-teachers obtained through interview*
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS	SC & ST	JNV
Suitable conditions for performing duties	S	AVEREGE	HS
Involvement in co-curricular activities	S	U	S
Relation with principals and teachers	S	S	HS
Relation with students	S	S	S
Relation with parents/ community members	S	AVEREGE	AVEREGE
Receiving capacity building training	HU	HU	U

The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Relation with students, teachers and community was better in ST & SC schools than in EMRSs. They were unhappy that attempts were not taken to provide capacity building training to the non-teaching staff in EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.

The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

The service conditions and benefits of staff are critical issues for employee motivation. Tables 8.3.1 and 8.3.2 present the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Except for incentive plans for students teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and

non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

Table 8.3.1: Model responses of teachers corresponding to Staff service conditions and benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	KHAREDI	MOTA	MAHUVA	USARVAN	KHAREDI
Salary/remuneration to the teaching staff	U	HU	S	S	A
Salary/remuneration to the non-teaching staff	U	HU	S	S	A
Service conditions of teachers	HU	HU	HS	HS	A
Service conditions of non-teachers	A	A	HS	S	A
Prospect for promotion	U	HU	A	A	S
Incentive plan for teachers	U	A	S	HS	S
Quarters inside campus	HU	HU	S	A	HU
Incentive plan for non-teachers	U	HU	A	U	A
Incentive plan for students	A	S	A	S	S

Table 8.3.2: Model responses of non-teaching staff corresponding to Staff service conditions and benefits

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	KHAREDI	MOTA	MAHUVA	USARVAN	KHAREDI
Salary/remuneration to the non-teaching staff	HU	U	A	U	A
Service conditions of non-teaching staff	U	U	A	A	S
Prospect for promotion	U	HU	A	A	S
Quarters inside campus	HU	HU	S	A	HU
Incentive plan for non-teachers	U	A	A	HU	A

8.4 Students' Perception and Feedback

Students are the central characters in any teaching-learning environment. Their perception and feedback are important for developing school practices because all infrastructure and educational inputs and throughputs are meant for them. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment: Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health checkup facilities and hostel accommodation. Students in ST & SC schools also experienced the same deficiencies. It was astonishing to note that students were not provided with mosquito nets in spite of the fact their environment was more unhygienic. JNV fared much better in most of these parameters.

Table 8.4.1: Percentage of students responding positively to the following School and hostel parameters obtained through Interview

Parameter	EMRS (N =22)	SC & ST (N = 17)	JNV (N = 12)
School and Hostel environment			
Like the school	100	80	100
Conducive hostel infrastructure and accommodation	90	63	94
Classroom and lab furniture adequate	50	10	70
Lab furniture adequate	50	0	70
Good quality food	48	30	80
Good drinking water	70	60	90
Health checkup facilities available	80	25	80
Host environment is clean	60	20	87
Toilets and bathrooms are clean	55	28	92
Mosquito net provided	20	10	50
Curricular and Co-curricular activities			
Teachers are supportive of students	80	60	90
Adequate supply of textbooks	100	70	100
Adequate supply of learning materials	30	20	50
Quality of teaching	70	50	80
Activity-based teaching done and TLMs used	30	18	50
Home assignments given	80	50	95
Projects given	37	21	90
Student work corrected regularly	61	45	90
Regular supervised study and remedial classes	75	20	80
Laboratories effectively used	80	20	90
Allowed to ask questions freely	80	90	95
Co-curricular activities promoted	89	40	90
Scope for games and sports	70	50	70
Participation at district and state level encouraged	69	65	85
Student participation			
Student suggestions are solicited in school functioning	25	10	20
Student participate in mess management	58	38	80

Curricular and Co-curricular activities: Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.

Student participation: In all categories of schools student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs: The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers. There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues. Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving 40 students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports

activities suffered on account of not having any proper playgrounds and PET teachers. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving 14 students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Only one PRI member was available for interview in the JNV who did not enough knowledge to respond truthfully to the interview questions. His responses were very general and were based on guesses than on direct experiences. Hence his response protocol is not analyzed here further.

**Table 8.5.1: Model responses of community members on facilities extended
To children and their interaction with school staff**

	EMRS (N = 09)	SC & ST (N =07)
Facilities for children		
Cleanliness of school environment	YES	NO
Cleanliness of hostel rooms and environment	YES	NO
Safety and security of hostels	NO	NO
Supply of free textbooks	YES	YES
Textbooks given before academic session	NO	NO
Children helped to solve academic problems	YES	YES
Children's results shared with parents	YES	YES
Children prepared to face competitive examinations	NO	NO
Quality of meals reasonably good	YES	NO
Cultural activities involving children	YES	YES
Opportunities for games and sports	YES	YES
Children's health problems duly attended	YES	YES
Non-discriminatory treatment to students	YES	YES
Interaction with school and staff		
Members' grievances properly received by staff	YES	YES
Teachers behave well with members	YES	YES
Member associated with school planning	NO	NO
Community contributes to school development	NO	NO

8.6 Views of Educational Administrators

They expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

8.7 Programme Strengths, Concerns and Suggestions: Stakeholders' Feedback on EMRS

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders

approached the issues from their points of view, certain common themes emerged (refer to Table 8.7.1 for feedback from each category of stakeholders).

Programme strengths (*need to be maintained*). Good school and hostel infrastructure; Residential facilities for students; Favorable PTR; Supply of free textbooks and uniforms and learning materials; Scope for games, sports and co-curricular activities; Engagement of qualified staff; Special attention and coaching to students; Gender and Social equity.

Concerns (*need special attention*). Poor salary and service conditions of the staff; Poor hostel maintenance and cleanliness; Water, power and toilet problems; Poor community involvement in school activities; Lack of regular health worker; Teacher-directed rather than student-initiated activities; Poor attention to build capacities of teachers

Suggestions (*need to be implemented*). Regular employment, proper salary and service conditions of staff; Solving water and power crises; Regular maintenance of hostel building and proper drainage system; Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit; Special measures for improving students' language proficiency; Capacity building of teaching and non-teaching staff; Student involvement in school practices and mess management; Strengthening school-community link.

Table 8.7.1: Strengths and difficulties of EMRS programme pointed out by stakeholders and their suggestions for strengthening EMRS

Stakeholder	Strengths	Difficulties	Suggestions
Principal	School environment is attractive Co-Curricular activities are organised Training for personalities development Time table followed strictly. Student involvement in school activities Qualitative food supplied Writing training Centralize admission Various competition are organised	Not proper orientation on pedagogy and content No service security No inspiration and encouragement Student face difficulties in un understanding No regular monitoring	Sufficient orientation training should be given All the posts should be regularised Inspiration through reward and reorganisation. Provide facilitator with remuneration Principle should have major power in the school Govt. benefit and allowance should be given
Teachers	Conduct assembly in the school School discipline is very good All the development of the student Fully furnished and well develop classroom	Lack of dedication at work No green campus Water problem in the school Lack of teacher There is no smart class and laboratory equipment No English laboratory	Strict discipline should be followed Service security for development of dedication at work Literary activities should be organised Make green campus and science laboratory Carrier counselling School furniture for student Appointment of teaching and non-teaching staff Boring and over tank should be made Smart class and laboratory equipment should be supplied.
Hostel Superintendent	Student are obedient Student are living with discipline Student are competitive	No RO system is available	RO system should be available. Permanent staff should be full fil

	Qualitative food are given Follow hostel rule		
Students	Library available Healthy school environment	No qualitative food (meal and tiffin) Un suitable play ground Un conducive toilet facilities	Supply qualitative food Available of play ground Available of conducive toilet facilities
Community Members	Free education and boarding Healthy campus Teachers are corporative Free cloths and stationaries	No drinking water facilities Water problem	Supply drinking and water supply
Educational Administrators		Management Teachers resentment Low Salary	There should be proper service condition for the EMRS staff. Appointment of regular staff should be taken up in place of Contractual staff. A Society like Navodaya Vidyalaya Samiti or Kendriya Vidyalaya sanghathan may be constituted at the Centre to run the EMRSs. In the line of NVS. Salary may be made at par with the Central Teachers.

Chapter 9

SUMMARY OF FINDINGS AND RECOMMENDATIONS

9.1 School and Hostel Infrastructure Facilities

- Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. All the buildings provided safe habitations for students except that the EMRS and ST & SC schools required regular maintenance and white washing. The EMRS and ST & SC schools did not fare well on hygienic parameters.
- The EMRS had library facilities but no adequate reading room. The conditions of labs, library and reading rooms were better in EMRS and JNV as compared to that of ST & SC schools. On most of the important infrastructure parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.
- Regrettably, water scarcity was a major problem one the ST & SC schools. Furthermore, drinking water safety was a major concern in ST & SC schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.
- All schools fell short on child-friendly parameters except Mahuva ST & SC School where it has been addressed properly and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required. Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Adequate and appropriate play-grounds need be planned in all types of schools. Unutilised space can be identified for the purpose.
- Each school had entrance gate, boundary wall but due attention was not paid to raising and maintaining gardens and kitchen gardens, the primary reason for which was water scarcity. The water problem can be largely compensated by proper water harvesting measures on which the school authorities had not been trained.
- Power supply was a major concern in one EMRS and two ST & SC schools. On an average, power failure was reported for about 4-5 hours a day. In case of power cuts, power supply was done through generators owned by the school. While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.
- Nearly 100% of students in EMRS, JNV and ST & SC schools stayed in hostels. For those who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor. The residential situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.
- All schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since a few teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.
- Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. The toilet condition and cleanliness was

poor in ST & SC hostels, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.

- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.
- On an average, EMRS could spend only 57% to 99% of the funds allocated during 2014-15 as against nearly 100% spending by JNV and spending in the range of 100% in ST & SC schools. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

9.2 Staff Profile and Service Condition

- The pupil-teacher ratio (PTR) was noticeably very high for ST & SC schools and one EMRS. The PTRs in other EMRS and JNV were good and were as per state norm.
- There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities.
- About 96% of teachers in EMRS were not trained. Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience. Teachers in EMRS and teachers in ST & SC schools and JNV in contractual employment were in the habit of leaving their respective schools when better employment opportunities were available.
- All the non-teachers in EMRS and ST & SC schools and more than 80% of non-teachers in JNV did not receive any formal training as required in their respective jobs. Nearly 50% of non-teaching staff had less than 5 years of experience on the job.
- Astonishingly and regrettably, there was no service condition for EMRS teaching and non-teaching staff. All the teaching staff in EMRS and 60% in ST & SC schools were employed on contractual basis and 28% of teachers in JNV were employed on daily-wages.
- There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV respectively receiving about 1.5 times and twice of the emoluments given to principals of EMRS. The teachers of ST & SC schools and JNV across all levels also received 1.5 times and twice of the gross monthly emoluments of teachers in EMRS, respectively. These noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff.
- Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality processes and outcomes.
- Capacity building training was given to teachers of EMRS for content knowledge enrichment and teaching practices but the duration was not adequate. The ST & SC School teachers received training as per Government's schedule. Except for the teachers of Navodaya Vidyalaya, the

teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

- The non-teaching staff of EMRS and ST & SC schools received hardly any training. The clerks and CCA had not been trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostels was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.
- The EMRS vision is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

9.3 Student Enrolment and Retention

- The percentage of increase in application to class VI in EMRS could not be calculated as the information of receipt of application could not be made available.
- The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 17% for ST & SC schools and 76% for JNV. The demand for admission to all types of schools increased over the years. The data in respect of EMRS was not available in the school as the entrance test were conducted centrally.
- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were, 24.37 and 2 for ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- Percentages of increase in applications for entry at Class XI in 2014-15 were 8.14% for ST & SC schools. Students seeking admission in different types of schools increased.
- The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 12 to 14 sq. ft., while that in ST & SC schools was 12.63-14.43 sq. ft. and in JNV about 11.76 sq. ft.

- Student attendance in all types of schools was satisfactory. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 88% in EMRS, 66% in ST & SC schools and 100% in JNV. The percentage in ST & SC schools fell short of 34% because some students shifted to other schools or dropped out of the system. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 96% in EMRS, 95% in ST & SC schools and 100% for JNV.
- Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 15% of students admitted to Class VI did not complete their education cycle in 2014-15. The information in respect of students staying out of the school system was not available with the school authorities.

9.4 School and Hostel Educational Climate

- The school campus and classrooms appeared to be clean in all types of schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools.
- While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC

schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.

- In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.
- While 99% of the required number of textbooks was distributed in EMRS, JNV registered a figure of 100% distribution of textbooks. The distribution of textbooks in ST & SC schools was not satisfactory as only 63.5% of students' textbook requirement was met.
- The status of EMRS did not turn out to be satisfactory in respect of preparation of lesson plan, activity-based teaching, group-based learning, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools in respect of these school-related activities. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor.
- Mostly TLMs and TLEs which were purchased by the teachers; they were not purchased with a proper plan to cater to students' need and course requirements and were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.
- Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS. The ST & SC schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.
- Adoption of CCE along most of parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.
- Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students. In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying student talents.
- Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.
- In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box, wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.

- The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.
- On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

9.5 Students' Educational Attainment

- In all the four subjects (English, Mathematics, Science and Social Science), Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- The performance of students from all the three types of schools was not in the satisfactory range. Class VIII students in ST & SC schools scored in the range of only 25% to 34% across four subject areas, while those in EMRS scored in the range of 24% to 33%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 26% to 40% across the four subject areas.
- The ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in English language attainment. The ST students in ST & SC schools performed in the range of 25% to 39% while their performance in EMRS was within 24% to 33% and in JNV in the range of 25% to 41%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- The performance of Class X students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 29% to 36%, while those in EMRS showed attainment in the range of 33% to 52%. The students in JNV performed in the range of 42% to 62%.
- Class X ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools. It was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant.
- Though Class XII students in JNV were better than their grade-mates in EMRS and ST & SC schools, the performance gap between students of ST & SC schools, EMRS and JNV narrowed down though JNV students performed better than others.
- The performance level of Class XII students of ST & SC schools was poorer in all subjects – English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40% only in English. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 44%. Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

- On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average. In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.
- In Class X Board examination, more percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 80% of marks. 0% of ST & SC School students got less than 40% and none of them got above 70%. In JNV none of the students got less than 50% and 6% of students got above 90%.
- The maximum concentration of students in ST & SC schools in 2014-15 was 40% to 50% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 60% to 70% bracket.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 60% to 70% for ST & SC schools, 60% to 70% for EMRS and 70% to 80% for JNV. The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- During the last five years 4% of students of EMRS and 13% of the students of ST & SC schools scored below 50%, while 13% of students of JNV none from the SC & STs schools & EMRS scored above 90%.
- The SC and general students performed almost at an equal level and both groups performed better than ST students. The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.
- In Class XII Board examinations in 2014, maximum number of students scored in 80% to 90% bracket in EMRS and in 70% to 80% bracket in JNV. None of the EMRS students scored below 50% and none from JNV scored below 60%, while only 70% of EMRS students scored above 80% and 28% of JNV students scored above 80% of whom 33% of EMRS students scored above 90%. It appears that the students of EMRS was better than the JNV in 2014.
- The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 80% to 90% bracket and maximum number of JNV students scored in the 70% to 80% bracket. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.
- Records of pass out have not been maintained in EMRS and SC ST schools. However in JNV in 2014 15 % students took Engineering courses while no students took medical courses. 6% got admitted in Diploma courses where as 13% took admission in general courses. Most of the information was incomplete because the school could not produce detail information.
- None of the student pass outs went for medical or management or law courses. Information was not available in respect of 5% of pass outs.

- That 95% of student pass outs (56% in Bachelor level general or technical courses, 22% in employment and 17% in diploma courses) progressed in their life in some way or the other reveals positive indications concerning the EMRS programme. But student preparation in EMRS to take up more valued professional courses such as medical or management was not satisfactory.

9.7 Student Participation in Co-curricular and Social Activities

- More girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 15% to 20% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.
- None of the students of EMRS and ST & SC schools participated in NCC, Scout and NSS. Among JNV students, 8% adopted Scouts.
- 100 % of EMRS students were involved in carrying out social awareness campaigns and 18% were involved in doing social service in villages, while the corresponding figures for ST & SC were 47% and 35% respectively. These activities were missing in JNV schools.

9.8 Schools-Community Linkage

- The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC and MTA members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals or monitoring utilization of funds. Their participation in preparing TLMs was non-existent and in schools' co-curricular activities, very poor.
- The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

9.9 School Monitoring and Supervision

- During the span of last one year, District Social Welfare Officers visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits by authorities to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.

- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.
- Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 6-8 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively more. Hostel visits were done by the principals about twice a week. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

9.10 Stakeholders' Feedback and suggestions

Teaching and Non-teaching staff

- Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counselling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counselling students and maintaining record of success rate of school pass outs.
- Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favourable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.
- In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements. The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.
- The non-teaching staff members of EMRS and ST & SC schools were unhappy that attempts were not taken to provide capacity building training to them. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

Student feedback

- Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV.
- Pertaining to the hostels, the major issues of concern for EMRS students were scarcity of water for daily-routine work, cleanliness of toilets and hostel environment, light, ventilation and accommodation facilities, water accumulation around hostel because of improper drainage system, poor repair and maintenance work, quality of food, health check-up facilities and indoor sports activities. Some expressed fear of bragging in schools and hostels. Students in ST & SC schools also experienced the same deficiencies to a greater degree. It was astonishing to observe that students in ST & SC hostels were not provided with mosquito nets in spite of the fact that their environment was more unhygienic. The students in JNV had a more favourable perception of school and hostel environment and facilities. JNV fared better on most of these parameters.
- Students perceived teachers to be supportive of them and nice to their parents. The major issues inviting unfavourable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, access to computers, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes.
- Students' perception of provisions in ST & SC schools was more unfavourable. There was nearly a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. There was very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback from Community Members

- Most of the community members in relation to EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About one-third of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. They were not directly involved in school planning and were aware that they did not have any contribution towards the school in the form of labour, service or funds.
- The community members' responses in respect of SC and ST schools were less favourable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Views of Educational Administrators

- The District level educational administrators (ADM and PA, ITDA) expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health check-up were necessary for proper policy implementation. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.
- All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged for feedback from each category of stakeholders).

9.11 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

<i>Programme strengths</i> (Need to be maintained).	<i>Concerns</i> (Need special attention).	<i>Suggestions</i> (Need to be implemented).
Good school and hostel infrastructure Residential facilities for students Favourable PTR Supply of free textbooks and uniforms and learning materials Scope for games, sports and co-curricular activities Engagement of qualified teaching staff Special attention and coaching to student Gender and Social equity.	Poor salary and service conditions of the staff Poor hostel maintenance and cleanliness Water, power and toilet problems Poor community involvement in school activities Lack of regular health worker Teacher-directed rather than student-initiated activities Poor attention to build capacities of teachers Adoption of CCE in student assessment	Regular employment, proper salary and service conditions of staff Solving water and power crises; Regular maintenance of hostel building and proper drainage system Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit Special measures for improving students' language proficiency Capacity building of teaching and non-teaching staff Student involvement in school practices and mess management Strengthening school-community link.

Section 7

Impact of Ekalavya Model Residential Schools in Enhancing the Educational Attainment of ST Children

(MAHARASHTRA REPORT)

Prepared

By

Scheduled Caste and Scheduled Tribe Research and Training Institute

Bhubaneswar, Odisha

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Chapter 1

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 School Infrastructure and Facilities

Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. The approximate average school campus area for EMRS, ST & SC and JNV are 26 acres, 30 acres and 13 acres, respectively. The built-up area for the EMRS and ST & SC schools and hostels for students run into 90,000 to 100, 000 sq. ft. and for the JNV to about 140, 000 sq. ft. All the buildings provided safe habitations for students except that the EMRS and ST & SC schools required regular maintenance and white washing. The condition of the school and the hostel building in JNV were found to be better compared to those in EMRS and ST & SC schools. The EMRS and ST & SC schools did not fare well on hygienic parameters as toilets appeared not to have been maintained properly. Regrettably one of the ST & SC schools did not have usable toilets and students had to go to open field and nearby forest areas to attend to the call of nature.

None of the schools had common room for either boys or girls. While each of the five sampled schools (EMRS, ST & SC and JNV) had building spaces marked for the Principal's room, teachers' common room, office room, kitchen, store room and prayer space, there were no common rooms or auditorium for students. Each of the schools had physics, chemistry, zoology and botany and IT labs. The English language laboratory was found only in EMRS in Nasik. Formal library, reading room and SMART classes were available in EMRS Nasik and JNV in Khedgaon but not in any of the ST & SC schools. The EMRS had library facilities but no adequate reading room. The conditions of labs were better in EMRS and JNV as compared to that of ST & SC schools. On most of the important parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.

Tables given below provide information relating to water and sanitation facilities in school (Table 1.1.1), child-friendly and safety facilities (Table 1.1.2) and boundary wall, garden and school gate (Table 1.1.3).

Table 1.1.1: School wise Availability of Water and Sanitation Facilities (Maharashtra)

School	Drinking water			Hand wash		Toilet for Boys					Toilet for Girls				No. of children per toilet			
	adequate	Safety	Major source	Soap available	hand washed before and after meal	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	Boys	Girls	
EMRS	Nasik	YES	YES	B.W	Yes	Yes	4	Yes	**	Yes	Yes	4	Yes	**	Yes	Yes	48	49
	Ramtek	YES	NO	B.W	Yes	Yes	5	Yes	**	Yes	Yes	8	Yes	**	Yes	Yes	34	23
SC & ST	Chankapur	YES	NO	B.W	Yes	Yes	8	Yes	*	Yes	Yes	8	Yes	**	Yes	Yes	39	41

	<i>Belda</i>	YES	NO	B.W	Yes	Yes	4	Yes	***	yes	Yes	12	Yes	***	Yes	Yes	10	15
JNV	<i>Khedgaon</i>	YES	YES	S.W	Yes	Yes	4	Yes	***	Yes	Yes	4	Yes	***	Yes	Yes	70	44

B.W: Bore well

Table 1.1.2: School-wise Availability of Child-friendly and Safety Facilities (Maharashtra) (ramp & rail, slides & swings, playground)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in classrooms	Fire safety
EMRS	23	Only to a few block	NIL	INADEQUATE	ONLY FOR A FEW GAMES	NO	INADEQUATE
SC & ST	52	Only to a few block	NIL	INADEQUATE	ONLY FOR A FEW GAMES	NO	INADEQUATE
JNV	28	Only to a few block	NIL	INADEQUATE	ONLY FOR A FEW GAMES	NO	INADEQUATE

Table 1.1.3: School-wise Availability of Boundary Wall, Garden, Kitchen Garden and School Gate (Maharashtra)

School	Boundary Wall	Garden	School gate
EMRS: Nasik	YES	M	YES
EMRS: RAMTEK	NO	NA	NA
SC & ST: CHANKAPUR	YES	NA	YES
SC & ST: BELDA	NO	M	NA

The major source of drinking water in all schools was bore well. Regrettably, drinking water was adequate in all the schools. Furthermore, drinking water safety was a major concern in SC& ST schools. Soap was provided at hand wash points and hand wash was available as per the requirements in all types of schools. Approximate number of children per toilet in EMRS was alright, except that they were not maintained as per hygienic standards and some of them remained non-functional at times because of delay in repair work. The situation in JNV was much better in comparison to EMRS and SC& STs schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV. All schools fell short on child-friendly parameters and in a large measure did not satisfy

the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required.

Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.

Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.

Each school had entrance gate, boundary wall but due attention was not been paid to raising and maintaining gardens and kitchen gardens, the primary reason for which was water scarcity. The water problem can be largely compensated by proper water harvesting measures on which the school authorities and students had not been trained.

Power supply was a major concern for the schools because there were frequent power cuts particularly in Nasik EMRS and ST & SC schools in Chankapur and Belda. On an average, power failure was reported for about 4-5 hours in Ramtek and for about 10-12 hours in ST & SC schools. In case of power cuts, power supply was done through generators owned by the school except in Chankapur where the generator was non-functional as it was not properly maintained and in Belda where generator was not available.

While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.

1.2 Hostel Infrastructure and Facilities

Tables given below present information on hostel infrastructure and facilities (Table 1.2.1), availability of different types of rooms and their conditions (Table 1.2.2), water and sanitation facilities in hostels (Table 1.2.3), child-friendly and safety facilities (Table 1.2.4) and presence of hostel boundary wall, garden and kitchen garden (Table 1.2.5).

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels by school type (Maharashtra)

School type	School	Hostel	Student strength		Condition of the hostel			Accommodation space per student	
			No in school	% staying in hostel	safety	leaking	Light & ventilation	Sq. ft. per student (app.)	Adequacy
EMRS	NASIK	BOYS	192	100	GOOD	NO	GOOD	52	IN Adequate
		GIRLS	197	100	Good	No	Good	51	IN Adequate
	RAMTEK	BOYS	170	100	POOR	NO	POOR	11	IN Adequate

		GIRLS	183	100	POOR	NO	POOR	16	IN Adequate
SC & ST	CHANKAPUR	BOYS	315	72	POOR	LEAKING	POOR	21	IN Adequate
		GIRLS	329	81	POOR	LEAKING	POOR	25	IN Adequate
	BELDA	BOYS	125	62	GOOD	NO	GOOD	19	IN Adequate
		GIRLS	178	59	GOOD	NO	GOOD	19	IN Adequate
JNV	KGEDGAoN	BOYS	278	100	GOOD	NO	GOOD	21	IN ADEQUATE
		GIRLS	175	100	GOOD	NO	GOOD	34	IN ADEQUATE

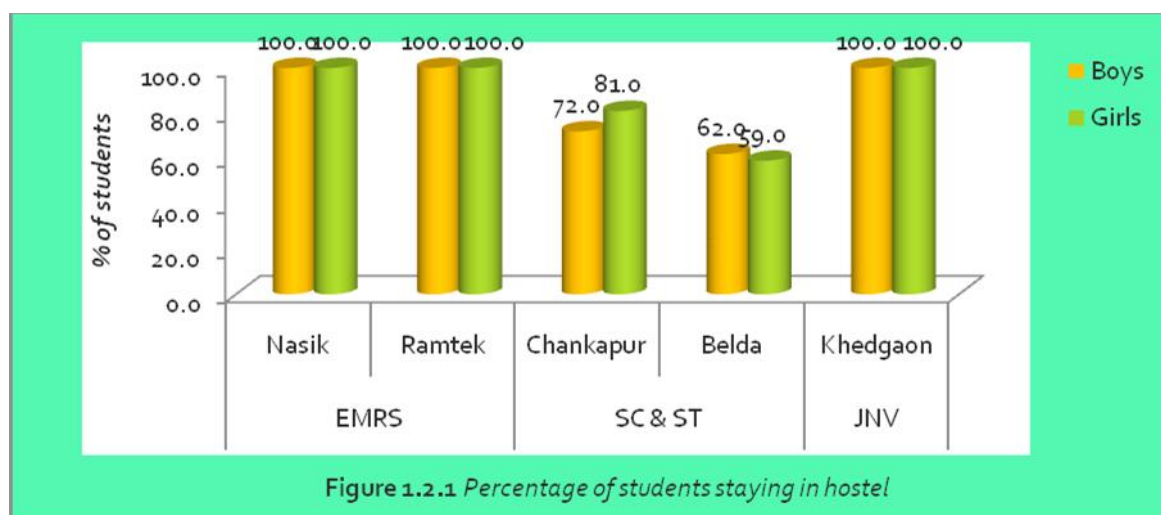


Table 1.2.2: Availability and condition of different types of rooms in boys' and girls' hostels by school type

Types of rooms	EMRS				SC & ST				JNV	
	NASIK		RAMTEK		CHANKAPUR		BELDA		KHEDGAON	
	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond
Superintendent's room /quarters	Y	M	N	-	Y	P	Y	G	Y	G
Dining room	Y	G	Y	P	Y	M	Y	M	Y	G
Living room	Y	G	Y	M	Y	P	Y	G	Y	G
Kitchen room	Y	G	Y	M	Y	M	Y	M	Y	G
Store room	Y	G	Y	M	Y	M	Y	M	Y	G
CCA room	Y	M	-	-	Y	P	-	-	-	-
Sick room	Y	M	-	-	Y	P	Y	P	Y	G
Prayer room	Y	M	Y	P	-	-	-	-	-	-
Auditorium / assembly	-	-	-	-	-	-	-	-	-	-
Security room	-	-	-	-	-	-	-	-	Y	M

Y: Yes N: No G: Good, M: Manageable, P: Poor

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities (Maharashtra)

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
		adequate	Major source	adequate	Adequate	Flow of water to toilets	No functional	Cleanliness and condition	Soap & accessories available	Used by all children	
EMRS: NASIK	Boys	Y	BW	Y	Y	**	20	***	Y	Y	9
	Girls	Y	BW	Y	Y	**	20	***	Y	Y	10
EMRS: RAMTEK	Boys	N	BW	Y	N	*	5	**	Y	Y	34
	Girls	N	BW	Y	N	*	8	**	Y	Y	23
SC & ST: CHANKAPUR	Boys	Y	SW	Y	Y	***	9	**	N	Y	25
	Girls	Y	SW	Y	Y	**	15	**	N	Y	18
SC & ST: BELDA	Boys	N	WELL	N	Y	*	12	**	N	Y	6
	Girls	N	WELL	N	Y	*	12	**	N	Y	9
JNV: KHEDGAON	Boys	Y	SW	Y	Y	***	78	***	Y	Y	3
	Girls	Y	SW	Y	Y	***	38	**	Y	Y	4

BW: Bore well *** Good ** Manageable * Poor

Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities (Maharashtra) (ramp & rail, slides & swings, playground)

School	App.No. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in hostel rooms	Fire safety
EMRS	13	NIL	NIL	NIL	ONLY FOR A FEW GAME	NO	IN ADEQUATE
SC & ST	21	NIL	NIL	NIL	IMENCELY IN ADEQUATE	NO	NO
JNV	5	NIL	NIL	NIL	ONLY FOR A FEW GAME	NO	IN ADEQUATE

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden, Kitchen Garden (Maharashtra)

School	Boundary Wall in girls' hostel	Garden	Kitchen Garden
EMRS: NASIK	GOOD	M	NA
EMRS: RAMTEK	NA	NA	NA
SC & ST: CHANKAPUR	NA	NA	NA
SC & ST: BELDA	NA	NA	NA

JNV: KHEDGAON	G	NA	NA
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M: Manageable NA: Not Available

Nearly 100% of students in EMRS and JNV stayed in hostels while about 41% of boy students in Belda and 19 % of girl students in Chankapur ST & SC schools did not stay in hostels. In ST & SC schools, greater percentage of girls as compared to boys came from nearby villages and attended school as day-scholars (Figure 1.2.1). For those students who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor. Without proper light and ventilation and in many instances not having fans. Many rooms had leaking roofs and accommodation hardly met safety and child-friendly parameters. With about 21 square feet of space per boarder, particularly for girls, the space was highly inadequate. The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to SC& ST schools and EMRSs. Needless to mention that all schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since a few teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV. Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. The toilet condition and cleanliness was poor in ST & SC schools, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools. Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV. Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals. Power supply was a major concern in the school and hostels because there were frequent power cuts particularly in Nasik EMRS and ST & SC schools in Chankapur and Belda. Solar lanterns were provided to all EMRS and ST & SC schools which were inadequate. The furniture supply in hostels was inadequate. In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.

1.3 Financial Support

Table 1.3.1 reveals that on an average only 88% to 99% of the funds allocated to EMRS during 2014-15 was spent while spending in SC&ST reached close to 100% mark. The average spending in the JNV schools was about 88%. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, need to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

Table 1.3.1: Receipt and use of funds by schools in Maharashtra during 2014-2015

School		Total fund received	Utilized	% utilized	Department providing funds
EMRS	<i>Nasik</i>	15719475/-	15703451/-	99	EKALAVYA SAMITI
	<i>Ramtek</i>	11687000/-	10313079/-	88	
SC & ST	<i>Chankapur</i>	134547/-	134547/-	100	ST & SCDEV. DEPT.
	<i>Belda</i>	12930290/-	12717403/-	98	
JNV	<i>Khedgaon</i>	18044000/-	15883000/-	88	NOVADAYABIDYALAYA SAMITI

Chapter 2

PROFILE OF TEACHING AND NON-TEACHING STAFF

Teacher motivation and engagement with students impact the quality of educational climate of the schools. Their nature of employment, training status, salary structure and service conditions determine to a large extent their attitude and motivation towards education. This section presents the profiles of teaching and non-teaching staff (Tables 2.1.2 & 2.1.3), employment status and service benefits (Tables 2.2.1 & 2.2.2).

2.1 Profile of Teaching and Non-Teaching Staff

The sanctioned posts and vacancy positions of the teaching and non-teaching staff are given in Table 2.1.1. The percentage of vacancy positions by school type is plotted in Figure 2.1.1.

Table 2.1.1: Sanctioned Strength and Vacancy Position of Teaching and Non-Teaching Staff

School		Position	Principal	Vice-Principal	PGT	TGT/ Music/ Art	PET	Lab Asst.	Librarian	Accountant /Udc	Head clerk /OS	Clerk /Ldc	Peon	Night watchman/ Sweeper	Warden/ Catering Asst.	Matron	Staff Nurse	CCA
EMRS	NASIK	SP	01	-	9	9	1	01	-	-	-	02	02	01	01	-	01	07
		Vac	0	-	3	4	0	00	-	-	-	01	02	01	00	-	00	01
	RAMTEK	SP	1	-	6	6	1	01	01	-	-	01	01	01	02	-	01	05
		Vac	0	-	1	1	0	01	01	-	-	00	00	00	00	-	00	00
SC & ST	CHANKAPUR	SP	1		7	11	-	01	-	-	-	01	01	02	01	-	-	13
		Vac	0		0	1	-	00	-	-	-	00	00	00	00	-	-	03
	BELDA	SP	01	-	04	10	-	-	-	-	-	01	01	01	-	-	-	6
		Vac	00	-	02	03	-	-	-	-	-	01	01	00	-	-	-	-
JNV	KHEDGAON	SP	01	01	07	12	02	01	01	01	01	02	-	04	01	01	01	03
		Vac	00	00	00	00	00	00	00	01	00	00	-	00	00	00	00	00

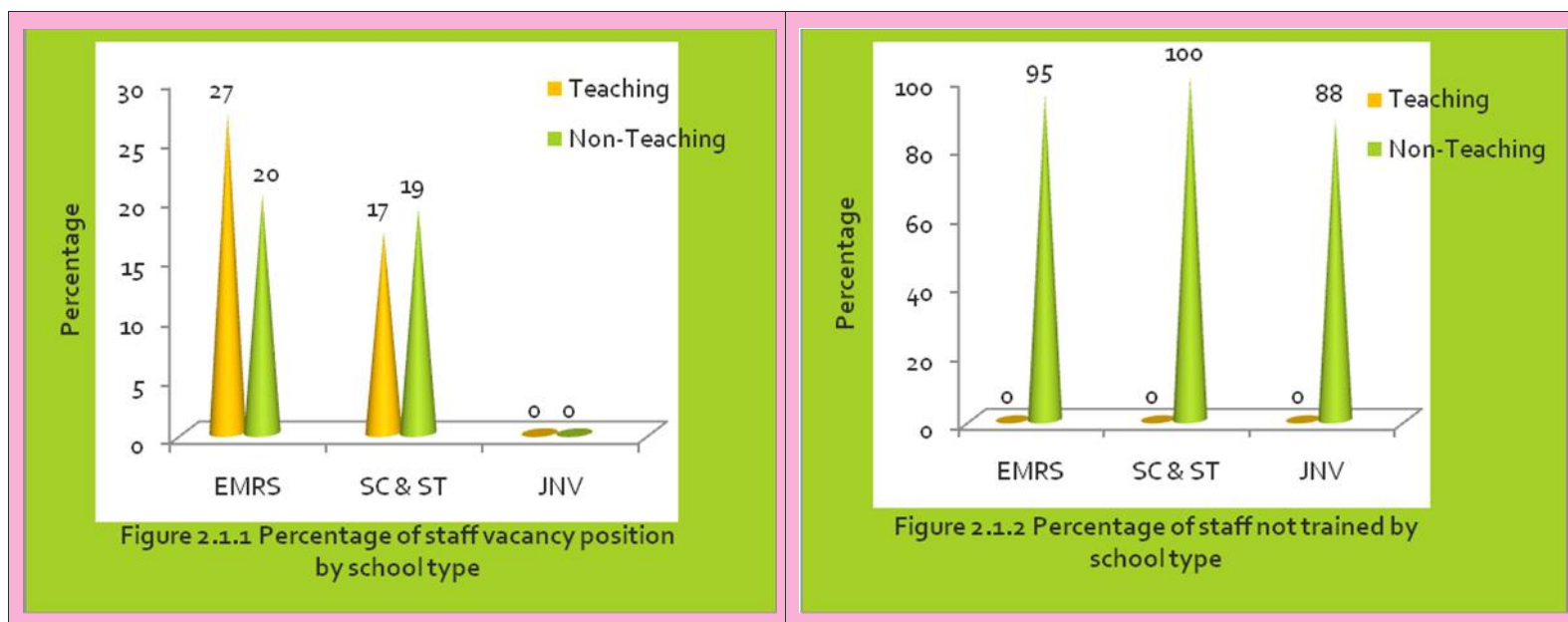
SP: Sanctioned Post Vac: Vacancy

Table 2.1.2: Profile of the Teaching Staff

School		No of Teachers in Position	Pupil-Teacher ratio in School	Category			Training Status		Length of Teaching Experience		
				ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	NASIK	13	1:30	2	-	11	13	-	1	3	9
	RAMTEK	12	1:30	02	03	07	12	-	3	4	5
SC & ST	CHANKAPUR	18	1:27	05	01	12	18	-	0	2	16
	BELDA	10	1:30	00	05	05	10	-	01	01	08
JNV	KHEDGAON	23	1:20	0	4	19	23	-	6	-	17

Table 2.1.3: Profile of the Non-Teaching Staff

School		No of Non-Teaching Staff in Position	Category			Training status		Length of experience		
			ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	NASIK	12	02	-	10	01	11	03	04	05
	RAMTEK	11	03	06	02	-	11	05	03	03
SC & ST	CHANKAPUR	15	10	-	05	-	15	04	03	08
	BELDA	15	05	04	06	-	15	-	07	08
JNV	KHEDGAON	16	3	3	10	2	14	2	4	10



- * Analysis of vacancy positions by school type indicated that 27% of the teaching and 20% of the non-teaching positions were lying vacant in EMRS compared to 17% and 19% in ST & SC schools. No single teaching and non-teaching post is vacant in JNV. (Figure 2.1.1).
- * The pupil-teacher ratio (PTR) was good in all the schools as per state norm.
- * There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities. All teachers are trained in all the schools. (Figure 2.1.1). Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience.
- * Among the non-teaching staff, there were more employees from the ST community in ST & SC schools compared to those from the SC or general category. Among the non-teaching staff, there were more employees from the gen community in JNV and EMRS schools. Regarding training of non-teaching staff 100 % of non-teachers in ST & SC schools did not receive any formal training as

required in their respective jobs in comparison to 95 % in EMRS and 88% in JNV schools (Figure 2.1.2). Nearly 50% of non-teaching staff has less than 5 years of experience on the job.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

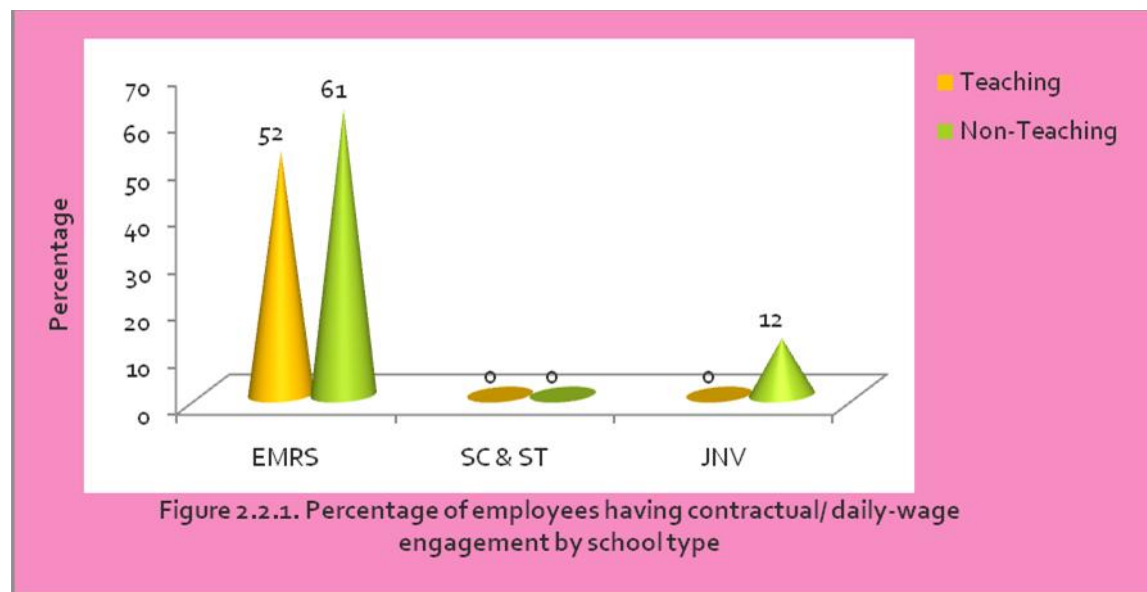
Tables 2.1.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

Table 2.2.1: Nature of employment of the teaching staff and service benefits

School		No of Teaching Staff in Position	Nature of Employment			Gross monthly Emoluments/Salary in Rupees (Range)						
			Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst/Asst teacher	Librarian
EMRS	NASIK	13	7	6	46	62730	-	8000-13500	7500-10000	6500-10000	3200-4900	-
	RAMTEK	12	5	7	58	10000-15200=29109	-	8000-13500	7500-12000	6500-10500	-	-
SC & ST	CHANKAPUR	18	18	-	-	15600-39100=55603	-	15000-29000	9300-34800	-	5200-20200	-
	BELDA	10	10	-	-	9300-34800	-	-	9300-34800	-	-	-
JNV	Khedgaon	23	16	7	31	9300-34800=84470	9300-34800=68428	9300-34800	9300-34800	9300-34800	5200-20200	9300-34800

Table 2.2.2: Nature of employment of the non-teaching staff and service benefits

School		Nature of Employment		Gross monthly Emoluments/Salary (Range)									
		Regular	Contractual	Head Clerk	Accountant	Clerk	Librarian	Warden	Peon Art	Night watchman / Sweeper	CCA	Matron	Staff Nurse
EMRS	NASIK	5	7	-	-	4000-6000	-	7500-12000	-	-	Daily wage	5500-9000	4000-6000
	RAMTEK	4	7	-	-	4000-6000	--	9300-43000	-	3500(cont.)	Daily wage	5500-9000	4000-9000
SC & ST	CHANKAPUR	15	0	-	-	5200-20200	-	5200-20200	4400-7440	4400-7440	5200-20200	-	-
	BELDA	15	-	-	-	5200-20200		5200-20200	4440-7440-	5200-20200	4440-7440	-	-
JNV	KHEDGAON	14	2	9300-34800	5200-20200	5200-20200	9300-34800	-	-	5200-20200	5200-20200	7500	9300-34800



- * No teaching and non-teaching staffs were engaged on contractual basis in ST & SC schools whereas 52% teaching staff and 61% non-teaching staff were engaged on contractual/daily wage basis in EMRS. No teaching staff even was engaged on contractual/daily wage basis in JNV. Only 12 % non-teaching staffs were engaged on contractual/daily wage basis in JNV schools. (Figure 2.2.1).
- * The monthly emoluments of the principals are satisfactory in all the schools. However the salary of principals, PGT teachers were more satisfactory in comparison to JNV schools, as of EMRS at the lower side. The TGTs and assistant teachers were also getting more salary in ST & SC schools and JNV in comparison to EMRS teachers. (Table 2.2.1). The noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the non-teaching staff across different types of schools was almost better in JNV in comparison to other schools. The monthly emoluments of non-teaching staff were at lower side in comparison to JNV and ST & SC schools (Table 2.2.2).
- * Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are issues of concern and need to be addressed to ensure quality processes and outcomes.

2.3 Capacity Building of Teaching and Non-teaching Staff

Capacity building training is given to teachers of EMRS for content knowledge enrichment and teaching practices but the duration is not adequate. The ST & SC School teachers received training by Government. The JNV teachers received capacity building training organized by Navodaya Vidyalaya Samiti. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools had inadequate computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

The non-teaching staff of EMRS and ST & SC schools received hardly any training. The accounts in EMRS received training from the financial advisor of OMTES during 2014-15. The non-teaching staff including clerks and CCAs have not been trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostel was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

The vision of EMRS is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCAs of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they come up with grievances.



CCAs were serving lunch in EMRS Nasik

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

The educational programme instituted in rural and tribal locations are expected to create a community demand for admitting children in these schools which would be reflected in the form of increasing number students seeking admissions though successive years. There needs to be more students from ST and SC categories in these schools and those admitted should complete the educational cycle. This chapter discusses the status of schools in respect of students seeking admission and retained in schools (Tables 3.1.1 to 3.2.2), students attending schools and completing educational cycle (Tables 3.3.1 & 3.3.2) and student dropouts over successive years (Table 3.4.1).

3.1 Student Admission

Table 3.1.1 lists the number of children seeking admission in different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission were given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

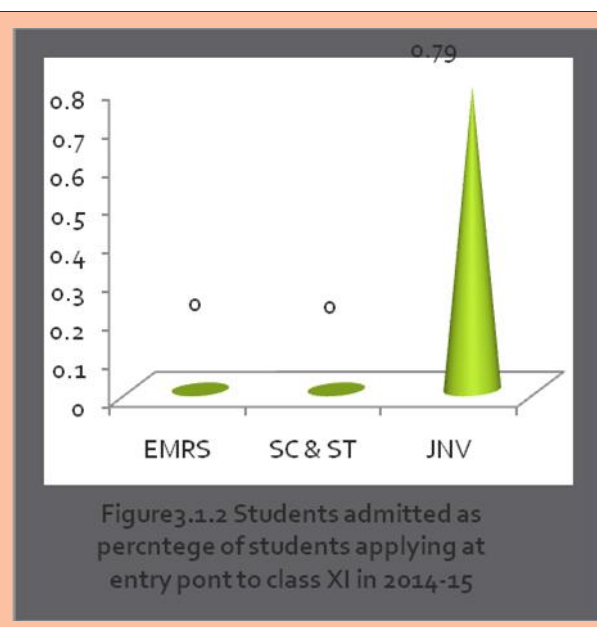
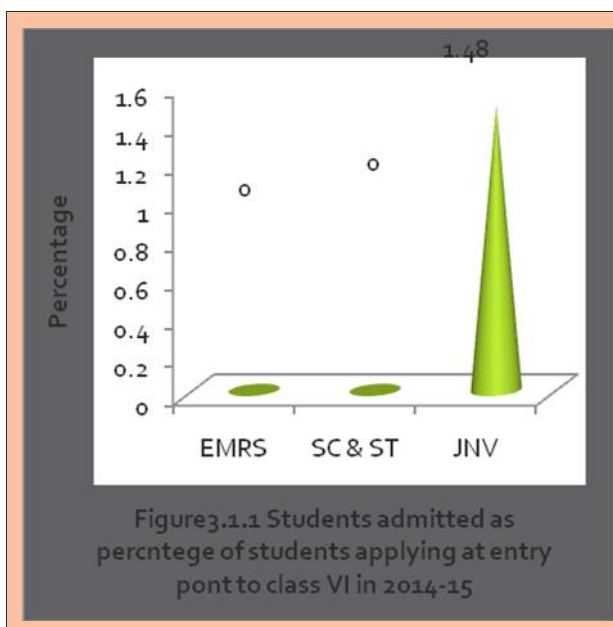
Table 3.1.1: Number of Candidates Applied and Number of students enrolled at entry points in Classes VI and XI during the last three Years (Maharashtra)
(NA: Number Applied; NE: Number Enrolled)

School		At Entry point to Class VI							At Entry point to Class XI						
		2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010		
EMRS	NASIK	NA	-	-	-	-	-	Could not be calculated as number of applicants could not be ascertained due to receipt of applications at district point	-	-	-	-	-		
		NE	55	60	57	61	60		21	49	56	49	49		
	RAMTEK	NA	-	-	-	-	-		-	-	-	-	-		-
		NE	53	51	64	61	45		27	34	30	46	48		
SC & ST	CHANKAPUR	NA	-	-	-	-	-	-	-	-	-	-	-		
		NE	64	71	65	78	79	96	86	69	74	64			
	BELDA	NA	40	30	37	27	16	59	55	52	51	60			
		NE	-	-	-	-	-	-	-	-	-	-	-		
JNV	KHEDGAON	NA	5466	4556	4745	4252	4837	-12%	4453	5678	4997	5335	5039	13%	
		NE	71	78	76	77	72		41	44	42	43	40		

NA= Number Applied, NE= Number Enrolled

Table 3.1.2 *Percentage Increase in application for admission and student enrollment as percentages of application for admission in 2014-15*

School type	At entry point of Class VI			At entry point of Class VI	
	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year		%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year
EMRS	-	-		-	-
SC & ST	-	-	-	-	-
JNV	02	1.48		01	0.79



- * The percentage of increase in applications could not be ascertained in EMRSs and SC& ST schools as the applications were received at district point and the principals had no information relating to the same. However the rate of receipt of application in JNV decreased by 12 % in class VI but increased by 13 % in case of class XI. The demand for admission to all types of schools increased over the years.
- * Further with respect to admission percentage of same year (2014-15), the percentage in class VI & XI were only 1.48%, and .79% increase.

3.2 Student Strength in Schools

Table 3.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 3.2.2 and plotted in Figure 3.2.1.

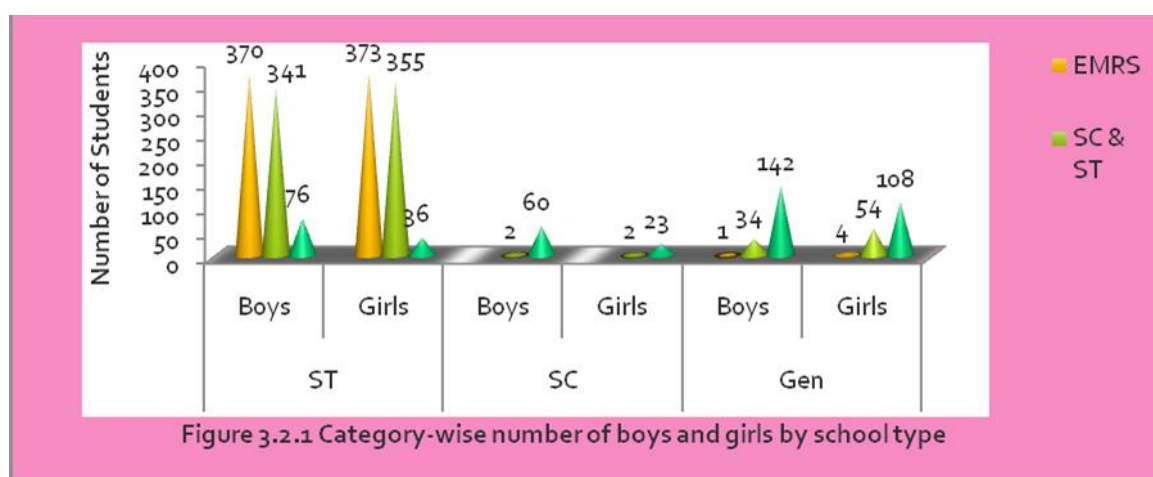
Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms and Classroom Space per Student (in sq. ft.) in Maharashtra

School			VI	VII	VIII	IX	X	XI	XII	Total
EMRS	NASIK	N of students	60	59	60	56	55	51	51	392
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	09							
	RAMTEK	N of students	45	59	59	48	46	48	49	354
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	08							
SC & ST	CHANKAPUR	N of students	79	79	75	71	64	64	71	503
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	07							
	BELDA	N of students	21	20	43	44	45	50	52	275
		N of Classrooms	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	14							
JNV	KHEDGAON	N of students	73	74	76	75	81	40	34	453
		N of Classrooms	2	2	2	2	2	01	01	12
		Per student floor space (in sq. ft.)	08							

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type (Maharashtra)

		ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Elementary Classes (VI to VIII)											
EMRS	NASIK	90	85	175	-	-	-	01	01	02	177
	RAMTEK	79	84	163	-	-	-	-	-	-	163
SC & ST	CHANKAPUR	101	111	212	01	-	01	06	03	09	222
	BELDA	29	38	67	-	-	-	05	12	17	84
JNV	KHEDGAON	37	21	58	28	13	41	68	56	124	223

Secondary Classes (IX & X)											
EMRS	NASIK	59	56	115	-	-	-	-	02	2	117
	RAMTEK	43	50	93	-	-	-	-	-	-	93
SC & ST	CHANKAPUR	62	62	124	-	01	01	04	06	10	135
	BELDA	39	43	82	-	-	-	12	8	20	102
JNV	KHEDGAON	25	13	38	21	07	28	51	36	87	153
Higher Secondary Classes (XI & XII)											
EMRS	NASIK	51	49	100	-	-	-	-	01	01	101
	RAMTEK	48	49	97	-	-	-	-	-	-	97
SC & ST	CHANKAPUR	67	61	128	01	01	02	02	02	04	134
	BELDA	43	40	83	-	-	-	05	20	25	108
JNV	KHEDGAON	14	02	16	11	03	14	23	16	39	69
Total		787	764	1551	62	25	87	177	163	340	1978



- * The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 8 to 9 sq. ft., while that in ST & SC schools was 7-14 sq. ft. and in JNV about 8 sq. ft. Average number of students per classroom was approximately 30-35 in EMRS and JNV, and 60-65 in ST & SC schools.
- * While children from SC, ST and general categories were in ST & SC schools, and JNV, EMRS was primarily meant for students from the ST community. This is reflected in the differential category-wise student strength in different types of schools (Figure 3.2.1).

3.3 Student Attendance

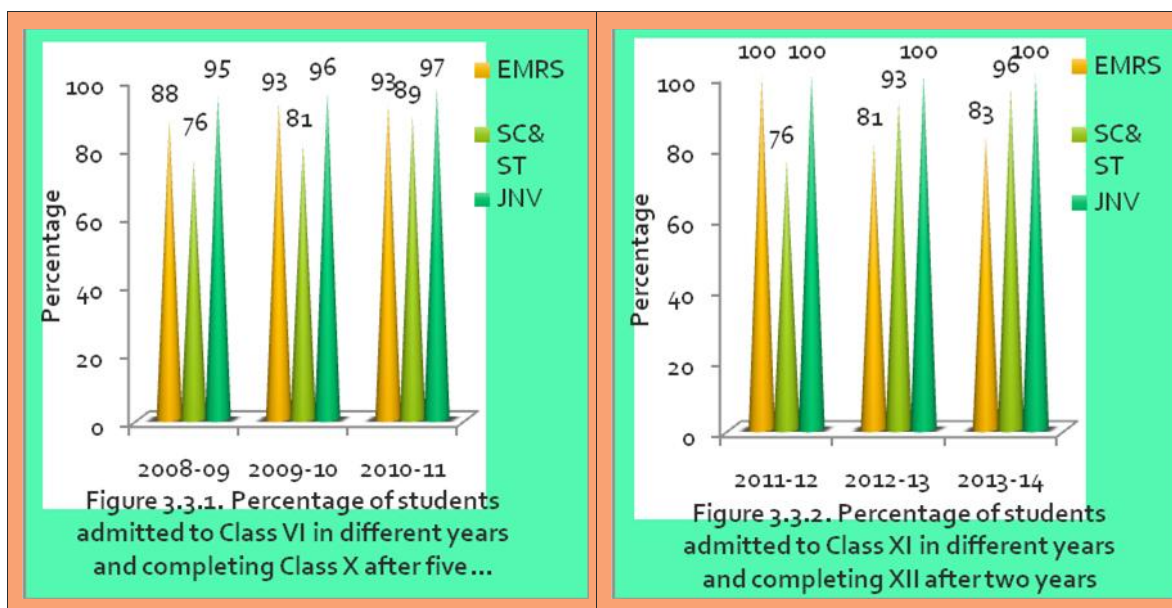
Student attendance and retention in the school to complete the educational cycle are important indicators to reveal how the school is catering to student needs and the awareness level of the community to encourage their children to be in the system. Table 3.3.1 and Figures 3.1.1 and 3.1.2 present information on student attendance and Table 3.3.2 indicates percentages of students completing the educational cycle.

Table 3.3.1: Percentage of average student attendance during the last month (Maharashtra)

		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	NASIK	97	96	99	97	99	97	94	97
	RAMTEK	99	97	99	93	98	92	93	96
SC & ST	CHANKAPUR	91	88	92	85	91	94	95	91
	BELDA	69	71	78	58	66	55	75	67
JNV	KHEDGAON	100	100	100	100	100	100	100	100

Table 3.3.2: Number of students admitted at entry points (classes VI and XI) and completing The educational cycle during the last three years

School		admitted in VI in	completing Class X	educational cycle in	admitted in VI in	completing Class X	educational cycle in	admitted in VI in	completing Class X	educational cycle in
EMRS:	NASIK	56	51	91	57	56	98	55	55	100
	RAMTEK	63	53	84	56	49	87	53	45	85
SC & ST	CHANKAPUR	77	69	89	66	64	97	73	67	92
	BELDA	51	32	62	49	32	65	40	34	85
JNV	KHEDGAON	85	81	95	83	80	93	83	81	97
School		admitted in XI in	completing Class XII	educational cycle in	admitted in VI in	completing Class XII	educational cycle in	admitted in VI in	completing Class XII	educational cycle in
EMRS:	NASIK	49	49	100	56	35	62	49	42	85
	RAMTEK	24	24	100	33	33	100	30	24	80
SC & ST	CHANKAPUR	68	68	100	74	74	100	72	71	98
	BELDA	55	29	52	54	46	85	51	48	94
JNV	KHEDGAON	37	37	100	45	45	100	34	34	100



Note: Higher-secondary classes opened in ST & SC schools in 2013-14 and the percentage figure shown for ST & SC schools in 2013-14 indicates the percentage of students scheduled to appear in Class XII examination.

- * Student attendance was satisfactory in JNV in comparison to EMRS. The students attendance percentage was highly unsatisfactory in ST & SC schools.
- * Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 93% in EMRS, 89% in ST & SC schools and 97% in JNV. The percentage in ST & SC schools fell as of 89% because some students shifted to other schools or dropped out of the system. During earlier years, students completing the educational cycle also fell short of 100% in EMRS. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 83% in EMRS, 96% in ST & SC schools and 100% for JNV.
- * Completion of educational cycle by 95% to 100% of students in JNV over the years can be considered satisfactory. The picture, however, is not the same for EMRS & ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15.

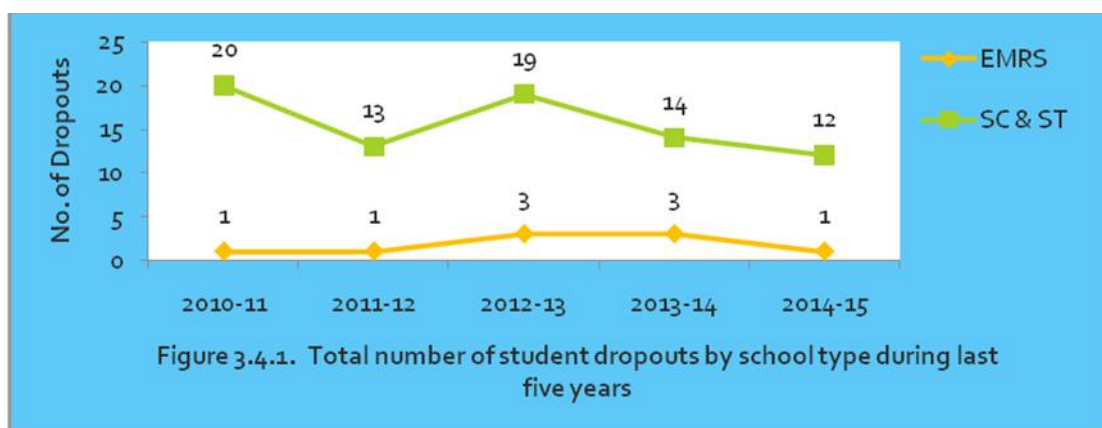
3.4 Student Retention /Drop-out

The number of students dropping out or being pushed out of the system during the last five years across types of schools are presented in Table 3.4.1 and plotted in Figure 3.4.1.

Table 3.4.1: Class-wise total Number of students dropping out of school by school type

School	Year	Elementary			Secondary		Higher secondary		Total (year-wise)
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	01	-	-	-	-	-	-	01
	2011-12	-	01	-	-	-	-	-	01
	2012-13	01	02	-	-	-	-	-	03
	2013-14	-	03	-	-	-	-	-	03
	2014-15	-	01	-	-	-	-	-	01

SC & ST	2010-11	03	05	02	04	-	-	06	20
	2011-12	02	01	03	05	01	01	-	13
	2012-13	02	03	04	09	01	-	-	19
	2013-14	-	01	03	04	-	06	-	14
	2014-15	02	03	01	02	01	03	-	12
JNV	2010-11	-	-	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-	-	-
	2012-13	-	-	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-



Note: Students dropping out of a school possibly sought admissions in other schools for which information was not available. JNV could not supply information on student dropout.

- * Noticeably more number of students drop out of SC& ST schools compared to EMRS. More students dropped out at the elementary stage compared to secondary and higher-secondary stages, particularly in ST & SC schools. These drop out cases may not viewed as instances of students completely leaving the schools system; rather a substantial number of students shifted to others schools or got admitted to JNV or EMRS. The information in respect of students staying out of the school system was not available with the school authorities.



Students were taking lunch in EMRS Nasik

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

Student learning and achievement are greatly impacted by school's instructional climate which includes school and classroom physical environment, teaching-learning process and materials, student development activities and procedures of student evaluation. These aspects are discussed in this chapter.

4.1 School and Classroom Environment

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and classroom environment

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Building white washed	Manageable	Poor	Good
Cleanliness of campus	Manageable	Manageable	Good
Cleanliness of classrooms	Manageable	Manageable	Manageable
Dustbins in classroom	No	No	No
Proper drainage system	In adequate	Inadequate	Inadequate
First-aid box	Yes	Yes	Yes
Fire safety	In adequate	Inadequate	Inadequate
Garbage disposal pit	Poor	Poor	Inadequate
Children's hygienic habits	Good	Good	Good
Information board	Partly done	Partly done	Regularly done
Wall magazine	Updated	Poor	Good
Wall activities	Poor	Poor	Good
TLM corner in classrooms	No	No	No
Library cum reading room	Manageable	Manageable	Good
Games equipments	In adequate	Inadequate	Inadequate
Monthly health check up	Frequently	Frequently	Daily
Campus beautification	Manageable	Manageable	Good
Suggestion box	Not used	Not used	Not used

- * The school campus and classrooms appeared to be clean in JNV and manageable in EMRS and SC &ST schools. Dustbins were not available inside the classrooms in all the schools. Initiative for school campus beautification was good in JNV but manageable in EMRS and ST & SC schools. .
- * While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.

- * In all schools, no TLM corner was evident in classrooms, wall magazine were updated in only EMRS and JNV , games and sports equipments were not adequate in all the schools, wall activities were nearly absent and suggestion boxes were not used by the students in all the schools. The library-cum-reading room was good in JNV, manageable in EMRS and in ST & SC schools. Children’s hygienic habits are good in all the schools.

4.2 Teaching-Learning Process, Materials and Equipments

Textbooks, TLMs and teaching-learning process are the throughputs in educational institutions that help student potentials translate into achievements. This section presents information regarding the availability of textbooks to students (Table 4.2.1; Figure 4.2.1) and teachers’ and students’ behaviours in the classroom during the course of teaching (Table 4.2.2).

Table 4.2.1: Class-wise percentage of new textbooks distributed to students as against requirement on the basis of student enrolment (Maharashtra)

School		New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
EMRS	NASIK	No. required	540	531	540	616	550	459	510	3746
		% distributed	100	100	100	100	100	100	100	100
	RAMTEK	No. required	405	590	590	432	466	432	490	3399
		% distributed	100	100	100	100	100	100	100	100
SC & ST	CHANKAPUR	No. required	632	632	632		450	600	600	3996
		% distributed	100	100	100	100	100	100	100	100
	BELDA	No. required	120	208	352	361	387	343	322	2093
		% distributed	100	100	100	100	100	100	100	100
JNV	KHEDGAON	No. required	730	740	836	975	1053	880	748	5962
		% distributed	100	100	100	100	100	100	100	100
Class-wise percentage of textbook distribution by school type										
EMRS			100	100	100	100	100	100	100	100
SC & ST			100	100	100	100	100	100	100	100
JNV			100	100	100	100	100	100	100	100

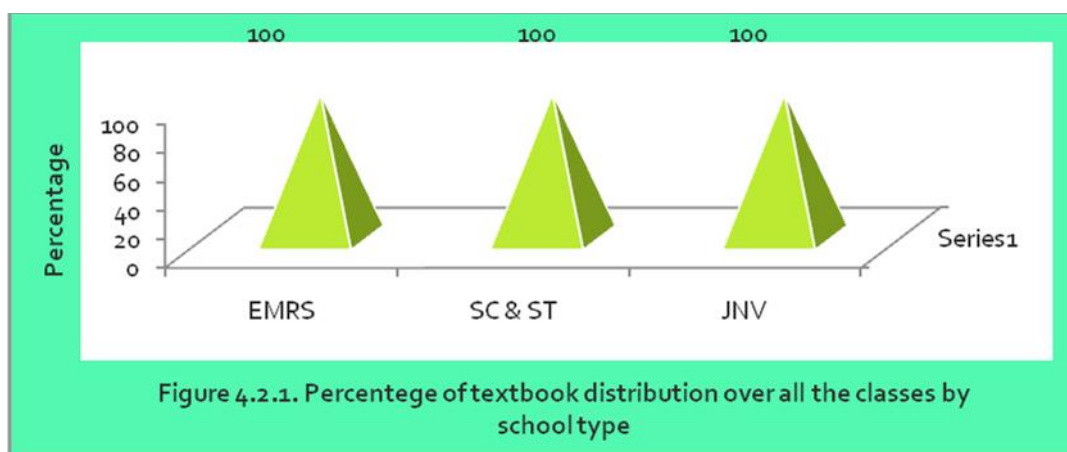


Table 4.2.2: Teaching-learning process and teacher-student behaviors in schools

Parameter	EMRS	SC & ST	JNV
Teaching-learning Process			
Seating arrangement and use of classroom space	Good	Manageable	Good
Adequacy of lesson plan/note	Maintained	Not Properly Maintained	Maintained
Teaching through activity-based methods	No	No	Partly done
Correction of students'	Average	Average	Good
Home assignments given	Average	Average	Good
Project assignments	Good	Manageable	Good
Use of e-content in SMART classes	No	No	Good
Effective use of laboratories	Average	Poor	Good
Using libraries effectively	Average	No	Good
Courses completed as per schedule	Yes	Yes	Yes
Time table structured and displayed	Yes	Yes	Yes
Academic calendar prepared and displayed	Yes	Yes	Yes
SDP prepared	Yes	No	Yes
Teacher behaviour in classrooms			
Topic presentation focused and organized	Good	Average	Good
Demonstrates during teaching	Average	Average	Manageable
Using blackboard appropriately	Yes	Yes	Yes
Using TLMs while teaching	Poor	Poor	Manageable
Initiating group learning	Poor	poor	Manageable
Encouraging students to ask questions	Good	Manageable	good
Giving academic feedback to students	Manageable	Manageable	good
Threatening	No	No	No
Student behaviour in classrooms			
Students actively listen and participate	Good	Average	Good
Ask questions and express ideas	Good	Average	Good
Students' use of TLMs	Poor	No	Manageable
Students respond and answer	Good	Manageable	Good

- * The distribution of textbooks in all the schools was satisfactory as 100% of students' textbook requirement was met.
- * In all types of schools, courses were completed as per syllabi and in time. Time table and academic calendars were prepared, SDPs were prepared in EMRS and JNV and students were given home assignments. Lesson plans were not properly prepared and maintained in all types of schools.

- * The status of EMRS did not turn out to be satisfactory in respect of activity-based teaching, regular correction of students' work was average in EMRS and SC&ST schools, and regular correction of students' work was regularly corrected in JNV. Project assignments, home assignments were given in EMRS & JNV but use of e-content in SMART classes was not found in EMRS and SC& ST schools, NV was relatively better because of activated Smart classes, use of e-content, Tele-teaching facility compared to other schools in respect of these school-related activities.
- * The classrooms were teacher-directed in all types of schools but student participation was also noticed in all the schools. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLMs were not used by students in EMRS and SC&ST schools. The situation in JNV was slightly better but far from being excellent in all aspects.
- * The nature for student engagement in classroom teaching was average. Their participation in classroom learning was good in JNV and EMRS in comparison to ST & SC schools.

Availability of TLMs and TLEs. Though schools are provided with grants for TLMs and TLEs which are purchased by the teachers, they were not purchased with a proper plan to cater to students' need and course requirements. They were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.

4.3 Student Development Activities

Besides classroom teaching students also need activities for their personal and career development. Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools and JNV on those activities.

Table 4.3.1: Student development activities

Activities	EMRS	SC & ST	JNV
Remedial coaching as per student need	No	No	Done
Counselling for behavioural problems	No	No	No
Career counselling	Inadequate	Inadequate	Inadequate
Identifying and developing student talents	Partly done	No	Done
Coaching for professional courses	Partly	No	Partly
Self-defence training	Yes	No	Yes
life skills training	Partly	Partly	Partly
Coaching for sports and games competitions	Manageable	Poor	Good
Training for musical and artistic talents	Poor	Poor	Good
Training on vocational and work education	No	No	No
Training students as social change agents	No	No	No

- * Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not

evident in EMRS. The picture in JNV in respect of the student development activities was slightly better than that of EMRS.

- * The SC & ST schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.

4.4 Student Evaluation Practices

The students are evaluated in half-yearly and yearly examinations and also in their respective classes at different phases during the instructional period by respective teachers. We wanted to ascertain how CCE has been adhered to in assessing student performance. Table 4.4.1 presents schools' adoption of CCE along important parameters.

Table 4.4.1: Student Evaluation Practices as per CCE

Parameter	EMRS	SC & ST	JNV
Using summative evaluations	Satisfactory	Satisfactory	Satisfactory
Using formative evaluations	Satisfactory	Un Satisfactory	Satisfactory
Assessing through oral questions	Satisfactory	Unsatisfactory	Satisfactory
Assessing through observations	Satisfactory	Satisfactory	Satisfactory
Using self and peer-assessment	Satisfactory	Un Satisfactory	Satisfactory
Using parental assessment	Un Satisfactory	Un Satisfactory	Un Satisfactory
Using group assessment	Satisfactory	Un Satisfactory	Satisfactory
Assessing socio-personal qualities	Satisfactory	Satisfactory	Satisfactory
Maintaining student portfolios and anecdotal records	Un Satisfactory	Un Satisfactory	Un Satisfactory
Using checklists and rating scales	Un Satisfactory	Un Satisfactory	Un Satisfactory
Cumulative progress card for each child maintained	Satisfactory	Satisfactory	Satisfactory
Identifying individual strengths	Satisfactory	Un Satisfactory	Satisfactory
Quality of feedback to students	Satisfactory	Un Satisfactory	Satisfactory
Remedial coaching on the basis of CCE	Un Satisfactory	Un Satisfactory	Satisfactory

- * Adoption of CCE along most of parameters was unsatisfactory in ST & SC schools. JNV performed better in all aspects of CCE in comparison to EMRS. Formative evaluations, summative evaluations, assessing through oral questions, assessing through observations were done in EMRS and JNV. Only summative evaluations on half-yearly and yearly basis were done.
- * The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Parental assessment was not done in all the three schools. Maintaining student portfolios and anecdotal records was unsatisfactory in all the schools.

* Group-based assessments and assessment of socio-personal qualities were evident in EMRS and JNV. The cumulative progress cards were properly maintained in all the schools and the quality of feedback to the students was satisfactory in all the schools except in ST & SC schools.



Students’ assessments were done in EMRS Nasik



Students were appearing in achievement tests



List of toppers in class XII in EMRS Nasik

Chapter 5

RESIDENTIAL CLIMATE IN HOSTELS

5.1 Residential Environment in Hostels

One of the objectives of EMRS is to support the construction of infrastructure that facilitates the educational, physical cultural needs of students. Students spent about 16 hours a day in hostels and therefore, the residential climate in the hostel impacts students' motivation, attitude and educational attainment. The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Hostel Residential environment in students' hostels

Parameter	EMRS	SC & ST	JNV
Building whitewashed	M	P	G
Cleanliness of hostel campus	M	P	G
Cleanliness of hostel rooms	M	M	G
Light and ventilation in hostel rooms	S	US	S
Garbage disposal pit	INADEQUATE	INADEQUATE	INADEQUATE
Proper drainage system	INADEQUATE	INADEQUATE	INADEQUATE
First-aid box	YES	YES	YES
Fire safety	INADEQUATE	INADEQUATE	INADEQUATE
Dustbin in hostel rooms	NO	NO	NO
Children's hygienic habits	YES	YES	YES
Using suggestion box	USED	NOT USED	USED
Wall magazine	NO	NO	NO
House system functional	YES	NO	YES
Cultural activities	YES	YES	YES
Inner house competitions	YES	NO	YES
Annual function	YES	YES	YES
Stationeries supplied	YES	YES	YES
Play and indoor games equipment	INADEQUATE	INADEQUATE	INADEQUATE
Health check up	IRREGULAR	IRREGULAR	REGULAR
Health cards issued	NO	NO	YES
ANM/Health worker available	YES	NO	YES
Mess committee's functional efficiency	S	US	S
Beautification of hostel campus	S	US	S
Hostel locked during school hours and remedial coaching	YES	NO	YES

- * On parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness while light and ventilation in rooms, provision of garbage disposal pit and drainage system and attempt to beautify the hostel campus were on the weaker side. Most of the conditions in ST & SC schools were unsatisfactory or inadequate. The JNV was better in many respects except that garbage clearance management and proper drainage system were not at the expected level.
- * First-aid boxes were available in hostels of all types of schools, but fire safety measures were inadequate in all. Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in all the schools.
- * In EMRS, house system was functional and cultural activities and annual functions were held. Students used suggestion box in EMRS, wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was better than EMRS in hostel residential parameters.
- * The mess committees consisting of students were functioning satisfactorily in EMRS and JNV in comparison to SC and ST schools. The presence of students in remedial classes was ensured by locking up the hostel rooms in EMRS and JNV hostels.

5.2 Hostel Kitchen and Food

Hygienic kitchen environment, quality of food and safety are the key elements in any residential accommodation set up. Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: Hygienic environment of kitchen and quality of food

Parameter	EMRS	SC & ST	JNV
Kitchen building whitewashed	M	P	G
Cleanliness of kitchen floor	M	P	M
Cleanliness of kitchen equipment's and utensils	M	M	G
Cleanliness of dining room	M	P	G
Light and Ventilation	M	P	G
Fire safety for the kitchen	NO	NO	YES
Proper drainage system for kitchen	INADEQUATE	INADEQUATE	INADEQUATE
Cleanliness of hand wash points	M	P	M
Cleanliness of store room	M	M	M
Safety stand for plates	NO	NO	YES
Hand washing points	INADEQUATE	INADEQUATE	ADEQUATE
Aqua guard points for safe drinking water	NO	NO	INADEQUATE
Kitchen waste clearance and management	M	P	M
Smokeless cooking	NO	NO	YES

Hygienic cooking	S	US	S
Approved menu chart displayed	YES	YES	YES
Meals served according to menu chart	YES	YES	YES
Quality of meal	S	US	S
Teachers on duty / mess committee supervision	NO	NO	YES
Procurement procedure duly followed	NO	NO	YES
Serving of food supervised teachers	YES	NO	YES

- * On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- * The fire and health-related safety measures in EMRS and ST & SC hostels was poor while the safety measures were better in JNV.
- * The quality of meals and supervision by teachers were satisfactory in EMRS and JNV hostels and relatively unsatisfactory in ST & SC schools. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls are located on either side.



Academic block in EMRS Nasik

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1 Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 through 6.1.9 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-4 on 'Method and Procedure'. It may be mentioned here the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

Table 6.1.1: Mean Achievement Level of Class VIII Students in Maharashtra in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	60	7.85 2.82	31.4	60	11.87 2.93	47.48	60	7.75 2.21	31	60	6.97 2.42	27.88
SC & ST	60	6.25 2.41	25	60	8.75 2.7	35	60	6.67 2.49	26.68	60	6.6 2.27	26.4
JNV	30	14.47 4.35	57.88	30	19.76 3.14	79.04	30	13.53 2.34	54.12	30	10.03 1.90	40.12

- * In all the four subjects, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools (Table 6.1.1).
- * It may however be mentioned that the performance of students in class VIII from all the three types of schools was not in the satisfactory range as students in ST & SC schools scored in the range of only 25% to 35% across four subject areas, while those in EMRS scored in the range of 31% to 48%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 40% to 80 % across the four subject areas.

Table 6.1.2:Category-wise Mean Achievement Level of Class VIII Students in Maharashtra in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	60	7.85 2.82	31.4	60	11.87 2.93	47.48	60	7.75 2.21	31	60	6.97 2.42	27.88
SC & ST	55	6.20 2.59	24.8	55	9.01 2.19	36.04	56	6.25 2.72	25	56	6.72 2.79	46.88
JNV	8	13.37 4.78	53.48	6	16.67 4.13	66.68	7	13.86 2.19	55.44	6	10.67 2.37	42.68
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	5	12.33 3.67	49.32	5	19 3.32	76	6	12.5 2.07	50	6	8.8 3.11	35.2
General Category Students												
EMRS	No General students											
SC & ST	5	6.5 2.38	26	5	7 3.54	28	4	6.75 3.59	27	4	5.8 3.42	23.2
JNV	15	17 3.14	68	19	20.74 2.23	83.16	17	13.65 2.62	54.6	19	10.15 1.26	40.6

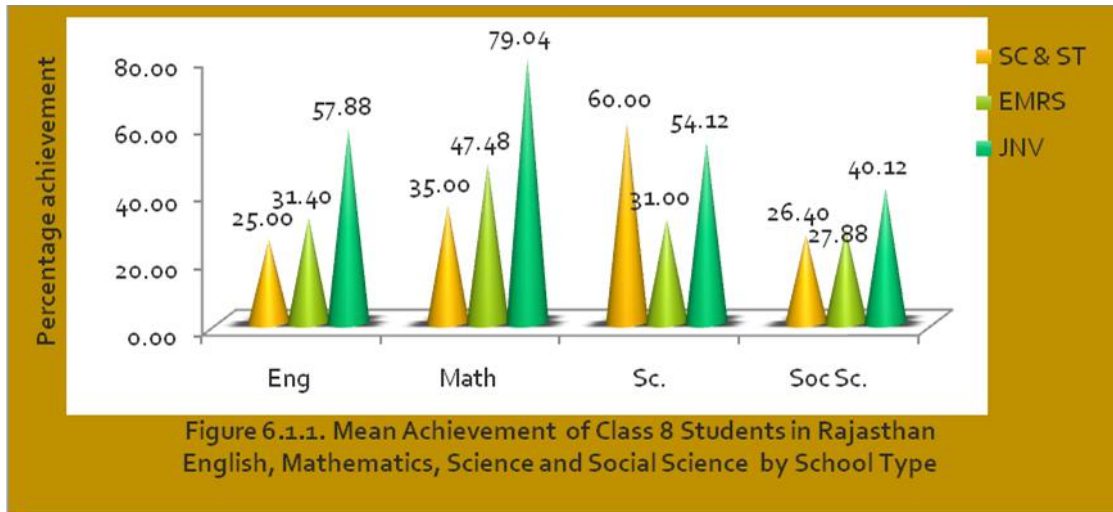


Figure 6.1.1. Mean Achievement of Class 8 Students in Rajasthan English, Mathematics, Science and Social Science by School Type

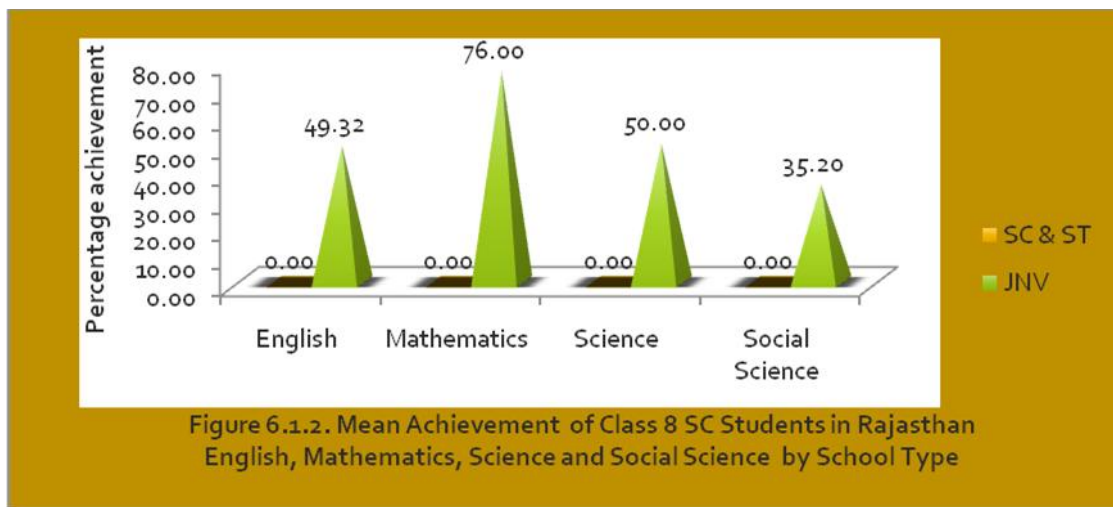


Figure 6.1.2. Mean Achievement of Class 8 SC Students in Rajasthan English, Mathematics, Science and Social Science by School Type

Table 6.1.3: 't' values showing group comparisons across school types in respect of achievement level of Class VIII ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	Df	t	Mean	df	t	Mean	df	T
EMRS vs. SC & ST	7.85 6.20	113	3.27 **	11.87 9.01	113	6.15 **	13.53 6.25	114	3.24 **	10.03 6.72	114	2.05 **
EMRS vs. JNV	7.85 13.37	66	1.846 *	11.87 16.67	64	2.77 **	13.53 13.86	65	6.98 **	10.03 10.67	64	3.64 **
SC & ST vs. JNV	6.20 13.37	61	4.15 **	9.01 16.67	59	4.49 **	6.25 13.86	61	8.42 **	6.72 10.67	60	3.81 **

; Significant at .05 level

; Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) revealed that the ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in Science & Social Science attainment. It was only in Social Science and Science that noticeable differences were not observed between the ST students in EMRS and JNV.
- * The performance of ST students in class VIII in SC & ST schools and EMRS was poor while in JNV, it was relatively better in all subjects except social science in ST & SC schools. The ST students in ST & SC schools performed in the range of 24% to 47% while their performance in EMRS was within 27% to 48% and in JNV in the range of 42% to 67%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- * There were no SC students in EMRS & ST & SC schools. The performance of SC students in JNV schools was average poorer SC students performed almost at an equal level with ST students in the JNV (Figure 6.1.2). The performance of general category students in ST & SC schools was not better than JNV. The general students of JNV are highly better than general students of ST & SC schools.

Table 6.1.4: Mean Achievement Level of Class X Students in Maharashtra in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	60	15.24 3.28	60.96	60	9.18 2.36	36.72	60	9.35 2.32	37.4	60	13.04 3.27	52.16
SC & ST	60	7.77 2.79	31.08	60	8.42 2.17	33.68	60	8.29 1.98	33.16	60	7.21 2.44	28.84
JNV	30	19.57 3.19	78.28	30	14.57 4.51	58.28	30	15.57 3.31	62.28	30	13.7 3.02	54.8

- * The performance of students in JNV in class X performance was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 28% to 34%, while those in EMRS showed attainment in the range of 36 to 61%. The students in JNV performed in the range of 54% to 79% (Table 6.1.4).

- * The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed poorly in all subject areas. Students in JNV scored highest in English followed by Science, Mathematics and Social Science.

Table 6.1.5: *Category-wise Mean Achievement Level of Class X Students in Maharashtra in English, Mathematics, Science and Social Science in relation to School Type in 2014-15*

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	59	12.87 3	51.48	59	9.03 2.31	37.2	59	9.29 2.29	37.16	59	15.31 3.24	61.24
SC & ST	52	7.9 2.9	31.6	51	8.46 2.20	33.84	51	7.48 2.81	29.92	51	5.97 2.24	23.88
JNV	14	17.90 3.24	71.6	10	12.4 2.91	49.6	11	13.90 4.10	55.6	9	12.64 3.47	50.56
SC Students												
EMRS	1	14 -	56	1	15 -	60	1	12 -	48	1	20 -	80
SC & ST	No SC Students											
JNV	6	18.17 5.07	72.68	7	13.71 3.68	54.84	7	15.43 1.81	61.72	5	12.2 0.84	48.8
General Category Students												
EMRS	No General students											
SC & ST	8	8.75 3.37	35	9	9 2.12	36	9	6.44 2.18	25.76	9	6.78 1.20	27.12
JNV	21	19.71 2.90	78.84	21	15.76 4.66	63.04	16	17 2.06	68	18	14.78 2.46	59.12

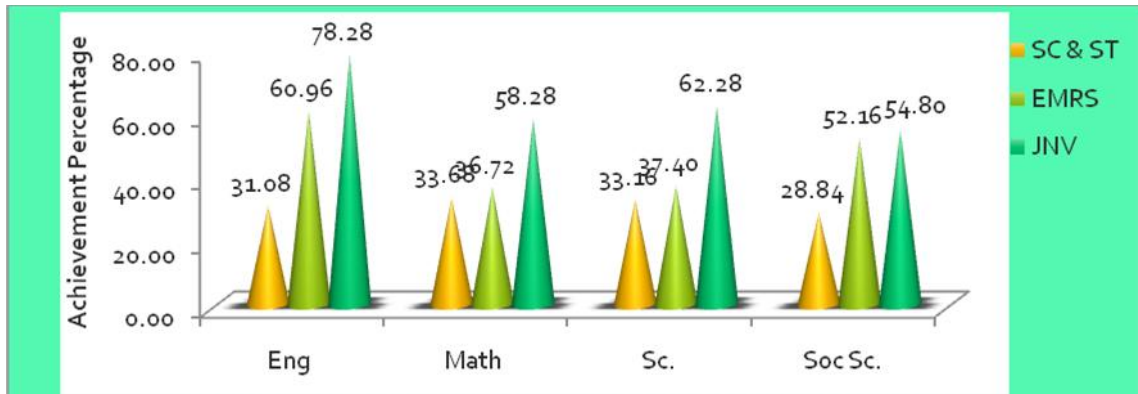


Figure 6.1.3. Mean Achievement of Class 10 ST Students in Rajasthan English, Mathematics, Science and Social Science by School Type

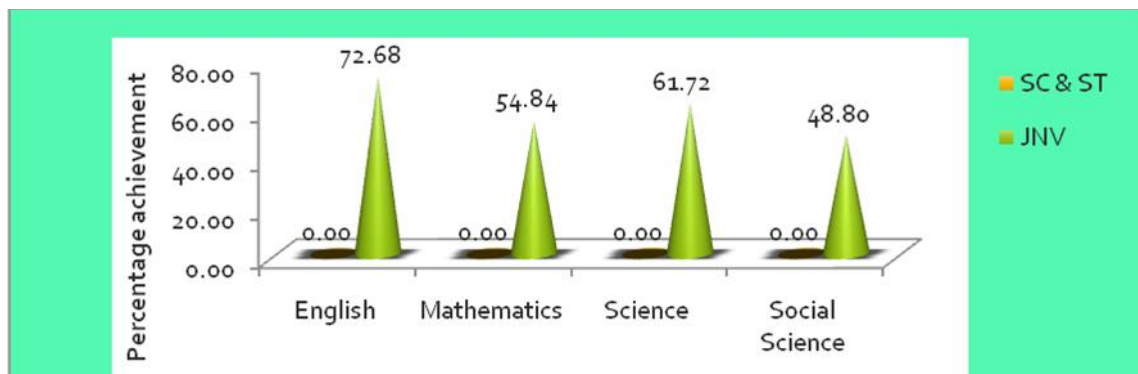


Figure 6.1.4. Mean Achievement of Class 10 SC Students in Rajasthan in English, Mathematics, Science and Social Science by School Type

Table 6.1.6: 't' values showing group comparisons across school types in respect of achievement level of Class XST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	Df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS vs. SC & ST	12.87	109	8.86	9.03	108	1.32	9.29	108	3.66	15.31	108	17.77
	7.9		**	8.46		*	7.48		**	5.97		**
EMRS vs. JNV	12.87	71	5.29	9.03	67	3.48	9.29	68	3.63	15.31	58	2.16
	17.90		**	12.4		**	13.90		**	12.64		**
SC & ST vs. JNV	7.9	64	10.47	8.46	59	4.07	7.48	60	4.95	5.97	58	5.56
	17.90		**	12.4		**	13.90		**	12.64		**

; Significant at .05 level

:: Significant at .01 level

- * Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS in English, Maths & Science. EMRS students did better in Social Science EMRS students were also better than ST students in ST & SC schools (Table 6.1.5; Figure 6.1.3).
- * t-values indicated that it was only in English language subject between EMRS and JNV and in Social Science subject between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS & ST & SC schools other than Social Science.
- * On an overall basis, SC students in EMRS performed better in Mathematics & Social science. They are poor in English and Science. JNV students were better in English and Science.

Table 6.1.7: Mean Achievement Level of Class XII Students in Maharashtra in English, Mathematics, Physics, Chemistry and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	60	12.35 2.99	41.14	60	11.4 2.18	38	60	9.79 1.83	25.97	38	13.35 2.26	44.5	60	9.5 1.76	31.67
SC & ST	60	8.79 2.41	29.9	60	7.57 2.1	25.23	60	7.12 1.83	23.74	60	9.27 2.56	30.9	60	7.99 2.02	26.63
JNV	30	18.9 2.64	63	30	12.17 3.34	40.57	30	11.57 2.98	38.57	24	18 3.76	60	21	14 2.89	46.67

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS schools were better in all subjects than ST & SC schools. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.
- * The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 41% only in English. The performance of students in JNV was also poor in all subjects except in English.

Table 6.1.8: Category-wise Mean Achievement Level of Class XII Students in Maharashtra in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	60	12.35 2.99	41.14	60	11.4 2.18	38	60	9.79 1.83	25.97	38	13.35 2.26	44.5	60	9.5 1.76	31.67
SC & ST	57	8.93 2.57	29.77	57	7.57 2.16	25.24	58	7.09 1.86	23.64	57	9.08 2.49	30.27	60	7.85 2.06	26.17
JNV	10	18.8 2.44	62.67	9	11.89 4.54	39.63	8	11.5 3.51	38.34	4	17.25 5.56	57.56	6	14.83 4.12	49.44
SC Students															
EMRS	No SC students														
SC & ST				1	7 -	23.34				1	9 -	30			
JNV	6	17 1.67	56.67	6	11.33 3.39	37.77	5	10.8 3.19	36	4	16 1.63	53.34	4	12.25 2.63	40.84
General Category Students															
EMRS	No General students														
SC & ST	3	6.33 2.52	21.1	2	7.5 0.71	25	2	7.5 0.71	25	2	11 -	36.67			
JNV	20	19.70 2.17	65.67	16	12.44 2.66	41.47	13	11.82 2.81	39.4	16	18.56 3.69	61.87	11	14.18 2.14	47.27

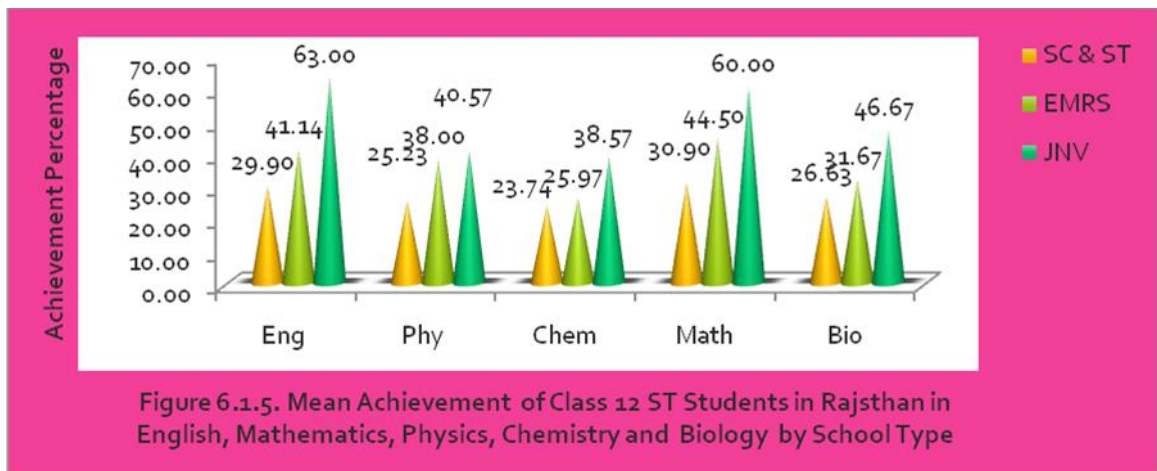


Figure 6.1.5. Mean Achievement of Class 12 ST Students in Rajasthan in English, Mathematics, Physics, Chemistry and Biology by School Type

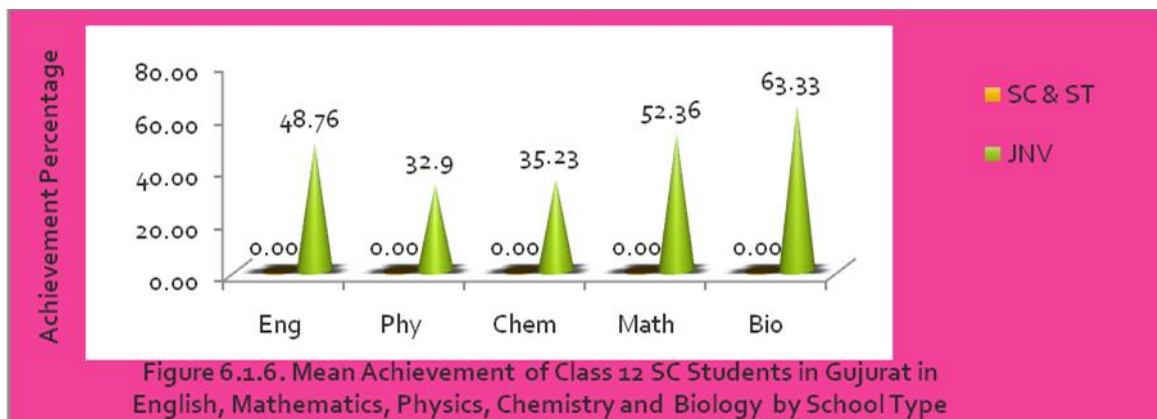


Figure 6.1.6. Mean Achievement of Class 12 SC Students in Gujarat in English, Mathematics, Physics, Chemistry and Biology by School Type

Table 6.1.9: 't' values showing group comparisons across school types in respect of achievement level of Class XIIST students in different subject areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	Df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. SC & ST	12.35	115	6.64	11.4	115	9.55	9.79	116	7.95	13.35	21	8.66	9.5	118	4.72
	8.93		**	7.57		**	7.09		**	9.08		**	7.85		**
EMRS vs. JNV	12.35	68	7.47	11.4	67	0.31	9.79	66	1.35	13.35	40	1.39	9.5	64	3.14
	18.8		**	11.89		**	11.5		*	17.25		*	14.83		**
SC & ST vs. JNV	8.93	65	11.70	7.57	64	2.80	7.09	64	3.48	9.08	59	2.92	7.85	64	4.10
	18.8		**	11.89		**	11.5		**	17.25		**	14.83		**

; Significant at .05 level

:: Significant at .01 level

* Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).

- * t-values revealed ST students in EMRS and those in ST & SC schools differ only in English language subject (Table 6.1.9; Figure 6.1.5). Even the ST students in JNV maintained their initial advantage over the ST students in ST & SC schools in all subjects. Differences were significant only in English and Biology. The ST students in EMRS performed at par with ST students in JNV in all subjects. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- * The trend was almost the same for general students in JNV & ST & SC schools (Figure 6.1.6). The performance differences narrowed down with JNV maintaining a slight advantage in only English and Physics.

On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.

In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

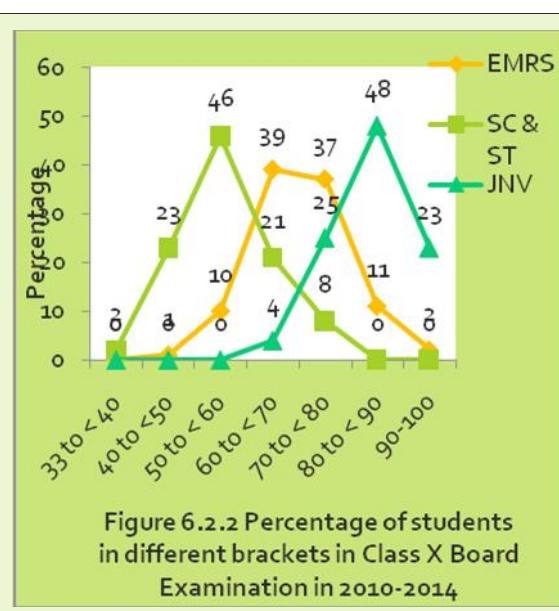
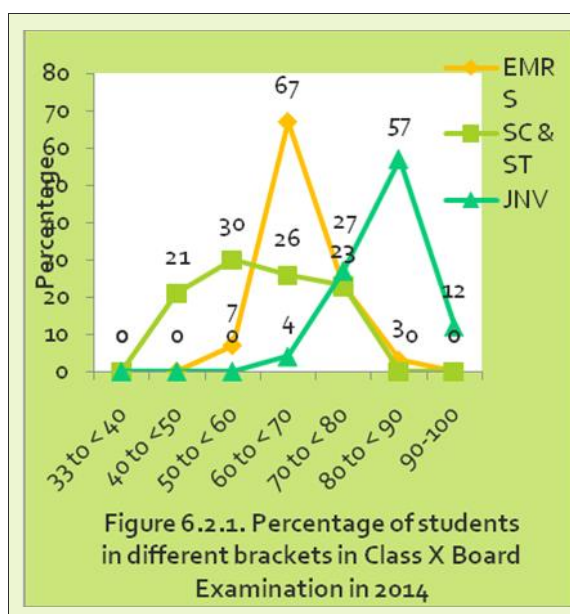
6.2 Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type in Maharashtra during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	82	82	100	-	04	29	30	32	05	0
	SC & ST	122	114	93	03	31	39	25	02	-	-
	JNV	80	80	100	-	-	-	06	12	54	28
2011	EMRS	86	86	100	-	-	12	26	34	26	2
	SC & ST	108	92	85	03	26	52	16	03	-	-
	JNV	75	75	100	-	-	-	03	31	46	20
2012	EMRS	91	91	100	-	-	06	32	32	25	05

	SC & ST	105	101	96	01	18	55	20	06	-	-
	JNV	76	76	100	-	-	-	04	17	42	37
2013	EMRS	106	106	100	-	-	02	33	62	03	-
	SC & ST	116	107	92	02	19	58	15	06	-	-
	JNV	81	81	100	-	-	-	05	36	42	17
2014	EMRS	107	107	100	-	-	07	67	23	03	-
	SC & ST	122	121	99	-	21	30	26	23	-	-
	JNV	81	81	100	-	-	-	04	27	57	12
TOTAL	EMRS	472	472	100	0	01	10	39	37	11	02
	SC & ST	573	535	93	02	23	46	21	08	0	0
	JNV	393	393	100	0	0	0	04	25	48	23



- * More percentages of students in JNV & EMRS were towards the higher end of the score continuum compared to the percentages noticed for ST & SC schools. In 2014, none of the students in EMRS & JNV scored below 50% & 60% respectively. 21% of ST & SC School students got less than 50% and none of them got above 80%. In JNV none of the students got less than 60% and 12% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 80% to 90% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 50% to 60% for ST & SC schools, 60% to 70% for EMRS and 80% to 90% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores

were approximately 10% less than what the students obtained in Board examinations in all types of schools.

- * During the last five years, none of the students of JNV and EMRS and 2% of the students of ST & SC schools scored below 40%, while 23% of students of JNV & 20% students of EMRS and none from the SC & STs schools scored above 90%.

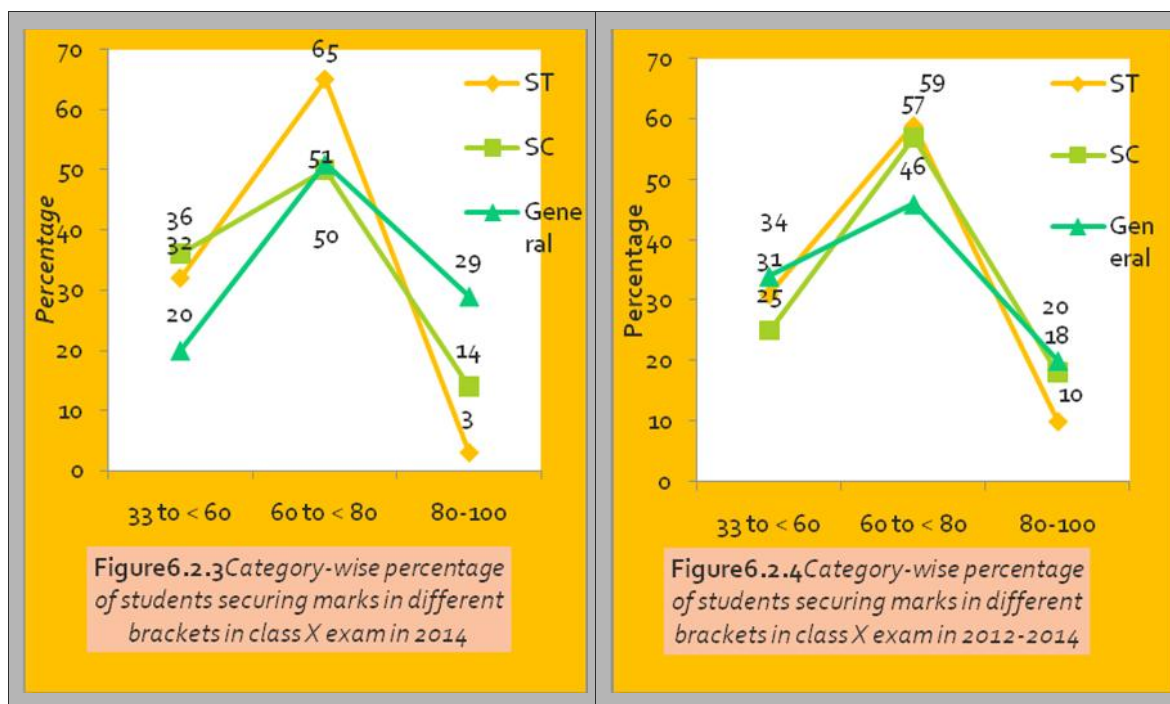
The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted in Figure 6.2.3 for the year 2014 and in Figure 6.2.4 for a period of three years from 2010 to 2014.

Table 6.2.2: Category-wise Student Performance in Class X Terminal Examination in the sampled schools in Maharashtra during the Last Three Years (2012-2014)

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	198	196	99	20	51	29
	SC	12	12	100	-	75	25
	General	60	58	99	47	41	12
2013	ST	229	222	97	39	59	02
	SC	14	14	100	36	50	14
	General	57	55	99	35	45	20
2014	ST	236	235	99	32	65	03
	SC	14	14	100	36	50	14
	General	59	59	100	20	51	29
Total	ST	663	653	98	31	59	10
	SC	40	40	100	25	57	18
	General	176	172	98	34	46	20



Students were appearing in achievement tests



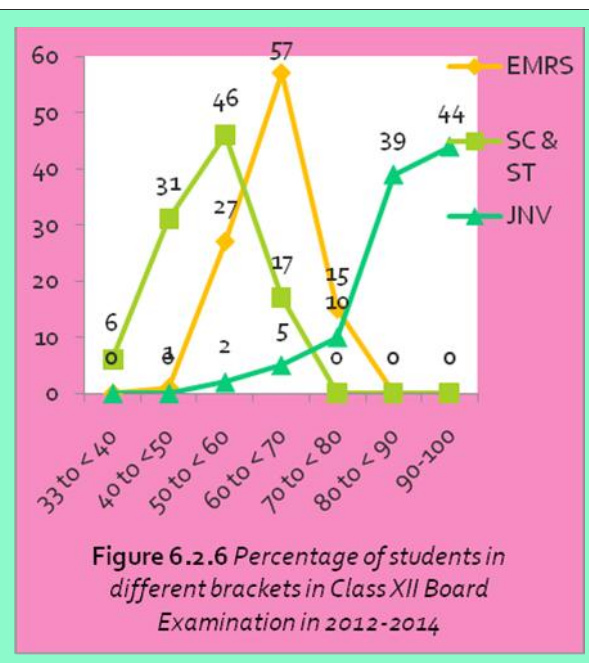
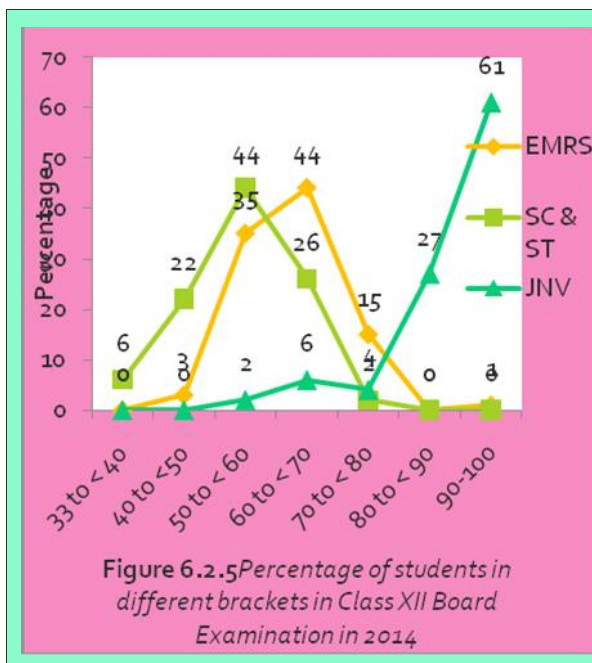
* The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014 (Figure 6.2.4).

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Figures 6.2.5 and 6.2.6 show students' performance trend for 2014 and for the five-year period from 2010 to 2015, respectively.

Table 6.2.3: Student Performance in Class XII Board Examination in relation to School Type in Maharashtra during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class XII Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	21	16	76	-	-	19	62	19	-	-
	SC & ST	126	111	88	01	47	41	11	-	-	-
	JNV	41	41	100	-	-	05	14	05	37	39
2011	EMRS	49	43	87	-	-	30	53	17	-	-
	SC & ST	152	123	81	05	27	50	18	-	-	-
	JNV	38	38	100	-	-	03	06	18	31	42
2012	EMRS	47	47	100	-	-	23	62	15	-	-
	SC & ST	156	137	88	13	27	47	13	-	-	-
	JNV	23	23	100	-	-	-	-	17	65	18
2013	EMRS	77	74	96	-	-	22	65	13	-	-

	SC & ST	134	132	98	03	35	48	14	-	-	-
	JNV	37	37	100	-	-	-	-	11	49	40
2014	EMRS	86	59	68	-	03	35	44	15	-	01
	SC & ST	125	125	100	06	22	44	26	02	-	-
	JNV	45	45	100	-	-	02	06	04	27	61
TOTAL	EMRS	280	239	85	-	01	27	57	15	0	00
	SC & ST	691	628	90	06	31	46	17	00	-	-
	JNV	184	184	100	-	-	02	05	10	39	44



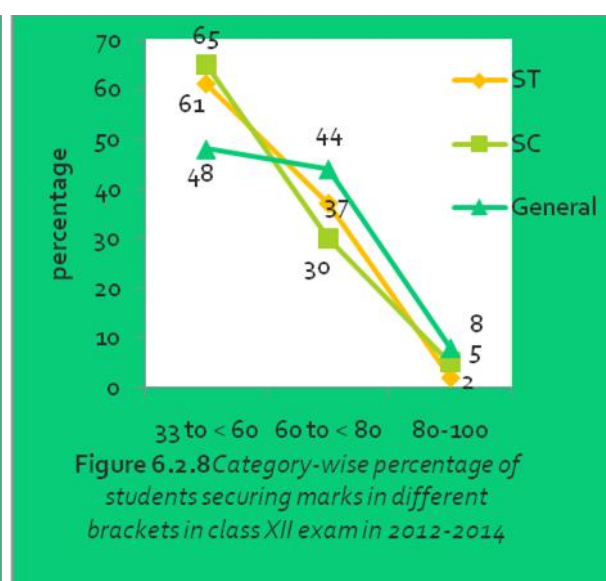
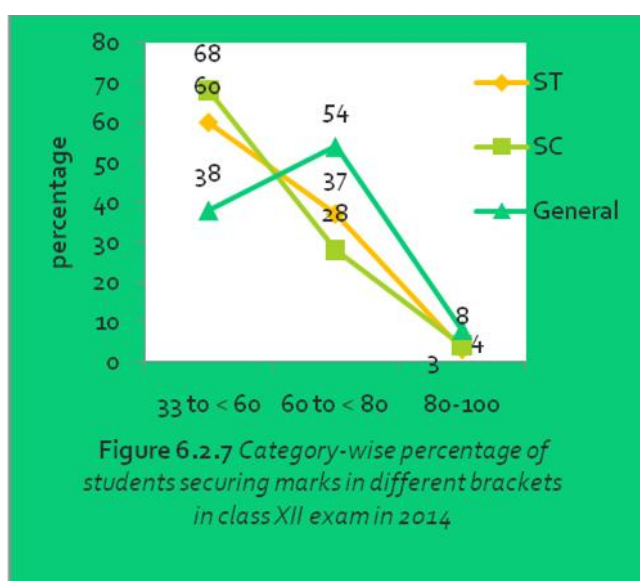
- * Maximum number of students scored in 60% to 70% bracket in EMRS and in 80% to 90% bracket in JNV in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 90%, 61% of JNV students scored above 80%. There was approximately gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter. (Figure 6.2.5)
- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 60% to 70% bracket and maximum number of JNV students scored in the 90% to 100% bracket. None of the EMRS students scored below 50% and none of the JNV students scored below 40%, while less than 0% of EMRS students scored above 80% and 39% of JNV students scored above 80% of whom 44% scored above 90%. Considering the results of last

five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter. (Figure 6.2.6)

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 and are plotted in Figure 6.2.7 for the year 2014 and in Figure 6.2.8 for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Terminal Examination in the sampled schools in Maharashtra during the Last Three Years (2012-2014)

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	162	147	90	69	31	00
	SC	19	19	100	53	42	05
	General	45	41	91	59	39	02
2013	ST	179	175	98	56	43	01
	SC	14	14	100	64	29	07
	General	55	54	99	50	41	09
2014	ST	191	164	85	60	37	03
	SC	76	76	100	68	28	04
	General	52	52	100	38	54	08
Total	ST	532	486	91	61	37	02
	SC	109	109	100	65	30	05
	General	152	147	97	48	44	08



- * In class XII Board examination in 2014, 60% of ST students across all types of schools scored below 60%, while 68% of SC students and 38% of the general students scored below 60%.
- * 3% of ST students, 4% of SC students and 8% of general students scored above 80%. Maximum number general students scored in 60% to 80% bracket, while maximum number of SC students scored in 33% to 66% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students (Figure 6.2.7).
- * In class XII exam while taking all the 3 years into consideration the percentage of all types of students was in the bracket of 33 % to 60 %. (Figure 6.2.8).

6.3 Student Participation in Co-curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of boys and girls participating in Co-Curricular and Sports activities by School Type (Maharashtra)

Activity	EMRS		SC & ST		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
Co-Curricular activities						
Drawing	44	63	45	47	15	34
Singing	28	51	20	10	20	32
Sewing/ Knitting	-	-	-	-	-	-
Dancing	77	77	34	39	23	37
Painting	38	30	35	26	-	-
Instrumental music	04	10	01	01	23	37
Debate/ Eloquence	16	14	24	17	22	40
Writing Skill	88	86	69	70	08	14
G.K. / Quiz	81	68	23	17	06	09
Drama	43	42	01	01	22	34
Games and Sports						
Football	03	-	21	14	36	43
Volleyball	07	07	22	17	28	41
Basketball	-	-	-	-	28	46
Kho-Kho	20	21	42	41	36	57
Badminton	-	-	-	-	-	-
Kabbadi	34	33	56	35	29	46
Skipping	-	13	-	22	-	-
Athletics	10	10	53	53	10	08
Karate	-	-	-	-	-	-
Archery	-	-	-	-	-	-
Handball	-	-	-	-	-	-

Social activities						
NCC	-	-	-	-	-	-
Scout	-	-	-	-	-	-
NSS	-	-	-	-	-	-
Red cross	-	-	-	-	-	-
Shramdan	-	-	-	-	-	-
Social awareness campaign	-	-	-	-	-	-
Socials service in villages	-	-	-	-	-	-

- * It may be observed that more girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- * The participation of ST & SC School students was about 25 % to 30% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 60% to 70%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 20% of boys participated in football, volleyball and kabbadi.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: Percentage of boys and girls participating in Social activities by School Type (Maharashtra)

	NCC	Scout	NSS	Shramdan	Social awareness campaign	Social service in villages
EMRS	-	08	-	55	40	-
SC & ST	-	-	-	57	68	-
JNV	-	07	-	100	-	-

- * Zero percent of EMRS students were in NCC, 8% in Scouts and 0% in NSS, while 0% of ST & SC students were in Scout, NCC and NSS. Among JNV students, 0% adopted NCC and 7 % were in Scouts *Shramdan* was carried in all types of schools with maximum student participation in the range of 55% to 100% (Table 6.3.2).
- * 40% of EMRS students were involved in carrying out social awareness campaigns and none was involved in doing social service in villages, while the corresponding figures for JNV were

0% and 0% respectively. These activities were missing in ST & SC schools. 68% of students of ST & SC schools were engaged in social awareness campaign.

6.4 Performance in National Talent Search Tests

None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

6.5 Success Indicators of School Pass Outs

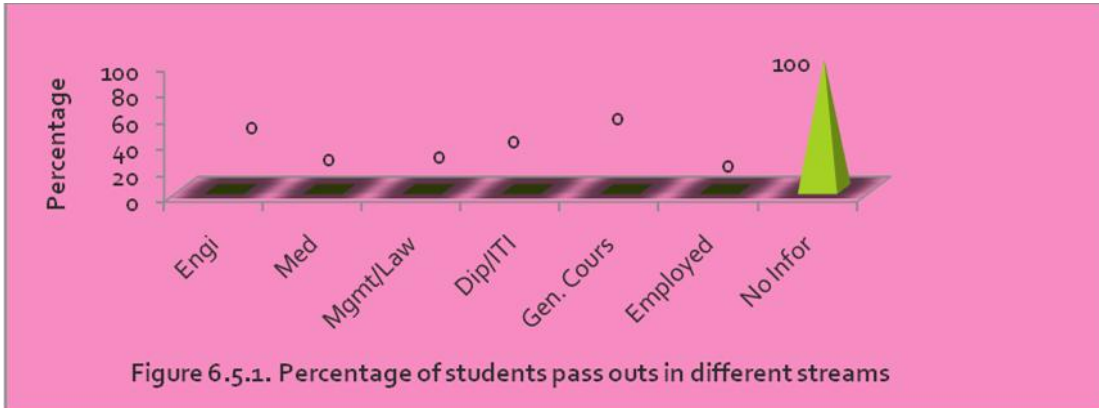
Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training. The data in respect of the pass outs from EMRS over the last three years (2012-14) are available in Table 6.5.1 which are plotted in Figure 6.5.1. The JNV did not keep any record of student pass outs, while the first batch of students in ST & SC schools are yet to appear in Class XII examination.

But it was ascertained from the principals of JNVs that though no record was kept in particular, but yet a good number of students pass outs could be enrolled in reputed institutes for IITs, Medical and Engineering. Same are in IAS also. They were of the view that inclusive education helped the ST students to achieve more percentage. They were also in IITS and Medical education.

Table 6.3.3: Success indicators of school pass outs

Year	No of pass outs	Engineering	Medical	Management/Law	Diploma/ITI	General courses	No taking up employment	Information not available (%)
EMRS	2012	91	-	-	-	-	-	100
	2013	106	-	-	-	-	-	100
	2014	107	-	-	-	-	-	100
SC & ST	2012	105	-	-	-	-	-	100
	2013	116	-	-	-	-	-	100
	2014	122	-	-	-	-	-	100
JNV	2012	76	-	-	-	-	-	100

2013	81	-	-	-	-	-	-	100
2014	81	-	-	-	-	-	-	100



Classrooms in EMRS Nasik

Chapter 7

SCHOOL-COMMUNITY LINKAGE

7.1 Functioning of SMC and Other School Committees

The involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Table 7.1.1 lists out the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA participation in school activities

Parameter	EMRS	SC & ST	JNV
SMC participation			
Regular meeting of SMC	SMC NOT FUNCTIONING	FREQUENTLY	SMC NOT FUNCTIONING
Implementing resolutions of SMC		POOR	
Involvement in developing SDP		V.P	
Monitoring student attendance and drop out		VP	
Monitoring student progress		POOR	
Participation in school's co-curricular activities		POOR	
Participation in preparing TLMs		NOT AT ALL	
Supervising hostels		VP	
Supervising quality of meals		POOR	
Monitoring utilization of funds		NOT AT ALL	
Liaoning with other agencies for school development		NOT AT ALL	
MTA participation			
Regular meeting of MTA	MTA NOT FUNCTIONING	MTA NOT FUNCTIONING	MTA NOT FUNCTIONING
Monitoring student attendance and drop out			
Participation in school's co-curricular activities			
Working for the safety of girls			
Monitoring Meena cabinet and Meena Manch			
Coordinating with SHG for catering to girls' hygienic requirements			

- * The participation of the community in school and hostel activities in all types of schools was not functioning in EMRS & JNV schools and was found to be negligible in ST & SC schools because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.

- * SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals, monitoring utilization of funds or in establishing coordination with other agencies. Their participation in preparing TLMs or in co-curricular activities in the school was very poor.
- * The MTA were not functioning in EMRS and JNV and were also held as a matter of formality in ST & SC schools. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff in ST & SC schools where it was found to be functional.

7.2 Teachers' Interaction with Community

Table 7.2.1 reveals how teaching staff treat and interact with community members.

Table 7.2.1: Teachers' interaction with parents and community members

Parameter	EMRS	SC & ST	JNV
Dealing with community members when they visit school	GOOD	GOOD	GOOD
Personal contact with community members	AV	GOOD	AV
Sharing of students' results with parents	GOOD	AV	GOOD
Influencing the community cognitive behavior	POOR	POOR	POOR

- * The teachers show interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.



Research team was interacting with the principal EMRS Nasik

MONITORING AND SUPERVISION

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Table 7.3.1 reports frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of monitoring and supervision of the school and the Hostel by Educational Administrators and Community members during the 2014-15 (Maharashtra)

Supervision	School			Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
By educational administrators	07	10	7	11	5	3	10	3	5
By community members	-	-	-	-	-	-	-	-	-

- * During a span of one year, educational administrators (mostly C.I/ D.I /District Welfare Officers) visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- * The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 and 7.4.2 provide information on class visits and hostel visits by the principals.

Table 7.4.1: Supervision of class visits by the Principal

Supervision	Month	EMRS (N of teachers = 25)	SC & ST (N of teachers = 28)	JNV (N of teachers = 23)
Frequency of class visits	Aug, 2014	9	14	7
	Sep, 2014	6	13	10
	Jan, 2015	10	9	13
	Feb, 2015	3	10	6
No. of teachers whose	Aug, 2014	20	25	17

classes have been visited	Sep, 2014	19	25	15
	Jan, 2015	21	23	15
	Feb, 2015	21	26	16
No. of teachers whose classes have not been visited	Aug, 2014	5	3	6
	Sep, 2014	6	3	8
	Jan, 2015	4	5	8
	Feb, 2015	4	2	7

- * The classroom supervision by principal was found to be better in ST & SC schools than EMRS & JNV. However the principal's visit required more attention in schools.
- * The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

Table 7.4.2: Frequency of hostel visits by the principal per week

Month	Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
Aug, 2014	04	07	08	03	07	08
Sep, 2014	05	09	09	04	08	09
Jan, 2015	05	05	08	05	06	10
Feb, 2015	07	05	06	07	05	07

- * Frequency of hostel visit was also poor in all types of schools and required more frequency for better administration and supervision.



Students in the classroom of EMRS Nasik

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

8.1 Teachers' Perception and Feedback

Thirteen teachers of EMRS, 12 teachers of ST & SC schools and 6 teachers of JNV were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

- * Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to EMRS schools with SC and ST schools coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed innovative teaching learning activities, completed course as per syllabus plan, TLMs were used during teaching learning activities, students' work was corrected regularly. Exchange of thoughts of students with teachers & subject experts was also done. In EMRS students were motivated to be sincere in their studies. In EMRSs, the areas which needed substantial improvement were salary / remuneration to the teaching staff, service conditions of teachers, service conditions of the non-teaching staff, prospect for future promotion, incentive plans for teachers, incentive plans for non-teaching staff, capacity building of the non-teaching staff, keeping a record of professional career of pass outs, allowing students to use TLMs. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as incentive plan for teaching and non-teaching staffs, keeping record of academic/professional career of pass outs, attendance in PTA meeting, relation with SMC members, relation with MTA members, relation with PRI members and personal contact with parents/ guardians.

Table 8.1.1: Model responses of teachers on important school functioning parameters obtained through interview

	EMRS	SC & ST	JNV
Satisfactory (need to be maintained)	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Preparing students for contribution to the society. * Incentive plans for students. * Preparing students for professional educational courses. * Educational support to meet the distinctive academic needs of 	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Preparing students for contribution to the society. * Salary / Remuneration to the teaching staff. * Salary / Remuneration to the non-teaching staff. * Service conditions of teachers. 	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Capacity building of teaching and non-teaching staff. * Salary/remuneration and teaching and non-teaching staffs. * Quarters inside the campus. * Capacity building of teaching and non-teaching staffs

	<p>children.</p> <ul style="list-style-type: none"> * <i>Course completion as per syllabus plan.</i> * <i>Use of TLM during teaching learning activities.</i> * <i>Correcting students' work regularly.</i> * <i>Innovative teaching learning activities.</i> * <i>Encouraging students to ask questions.</i> * <i>Exchange of thoughts with teachers & subject experts.</i> * <i>Motivating students to be sincere in their studies.</i> * <i>Safety and security of the inmates.</i> * <i>Infrastructure facilities as per inmates' need</i> * <i>Maintaining student portfolios & anecdotal records.</i> * <i>Feedback to students.</i> * <i>Personal contact with parents/guardians.</i> * <i>Involving community in school activities.</i> * <i>Environment cleanliness in the hostel.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Transparency in the management of hostel accounts</i> 	<ul style="list-style-type: none"> * <i>Prospect for future promotion.</i> * <i>Incentive plans for students.</i> * <i>Capacity building of the teaching staff.</i> * <i>Preparing students for professional educational courses.</i> * <i>Keeping a record of students' success rate in professional examinations.</i> * <i>Educational support to meet the distinctive academic needs of children.</i> * <i>Educational support to meet the distinctive cultural needs of children.</i> * <i>Course completion as per syllabus plan.</i> * <i>Preparation of lesson plan and lesson diary.</i> * <i>Activity based learning methods used in transaction of lessons.</i> * <i>Correcting students' work regularly.</i> * <i>Encouraging students to ask questions.</i> * <i>Organizing games, sports in the school.</i> * <i>Providing computer knowledge to the learners.</i> * <i>Encouraging students having talents in specific areas.</i> * <i>Counselling students for behavioural problems.</i> * <i>Involvement in school management.</i> * <i>Support received from the Headmaster / Principal.</i> * <i>Using Formative evaluations.</i> * <i>Informal assessment through observation.</i> * <i>Assessment through oral questions.</i> 	<ul style="list-style-type: none"> * <i>Course completion as per syllabus</i> * <i>Innovative teaching-learning activities</i> * <i>Using summative evaluations</i> * <i>Using formative evaluations</i> * <i>Provision for self and peer assessment.</i> * <i>Feedback to students.</i> * <i>Quality and hygienic nature of meal.</i> * <i>Healthy and hygienic condition of the hostel.</i> * <i>Safety and Security of inmates</i> * <i>Special attention to the slow learners (remedial).</i> * <i>Encouraging students to ask questions.</i> * <i>Encouraging students to ask questions.</i> * <i>Organizing games, sports in the school.</i> * <i>Providing computer knowledge to the learners.</i> * <i>Encouraging students having talents in specific areas.</i> * <i>Transparency in the management of hostel accounts.</i> * <i>Mechanism of redressing grievances of the inmates.</i> * <i>Learning atmosphere in the hostel.</i> *
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		<ul style="list-style-type: none"> * <i>Identifying individual student strengths.</i> * <i>Provision for group-assessment.</i> * <i>Assessing student participation in co-curricular activities.</i> * <i>Home assignment given.</i> * <i>Maintaining student portfolios & anecdotal records.</i> * <i>Feedback to students.</i> * <i>Personal contact with parents/guardians.</i> * <i>Involving community in school activities.</i> * <i>Environment cleanliness in the hostel.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Transparency in the management of hostel accounts.</i> 	
Average (need to be strengthened)	<ul style="list-style-type: none"> * Quarters inside the campus. * Capacity building of the teaching staff. * Keeping a record of students' success rate in professional examinations. * <i>Preparation of lesson plan and lesson diary.</i> * <i>Activity based learning methods used in transaction of lessons.</i> * <i>Use of library by students.</i> * <i>Using labs effectively.</i> * <i>Use of e-content in SMART Class.</i> * <i>Special attention to the slow learners (remedial).</i> * <i>Preparing student for professional</i> 	<ul style="list-style-type: none"> * <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> * <i>Organizing physical exercises for students.</i> * <i>Organizing programs on arts & aesthetics.</i> * <i>Organizing activities like gardening, plantation, wood work, tailoring, candle making.</i> * <i>Career counselling to students.</i> * <i>Support received from fellow teachers.</i> * <i>Using Summative evaluations.</i> * <i>Provision for self-assessment.</i> * <i>Provision for peer-assessment.</i> * <i>Provision for parental-assessment.</i> 	<ul style="list-style-type: none"> * Keeping a record of students success rate in professional examinations * Preparation of lesson plan and lesson dairy. * Special attention to slow Lerner. * Organizing social service camps. * Counselling for student behavioural problems. * Informal assessment through observation. * Identifying individual student strength. * Use of checklist and rating scale. * Sharing written progress card of students with parents * Remedial coaching as per CCE. * Feedback to parents.

	<p><i>courses.</i></p> <ul style="list-style-type: none"> * 	<ul style="list-style-type: none"> * <i>Assessment of personal social qualities.</i> * <i>Projects given.</i> * <i>Use of checklists and rating scales.</i> * <i>Feedback to parents.</i> * <i>Attendance in PTA meeting.</i> * <i>Relation with SMC members.</i> * <i>Safety and security of the inmates.</i> * <i>Quality of and hygienic nature of meals.</i> * <i>Healthy and hygienic conditions in the hostel.</i> * <i>Mechanism of redressing grievances of the inmates.</i> 	
Unsatisfactory (need substantial improvement)	<ul style="list-style-type: none"> * Salary / Remuneration to the teaching staff. * Salary / Remuneration to the non-teaching staff. * Service conditions of teachers. * Service conditions of the non-teaching staff. * Prospect for future promotion. * Incentive plans for teachers. * Incentive plans for non-teaching staff. * Capacity building of the non-teaching staff. * Keeping a record of professional career of pass outs. * <i>Allowing students to use TLMs.</i> 	<ul style="list-style-type: none"> * <i>Organizing social service camps.</i> * <i>Cumulative progress card for each child maintained.</i> * <i>Remedial coaching on the basis of CCE</i> * <i>Sharing of students' result with their parents/guardian.</i> * <i>Infrastructure facilities as per inmates' need.</i> * 	<ul style="list-style-type: none"> * Incentive plan for teaching and non-teaching staffs. * Keeping record of academic/professional career of pass outs. * <i>Attendance in PTA meeting.</i> * <i>Relation with SMC members.</i> * <i>Relation with MTA members.</i> * <i>Relation with PRI members.</i> * <i>Personal contact with parents/guardians.</i> *

8.2 Perception and Feedback of Non-teaching Staff

The modal responses obtained from the non-teaching staff through interview pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: *Model responses of non-teachers obtained through interview*

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS	SC & ST	JNV
Suitable conditions for performing duties	S	S	HS
Involvement in co-curricular activities	AV	AV	AV
Relation with principals and teachers	S	S	S
Relation with students	S	S	S
Relation with parents/ community members	S	S	S
Receiving capacity building training	U	U	U

The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Relation with students, teachers and community was satisfactory in all the three schools. They were unhappy that attempts were not taken to provide capacity building training to the non-teaching staff in JNV, EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.

The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

The service conditions and benefits of staff are critical issues for employee motivation. Tables 8.3.1 and 8.3.2 present the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Except for incentive plans for students teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and

non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, prospect for promotion and provision of quarters inside the campus. The teaching staffs in JNV were not satisfied with the incentive plan for teachers.

Table 8.3.1: Model responses of teachers corresponding to Staff service conditions and benefits [Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	NASIK	RAMTEK	CHANKAPUR	BELDA	KHEDGAON
Salary/remuneration to the teaching staff	HU	U	S	S	HS
Salary/remuneration to the non-teaching staff	U	U	S	S	S
Service conditions of teachers	HU	HU	S	S	HS
Service conditions of non-teachers	U	U	S	S	HS
Prospect for promotion	HU	U	S	S	S
Incentive plan for teachers	HU	U	A	S	U
Quarters inside campus	HU	U	A	U	S
Incentive plan for non-teachers	U	U	A	U	S
Incentive plan for students	S	S	S	S	S

Table 8.3.2: Model responses of non-teaching staff corresponding to Staff service conditions and benefits

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	NASIK	RAMTEK	CHANKAPUR	BELDA	KHEDGAON
Salary/remuneration to the non-teaching staff	AV	U	S	HS	S
Service conditions of non-teaching staff	HU	HU	S	S	S
Prospect for promotion	AV	U	S	S	S
Quarters inside campus	AV	HU	S	S	HS
Incentive plan for non-teachers	U	U	S	S	S

8.4 Students' Perception and Feedback

Students are the central characters in any teaching-learning environment. Their perception and feedback are important for developing school practices because all infrastructure and educational inputs and throughputs are meant for them. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment: Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and bathrooms. Students in ST & SC schools also experienced the problems of unclean toilets. JNV fared much better in most of these parameters.

Table 8.4.1: *Percentage of students responding positively to the following School and hostel parameters obtained through Interview*

Parameter	EMRS (N = 20)	SC & ST (N = 20)	JNV (N = 10)
School and Hostel environment			
Like the school	100	100	100
Conducive hostel infrastructure and accommodation	70	30	90
Classroom and lab furniture adequate	50	50	95
Lab furniture adequate	55	30	90
Good quality food	70	70	100
Good drinking water	70	40	90
Health checkup facilities available	70	20	100
Hostel environment is clean	50	30	100
Toilets and bathrooms are clean	40	25	90
Mosquito net provided	100	100	100
Curricular and Co-curricular activities			
Teachers are supportive of students	60	70	95
Adequate supply of textbooks	100	100	90
Adequate supply of learning materials	80	60	90
Quality of teaching	50	50	95
Activity-based teaching done and TLMs used	25	20	95
Home assignments given	40	30	95
Projects given	70	60	95
Student work corrected regularly	50	40	90
Regular supervised study and remedial classes	20	20	90
Laboratories effectively used	40	30	100
Allowed to ask questions freely	80	60	90
Co-curricular activities promoted	70	70	90
Scope for games and sports	80	60	95
Participation at district and state level encouraged	60	40	95
Student participation			
Student suggestions are solicited in school functioning	20	20	50
Student participate in mess management	40	30	20

Curricular and Co-curricular activities: Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, lack of supervised study

and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. JNV was far better in most of curricular and co-curricular parameters.

Student participation: In all categories of schools student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs: The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers. There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues. Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary

students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 40 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Only one PRI member was available for interview in the JNV who did not enough knowledge to respond truthfully to the interview questions. His responses were very general and were based on guesses than on direct experiences. Hence his response protocol is not analyzed here further.

Table 8.5.1: Model responses of community members on facilities extended
To children and their interaction with school staff

	EMRS (N = 5)	SC & ST (N =5)
Facilities for children		
Cleanliness of school environment	YES	NO
Cleanliness of hostel rooms and environment	YES	NO
Safety and security of hostels	YES	NO
Supply of free textbooks	YES	YES

Textbooks given before academic session	YES	YES
Children helped to solve academic problems	NO	NO
Children's results shared with parents	YES	YES
Children prepared to face competitive examinations	NO	NO
Quality of meals reasonably good	YES	YES
Cultural activities involving children	YES	YES
Opportunities for games and sports	YES	NO
Children's health problems duly attended	YES	NO
Non-discriminatory treatment to students	NO	NO
Interaction with school and staff		
Members' grievances properly received by staff	YES	YES
Teachers behave well with members	YES	YES
Member associated with school planning	NO	NO
Community contributes to school development	NO	NO

8.6 Views of Educational Administrators

Views of the Additional District Magistrate (ADM) and the Project Administrator (PA), ITDA & Assistant Commissioner) were available in respect of EMRSs and ST & SC schools at. They expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

8.7 Programme Strengths, Concerns and Suggestions: Stakeholders' Feedback on EMRS

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 9.7.1 for feedback from each category of stakeholders).

Programme strengths (need to be maintained). The students were imparted education through English medium affiliated to CBSE. Number of activities are conducted in EMRS that is curricular, co- curricular and extra-curricular to bring out all round development of the student. Various activities like debate, speech, drawing, quiz, dance, singing, skill competition are organized. Cultural activities are carried out and their hidden talents are nurtured. Staff nurse is available for addressing the health problem of students. Personal attention to every student is given in EMRS.

Concerns (*need special attention*). No provision to fill up the vacant seat after class VII and admission of class XI. No rules and regulations are applied to teaching and non-teaching staffs. Vacancies of art & music teacher and class IV staffs. Infrastructure is not sufficient for CBSE School, no service rule of the staff, Marathi medium students come from Marathi medium in VI standard. It is difficult to teach them in English medium. There is a need of science laboratory and science equipment.

Suggestions (*need to be implemented*). Vacant seats of class IX and XI should be filled through entrance test. All benefit should be provided to staffs. Playground should be available for students. Adequate staff should be employed. Staff requirement should be filled up according to the GR of 11th September 2000 for EMRS employs of Maharashtra government. Medical facilities should be given employees. Service rule for employees should be formed. Selection of students should be proper so that eligible students can be enrolled in EMRS. Proper infrastructure should be built up as early as possible.



FGD with the students of EMRS Nasik Hostel Room sin EMRS Nasik



Gym in EMRS Nasik

Hand wash Points in EMRS Nasik

Table 8.7.1: Strengths and difficulties of EMRS programmer pointed out by stakeholders and their suggestions for strengthening EMRS

Stakeholder	Strengths	Difficulties	Suggestions
Principal	<p>EMRS;-NASIK The student are imparted education through English medium affiliated to CBSE. No of activities are conducted that is curricular, co- curricular and extra-curricular to bring out all round development of the student. Various activities like Debate speech, drawing, quiz, dance, singing, skill competition are organized.</p> <p>EMRS;-RAMTEK The School strictly follow the CBSE and the school show good result every year. Cultural activities are carried out and their hidden talent are nurture Social awareness program such as cleanness plantation save girl are done</p> <p>ST & SC:-CHANKAPUR School is GT 3 RCC Building. Environment is good for study.</p>	<p>No provision to fill up the vacant seat after class VII and admission of class XI. No rules and regulations are applied to teaching and non-teaching staffs. Vacancies of art & music teacher and class IV staffs.</p> <p>Infrastructure is not sufficient for CBSE school Smart class , highly equipment for game and sports</p>	<p>Vacant seats of class IX and XI should be filled through entrance test. Class XI admission process is adopted just like JNV. All benefit should be provided to staffs. MPSR rules should be applied to staff.</p> <p>School building should be construction Maximum grant and aid should be provide.</p>

<p>Teachers</p>	<p>EMRS;-NASIK This school run for only ST student's total English medium with CBSE curriculum. Students are admitted through entrance test. Different activities like arts competition, quiz competition, hand writing, essay writing competition are conducted.</p> <p>EMRS;-RAMTEK The EMRS School is built up students moral and scientific values. To give better education than other school institution for tribal student So that they go the professional medical and technical education. To provide competitive exam. Oriented coaching and classes. Conduct yoga and meditation related programme.</p>	<p>No service rule of the staff. Marathi medium students come from Marathi medium in VI standard. So it is difficult to teach them. No compulsion to take admission Students are not interested to stay away from house. No benefits for six pay commission. No medical facilities Student of six standard can't speak, write and understand Marathi as well as English. The school infrastructure is poor, therefore study atmosphere is highly affected. In teaching of science subject need of scientific lab and equipment. Inadequate fund for student recreation.</p>	<p>Apply the service rule as per government. Staff requirement according to the GR of 11th September 2000 for EMRS employs of Maharashtra government. Medical facilities should be given employees. For quick service rule for employees Requirement of Arts and Science stream.</p> <p>Proper selection of students who enrolled in EMRS should be very proper so that eligible students can be enrolled. Proper infrastructure should be built up as early as possible. Need of well equipment and library books.</p>
<p>Hostel Superintendent</p>	<p>EMRS;-NASIK 24 X 7 hrs Lady super tend available. Staff nurse for health problem. Well construction building. Educational environment. Good food qualities. All round development. Personal attention to every student. Gym facilities to every student.</p>	<p>No service rule of the staff Students are not interested to stay away from house.</p>	<p>One peon, Clerk and Security guard should be appointed. There should be separate fund for the hostel management. One assistant should be appointed to help super tented</p>

	<p>Every day supervise study. Celebration of all festival.</p> <p>EMRS;-RAMTEK</p>		
Students	<p>EMRS;-NASIK</p> <ul style="list-style-type: none"> • School teacher are very friendly • Student are cooperative to each other. • Hostel supervisor help us to solve our problem. <p>EMRS;-RAMTEK</p> <ul style="list-style-type: none"> • School teachers are friendly. • Teachers understand our problems. • Student are cooperative and helping in nature. • Teachers teach well. 	<ul style="list-style-type: none"> • Worker's attitude for serving hostel • Student do not like the quality of school uniform. • Food management. • No water purify. • Dinner time should be changed. • Requirement for sports equipment, computer, language lab. • Special teacher for sports, arts, dance and music. • Yoga and playground. • Infrastructure of the school and hostel. • Lacking of School playground. • Study disturbed by the vehicles running on the road as the school is situated at road side. • Classroom is crowded. 	
Community Members	<p>EMRS;-NASIK</p> <ul style="list-style-type: none"> • The school is far better from other school in every aspect. • Better food Better education than other ashram school. <p>EMRS;-RAMTEK</p> <ul style="list-style-type: none"> • Students get better education than the ashram school. 	<ul style="list-style-type: none"> • Salary of the staff • EPF, GPF should be available for staff • Good food and drinking water facilities. 	<ul style="list-style-type: none"> • Adequate staff should be employed. • Playground should be available for the

		<ul style="list-style-type: none"> • School and hostel infrastructure should be developed. 	students.
Educational Administrators			<p>EMRS;-RAMTEK</p> <ul style="list-style-type: none"> • Infrastructure and staff position should be improved. • Quality of food should be improved. • Special attention should be taken for tribal culture



Student's assessment in Laboratory in EMRS Nasik

Chapter 9

SUMMARY FINDINGS AND OBSERVATIONS

9.1 School and Hostel Infrastructure Facilities

- The land allocation for schools were adequate and were in the range of 13 to 30 acres all types of schools.
- None of the schools had common room for either boys or girls. While each of the five sampled schools (EMRS, ST & SC and JNV) had building spaces marked for the Principal's room, teachers' common room, office room, kitchen, store room and prayer space, there were no common rooms or auditorium for students. Each of the schools had physics, chemistry, zoology and botany and IT labs. The rooms marked for different labs did not function in one of the ST & SC schools and some of these rooms were used for higher-secondary student accommodation. The English language laboratory was found only in EMRS in Nasik. Formal library, reading room and SMART classes were available in EMRS in Nasik and JNV in Khedgaon but not in any of the ST & SC schools. The EMRS had library facilities but no adequate reading room. The conditions of labs, library and reading rooms were better in EMRS and JNV as compared to that of ST & SC schools. On most of the important parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.
- The major source of drinking water in all schools was bore well. Drinking water was adequate in all the schools. Furthermore, drinking water safety was a major concern in SC& ST schools. But at least soap was provided at hand wash points and hand wash was available as per the requirements of students in ST & SC schools.
- Approximate number of children per toilet in EMRS was alright, except that they were not maintained as per hygienic standards and some of them remained non-functional. The situation in JNV was much better in comparison to EMRS and SC& STs schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.
- All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.
- Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Each school had entrance gate, boundary wall but due attention was not been paid to raising and maintaining gardens and kitchen gardens.
- Power supply was a major concern for the schools because there were frequent power cuts particularly in ST & SC schools in Chankapur and Belda. On an average, power failure was reported for about 4-5 hours in Ramtek and for about 7-8 hours in ST & SC schools. In case of power cuts, power supply was done through generators owned by the school.
- While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.
- Nearly 100% of students in EMRS and JNV stayed in hostels. 40% of students in ST & SC schools did not stay in hostels.
- For those students who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor as many of them were sleeping on the floor or sharing beds with others in rooms without proper light and ventilation and in many instances not having fans. Many rooms had

leaking roofs and accommodation hardly met safety and child-friendly parameters. With about 10-12 square feet of space per boarder, particularly for girls, the space was highly inadequate in ST & SC schools. . The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to SC& ST schools and EMRSs.

- EMRS, ST & SC schools and JNV schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels.
- Drinking water was adequate for all boarders in EMRS, ST & SC schools and JNV hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity.
- The toilet condition and cleanliness was poor in ST & SC schools, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not satisfactory in ST & SC schools.
- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were taken in ST & SC schools while fire-safety measures provided were inadequate in EMRS as well as JNV.
- Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference.

9.2 Staff Profile and Service Condition

- The pupil-teacher ratio (PTR) was good in all the schools as per state norm. 27% of the teaching and 20% of the non-teaching positions were lying vacant in EMRS compared to 17% and 19% in ST & SC schools. No single teaching and non-teaching post is vacant in JNV.
- There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities. Teachers were trained in all the schools. Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience.
- Among the non-teaching staff, there were more employees from the ST community in ST & SC schools compared to those from the SC or general category. Among the non-teaching staff, there were more employees from the general community in JNV and EMRS schools. Regarding training of non-teaching staff 100 % of non-teachers in ST & SC schools did not receive any formal training as required in their respective jobs in comparison to 95 % in EMRS and 88% in JNV schools. Nearly 50% of non-teaching staff has less than 5 years of experience on the job.
- No teaching and non-teaching staff were engaged on contractual basis in ST & SC schools whereas 52% of the teaching staff and 61% of non-teaching staff were engaged on contractual/daily wage basis in EMRS. No teaching staff even was engaged on contractual/daily wage basis in JNV. Only 12 % non-teaching staff was engaged on contractual/daily wage basis in JNV schools.
- The monthly emoluments of the principals are satisfactory in all the schools. However the salary of principals, PGT teachers were more satisfactory in JNV schools, as of EMRS at the lower side. The TGTs and assistant teachers were also getting more salary in ST & SC schools and JNV in comparison to EMRS teachers. The picture in respect of the monthly emoluments of the non-teaching staff across different types of schools was almost better in JNV in comparison to other schools. The monthly emoluments of non-teaching staff were at lower side in comparison to JNV and ST & SC schools.

- The non-teaching staff of EMRS and ST & SC schools received hardly any training. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

9.3 Student Enrolment and Retention

- The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools.
- The ST & SC schools catered to the needs of more students compared to EMRS and JNV, of course, most of the time sacrificing quality. A rough calculation of the classroom floor space per student in EMRS was about 8 to 9 sq. ft., while that in ST & SC schools was 7-14 sq. ft. and in JNV about 8 sq. ft. Average number of students per classroom was approximately 30-35 in EMRS and JNV, and 60-65 in ST & SC schools.
- Children from SC, ST and general categories were in ST & SC schools, and JNV. EMRS was primarily meant for students from the ST community. This is reflected in the differential category-wise student strength in different types of schools. Student attendance was satisfactory in JNV in comparison to EMRS and ST & SC schools.
- Percentage of students admitted to Class VI in 2010-11, completing the educational cycle in Class X were 87.5% in EMRS, 75.5% in ST & SC schools and 95% in JNV. During earlier years, students completing the educational cycle also fell short of 100% in EMRS. Percentage of students admitted to Class XI in 2013-14, completing the educational cycle in Class XII were 92.5% in EMRS, 88.5% in ST & SC schools and 97% for JNV.
- Noticeably more number of students drop out from SC& ST schools compared to EMRS. More students dropped out at the elementary stage compared to secondary and higher-secondary stages, particularly in ST & SC schools.

9.4 School and Hostel Educational Climate

- The school campus and classrooms appeared to be clean in JNV, manageable in both EMRS and SC & ST schools. Dustbins were not available inside the classrooms in all the schools. Initiative for school campus beautification was good in JNV but manageable in both EMRS and ST & SC schools.
- While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was not done frequently in EMRS and ST & SC schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.
- In EMRS, ST & SC schools and JNV schools, no TLM corner was evident in classrooms. Wall magazine was updated in only EMRS and JNV, games and sports equipments were not adequate in all the schools, wall activities were nearly absent and suggestion boxes were not used by the students in all the schools. The library-cum-reading room was good in JNV, manageable in both EMRS and in ST & SC schools. Children's hygienic habits are good in EMRS, ST & SC schools and JNV schools.
- The distribution of textbooks in EMRS, ST & SC schools and JNV schools was satisfactory as 100% of students' textbook requirements were met.
- In EMRS, ST & SC schools and JNV schools, courses were completed as per syllabi and on time. Time table and academic calendars were prepared, SDPs were prepared in EMRS and JNV. Students were given home assignments EMRS and JNV. Lesson plans were not properly prepared and maintained in all types of schools.
- The status of EMRS did not turn out to be satisfactory in respect of activity-based teaching. Regular correction of students' work was average in EMRS and SC&ST schools. Students' work was regularly corrected in JNV. Project assignments, home assignments were given in EMRS & JNV. Use of e-content in SMART classes was not found in EMRS and SC& ST schools, JNV was relatively better because of activated smart classes, use of e-content, tele-teaching facility compared to other schools in respect of these school-related activities.

- The classrooms were teacher-directed in all types of schools. Student participation was noticed to some extent in all the schools. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLMs were not used by students in EMRS and SC&ST schools. The situation in JNV was slightly better but far from being excellent in all aspects.
- The nature for student engagement in classroom teaching was average. Their participation in classroom learning was good in JNV and EMRS in comparison to ST & SC schools.
- TLMs and TLEs were not available in classrooms for ready use by the teacher while teaching. Students hardly got opportunities to handle the TLMs themselves.
- Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was slightly better than that of EMRS. The SC& ST schools appeared to be weak on many fronts.
- Most of parameters in adopting CCE was unsatisfactory in ST & SC schools. JNV performed better in all aspects of CCE in comparison to EMRS. Formative evaluations, summative evaluations, assessing through oral questions, assessing through observations were done in EMRS and JNV. Only summative evaluations on half-yearly and yearly basis were done in ST & SC schools. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Parental assessment was not done in all the three schools. Maintaining student portfolios and anecdotal records was unsatisfactory in all the schools.
- Group-based assessments and assessment of socio-personal qualities were evident in EMRS and JNV. The cumulative progress cards were properly maintained in all the schools. The quality of feedback provided to the students was satisfactory in all the schools except in ST & SC schools.
- On parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness while light and ventilation in rooms, provision of garbage disposal pit and drainage system and attempt to beautify the hostel campus were on the weaker side. Most of the conditions in ST & SC schools were unsatisfactory or inadequate. The JNV was better in many respects in comparison to EMRS and ST & SC schools.
- First-aid boxes were available in hostels of all types of schools. Fire safety measures were inadequate in EMRS, ST & SC schools and JNV. Health check-up schedule was irregular in EMRS and ST & SC hostel s. No ANM/ health worker was available EMRS, ST & SC schools except in JNV. Children's hygienic habits were good in all the schools.
- In EMRS, house system was functional. Cultural activities and annual functions were held in EMRS. Students used suggestion box in EMRS but wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, ST & SC hostel s were weak on many fronts. The picture in JNV was better than EMRS in hostel residential parameters.
- The mess committees consisting of students were functioning satisfactorily in EMRS and JNV in comparison to SC and ST schools. The presence of students in remedial classes was ensured by locking up the hostel rooms in EMRS and JNV.
- On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostel s was poor and it was good in JNV. There was no smokeless cooking in EMRS. The drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate in EMRS. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- The fire and health-related safety measures in EMRS and ST & SC hostel s was poor while the safety measures were better in JNV.

- The quality of meals and supervision by teachers were satisfactory in both EMRS and JNV hostels and relatively unsatisfactory in ST & SC schools. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes take lunch with the students.

9.5 Students' Educational Attainment

- In all the four subjects, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- It may however be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in ST & SC schools scored in the range of only 25% to 35% across four subject areas, while those in EMRS scored in the range of 27% to 48%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 40% to 80 % across the four subject areas.
- ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in Science & Social Science attainment. It was only in Social Science and Science that noticeable differences were not observed between the ST students in EMRS and JNV.
- The performance of ST students in ST & SC schools and EMRS was poor while in JNV, it was relatively better in all subjects except social science in ST & SC schools. The ST students in ST & SC schools performed in the range of 24% to 47% while their performance in EMRS was within 30% to 41% and in JNV in the range of 42% to 67%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- There were no SC students in EMRS & ST & SC schools. The performance of SC students in JNV schools was average poorer SC students performed almost at an equal level with ST students in the JNV.
- The performance of general category students in ST & SC schools was not better than JNV. The general students of JNV are highly better than general students of ST & SC schools.
- The performance of students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 28% to 34%, while those in EMRS showed attainment in the range of 36 to 61%. The students in JNV performed in the range of 54% to 79%.
- The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed poorly in all subject areas. Students in JNV scored highest in English followed by Science, Mathematics and Social Science.
- ST students in JNV performed better than ST students in EMRS in English, Maths & Science. EMRS students did better in Social Science EMRS students were also better than ST students in ST & SC schools.
- It was only in English language subject between EMRS and JNV and in Social Science subject between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant. In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS & ST & SC schools other than Social Science.
- On an overall basis, SC students in EMRS performed better in Mathematics & Social science. They are poor in English and Science. JNV students were better in English and Science.
- The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools However, the differences between EMRS schools were better in all subjects than ST & SC schools. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.

- The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 41% only in English. The performance of students in JNV was also poor in all subjects except in English.
- Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- ST students in EMRS and those in ST & SC schools differ only in English subject. Even the ST students in JNV maintained their initial advantage over the ST students in ST & SC schools in all subjects. Differences were significant only in English and Biology. The ST students in EMRS performed at par with ST students in JNV in all subjects. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- The trend was almost the same for general students in JNV & ST & SC schools. The performance differences narrowed down with JNV maintaining a slight advantage in only English and Physics.
- On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.
- More percentages of students in JNV & EMRS were towards the higher end of the score continuum compared to the percentages noticed for ST & SC schools. In 2014, none of the students in EMRS & JNV scored below 40%. 21% of ST & SC School students got less than 50% and none of them got above 80%. In JNV none of the students got less than 60% and 12% of students got above 90%.
- The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 80% to 90% bracket.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 50% to 60% for ST & SC schools, 60% to 70% for EMRS and 80% to 90% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.
- During the last five years, none of the students of JNV, 6% of students of EMRS and 19% of the students of ST & SC schools scored below 40%, while 23% of students of JNV & 20% students of EMRS and none from the SC & STs schools scored above 90%.
- The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.
- Maximum number of students scored in 60% to 70% bracket in EMRS and in 80% to 90% bracket in JNV in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1% of EMRS students scored above 80%, 31% of JNV students scored above 27%. There was approximately gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 60% to 70% bracket and maximum number of JNV students scored in the 90% to 100% bracket. None of the EMRS students scored below 50% and none of the JNV students scored below 50%, while less than 0% of EMRS students scored above 80% and 16% of JNV students scored above 80% of whom 44% scored above 90%. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.
- In class XII Board examination in 2014, 51% of ST students across all types of schools scored below 60%, while 68% of SC students and 38% of the general students scored below 60%.
- Four percentage of ST students, 4% of SC students and 8% of general students scored above 80%. Maximum number of ST and general students scored in 60% to 80% bracket, while

maximum number of SC students scored in 33% to 66% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.

- Considering the Class XII Board examination results over the last three years (2012-14), the ST and general students performed at an equal level and both groups performed noticeably better than the SC students.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. Over the last three years 91,106,4107 number of students passed out respectively in EMRS, 105,116 & 122 nos. Of students passed out in SC/ ST schools. 76, 81 & 81 students passed out from JNV. But no date is available for different couriers.

9.7 Student Participation in Co-curricular and Social Activities

- It may be observed that more girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 15% to 20% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 50% to 70%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 20% of boys participated in football, volleyball and kabbadi.
- Zero percent of EMRS students were in NCC, 8% in Scouts and 0% in NSS, while 0% of ST & SC students were in Scouts and NCC and NSS were not adopted in ST & SC schools. Among JNV students, 0% adopted Scouts and 13% were in NSS. Shramdan was carried in all types of schools with maximum student participation in the range of 80% to 100%.
- 40% of EMRS students were involved in carrying out social awareness campaigns and none was involved in doing social service in villages, while the corresponding figures for JNV were 0% and 0% respectively. These activities were missing in ST & SC schools.

9.8 Schools-Community Linkage

- The participation of the community in school and hostel activities in all types of schools was not functioning in EMRS & JNV schools and was found to be negligible in ST & SC schools because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals, monitoring utilization of funds or in establishing coordination with other agencies. Their participation in preparing TLMs or in co-curricular activities in the school was very poor.
- The MTA were not functioning in EMRS and JNV and were also held as a matter of formality in ST & SC schools. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff in ST & SC schools where it was found to be functional.

- The teachers show interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

9.9 School Monitoring and Supervision

- During a span of one year, educational administrators (mostly C.I/ D.I /District Welfare Officers) visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.
- Class visits by the principals of EMRS appeared to be in the low range in comparison to JNV and ST & SC schools as there were about 3-10 visits a month covering classes of 19-21 teachers. The number of class visits by in ST & SC schools was better in comparison to EMRS schools as the range was in between 9-14 visits a month covering classes of 23-26 teachers. In JNV the range of visit was varied from 7-13 visits in a month covering between 15-17 teachers which was moderate in comparison to EMRS and ST & SC schools.
- The principals in EMRS visited boys' and girls' hostels about twice a week. The same was also true for ST & SC schools. The frequency of hostel visits by the principal of JNV was comparatively less and on enquiry it was known that superintendents (MOD & Housemasters) were doing their jobs with the principal being informed almost on a regular basis.
- The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

9.10 Stakeholders' Feedback and suggestions

Teaching and Non-teaching staff

- Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to EMRS schools with SC and ST schools coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed innovative teaching learning activities, completed course as per syllabus plan, TLMs were used during teaching learning activities, students' work was corrected regularly. Exchange of thoughts of students with teachers & subject experts was also done. In EMRS students were motivated to be sincere in their studies. In EMRSs, the areas which needed substantial improvement were salary / remuneration to the teaching staff, service conditions of teachers, service conditions of the non-teaching staff, prospect for future promotion, incentive plans for teachers, incentive plans for non-teaching staff, capacity building of the non-teaching staff, keeping a record of professional career of pass outs, allowing students to use TLMs. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as incentive plan for teaching and non-teaching staffs, keeping record of academic/professional career of pass outs, attendance in PTA meeting, relation with SMC members, relation with MTA members, relation with PRI members and personal contact with parents/ guardians.
- The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Relation with students, teachers and community was satisfactory in all the three schools. They were unhappy that attempts were not taken to provide capacity building

training to the non-teaching staff in JNV, EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

- In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.
- Except for incentive plans for students teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favourable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, prospect for promotion and provision of quarters inside the campus. The teaching staffs in JNV were not satisfied with the incentive plan for teachers.
- Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and bathrooms. Students in ST & SC schools also experienced the problems of unclean toilets. JNV fared much better in most of these parameters.
- Students perceived teachers to be supportive of them. The major issues inviting unfavourable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavourable. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.
- The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes in English and Hindi were most often not held because of shortage of teachers. There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues. Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of

sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

- FGDs involving 40 students in ST & SC schools revealed an unfavourable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. Only the national days (August 15, January 26) were celebrated as a matter of formality. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. The higher-secondary students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.
- FGDs involving 14 students in JNV revealed a favourable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favourable perception of school and hostel environment and facilities.
- Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labour, service or funds.
- Views of the Additional District Magistrate (ADM) and the Project Administrator (PA), ITDA, and that of the Project Administrator, ITDA, were available in respect of EMRSs and ST & SC schools at. They expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health check-up were necessary for proper policy implementation. Regular counselling and motivational programs for students

would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

9.11 EMRS Programme Strengths, Concerns and Suggestions

- Programme strengths (need to be maintained). The students were imparted education through English medium affiliated to CBSE. Number of activities are conducted in EMRS that is curricular, co-curricular and extra-curricular to bring out all round development of the student. Various activities like debate, speech, drawing, quiz, dance, singing, skill competition are organized. Cultural activities are carried out and their hidden talents are nurtured. Staff nurse is available for addressing the health problem of students. Personal attention to every student is given in EMRS.
- Concerns (need special attention). No provision to fill up the vacant seat after class VII and admission of class XI. No rules and regulations are applied to teaching and non-teaching staffs. There are vacancies of art & music teacher and class IV staffs. Infrastructure is not sufficient for CBSE School, no service rule of the staff, Marathi medium students come from Marathi medium in VI standard. It is difficult to teach them in English medium. There is a need of science laboratory and science equipment.
- Suggestions (need to be implemented). Vacant seats of class IX and XI should be filled through entrance test. All benefit should be provided to staffs. Playground should be available for students. Adequate staff should be employed. Staff requirement should be filled up according to the GR of 11th September 2000 for EMRS employs of Maharashtra Government. Medical facilities should be given to employees. Service rule for employees should be formed. Selection of students should be proper so that eligible students can be enrolled in EMRS. Proper infrastructure should be built up as early as possible.



Research team was interacting with the Students in EMRS Nasik

<i>Programme strengths</i> (Need to be maintained)	<i>Concerns</i> (Need special attention)	<i>Suggestions</i> (Need to be implemented)
<ul style="list-style-type: none"> • The student are imparted education through English medium affiliated to CBSE. • No of activities are conducted that is curricular, co-curricular and extra-curricular to bring out all round development of the student. • Various activities like Debate speech, drawing, quiz, dance, singing, skill competition are organized 	<ul style="list-style-type: none"> • No provision to fill up the vacant seat after class VII and admission of class XI. • No rules and regulations are applied to teaching and non-teaching staffs. • Vacancies of art & music teacher and class IV staffs. • Infrastructure is not sufficient for CBSE school • Smart class , highly equipment for game and sports 	<ul style="list-style-type: none"> • Vacant seats of class IX and XI should be filled through entrance test. • Class XI admission process is adopted just like JNV. • All benefit should be provided to staffs. • MPSR rules should be applied to staff. • School building should be construction • Maximum grant and aid should be provided



Solar Panel in EMRS Nasik

Section 8

Impact of Ekalavya Model Residential Schools in Enhancing the Educational Attainment of ST Children

(RAJASTHAN REPORT)

**Prepared
By**

**Scheduled caste and Scheduled Tribe Research and Training Institute
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Chapter 1

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 . School Infrastructure and Facilities

Each of the EMRS, ST & SC schools and JNV in Rajasthan are spread over acres of land with a lot of space for students to move around. The approximate average school campus area for EMRS, ST & SC and JNV are 28 acres, 25 acres and 30 acres, respectively. The built-up area for the EMRS school & hostel run about 33840 to 1,87,500 sq. ft., for ST & SC schools and hostels for students run into 1,04,712 sq. ft. and for the JNV to about 5, 16, 000 sq. ft. All the buildings are provided with safe habitations for students except that the EMRS and ST & SC schools required regular maintenance and white washing. The condition of the school and the hostel building in JNV were found to be better compared to those in EMRS and ST & SC schools. The EMRS and ST & SC schools did not fare well on hygienic parameters as toilets appeared not to have been maintained properly.

None of the schools had common room for either boys or girls. While the JNV had building spaces marked for the Principal's room, Vice Principals room, Teachers' common room, office room, kitchen, store room and prayer space, there were no common rooms or auditorium for students. Each of the schools had Physics, Chemistry, Biology and IT labs. The laboratory rooms were not adequate in EMRS and ST/SC Ashram Schools. The English language laboratory, library, reading room and SMART classes were available in JNV in Kalendri but not in any of the ST & SC schools & EMRSs. On most of the important parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools. The building condition of Ashram school, Nayagaon was found to be extremely unhealthy and inadequate in comparison with other schools. The infrastructure required for Ekalavya Model Residential Schools as per revised guidelines of Ministry of Tribal Affairs has not been followed in Rajasthan. The existing government schools have been renamed as EMRSs and further addition of infrastructure is yet to be implemented.

Tables given below provide information relating to water and sanitation facilities in school (Table 1.1.1), child-friendly and safety facilities (Table 1.1.2) and boundary wall, garden and school gate (Table 1.1.3).

Table 1.1.1: School wise Availability of Water and Sanitation Facilities (Rajasthan)

School	Drinking water			Hand wash		Toilet for Boys				Toilet for Girls				No. of children per toilet			
	adequate	Safety	Major source	Soap available	Hand washed before and after meal	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	No functional	Water facility in toilets	Cleanliness and condition	Soap & accessories available	Used by all children	Boys	Girls

EMRS	ABUROAD	NO	YES	SW	YES	YES	10	YES	**	YES	YES	No girls				28	-	
	NEWAI	YES	YES	SW	YES	YES	No boys				10	YES	**	YES	YES	-	31	
SC & ST	NAYAGAON	NO	NO	SW	YES	YES	1	NO	*	NO	YES	No girls				122	-	
	DHIKILI	YES	YES	BW	YES	YES	No boys				5	YES	**	YES	YES	-	39	
JNV	KALANDRI	YES	YES	BW	YES	YES	20	YES	***	YES	YES	22	YES	***	YES	YES	14	12

BW: Bore well SW: Supply water *** Good, ** Manageable, * Poor

Table 1.1.2: School-wise Availability of Child-friendly and Safety Facilities (Rajasthan) (ramp & rail/ slides & swings/ playground/ Fire Safety)

School	Approximate no. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in classrooms	Fire safety
EMRS	40	Only to a few block	Nil	NO	Only for a few games	NO	Inadequate
SC & ST	63	Only to a few block	Nil	NO	Only for a few games	NO	Inadequate
JNV	24	Only to a few block	Nil	NO	Only for a few games	NO	Inadequate

Table 1.1.3: School-wise Availability of Boundary Wall, Garden, Kitchen Garden and School Gate (Rajasthan)

School	Boundary Wall	Garden	School gate
EMRS: ABUROAD	YES	M	YES
EMRS: NEWAI	YES	NA	YES
SC & ST: NAYAGAON	YES	NA	YES
SC & ST: DHIKILI	YES	M	YES
JNV: KALANDRI	YES	M	YES

M: Manageable NA: Not Available

- The major source of drinking water in all schools was bore well. Drinking water was not adequate in one of the ST & SC schools at Nayagaon. Furthermore, drinking water safety was a major concern in ST & SC schools. Soap was provided at hand wash points but detergent was not supplied as per the requirements of students in ST & SC schools.
- Approximate number of children per toilet in EMRS was almost 50% less. The situation in JNV was much better while that in SC & STs schools was not at all satisfactory. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV. In the absence of functional toilets in Nayagaon, some children were going out into the open for toilet work.
- All schools fell short of child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in all schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.
- Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Each school had entrance gate, boundary wall. Due attention has not been paid to raising and maintaining gardens and kitchen gardens in Nayagaon Ashram School and EMRS, Aburoad. The water problem persists in Ashram School, Nayagaon which can be largely compensated by proper water harvesting measures on which the school authorities have not been trained. Girls' hostels do not have separate boundary walls.
- Power supply was a major concern for the schools because there were frequent power cuts particularly in Abu Road EMRS and ST & SC schools in Nayagaon. On an average, power failure was reported for about 2-3 hours in Abu Road and for about 5-6 hours in ST & SC schools at Nayagaon. In case of power cuts, power supply was done through generators owned by the school.
- While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.

1.2. Hostel Infrastructure and Facilities:

Tables given below present information on hostel infrastructure and facilities (Table 1.2.1), availability of different types of rooms and their conditions (Table 1.2.2), water and sanitation facilities in hostels (Table 1.2.3), child-friendly and safety facilities (Table 1.2.4) and presence of hostel boundary wall, garden and kitchen garden (Table 1.2.5).

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels (Rajasthan)

School type	School		Student strength		Condition of the hostel			Accommodation space per student	
			No in school	% staying in hostel	Safety	leaking	Light & ventilation	Sq. ft. per student (app.)	Adequacy
EMRS	ABUROAD	BOYS	289	100	Manageable	NO	Manageable	33	Adequate
		GIRLS	No girls						
	NEWAI	BOYS	No boys						
		GIRLS	310	100	Manageable	NO	Manageable	106	Adequate
SC & ST	NAYAGAON	BOYS	122	100	Manageable	NO	Manageable	126	Adequate
		GIRLS	No girls						
	DHIKILI	BOYS	No boys						
		GIRLS	197	100	Manageable	NO	Manageable	45	Adequate
JNV	KALANDRI	BOYS	360	100	Good	NO	Good	39	Adequate
		GIRLS	180	100	Good	NO	Good	26	Adequate

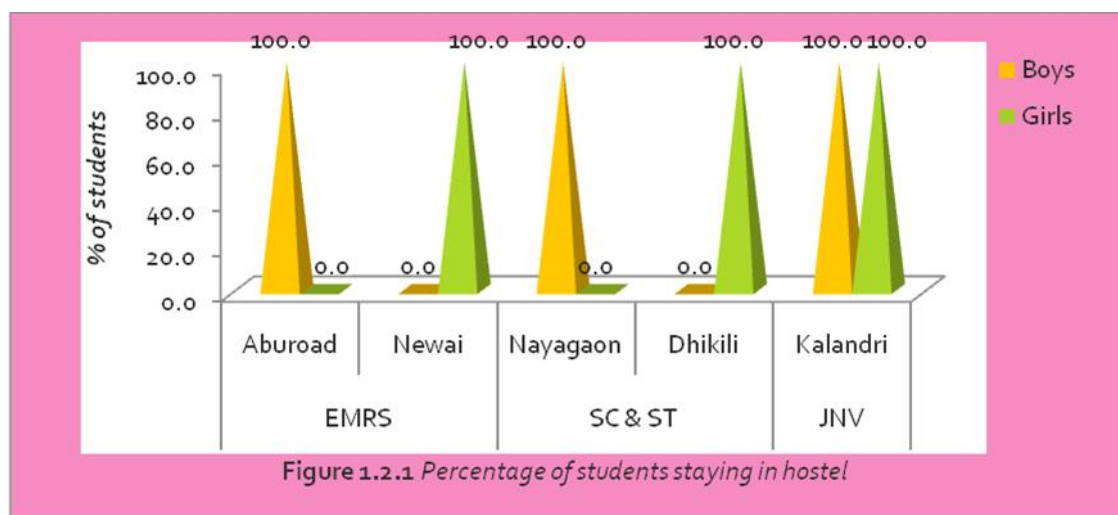


Table 1.2.2: Availability and condition of different types of rooms in boys' and girls' hostels by school type

Types of rooms	EMRS				SC & ST				JNV	
	ABUROAD		NEWAI		NAYAGAON		DHIKILI		KALANDRI	
	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond	Avlblty	Cond
Superintendent's room /quarters	Y	M	Y	M	Y	G	Y	M	-	-
Dining room	Y	G	Y	P	Y	P	Y	M	Y	G

Living room	Y	M	Y	P	Y	P	Y	M	Y	G
Kitchen room	Y	M	Y	M	Y	P	Y	P	Y	G
Store room	Y	G	Y	M	Y	M	Y	P	Y	M
CCA room	Y	M	-	-	Y	M	Y	M	-	-
Sick room	-	-	-	-	-	-	-	-	Y	G
Prayer room	Y	P	-	-	Y	M	-	-	-	-
Auditorium / assembly	-	-	-	-	-	-	-	-	-	-
Security room	-	-	-	-	-	-	-	-	Y	M

Y: Yes, G: Good, M: Manageable, P: Poor

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities (Rajasthan)

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
			Major source	adequate	Adequate	Flow of water to toilets	No functional	Cleanliness and condition	Soap & accessories available	Used by all children	
EMRS: ABUROAD	Boys	No	Bw/SW	No	NO	NO	50	**	NO	YES	06
	Girls	No Girls									
EMRS: Ewai	Boys	No boys									
	Girls	YES	BW/SW	NO	NO	NO	32	**	NO	YES	09
SC & ST: Nayagaon	Boys	NO	BW/SW	NO	NO	NO	10	**	NO	YES	12
	Girls	No Girls									
SC & ST: Dhikili	Boys	No boys									
	Girls	NO	BW/SW	NO	NO	NO	32	*	NO	YES	06
JNV: Kalandri	Boys	YES	BW/SW	YES	YES	YES	118	***	YES	YES	03
	Girls	YES	BW/SW	YES	YES	YES	18	***	YES	YES	10

Bw: Bore well SW-Supply Water

Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities (Rajasthan)(ramp & rail, slides & swings, playground)

School	Approximate no. of children per hand wash point	Ramp & Rail to Blocks	Ramp & Rail to Toilets	Slides & Swings	Playground	Double doors in hostel rooms	Fire safety
EMRS	33	NIL	NIL	NIL	Only for a	No	Inadequate

					few game		
SC & ST	15	NIL	NIL	NIL	Only for a few game	No	No
JNV	20	NIL	NIL	NIL	Only for a few game	No	inadequate

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden, Kitchen Garden (Rajasthan)

School	Boundary Wall in girls' hostel	Garden	Kitchen Garden
EMRS: Aburoad	-	-	-
EMRS: Newai	Yes	Poor	NA
SC & ST: Nayagaon	-	-	-
SC & ST: Dhikili	Yes	M	NA
JNV: Kalandri	Yes	M	M

M: Manageable NA: Not Available

- * Nearly 100% of students in all types of schools stay in hostels.
- * For those students who stayed in ST & SC hostels, Nayagaon, the infrastructure and accommodation facilities were poor as many of them were sleeping on the floor or sharing beds with others in rooms without proper light and ventilation and in many instances not having fans. The infrastructure facility in EMRS, Aburoad and EMRS, Newai are in a state of manageable parameter. Many rooms had leaking roofs and accommodation hardly met safety and child-friendly parameters. JNV projected a much better picture compared to ST & SC schools and EMRSs.
- * Needless to mention that all schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools results in very poor monitoring and supervision of hostels. EMRS fares better than ST & SC schools. Supervision of hostel facilities was better in JNV.
- * Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and there is no continuous flow of water into toilets giving rise to problems in toiletry & bathing.
- * The toilet condition and cleanliness was poor in ST & SC schools, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.

- * Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to all hostel blocks and toilets. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- * Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- * Power supply was a major concern in the school and hostels because there were frequent power cuts particularly in Abu Road EMRS and ST & SC schools in Nayagaon. The furniture supply in hostels was inadequate. In EMRSs, students had been provided with no study tables and chairs. Besides having no tables and chairs in ST & SC schools, cots were not also made available to all boarders. In JNVs, arrangements for facilitating students' study were better and the design adopted for beds and study could be adapted in other hostels.

1.3 Financial Support

Table 1.3.1 reveals that on an average the expenditure incurred in respect of funds allocated to different types of schools were spent close to 100% mark. While schools lacked many facilities, it is difficult to reconcile why less funds are allocated to specifically EMRSs resulting in deficiency of required infrastructure to bring the school at par with the Navodaya Vidyalayas. This aspect requires relook in the right earnest.

Table 1.3.1: Receipt and use of funds by schools in Rajasthan during 2014-2015

School		Total fund received	Utilized	% utilized	Department providing funds
EMRS	ABUROAD	2,05,06,000/-	2,05,06,000/-	100	
	NEWAI	58,82,000/-	58,20,000/-	98.94	
SC & ST	NAYAGAON	32,50,000/-	32,50,000/-	100	ST & SC DEVELOPMENT DEPT.
	DHIKILI	57,80,000/-	57,80,000/-	100	
JNV	KALENDRI	3,55,35,000/-	3,54,65,000/-	99.80	NAVODAYA BIDYALAYA SAMITI

Chapter 2

PROFILE OF TEACHING AND NON-TEACHING STAFF

It is teachers' motivation and engagement with students, which matters in judging the quality of educational climate of the schools. Teachers nature of employment, training status, salary structure and service conditions determine to a large extent their attitude and motivation towards education. This section presents the profiles of teaching and non-teaching staff (Tables 2.1.1 to 2.1.3), employment status and service benefits (Tables 2.2.1 & 2.2.2).

2.1 Profile of Teaching and Non-Teaching Staff

The sanctioned posts and vacancy positions of the teaching and non-teaching staff are given in Table 2.1.1. The percentage of vacancy positions by school type is plotted in Figure 2.1.1.

Table 2.1.1: Sanctioned Strength and Vacancy Position of Teaching and Non-Teaching Staff

School		Position	Principal	Vice-Principal	PGT	TGT/Music/Art	PET	Lab Asst.	Librarian	Accountant	Head clerk	Clerk	Peon	Night watchman/ Sweeper	Warden/Catering Asst.	Matron	Staff Nurse	CCA		
EMRS	ABUROAD	SP	01	01	08	09	01	02	01	-	-	02	-	-	-	-	-	-	06	
		Vac	00	00	01	02	00	01	01	-	-	01	-	-	-	-	-	-	-	00
	NEWAI	SP	01	-	08	09	01	02	01	-	-	01	-	02	-	-	-	-	-	06
		Vac	01	-	06	05	00	01	00	-	-	00	-	00	-	-	-	-	-	00
SC & ST	NAYAGAON	SP	01	-	05	06	01	-	-	-	-	01	-	01	-	-	-	-	-	06
		Vac	01	-	04	01	01	-	-	-	-	01	-	01	-	-	-	-	-	00
	DHIKILI	SP	01	-	05	07	01	02	-	-	-	01	-	-	-	-	-	-	-	05
		Vac	00	-	00	00	01	02	-	-	-	01	-	-	-	-	-	-	-	00

JNV	KALANDRI	SP	01	01	10	14	02	01	01	01	-	05	02	02	02	01	01	03
		Vac	00	00	01	02	00	00	00	00	-	00	00	00	00	00	00	00

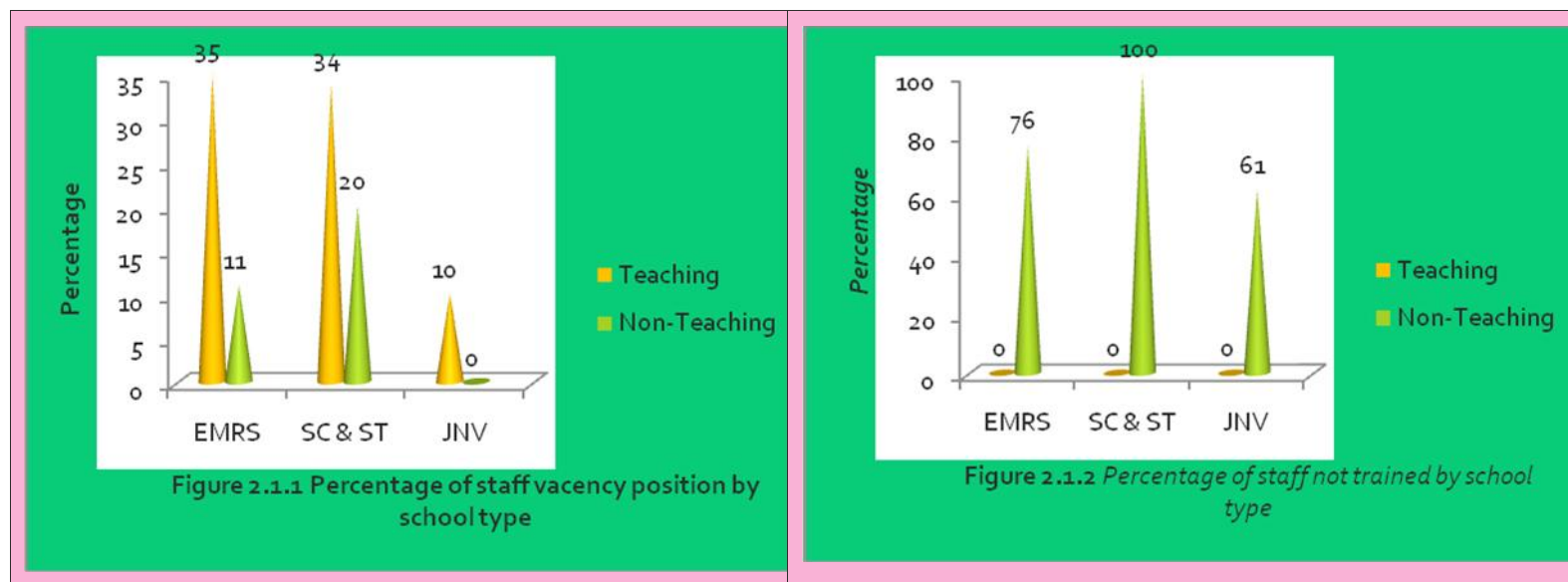
SP: Sanctioned Post, Vac: Vacancy

Table 2.1.2: Profile of the Teaching Staff

School		No of Teachers in Position	Pupil-Teacher ratio in School	Category			Training Status		Length of Teaching Experience		
				ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	ABUROAD	17	1:17	01	03	13	17	00	00	00	17
	NEWAI	07	1:44	01	00	06	07	00	00	00	06
SC & ST	NAYAGAON	06	1:20	03	00	03	06	00	01	03	02
	DHIKILI	13	1:15	04	00	09	13	00	00	00	13
JNV	KALANDRI	24	1:21	01	05	19	24	00	01	05	19

Table 2.1.3: Profile of the Non-Teaching Staff

School		No of Non-Teaching Staff in Position	Category			Training status		Length of experience		
			ST	SC	Gen	Trained	Untrained	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	ABUROAD	07	03	03	01	02	05	03	01	03
	NEWAI	10	08	00	02	02	08	02	06	02
SC & ST	NAYAGAON	07	06	01	00	00	07	01	04	02
	DHIKILI	05	05	00	00	00	05	03	02	00
JNV	KALANDRI	13	02	03	08	05	08	02	03	08



- * Analysis of vacancy positions by school type indicated that 35% of the teaching and 11% of the non-teaching positions were lying vacant in EMRS compared to 34% and 20% in ST & SC schools and 10% and 0% in JNV (Figure 2.1.1).
- * The pupil-teacher ratio (PTR) was high in EMRS, Newai, & Ashram School, Nayagaon but were good in other schools.
- * There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities. It was a positive indication that 100% teachers are trained in all types of schools. Nearly more than 90% of teachers in all schools taken together had more than 5 years of teaching experience.
- * Among the non-teaching staff, there were more employees from the ST community compared to those from the SC or general category. & 6% of the non-teachers in EMRS and 100% in ST & SC schools and 61% of non-teachers in JNV did not receive any formal

training as required in their respective jobs (Figure 2.1.2). Nearly 70% of non-teaching staff have more than 5 years of experience on the job.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

Tables 2.1.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

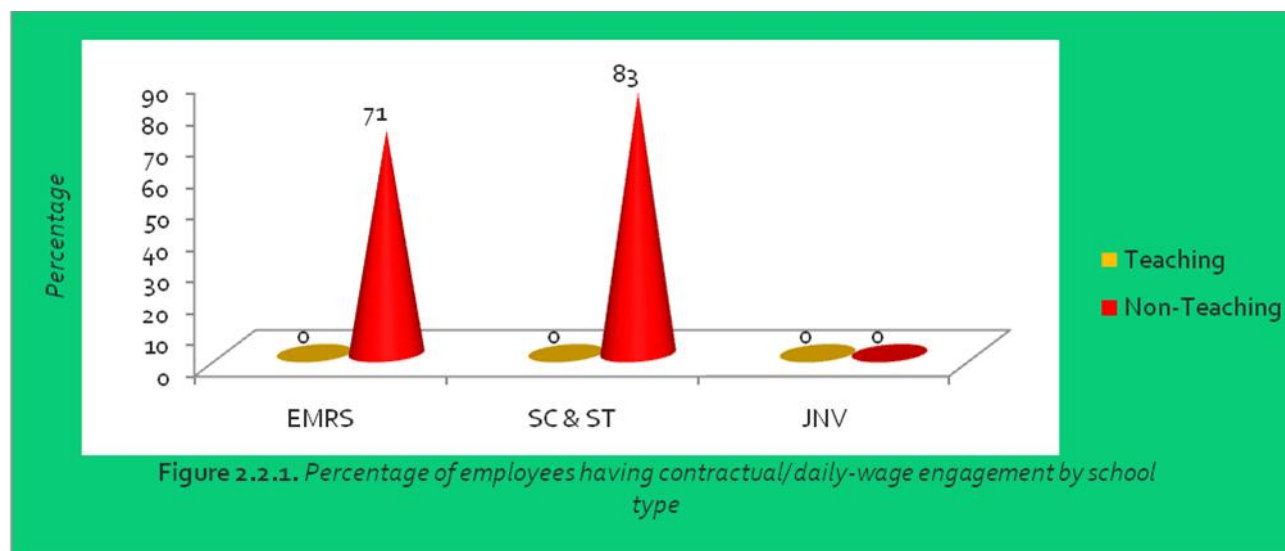
Table 2.2.1: Nature of employment of the teaching staff and service benefits

		No of Teaching Staff in Position	Nature of Employment			Gross monthly Emoluments/Salary in Rupees (Range)						
			Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/Music/ Art	PET	Lab Asst/ Asst teacher	Librarian
EMRS	ABUROAD	17	17	00	00	15600-39100	9300-34800	9300-34800	9300-34800	9300-34800	9300-34800	-
	NEWAI	07	07	00	00	9300-34800	-	9300-34800	9300-34800	9300-34800	-	-
SC & ST	NAYAGAON	06	06	00	00	9300-34800	-	9300-34800	9300-34800	-	-	-
	DHIKILI	13	13	00	00							
JNV	KALANDRI	24	24	00	00	9300-34800	9300-34800	9300-34800	9300-34800	9300-34800	5200-20200	9300-34800

Table 2.2.2: Nature of employment of the non-teaching staff and service benefits

		Nature of Employment		Gross monthly Emoluments/Salary (Range)									
		Regular	Contractual	Head Clerk/OS	Accountant/JDC	Clerk/LDC	Librarian	Warden	Peon Art	Night watchman / Sweeper	CCA	Matron	Staff Nurse
EMRS	ABUROAD	02	05	-	-	5200-20200	-	-	-	-	4000	-	-
	NEWAI	03	07	-	-	5200-20200	5200-20200	-	-	-	4500	-	-
SC & ST	NAYAGAON	01	06	-	-	-	-	-	-	5200-20200	4000	-	-
	DHIKILI	01	04	-	-	-	5200-20200	-	-	-	4000	-	-
JNV	KALANDRI	13	00	5200-20200	5200-20200	5200-20200	9300-34800	-	-	5200-20200	5200-20200	7500	9300-34800

Note: The contractual non-teaching staffs in JNV were employed on daily-wage basis.



- * The Ekalavya Model Residential Society has not been constituted as yet in Rajasthan and as such document pertaining to Service condition of employees of EMRS was not available in Rajasthan. There is no bye law, no specific guideline for EMRSs. The Government run Model schools have been re designated as EMRSs with least innovative majors in the light if EMRS guidelines of Ministry of Tribal Affairs. Government teachers have been either deployed or deputed to such schools to run the schools. Engagement of teachers under the EMRS Society is yet to be taken up to meet the requirement of the Society. Astonishingly and regrettably, there were no service conditions for EMRS teaching and non-teaching staff. The present deputed staff are guided by State government rules as the staff are government servants. Nearly 83% non-teaching staff in ST & SC schools and 71% in EMRSs were employed on contractual basis. The picture at JNV is quite positive. (2.2.1).
- * There are no Service rules for EMRS employees. Teaching staff have not been engaged in EMRSs for which the schools are running with the help of government teachers deployed temporarily as a stop gap arrangement. They lack the initiative and ownership required for such society run schools. This adversely influences the remedial coaching required for slow learners. Due to lack of infrastructure like government quarters, the teachers are not staying in the school campus and as such the residential students do not reap the benefit of teachers guidance so intimately evident in the schools established in the residential set-up. Non-teaching staff are noticeably getting much less salary as compared to the JNVs. The noticeable differences worked to the disadvantage and had a depressing effect on their motivation and commitment. (Table 2.2.2).
- * Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS staff are issues of concern and need to be addressed to ensure quality processes and outcomes.

2.3 Capacity Building of Teaching and Non-teaching Staff

Capacity building training for teachers in EMRSs and Tribal Department run schools have been given less priority and as such is inadequate. The JNV teachers received capacity building training organized by Navodaya Vidyalaya Samiti. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

The non-teaching staff of EMRS and ST & SC schools received hardly any training as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostel was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

The vision of EMRS is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/ superintendent, the security personnel, attendants and CCAs of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they come up with grievances.

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

The educational programme instituted in rural and tribal locations are expected to create a community demand for admitting children in these schools which would be reflected in the form of increasing number students seeking admissions through successive years. There needs to be more students from ST and SC categories in these schools and those admitted should complete the educational cycle. This chapter discusses the status of schools in respect of students seeking admission and retained in schools (Tables 3.1.1 to 3.2.2), students attending schools and completing educational cycle (Tables 3.3.1 & 3.3.2) and student dropouts over successive years (Table 3.4.1).

3.1 Student Admission

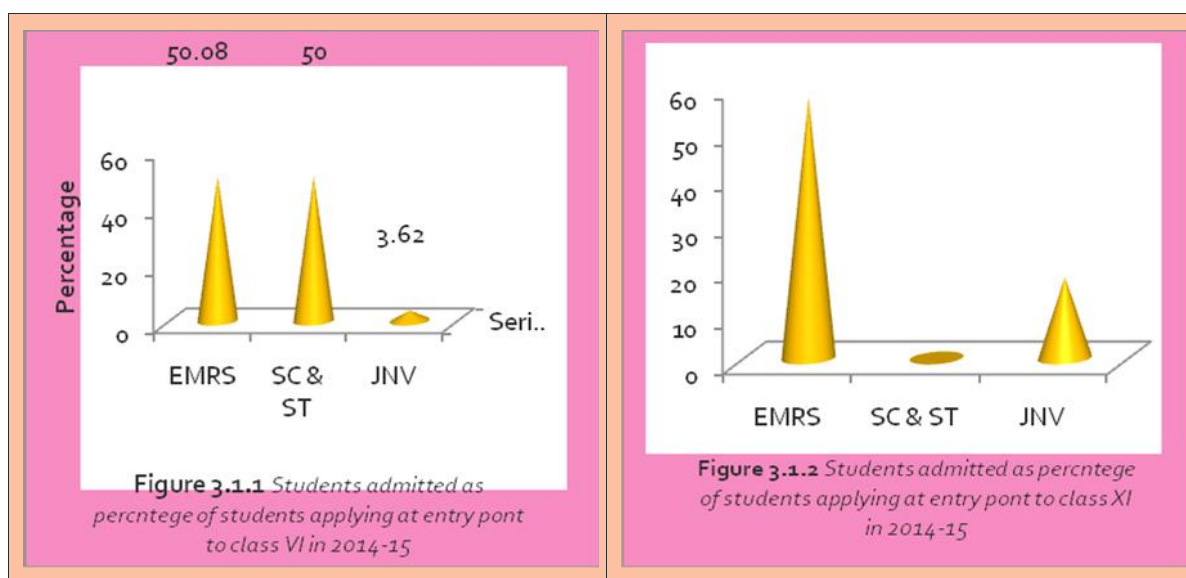
Table 3.1.1 lists the number of children seeking admission in different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission are given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

Table 3.1.1: Number of Candidates Applied and Number of students enrolled at entry points in Classes VI and XI during the last three Years (Rajasthan)
(NA: Number Applied; NE: Number Enrolled)

School		At Entry point to Class VI						At Entry point to Class XI						
			2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010
EMRS	ABUROAD	NA	66	75	78	85	92	39%	47	58	34	28	28	-40%
		NE	45	48	47	45	47		41	39	25	14	16	
	NEWAI	NA	78	75	109	97	75	-04%	18	06	29	09	07	-61%
		NE	50	50	50	50	50		08	02	20	05	04	
SC & ST	NAYAGAON	NA	22	23	25	30	40	81%	No Higher Secondary during the period		10	12	-	-
		NE	18	17	21	26	20		04	05	-			
	DHIKILI	NA	-	30	30	30	30	0%	No Higher Secondary during the period			19	0%	
		NE	-	30	30	30	30		19					
JNV	KALANDRI	NA	1439	1651	1033	1695	2151	49%	65	79	58	45	62	-5%
		NE	72	78	64	77	78		17	08	14	05	11	

TABLE 3.1.2 PERCENTAGE Increase in application for admission and student enrollment as percentages of application for admission

School type	At entry point of Class VI		At entry point of Class XI	
	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year
EMRS	-10.69	50.08	-44.44	57
SC & ST	60	50	-	-
JNV	108	3.62	6.89	17.74



- * The number of students seeking admission at the entry point to Class VI increased over the last five years except in one of the ST & SC schools. The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were -10.69 % for EMRS, 60 % for ST & SC schools and 108% for JNV. The demand for admission to JNV & ST & SC schools increased over the years but there is decreasing trend in EMRS.
- * Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 50.08, 50 and 3.62 for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- * Percentages of increase in applications for entry at Class XI in 2014-15 were 44.44% for EMRS and 6.89% for JNV. ST & SC Deptt. run school had no such class in the session. Students seeking admission in different types of schools increased. While 57 % of those seeking admission to Class XI in EMRS were admitted, and 17.74 % were admitted in JNV, there was no admission in ST & SC Deptt. run Higher Secondary Schools.

3.2 Student Strength in Schools

Table 5.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 5.2.2 and plotted in Figure 5.2.1.

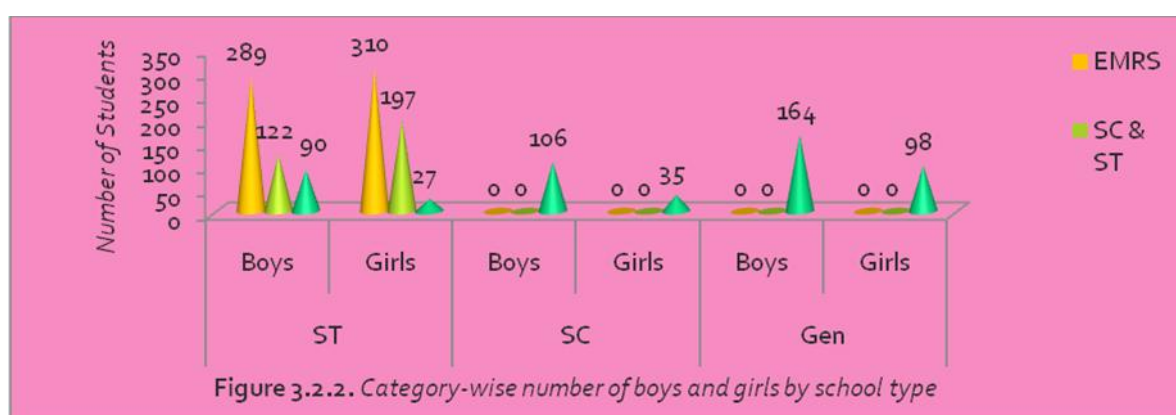
Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms and Classroom Space per Student (in sq. ft.) in Rajasthan

School			VI	VII	VIII	IX	X	XI	XII	Total	
EMRS	ABUROAD	N of students	48	47	49	50	28	34	33	289	
		N of Classrooms	01	01	01	01	01	01	01	01	07
		Per student floor space (in sq. ft.)	10								
	NEWAI	N of students	41	45	41	47	43	47	46		310
		N of Classrooms	01	01	01	01	01	02	02		09
		Per student floor space (in sq. ft.)	15								
SC & ST	NAYAGAON	N of students	20	24	20	27	12	11	08		122
		N of Classrooms	01	01	01	01	01	01	01		07
		Per student floor space (in sq. ft.)	28								
	DHIKILI	N of students	30	30	30	30	30	28	19		197
		N of Classrooms	01	01	01	01	01	01	01		07
		Per student floor space (in sq. ft.)	24								
JNV	KALANDRI	N of students	80	72	73	86	76	70	63		520
		N of Classrooms	02	02	02	02	02	02	02		14
		Per student floor space (in sq. ft.)	11								

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type (Rajasthan)

		ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Elementary Classes (VI to VIII)											
EMRS	ABUROAD	144	-	144	-	-	-	-	-	-	144
	NEWAI	-	127	127	-	-	-	-	-	-	127
SC & ST	NAYAGAON	64	-	64	-	-	-	-	-	-	64
	DHIKILI	-	90	90	-	-	-	-	-	-	90
JNV	KALANDRI	44	12	56	48	15	63	61	45	406	225
Secondary Classes (IX & X)											
EMRS	ABUROAD	78	-	78	-	-	-	-	-	-	78

	NEWAI	-	90	90	-	-	-	-	-	-	90
SC & ST	NAYAGAON	39	-	39	-	-	-	-	-	-	39
	DHIKILI	-	60	60	-	-	-	-	-	-	60
JNV	KALANDRI	23	8	31	30	11	41	57	33	90	162
Higher Secondary Classes (XI & XII)											
EMRS	ABUROAD	67	-	67	-	-	-	-	-	-	67
	NEWAI	-	93	93	-	-	-	-	-	-	93
SC & ST	NAYAGAON	19	-	19	-	-	-	-	-	-	19
	DHIKILI	-	47	47	-	-	-	-	-	-	47
JNV	KALANDRI	23	07	30	28	09	37	46	20	66	133
Total		501	534	1035	106	35	141	164	98	262	1438



- * The EMRS schools catered to the needs of more ST students compared to JNV. A rough calculation of the classroom floor space per student in EMRS was about 10 to 15 sq. ft., while that in ST & SC schools was 24-28 sq. ft. and in JNV about 11 sq. ft. Average number of students per classroom was approximately 38 in EMRS, 23 in ST & SC schools and 37 in JNV.
- * While children from SC, ST and general categories were in JNV, EMRS and ST & SC schools was primarily meant for students from the ST community. This is reflected in the differential category-wise student strength in different types of schools (Figure 3.2.1).

3.3. Student Attendance

Student attendance and retention in the school to complete the educational cycle are important indicators to reveal how the school is catering to student needs and the awareness level of the community to encourage their children to be in the system. Table 3.3.1 and Figures 3.1.1 and 3.1.2 present information on student attendance and Table 3.3.2 indicates percentages of students completing the educational cycle.

Table 3.3.1: Percentage of Average Student Attendance during the Last Month (March, 2015)

		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	Abu Road	98	98.5	99	99	98.5	98	98.5	98.5
	Hirli	94	98	98.5	99	98.7	98	99	97.8
SC & ST	Nayagoan	95.5	97.5	95.5	98	98	97	95.5	96.7
	Dhikli	98	96.5	94	94.5	97	96	97.5	96.2
JNV	Kalandri	99.5	100	99.5	99	99.5	100	98.5	99.6

Table 3.3.1: Percentage of average student attendance during the last month (Rajasthan)

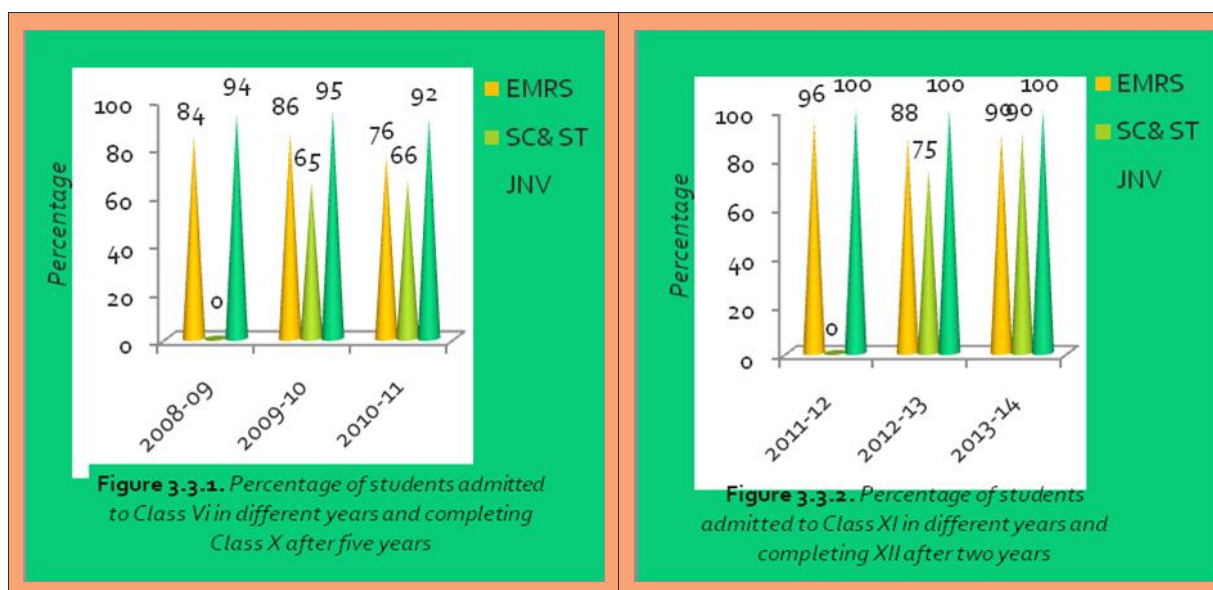
		VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	ABUROAD	91	89	90	87	97	90	90	90
	NEWAI	90	65	71	64	98	89	94	83
SC & ST	NAYAGAON	60	75	65	67	92	64	88	73
	DHIKILI	100	100	100	100	100	100	100	100
JNV	KALANDRI	100	100	100	100	100	100	100	100

Table 3.3.2: Number of students admitted at entry points (classes VI and XI) and completing The educational cycle during the last three years

Students admitted in Class VI completing Class-X										
School		No. of students admitted in VI in 2008-09	N of students completing Class X after 5 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2009-10	N of students completing Class X after 5 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2010-11	N of students completing Class X after 5 years	% completing educational cycle in 2014-15
EMRS:	ABUROAD	-	-	-	-	-	-	-	-	-
	NEWAI	50	42	84	50	43	86	50	38	76
SC & ST	NAYAGAON	-	-	-	29	19	65	18	12	66
	DHIKILI	-	-	-	-	27	-	-	26	-
JNV	KALANDRI	80	75	94	80	76	95	80	74	92
Students admitted in Class XI completing Class XII										
School		No. of students admitted in XI in 2011-12	N of students completing Class XII after 2 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2012-13	N of students completing Class XII after 2 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2013-14	N of students completing Class XII after 2 years	% completing educational cycle in 2014-15
EMRS:	ABUROAD	-	-	-	-	-	-	-	-	-

	NEWAI	50	48	96	50	40	88	50	45	90
SC & ST	NAYAGAON	-	-	-	04	03	75	08	08	100
	DHIKILI	-	-	-	-	-	-	19	15	79
JNV	KALANDRI	65	65	100	64	64	100	67	67	100

N.B: Dhikili Ashram School was established in 2011-12 with admission in class-VI-30, VII-30, VIII-30 simultaneously. The students of EMRS and ST & SC Department run Higher Secondary Schools usually opt for JNV and leave such schools if gets selected for JNV in common entrance test. JNV attracts better than other schools.



Note: Data in respect of EMRS, Aburoad was not available.

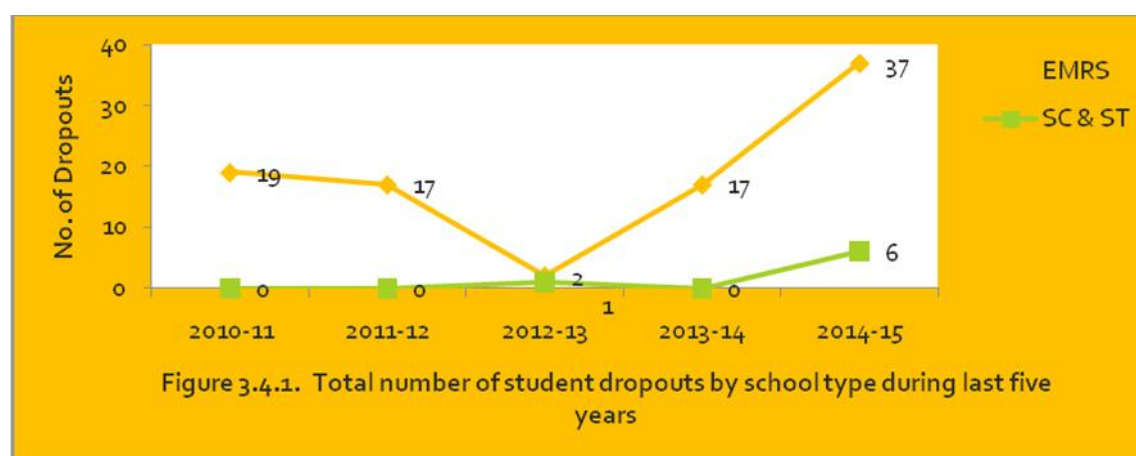
- * Student attendance in all types of schools was satisfactory.
- * Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X were 90% in EMRS, 100% in ST & SC schools and 100% in JNV. The percentage in EMRS schools fell short of 100% because some students shifted to other schools. During earlier years, students completing the educational cycle also fell short of 100% in EMRS. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were 96% in EMRS, 95% in ST & SC schools and 100% for JNV.
- * Completion of educational cycle by 95% to 100% of students in ST & SC schools and JNV over the years can be considered satisfactory. The picture, however, is not the same for EMRS schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15.

3.4 Student Retention /Drop-out

The number of students dropping out or being pushed out of the system during the last five years across types of schools are presented in Table 3.4.1 and plotted in Figure 3.4.1.

Table 3.4.1: Class-wise total Number of students dropping out of school by school type

School	Year	Elementary			Secondary		Higher secondary		Total (year-wise)
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	08	05	02	01	02	01	-	19
	2011-12	06	05	-	02	02	01	01	17
	2012-13	-	-	-	-	-	02	-	02
	2013-14	05	02	-	-	-	04	06	17
	2014-15	12	13	03	03	02	03	01	37
SC & ST	2010-11	-	-	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-	-	-
	2012-13	-	-	-	01	-	-	-	01
	2013-14	-	-	-	-	-	-	-	-
	2014-15	01	02	02	-	01	-	-	06
	2010-11	-	-	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-	-	-
	2012-13	-	-	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-



Note: Students dropping out of a school possibly sought admissions in other schools for which information was not available. JNV could not supply information on student dropout.

- * Noticeably more number of students drop out of ST & SC schools compared to EMRS. More students dropped out at the elementary stage compared to secondary and higher-secondary stages, particularly in ST & SC schools. These drop out cases may not viewed as instances of students completely leaving the schools system; rather a substantial number of students shifted to others schools or got admitted to JNV or EMRS. The information in respect of students staying out of the school system was not available with the school authorities.

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

Student learning and achievement are greatly impacted by school's instructional climate which includes school and classroom physical environment, teaching-learning process and materials, student development activities and procedures of student evaluation. These aspects are discussed in this chapter.

4.1 School and Classroom Environment

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and classroom environment

<i>Parameter</i>	<i>EMRS</i>	<i>SC & ST</i>	<i>JNV</i>
Building white washed	GOOD	POOR	GOOD
Cleanliness of campus	GOOD	MANAGEABLE	GOOD
Cleanliness of classrooms	GOOD	GOOD	GOOD
Dustbins in classroom	YES	NO	YES
Proper drainage system	INADEQUATE	INADEQUATE	ADEQUATE
First-aid box	YES	YES	YES
Fire safety	INADEQUATE	INADEQUATE	INADEQUATE
Garbage disposal pit	INADEQUATE	INADEQUATE	INADEQUATE
Children's hygienic habits	MANAGEABLE	MANAGEABLE	GOOD
Information board	PARTLY DONE	PARTLY DONE	PARTLY DONE
Wall magazine	NO	NO	NO
Wall activities	POOR	MANAGEABLE	GOOD
TLM corner in classrooms	NO	NO	YES
Library cum reading room	GOOD	MANAGEABLE	GOOD
Games equipments	INADEQUATE	INADEQUATE	ADEQUATE
Monthly health check up	IRREGULAR	IRREGULAR	REGULAR
Campus beautification	GOOD	GOOD	GOOD
Suggestion box	USED	NOT USED	USED

- * The school campus and classrooms appeared to be clean in all types of schools except Ashram School at Nayagaon. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools.
- * While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of having inadequate garbage disposal pit and proper drainage system.

- * In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, non-existent in ST & SC schools & EMRSs.

4.2 Teaching-Learning Process, Materials and Equipments

Textbooks, TLMs and teaching-learning process are the throughputs in educational institutions that help student potentials translate into achievements. This section presents information regarding the availability of textbooks to students (Table 4.2.1; Figure 4.2.1) and teachers' and students' behaviours in the classroom during the course of teaching (Table 4.2.2).

Table 4.2.1: Class-wise percentage of new textbooks distributed to students as against requirement on the basis of student enrolment (Rajasthan)

School		New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
EMRS	ABUROAD	No. required	336	329	343	700	364	240	182	2494
		% distributed	100	100	100	100	100	100	100	100
	NEWAI	No. required	287	315	287	658	559	658	644	3408
		% distributed	100	100	100	100	100	100	100	100
SC & ST	NAYAGAON	No. required	120	144	120	324	144	143	104	1238
		% distributed	100	100	100	100	100	100	100	100
	DHIKILI	No. required	210	210	210	420	420	420	266	2156
		% distributed	100	100	100	100	100	100	100	100
JNV	KALANDRI	No. required	480	432	438	516	380	350	315	2911
		% distributed	100	100	100	100	100	100	100	100
Class-wise percentage of textbook distribution by school type										
			100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100
			100	100	100	100	100	100	100	100

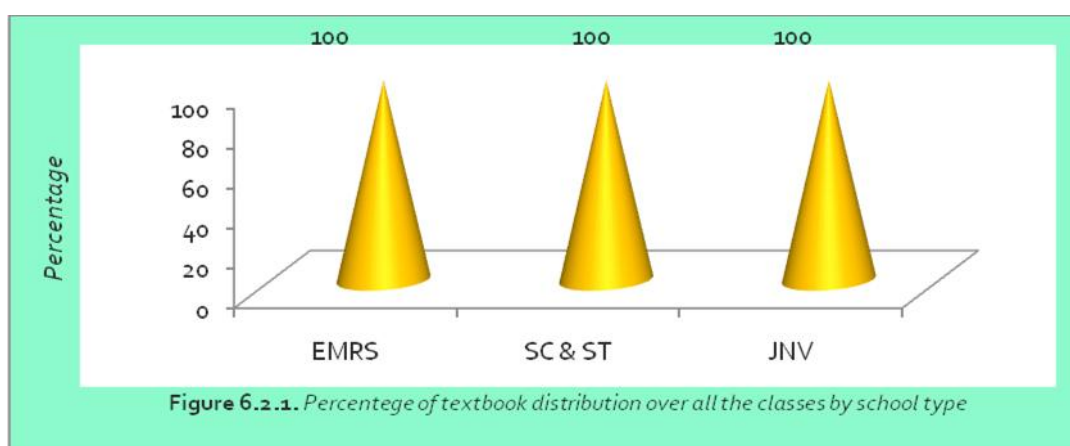


Table 4.2.2: Teaching-learning process and teacher-student behavior in schools

Parameter	EMRS	SC & ST	JNV
Teaching-learning Process			
Seating arrangement and use of classroom space	Good	Poor to Manageable	Very good
Adequacy of lesson plan/note	Not maintained	Not maintained	Maintained
Teaching through activity-based methods	No	No	Good
Correction of students' assignments	Manageable	Manageable	Good
Home assignments given	Good	Good	Good
Project assignments	Manageable	No	Good
Use of e-content in SMART classes	No	No	Good
Effective use of laboratories	Manageable	No	Good
Using libraries effectively	Manageable	No	Good
Courses completed as per schedule	Yes	Yes	Yes
Time table structured and displayed	Yes	Yes	Yes
Academic calendar prepared and displayed	Yes	Yes	Yes
SDP prepared	Yes	Yes	Yes
Teacher behaviour in classrooms			
Topic presentation focused and organized	Manageable	Manageable	Good
Demonstrates during teaching	No	No	Good
Using blackboard appropriately	Yes	Yes	Yes
Using TLMs while teaching	No	Poor	Manageable
Initiating group learning	No	No	No
Encouraging students to ask questions	Manageable	Manageable	Good
Giving academic feedback to students	Good	Manageable	Good
Threatening	No	No	No
Student behaviour in classrooms			
Students actively listen and participate	Good	Manageable	Good
Ask questions and express ideas	Manageable	Poor	Good
Students' use of TLMs	Manageable	No	Good
Students respond and answer	Manageable	Manageable	Good

- * Text books have been distributed to all students (100%). In all types of schools, courses were completed as per syllabi and in time. Time table and academic calendars were prepared, SDPs were prepared and students were given home assignments. Lesson plans were not properly prepared and maintained in all types of schools. The status of EMRS did not turn out to be satisfactory in respect of activity-based teaching, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better because of activated Smart classes, use of e-content, Tele-teaching facility compared to other schools in respect of these school-related activities.
- * The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor. Teachers refrained from threatening students. Whenever students asked, their questions were entertained by teachers. TLM use during teaching and initiating

group-based learning was not satisfactory. The situation in JNV was slightly better but far from being excellent. The nature for student engagement in classroom teaching was less active. Their behaviours in classrooms were more or less teacher-directed. Their participation in classroom learning was minimal in ST & SC schools, manageable in EMRS and slightly better in JNV.

Availability of TLMs and TLEs. Though schools are provided with grants for TLMs and TLEs which are purchased by the teachers, they were not purchased with a proper plan to cater to students' need and course requirements. They were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.

4.3 Student Development Activities

Besides classroom teaching students also need activities for their personal and career development. Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools and JNV on those activities.

Table 4.3.1: Student development activities

Activities	EMRS	SC & ST	JNV
Remedial coaching as per student need	NO	NO	DONE
Counselling for behavioural problems	MANAGEABLE	MANAGEABLE	NO
Career counselling	INADEQUATE	INADEQUATE	INADEQUATE
Identifying and developing student talents	NO	NO	YES
Coaching for professional courses	NO	NO	PARTLY GIVEN
Self-defence training	YES	NO	YES
life skills training	YES	NO	PARTLY DONE
Coaching for sports and games competitions	GOOD	MANAGEABLE	GOOD
Training for musical and artistic talents	NO	NO	GOOD
Training on vocational and work education	NO	MANAGEABLE	GOOD
Training students as social change agents	YES	YES	YES

- * Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was slightly better than that of EMRS. The ST & SC schools appeared to be weak on many fronts except that training for life skills.

4.4 Student Evaluation Practices

The students are evaluated in half-yearly and yearly examinations and also in their respective classes at different phases during the instructional period by respective teachers. We wanted to ascertain how CCE has been adhered to in assessing student performance. Table 6.4.1 presents schools' adoption of CCE along important parameters.

Table 4.4.1: Student Evaluation Practices as per CCE

Parameter	EMRS	SC & ST	JNV
Using summative evaluations	SATISFACTORY	SATISFACTORY	SATISFACTORY
Using formative evaluations	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Assessing through oral questions	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Assessing through observations	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Using self and peer-assessment	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Using parental assessment	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Using group assessment	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Assessing socio-personal qualities	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Maintaining student portfolios and anecdotal records	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Using checklists and rating scales	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY
Cumulative progress card for each child maintained	SATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Identifying individual strengths	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Quality of feedback to students	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Remedial coaching on the basis of CCE	UNSATISFACTORY	UNSATISFACTORY	SATISFACTORY

- * Adoption of CCE along most of parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- * In respect of the methods of assessment, oral as well as written questions used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.
- * Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students.
- * In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying the individual strengths of students.

Chapter 5 RESIDENTIAL CLIMATE IN HOSTELS

5.1. Residential Environment in Hostels

One of the objectives of EMRS is to support the construction of infrastructure that facilitates the educational, physical cultural needs of students. Students spent about 14-16 hours a day in hostels and therefore, the residential climate in the hostel impacts students' motivation, attitude and educational attainment. The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Residential environment in students' Hostels

Parameter	EMRS	SC & ST	JNV
Building whitewashed	MANAGEABLE	POOR	GOOD
Cleanliness of hostel campus	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of hostel rooms	MANAGEABLE	MANAGEABLE	GOOD
Light and ventilation in hostel rooms	SATISFACTORY	SATISFACTORY	SATISFACTORY
Garbage disposal pit	INADEQUATE	INADEQUATE	INADEQUATE
Proper drainage system	INADEQUATE	INADEQUATE	ADEQUATE
First-aid box	YES	YES	YES
Fire safety	INADEQUATE	INADEQUATE	INADEQUATE
Dustbin in hostel rooms	YES	YES	YES
Children's hygienic habits	MANAGEABLE	MANAGEABLE	GOOD
Using suggestion box	NOT USED	NOT USED	NOT USED
Wall magazine	MANAGEABLE	NO	GOOD
House system functional	NO	NO	YES
Cultural activities	SATISFACTORY	SATISFACTORY	SATISFACTORY
Inner house competitions	NO	NO	SATISFACTORY
Annual function	DONE	DONE	DONE
Stationeries supplied	YES	YES	YES
Play and indoor games equipment	INADEQUATE	INADEQUATE	INADEQUATE
Health check up	IRREGULAR	IRREGULAR	REGULAR
Health cards issued	NO	NO	YES
ANM/Health worker available	NO	NO	YES
Mess committee's functional efficiency	UNSATISFACTORY	UNSATISFACTORY	UNSATISFACTORY
Beautification of hostel campus	SATISFACTORY	UNSATISFACTORY	SATISFACTORY
Hostel locked during school hours and remedial coaching	YES	YES	YES

- * On parameters of physical environment and cleanliness, EMRS hostel campus maintained overall cleanliness while light and ventilation in rooms, provision of garbage disposal pit and

drainage system and attempt to beautify the hostel campus were on the weaker side. Most of the conditions in ST & SC schools were unsatisfactory or inadequate. The JNV was better in many respects except that garbage clearance management and school campus beautification were not at the expected level.

- * First-aid boxes were available in hostels of all types of schools, but fire safety measures were inadequate in all. Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.
- * In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box. Wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was better than that of EMRS & ST & SC schools.
- * The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students selected for remedial classes was not ensured by way of facilitating presence by locking up the hostel rooms in EMRS and ST & SC hostels at the time of remedial hours.

5.2. Hostel Kitchen and Food

Hygienic kitchen environment, quality of food and safety are the key elements in any residential accommodation set up. Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: Hygienic environment of kitchen and quality of food

Parameter	EMRS	SC & ST	JNV
Kitchen building whitewashed	GOOD	MANAGEABLE	GOOD
Cleanliness of kitchen floor	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of kitchen equipment and utensils	MANAGEABLE	MANAGEABLE	GOOD
Cleanliness of dining room	MANAGEABLE	MANAGEABLE	GOOD
Light and Ventilation	SATISFACTORY	SATISFACTORY	SATISFACTORY
Fire safety for the kitchen	NO	NO	INADEQUATE
Proper drainage system for kitchen	MANAGEABLE	MANAGEABLE	MANAGEABLE
Cleanliness of hand wash points	MANAGEABLE	MANAGEABLE	SATISFACTORY
Cleanliness of store room	GOOD	GOOD	GOOD
Safety stand for plates	NO	NO	YES
Hand washing points	INADEQUATE	INADEQUATE	ADEQUATE
Aqua guard points for safe drinking water	INADEQUATE	INADEQUATE	ADEQUATE
Kitchen waste clearance and management	MANAGEABLE	POOR	MANAGEABLE
Smokeless cooking	No	NO	YES
Hygienic cooking	MANAGEABLE	MANAGEABLE	SATISFACTORY

Approved menu chart displayed	YES	YES	YES
Meals served according to menu chart	No	No	YES
Quality of meal	MANAGEABLE	MANAGEABLE	SATISFACTORY
Teachers on duty / mess committee supervision	YES	NO	YES
Procurement procedure duly followed	NO	NO	YES
Serving of food supervised teachers	NO	NO	YES

- * On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- * The fire and health-related safety measures in EMRS and ST & SC hostels was poor while the safety measures were better in JNV.
- * The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively good in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls are located on either side. Teachers and students take lunch at a fixed time simultaneously which ensures quality cooking. The method could be well adapted in EMRSs.

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1. Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 through 6.1.6 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-4 on 'Method and Procedure'. It may be mentioned here the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (Questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

Table 6.1.1: Mean Achievement Level of Class VIII Students in Rajasthan in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	46	5.33 2.12	21.32	48	7.09 2.52	28.36	48	7.11 2.18	28.44	49	6.92 2.4	27.68
SC & ST	44	5.95 2.24	23.8	44	5.81 2.53	23.24	43	6.64 2.67	26.56	45	6.75 1.90	27
JNV	34	10.68 3.60	40.32	37	10.32 4.34	41.20	32	8.28 2.93	33.12	35	8.97 2.11	35.88

- * In all the four subjects, Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools in all subjects except English. (Table 6.1.1).
- * It may however be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in ST & SC schools scored in the range of only 23% to 27% across four subject areas, while those in EMRS scored in the range of 21 % to 28 %. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 35% to 41 % across the four subject areas.

Table 6.1.2: Category-wise Mean Achievement Level of Class VIII Students in Rajasthan in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	46	5.33 2.12	21.32	48	7.09 2.52	28.36	48	7.11 2.18	28.44	49	6.92 2.4	27.68
SC & ST	44	5.95 2.24	23.8	44	5.81 2.53	23.24	43	6.64 2.67	26.56	45	6.75 1.90	27
JNV	7	10.85 3.84	43.4	7	10.57 3.87	42.28	7	6.86 1.86	27.44	7	8.71 2.63	34.84
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	12	10 3.64	40	12	10.42 3.63	41.68	12	8.5 2.97	34	12	8.42 1.78	33.68
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	15	10.47 3.44	41.88	18	10.83 4.43	43.32	13	9.07 3.17	36.28	16	9.5 2.09	38

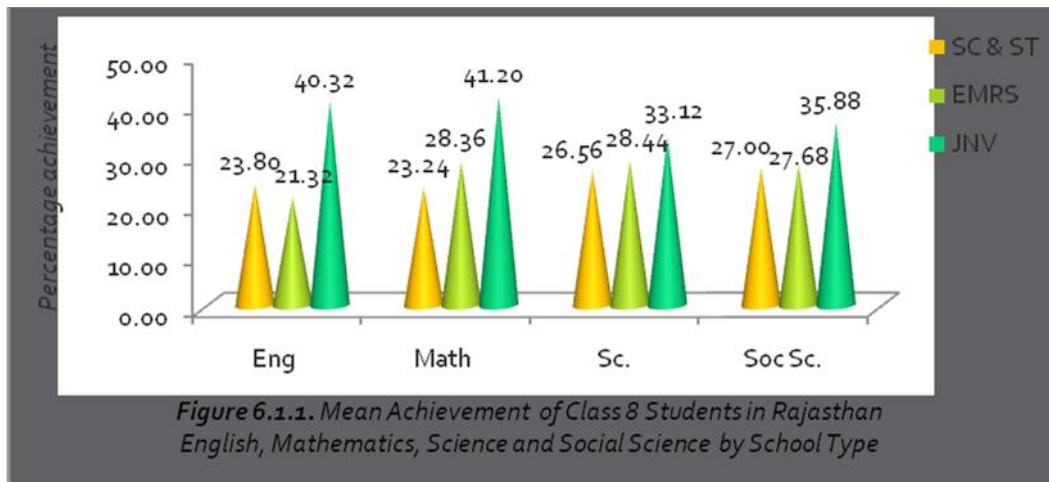


Figure 6.1.1. Mean Achievement of Class 8 Students in Rajasthan English, Mathematics, Science and Social Science by School Type

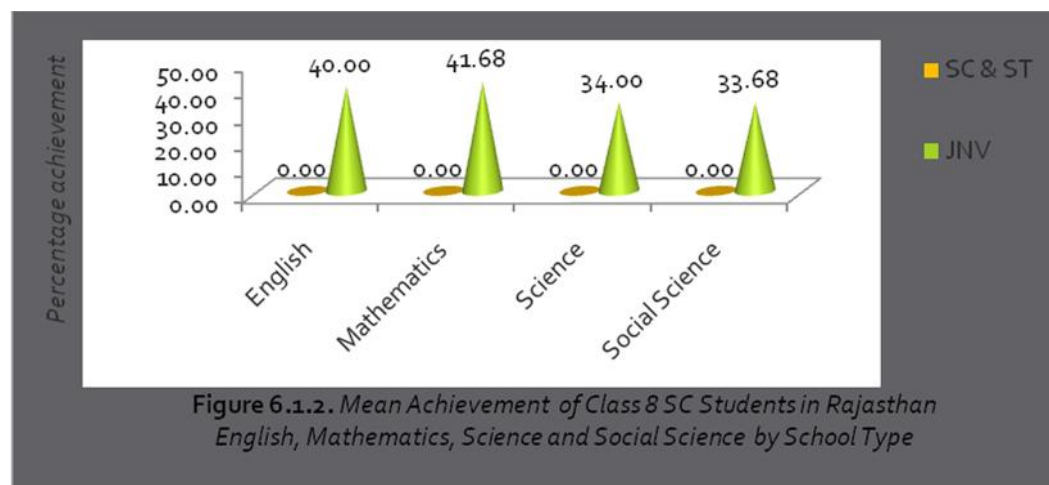


Figure 6.1.2. Mean Achievement of Class 8 SC Students in Rajasthan English, Mathematics, Science and Social Science by School Type

Table 6.1.3: 't' values showing group comparisons across school types in respect of achievement level of Class VIII ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. SC & ST	5.33 5.95	88	1.35	7.09 5.81	90	4.43**	7.11 6.64	89	0.91	6.92 6.75	92	0.44
EMRS vs. JNV	5.33 10.85	51	3.72**	7.09 10.57	53	2.31**	7.11 6.86	53	0.32	6.92 8.71	54	1.7
SC & ST vs. JNV	5.95 10.85	49	3.29**	5.81 10.57	49	3.15**	6.64 6.86	48	0.27	6.75 8.71	50	1.89

; Significant at .05 level

; ; Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) revealed that the ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in Mathematics attainment. It was only in Social science and Science that noticeable differences were not observed between the ST students in EMRS and JNV.
- * The performance of ST students in ST & SC schools and EMRS was poor while in JNV, it was relatively better. The ST students in ST & SC schools performed in the range of 23 % to 27 % while their performance in EMRS was within 21 % to 29 % and in JNV in the range of 27 % to 44%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- * There were no SC students in EMRS & ST & SC schools. The performance of SC students in JNV was found to be almost at an equal level with ST students. (Figure 6.1.2). The performance of general category students in JNV was bit higher than ST & SC category students.

Table 6.1.4: Mean Achievement Level of Class X Students in Rajasthan in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	35	10.82 2.86	43.28	34	7.79 2.17	31.16	34	10.35 2.77	41.4	35	8.72 3	24.9
SC & ST	45	9.28 2.70	37.12	45	8.39 2.75	35.56	45	9.77 2.89	39.08	45	11.49 2.25	45.96
JNV	36	17.64 2.64	70.56	39	13.76 4.40	55.04	41	12.32 3.03	49.28	36	14.89 3.37	59.56

- * The performance of students in JNV was the highest followed by their grade-mates in EMRS in English/Science subjects only. The students in SC and ST schools performed in the range of 35% to 46%, while those in EMRS showed attainment in the range of 24% to 44%. This projects the low achievement level of students in EMRS in comparison with students of SC & ST schools and JNV as well. The students in JNV performed in the range of 41% to 71% (Table 6.1.4).
- * The performance of EMRS students in English was better compared to their performance in other subjects in which their performance would be judged as poor. The students in SC and ST schools performed better than students of EMRSs in Mathematics & Social Science.

Table 6.1.5: Category-wise Mean Achievement Level of Class X Students in Rajasthan in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	35	10.82 2.86	43.28	34	7.79 2.17	31.16	34	10.35 2.77	41.4	35	8.72 3	24.9
SC & ST	45	9.28 2.70	37.12	45	8.39 2.75	35.56	45	9.77 2.89	39.08	45	11.49 2.25	45.96
JNV	9	17.56 2.07	70.24	7	12.57 3.69	50.28	8	11.63 3.25	46.12	9	14 2.24	56
SC Students												
EMRS	No SC students											
SC & ST	No SC students											
JNV	11	17 3.74	68	13	12.15 3.80	48.6	14	11.78 3.24	47.12	11	15.82 4.33	63.28
General Category Students												
EMRS	No General students											
SC & ST	No General students											
JNV	16	18.13 2.16	72.52	19	15.32 4.67	61.28	19	13 2.79	52	16	14.87 3.03	59.48

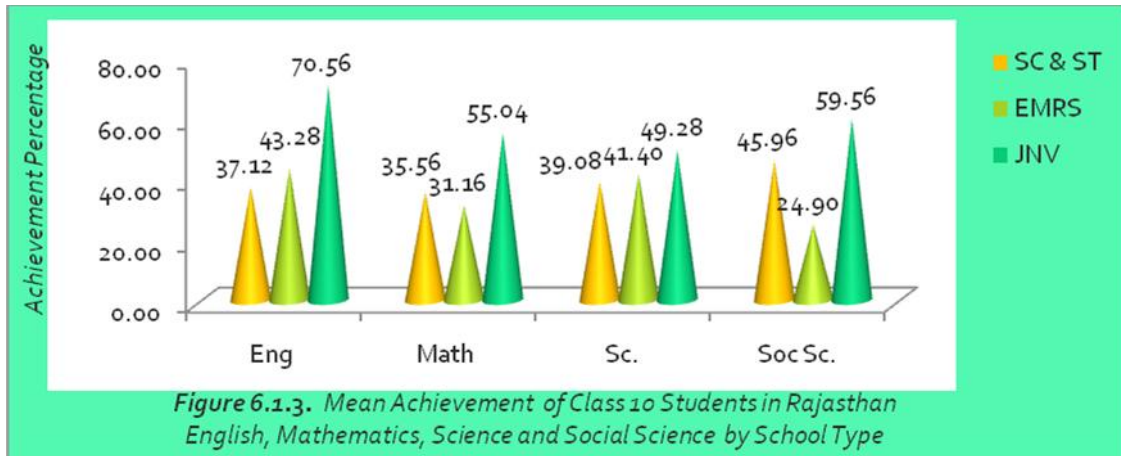


Figure 6.1.3. Mean Achievement of Class 10 Students in Rajasthan in English, Mathematics, Science and Social Science by School Type

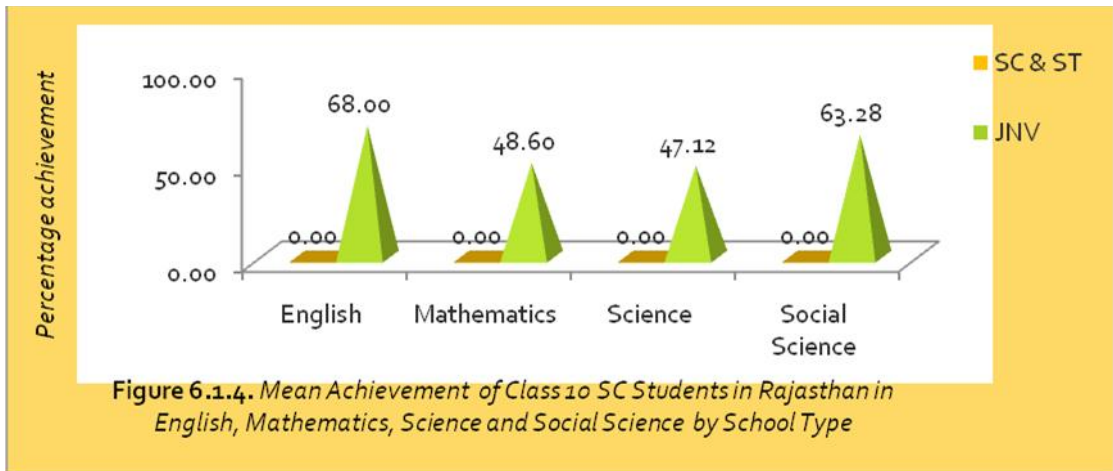


Figure 6.1.4. Mean Achievement of Class 10 SC Students in Rajasthan in English, Mathematics, Science and Social Science by School Type

Table 6.1.6: 't' values showing group comparisons across school types in respect of achievement level of Class XST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. SC & ST	10.82	78	2.45**	7.79	77	1.08**	10.35	77	0.9	8.72	78	4.56**
	9.28			8.39			9.77			11.49		
EMRS vs. JNV	10.82	42	8**	7.79	39	3.31**	10.35	40	1.03	8.72	42	5.82**
	17.56			12.57			11.63			14		
SC & ST vs. JNV	9.28	52	10.36**	8.39	50	2.87**	9.77	51	1.52	11.49	52	3.06**
	17.56			12.57			11.63			14		

; Significant at .05 level

:: Significant at .01 level

- * Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS. The performance of ST & SC students are also higher than EMRSs in Mathematics and social science. (Table 6.1.5; Figure 6.1.3).
- * t-values indicated that it was only in English & Social science between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- * On an overall basis, SC students in ST & SC schools and JNV performed at par with ST students in their respective institutions except in English and Social Science in which performance of SC students in JNV was better than that of ST students (Figure 6.1.4) of other types of schools. The general category students performed at par with SC students in JNV as well as in ST & SC schools.

Table 6.1.7: Mean Achievement Level of Class XII Students in Rajasthan in English, Mathematics, Physics, Chemistry and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	17	10.84 2.09	36.3	17	6.85 1.58	22.83	17	7.46 1.80	24.87	15	10.6 1.80	35.33			
SC & ST	15	11.07 4.15	36.07	15	7.87 1.25	26.23	15	7.2 2.11	24				15	7.27 2.22	24.23
JNV	31	16.55 3.75	55.17	31	11.65 3.35	38.83	31	10.77 2.46	35.9	24	17.67 4.25	58.9	7	14.57 2.88	48.55

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS and ST & SC schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV also narrowed down though JNV students performed better than others.
- * The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students of EMRS. But ST students performance in JNV in all subjects was unsatisfactory

Table 6.1.8: Category-wise Mean Achievement Level of Class XII Students in Rajasthan in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	15	7.67 2.09	25.56	15	10.2 2.46	24	15	5.93 2.22	19.76	15	10.6 1.80	35.33			
SC & ST	17	10.54 4.9	35.13	17	7.18 0.98	23.93	17	8.1 1.76	27				17	7.38 2.17	24.6
JNV	2	12.5 9.19	41.67	2	14 2.83	46.67	2	10.5 0.71	35	2	16.5 2.12	55			
SC Students															
EMRS	No SC students														
SC & ST	No SC students														
JNV	8	14.63 3.58	48.76	8	9.87 1.88	32.9	7	10.57 2.57	35.23	7	15.71 5.56	52.36	1	19 -	63.33
General Category Students															
EMRS	No General students														
SC & ST	No General students														
JNV	21	17.19 3.37	57.3	21	12.09 3.63	40.3	22	10.86 2.58	36.2	15	18.73 3.57	62.43	6	13.83 2.32	46.1

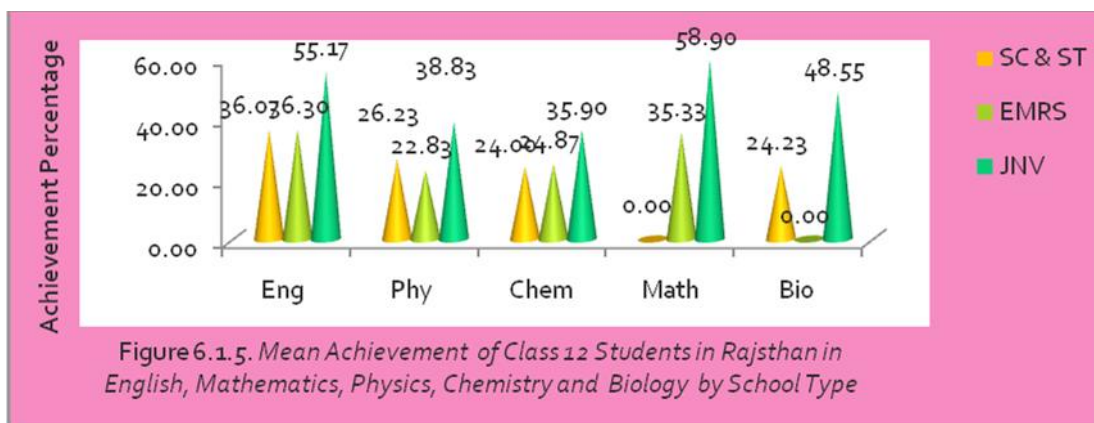


Figure 6.1.5. Mean Achievement of Class 12 Students in Rajasthan in English, Mathematics, Physics, Chemistry and Biology by School Type

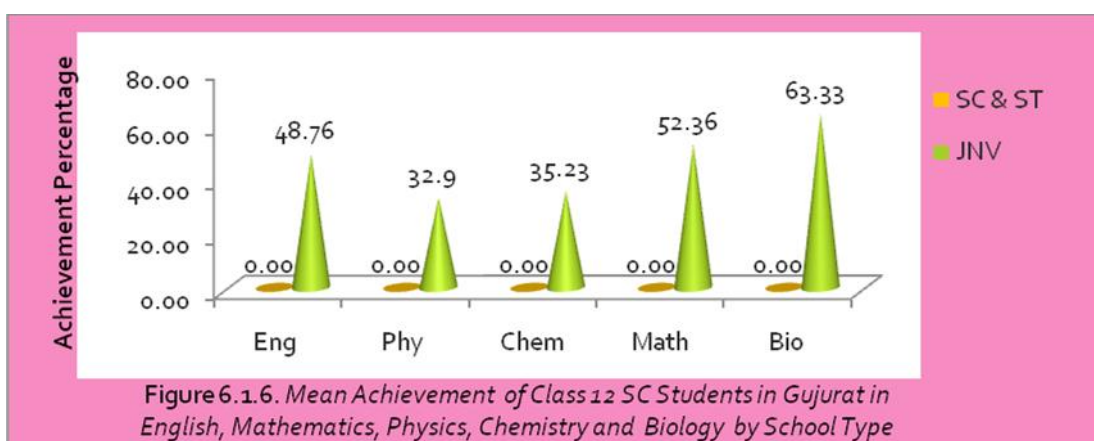


Figure 6.1.6. Mean Achievement of Class 12 SC Students in Gujarat in English, Mathematics, Physics, Chemistry and Biology by School Type

Table 6.1.9: 't' values showing group comparisons across school types in respect of achievement level of Class XIIST students in different subject areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t
EMRS vs. SC & ST	7.67	30	2.20	7.2	30	4.5	5.93	30	3.04	10.6	-	-	-	-	7.58
	10.54			7.18			8.1			-					
EMRS vs. JNV	7.67	15	0.74	7.2	15	1.81	5.93	15	-5.1	10.6	15	-3.76	-	-	-
	12.5			14			10.5			16.5					
SC & ST vs. JNV	10.54	17	0.29	7.18	17	-	8.1	17	-3.64	-	-	-	7.58	-	-
	12.5			14			10.5			16.5					

; Significant at .05 level

:: Significant at .01 level

* Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).

- * t-values revealed noticeable difference between ST students in EMRS and those in ST & SC schools only in Physics. (Table 6.1.9; Figure 6.1.5). Even the ST students in JNV did not maintain their initial advantage over the ST students in ST & SC schools in two subject areas such as English and Physics. Differences were significant only in Chemistry. The ST students in EMRS performed at par with ST students in JNV in English & Physics and fell short of them in Chemistry and Mathematics. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- * The trend was almost the same for SC and general students in JNV & ST & SC schools (Figure 6.1.6). The performance differences narrowed down with JNV maintaining a slight advantage in all subjects.

On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.

In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

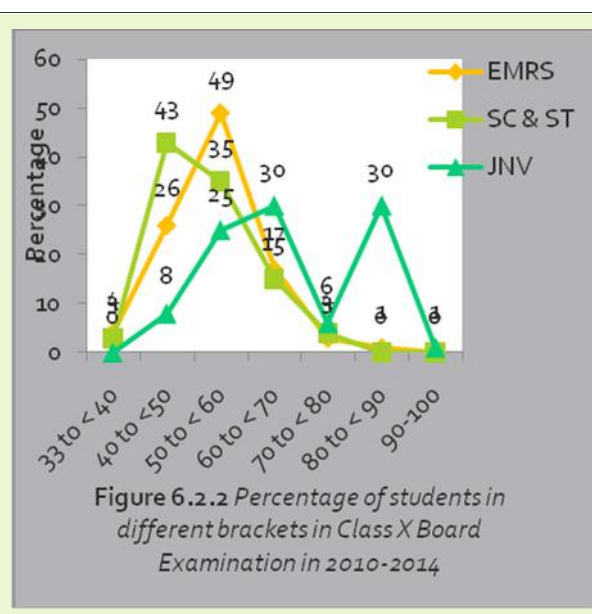
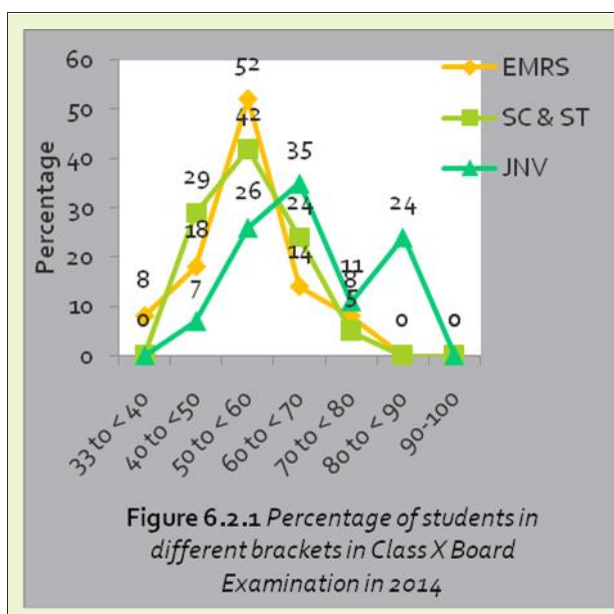
6.2. Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type in Rajasthan during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	95	85	89	04	15	61	18	1	1	-
	SC & ST	-	-	-	-	-	-	-	-	-	-
	JNV	73	72	99	-	10	28	28	-	31	03
2011	EMRS	98	71	72	01	22	59	17	01	-	-
	SC & ST	07	05	71	-	60	20	20	-	-	-
	JNV	70	70	100	-	07	37	21	17	18	-

2012	EMRS	82	59	72	08	12	45	25	05	03	-
	SC & ST	13	12	92	08	50	42	-	-	-	-
	JNV	74	73	98	-	05	14	41	-	40	-
2013	EMRS	99	75	76	01	59	24	15	01	-	-
	SC & ST	21	19	90	05	63	22	05	05	-	-
	JNV	72	72	100	-	10	25	30	-	35	-
2014	EMRS	71	65	92	08	18	52	14	08	-	-
	SC & ST	42	38	90	-	29	42	24	05	-	-
	JNV	72	72	100	-	07	26	35	11	24	-
TOTAL	EMRS	445	355	80	04	26	49	17	03	01	-*
	SC & ST	83	74	89	03	43	35	15	04	-	-
	JNV	361	359	99	-	08	25	30	06	30	01



- * More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, none of the students in EMRS scored below 40% or above 80% of marks. 4% of ST & SC School students got less than 40% and none of them got above 90%. In JNV none of the students got less than 50% and 2% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 40% to 70% bracket, in EMRS the maximum concentration was in 40% to 70% bracket and in JNV, maximum students scored in the 70% to 90% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 40% to 70% for ST & SC schools and EMRSs and 70% to 90% for JNV (Figure 6.2.2).

The results obtained from the educational achievement tests revealed the same relative standing of different types of schools except that the scores were approximately 10% less than what the students obtained in Board examinations in all types of schools.

- * During the last five years, none of the students of JNV and EMRS and 10 % of the students of ST & SC schools scored below 40%, while 2% of students of JNV, none from EMRS and SC & STs schools scored above 90%.

The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted for the year 2014 and for a period of three years from 2010 to 2014.

Table 6.2.2: Category-wise Student Performance in Class X Terminal Examination in the sampled schools in Rajasthan during the Last Three Years (2012-2014)

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	113	89	79	63	26	11
	SC	20	20	100	50	40	10
	General	36	35	97	11	34	55
2013	ST	136	110	81	85	13	02
	SC	19	19	100	16	42	42
	General	37	37	100	32	30	38
2014	ST	128	118	92	75	20	05
	SC	23	23	100	39	43	18
	General	34	34	100	15	62	23
Total	ST	377	317	84	75	19	06
	SC	62	62	100	37	42	21
	General	107	106	99	20	42	38

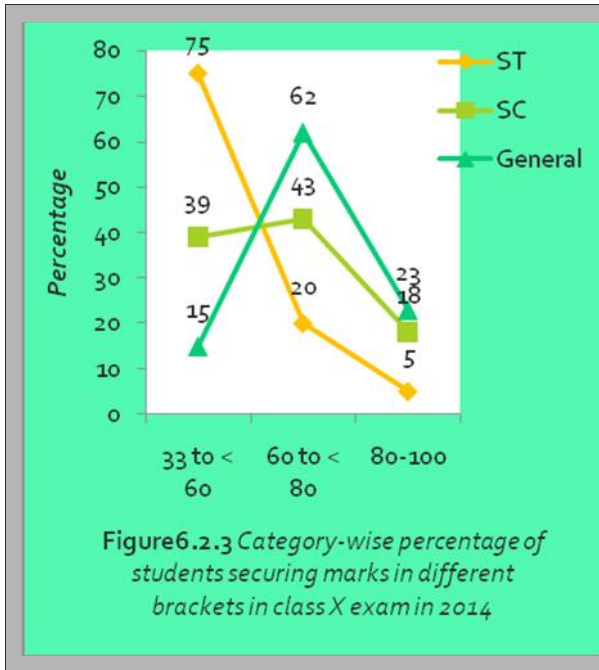


Figure 6.2.3 Category-wise percentage of students securing marks in different brackets in class X exam in 2014

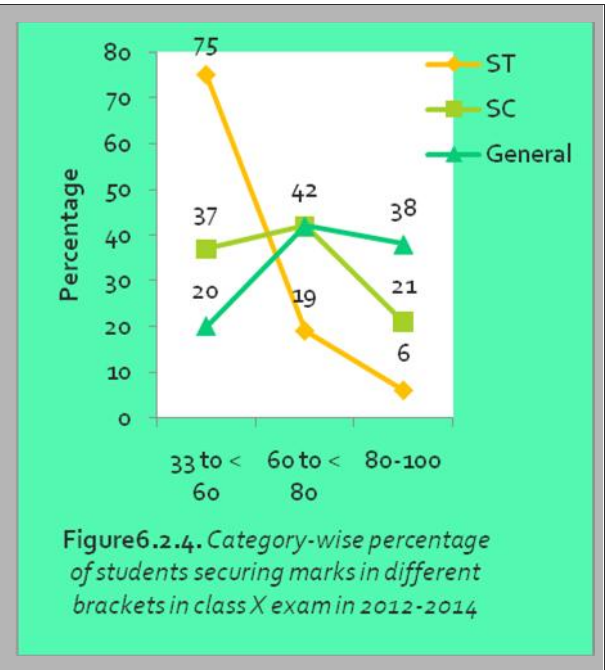


Figure 6.2.4. Category-wise percentage of students securing marks in different brackets in class X exam in 2012-2014

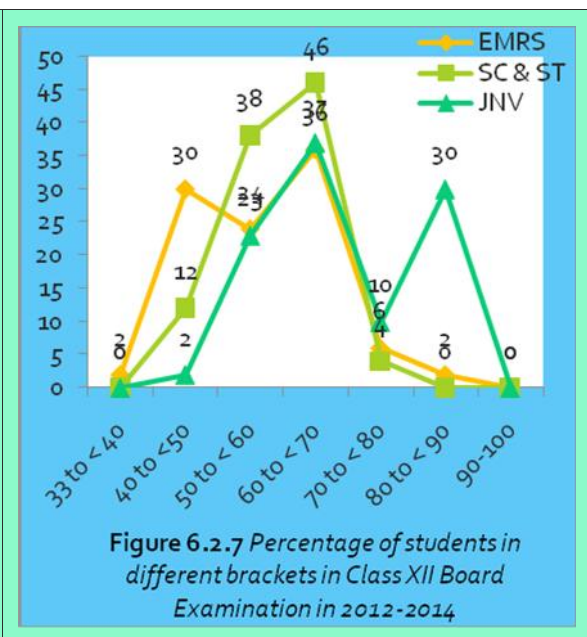
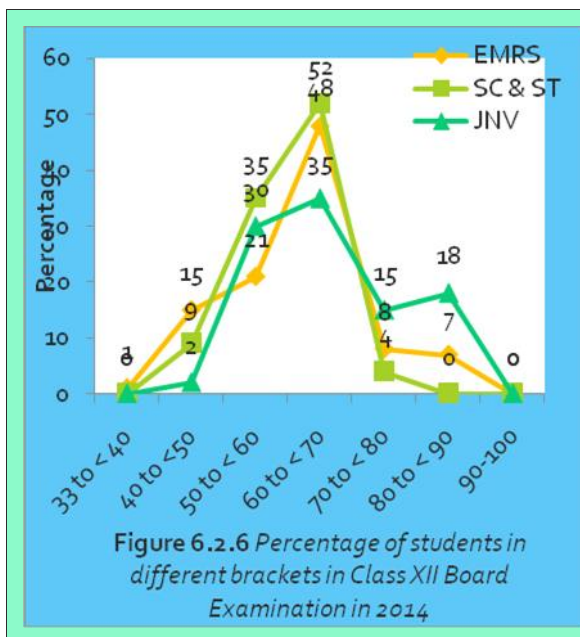
- * Analysis of performance of ST, SC and general students in all types of schools in Class X board examination in 2014 revealed that the SC and general students performed almost at an equal level and both groups performed better than ST students. The SC, ST and general students scoring above 80% were 21%, 6% and 38% respectively while 37% of SC students, 75% of ST students and 20% of general students scored below 60% (Figure 6.2.3).
- * The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014 (Figure 6.2.4).

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Show students' performance trend for 2014 and for the five-year period from 2010 to 2015, respectively.

Table 6.2.3: Student Performance in Class XII Board Examination in relation to School Type during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class XII Board						
					33- less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	89	89	100	00	30	24	38	08	-	-
	SC&ST	-	-	-	-	-	-	-	-	-	-
	JNV	64	64	100	-	-	14	86	-	-	-
2011	EMRS	88	76	86	-	43	22	32	03	-	-
	SC&ST	-	-	-	-	-	-	-	-	-	-
	JNV	63	60	96	-	03	15	60	22	-	-
2012	EMRS	68	66	97	06	48	18	21	06	-	-
	SC&ST	-	-	-	-	-	-	-	-	-	-
	JNV	65	63	97	-	02	27	-	-	71	-
2013	EMRS	67	65	97	02	12	36	43	05	02	-

	SC&ST	04	03	75	-	33	67	-	-	-	-
	JNV	64	64	100	-	02	27	28	16	27	-
2014	EMRS	79	71	90	01	15	21	48	08	07	
	SC&ST	27	23	85	-	09	35	52	04	-	-
	JNV	67	66	99	-	02	30	35	15	18	-
TOTAL	EMRS	391	367	94	02	30	24	36	06	02	-
	SC&ST	31	26	84	-	12	38	46	04	-	-
	JNV	323	317	99	-	02	23	37	10	30	-

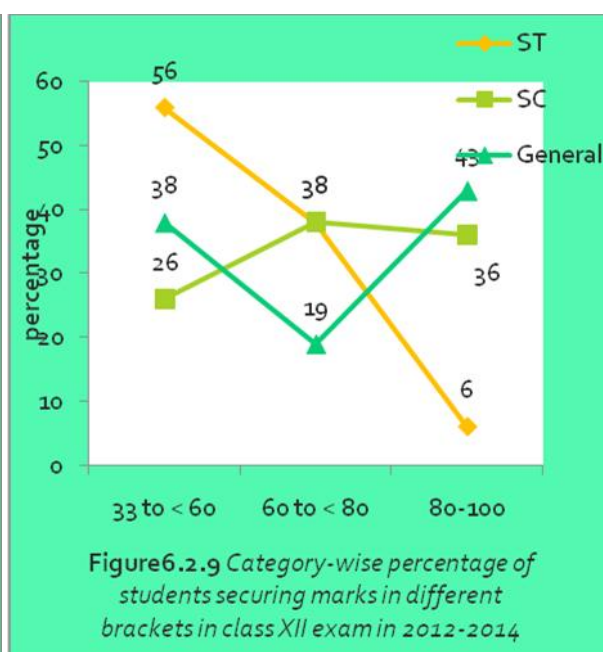
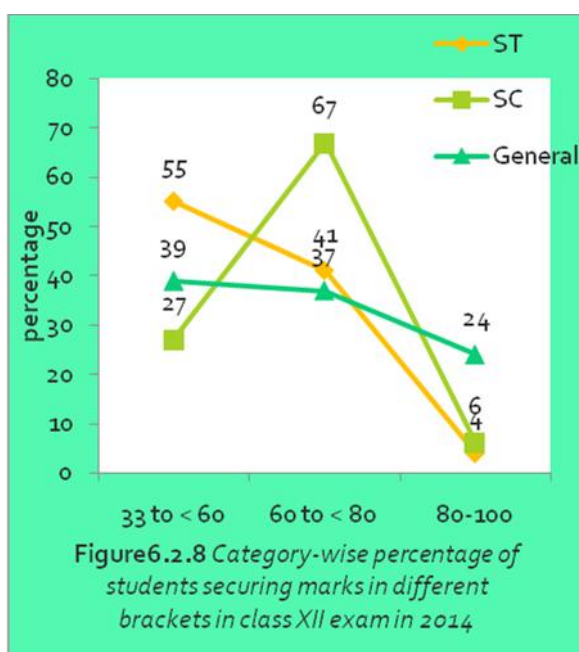


- * Maximum number of students scored in 30% to 80% bracket in EMRS and in 60% to 100% bracket in JNV in class XII Board examination in 2014. None of the ST & SC students & JNV students scored below 40% %, while none of the ST & SC students scored above 80%. 9% of JNV students & 5% of EMRS scored above 80%. There was approximately 5% gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 40% to 80% bracket and maximum number of JNV students scored in the 50% to 90% bracket. None of the EMRS students scored below 40% and none of the JNV students scored below 50%, while 8% of EMRS students scored above 80%, 27% of JNV students scored above 80%. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 for the year 2014 and for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Terminal Examination in the sampled schools in Rajasthan during the Last Three Years (2012-2014)

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	80	77	96	64	23	13
	SC	20	19	95	42	-	58
	General	33	33	100	27	-	73
2013	ST	88	85	96	52	46	02
	SC	16	16	100	06	56	38
	General	31	31	100	48	16	36
2014	ST	116	104	89	55	41	04
	SC	15	15	100	27	67	06
	General	42	41	98	39	37	24
Total	ST	284	266	93	56	38	06
	SC	51	50	98	26	38	36
	General	106	105	99	38	19	43



- * In class XII Board examination in 2014, 21% of ST students across all types of schools scored below 60%, while 52% of SC students and 36% of the general students scored below 60%.
- * 2% of ST students, 72% of SC students and 41% of general students scored above 80%. Maximum number of ST and general students scored in 33% to 60% bracket, while maximum number of SC students scored in 60% to 80% bracket. The SC and general students performed better than ST students and general students had a slight advantage over SC students

- * Considering the Class XII Board examination results over the last three years (2012-14), the ST students' performance level was low and general students performed at an equal level with SC students and both groups performed noticeably better than the ST students.

6.3. Student Participation in Co-curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of boys and girls participating in Co-Curricular and Sports activities by School Type (Rajasthan)

Activity	EMRS		SC & ST		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
Co-Curricular activities						
Drawing	19	-	-	07	09	15
Singing	05	-	-	07	12	25
Sewing/ Knitting	-	-	-	07	-	-
Dancing	08	02	-	07	12	25
Painting	26	-	-	07	12	32
Instrumental music	-	-	-	-	06	19
Debate/ Eloquence	-	01	41	07	12	25
Writing Skill	12	02	50	07	27	25
G.K. / Quiz	03	22	100	07	09	19
Drama	08	-	-	04	06	13
Games and Sports						
Football	-	-	-	-	12	-
Volleyball	-	13	-	-	14	06
Basketball	-	-	-	-	-	-
Kho-Kho	-	08	-	12	22	25
Badminton	-	-	-	15	06	06
Kabadi	11	08	-	20	14	16
Skipping	-	-	-	-	-	-
Athletics	04	-	-	50	14	13
Karate	-	-	-	-	-	-
Archery	04	-	-	-	-	-
Handball	11	-	-	-	-	-
Social activities						
NCC	-	-	-	-	-	-
Scout	-	-	-	-	-	-
NSS	-	-	-	-	-	-
Red cross	-	-	-	-	-	-
Shramdan	-	-	-	-	-	-
Social awareness campaign	-	-	-	-	-	-
Socials service in villages	-	-	-	-	-	-

- * It may be observed that more girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- * The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Drawing, Painting & Writing skill invited maximum student participation in the EMRS in the range of 40% to 48%. Drawing, painting, debating, singing, Debate/ Eloquence and writing competitions invited maximum student participation in the JNV.
- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, handball and athletics. The same was also true for the JNV except that more JNV students compared to EMRS students went into sporting activities. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, Kho-Kho, Badminton, kabbadi and athletics.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: Percentage of boys and girls participating in Social activities by School Type (Rajasthan)

	NCC	Scout	NSS	Shramdan	Social awareness campaign	Social service in villages
EMRS		12	11	83	85	64
SC & ST	-	30	-	100	100	37
JNV	-	12	13	69	32	-

- * None of the students have opted for NCC. Among JNV students, 4% adopted Scouts and 13% were in NSS. *Shramdan* was carried in all types of schools with maximum student participation in the range of 80% to 100% (Table 6.3.2).
- * 6% of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV were 25% and 20% respectively. These activities were missing in ST & SC schools.

6.4 Performance in National Talent Search Tests

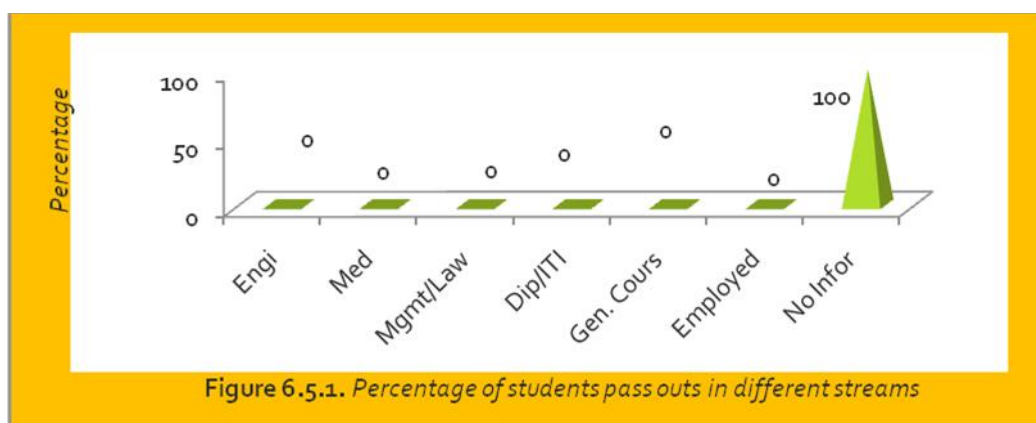
None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

6.5 Success Indicators of School Pass Outs

Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training. The data in respect of the pass outs are not available in any Institution.

Table 6.5.1.: Success indicators of school pass outs

Year	No of pass outs	Engineering	Medical	Management/Law	Diploma/ITI	General courses	No taking up employment	Information not available (no.)
EMRS	2012	68	-	-	-	-	-	100
	2013	67	-	-	-	-	-	100
	2014	79	-	-	-	-	-	100
SC & ST	2012	00	-	-	-	-	-	100
	2013	04	-	-	-	-	-	100
	2014	27	-	-	-	-	-	100
JNV	2012	65	-	-	-	-	-	100
	2013	64	-	-	-	-	-	100
	2014	67	-	-	-	-	-	100



* In the absence of data it could not be possible to track out the merits of the programme.

Chapter 7

SCHOOL-COMMUNITY LINKAGE

7.1 Functioning of SMC and Other School Committees

The involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Table 7.1.1 lists out the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA participation in school activities

Parameter	EMRS	SC & ST	JNV
SMC participation			
Regular meeting of SMC	NO SMC NO MTA FUNCTIONING	NO SMC NO MTA FUNCTIONING	NO SMC NO MTA FUNCTIONING
Implementing resolutions of SMC			
Involvement in developing SDP			
Monitoring student attendance and drop out			
Monitoring student progress			
Participation in school's co-curricular activities			
Participation in preparing TLMs			
Supervising hostels			
Supervising quality of meals			
Monitoring utilization of funds			
Liaoning with other agencies for school development			
MTA participation			
Regular meeting of MTA	NO MTA FUNCTIONING		
Monitoring student attendance and drop out			
Participation in school's co-curricular activities			
Working for the safety of girls			
Monitoring Meena cabinet and Meena Manch			
Coordinating with SHG for catering to girls' hygienic requirements			

- * The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- * SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and

quality of meals, monitoring utilization of funds or in establishing coordination with other agencies. Their participation in preparing TLMs or in co-curricular activities in the school was very poor.

- * The MTA meetings were very infrequent and were also held as a matter of formality. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff.

7.2 Teachers' Interaction with Community

Table 7.2.1 reveals how teaching staff treat and interact with community members.

Table 7.2.1: *Teachers' interaction with parents and community members*

Parameter	EMRS	SC & ST	JNV
Dealing with community members when they visit school	Good	Manageable	Good
Personal contact with community members	Manageable	Manageable	Manageable
Sharing of students' results with parents	Manageable	Poor	Manageable
Influencing the community cognitive behavior	Poor	Poor	Poor

- * The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues. Guardian contact programme would have been more effective.

MONITORING AND SUPERVISION

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Table 7.3.1 reports frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of monitoring and supervision of the school and the Hostel by Educational Administrators and Community members during the 2014-15 (Rajasthan)

Supervision	School			Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
By educational administrators	06	10	18	04	03	10	03	03	08
By community members	-	-	-	-	-	-	-	-	-

During a span of one year, educational administrators visited EMRS and boys' hostels approximately about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was almost was better. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavors in EMRS & ST & SC schools where as in JNV it was more systematic.

The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 provide information on hostel visits by the principals. Class visits by the principals of EMRS appeared to be in the moderate range as there were about 10 visits a month covering classes of 15-17 teachers. The number of class visits by principal in ST & SC schools was comparatively less where as in JNV the supervision aspect was better.

Table 7.4.1: Frequency of hostel visits by the principal

Month	Boys' Hostel			Girls' Hostel		
	EMRS	SC & ST	JNV	EMRS	SC & ST	JNV
Aug, 2014	03	02	07	03	02	07
Sep, 2014	04	05	06	04	05	06
Jan, 2015	06	02	05	06	02	05
Feb, 2015	02	03	03	02	03	03

- * The principals in EMRS visited boys' and girls' hostels about twice a week. The same was also true for ST & SC schools. The frequency of hostel visits by the principal of JNV was comparatively more and on enquiry it was known that superintendents (MOD & Housemasters) were supervising hostels regularly with the principal being informed almost on a regular basis.
- * The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

8.1. Teachers' Perception and Feedback

Thirteen teachers of EMRS, 12 teachers of ST & SC schools and 6 teachers of JNV were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on hostel and toilet cleanliness, activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counseling services for students, capacity building of teaching and non-teaching staff. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices being in contact with subject experts, counseling students and maintaining record of success rate of school pass outs.

Table 8.1.1: Model responses of teachers on important school functioning parameters obtained through interview

	EMRS	SC & ST	JNV
Satisfactory (need to be maintained)	<ul style="list-style-type: none"> * Incentive plans for students. * Educational support to meet the distinctive academic needs of children. * Educational support to meet the distinctive cultural needs of children. * <i>Course completion as per syllabus plan.</i> 	<ul style="list-style-type: none"> * Incentive plans for students. * Educational support to meet the distinctive academic needs of children. * Educational support to meet the distinctive cultural needs of children. * <i>Course completion as per syllabus plan.</i> * <i>Preparation of lesson plan and lesson diary.</i> * <i>Activity based learning methods used in transaction of lessons.</i> 	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Preparing students for contribution to the society. * Salary / Remuneration to the teaching staff. * Service conditions of teachers. * Quarters inside the cam pus. * Incentive plans for students.

	<ul style="list-style-type: none"> * Preparation of lesson plan and lesson diary. * Activity based learning methods used in transaction of lessons. * Use of TLM during teaching learning activities. * Correcting students' work regularly. * Use of library by students. * Innovative teaching learning activities. * Encouraging students to ask questions. * Organizing games, sports in the school. * Organizing literary activities (story & essay writing, debate, quiz etc.). * Organizing physical exercises for students. * Organizing programs on arts & aesthetics 	<ul style="list-style-type: none"> * Use of TLM during teaching learning activities. * Correcting students' work regularly. * Use of library by students. * Innovative teaching learning activities. * Encouraging students to ask questions. * Organizing games, sports in the school. * Organizing literary activities (story & essay writing, debate, quiz etc.). * Organizing physical exercises for students. * Organizing programs on arts & aesthetics 	<ul style="list-style-type: none"> * Capacity building of the teaching staff. * Capacity building of the non-teaching staff. * Preparing students for professional educational courses. * Preparing students to get jobs in the public and private sectors. * Educational support to meet the distinctive academic needs of children. * Educational support to meet the distinctive cultural needs of children. * Course completion as per syllabus plan. * Preparation of lesson plan and lesson diary. * Activity based learning methods used in transaction of lessons. * Use of TLM during teaching learning activities. * Correcting students' work regularly. * Use of library by students. * Using labs effectively. * Innovative teaching learning activities. * Use of e-content in SMART Class. * Special attention to the slow learners (remedial). * Encouraging students to ask questions. * Organizing games, sports in the school. * Organizing literary activities (story & essay writing, debate, quiz etc.). * Organizing physical exercises for students. * Organizing programs on arts & aesthetics. *
Average (need to be strengthened)	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Preparing students for contribution 	<ul style="list-style-type: none"> * Preparing students to contribute to family wellbeing. * Preparing students for contribution to the 	<ul style="list-style-type: none"> * Salary / Remuneration to the non-teaching staff. * Service conditions of the non-teaching staff.

	<p>to the society.</p> <ul style="list-style-type: none"> * Salary / Remuneration to the teaching staff. * Salary / Remuneration to the non-teaching staff. * Service conditions of the non-teaching staff. * <i>Mechanism of redressing grievances of the inmates.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Environment cleanliness in the hostel.</i> * Incentive plans for teachers. * Keeping a record of students' success rate in professional examinations. * Keeping a record of professional career of pass outs. * <i>Allowing students to use TLMs.</i> * <i>Exchange of thoughts with teachers & subject experts.</i> * <i>Organizing games, sports in the school.</i> * <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> * <i>Organizing physical exercises for students.</i> 	<p>society.</p> <ul style="list-style-type: none"> * Salary / Remuneration to the teaching staff. * Salary / Remuneration to the non-teaching staff. * Service conditions of the non-teaching staff. * <i>Mechanism of redressing grievances of the inmates.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Environment cleanliness in the hostel.</i> * Incentive plans for teachers. * Keeping a record of students' success rate in professional examinations. * Keeping a record of professional career of pass outs. * <i>Allowing students to use TLMs.</i> * <i>Exchange of thoughts with teachers & subject experts.</i> * <i>Organizing games, sports in the school.</i> * <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> * <i>Organizing physical exercises for students.</i> * <i>Organizing programs on arts & aesthetics.</i> * <i>Organizing social service camps</i> * <i>Encouraging students to ask questions.</i> * <i>Organizing games, sports in the school.</i> 	<ul style="list-style-type: none"> * Prospect for future promotion. * Incentive plans for teachers. * Keeping a record of students' success rate in professional examinations. * Keeping a record of professional career of pass outs. * <i>Allowing students to use TLMs.</i> * <i>Exchange of thoughts with teachers & subject experts.</i> * <i>Organizing games, sports in the school.</i> * <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> * <i>Organizing physical exercises for students.</i> * <i>Organizing programs on arts & aesthetics.</i> * <i>Organizing social service camps</i> * <i>Encouraging students to ask questions.</i> * <i>Organizing games, sports in the school.</i> * <i>Providing computer knowledge to the learners.</i> * <i>Encouraging students having talents in specific areas.</i> * <i>Transparency in the management of hostel accounts.</i> * <i>Mechanism of redressing grievances of the inmates.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Environment cleanliness in the hostel. Nm</i>
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<p>Unsatisfactory (need substantial improvement)</p>	<ul style="list-style-type: none"> * Quarters inside the campus. * <i>Using labs effectively.</i> * Preparing students to contribute to family wellbeing. * Preparing students for contribution to the society. * Salary / Remuneration to the teaching staff. * Salary / Remuneration to the non-teaching staff. * Service conditions of the non-teaching staff. * <i>Mechanism of redressing grievances of the inmates.</i> * <i>Learning atmosphere in the hostel.</i> * <i>Environment cleanliness in the hostel.</i> * Incentive plans for teachers. * Keeping a record of students' success rate in professional examinations. * Keeping a record of professional career of pass outs. * <i>Allowing students to use TLMs.</i> 	<ul style="list-style-type: none"> * Quarters inside the campus. * Capacity building of the teaching staff. * Capacity building of the non-teaching staff. * Preparing students for professional educational courses. * Preparing students to get jobs in the public and private sectors. * <i>Using labs effectively.</i> * <i>Use of e-content in SMART Class.</i> * <i>Attendance in PTA meeting.</i> * <i>Relation with SMC members.</i> * <i>Relation with MTA members.</i> * <i>Relation with PRI members.</i> * <i>Personal contact with parents/guardians.</i> * 	<ul style="list-style-type: none"> * Incentive plan for teaching and non-teaching staffs. * Keeping record of academic/professional career of pass outs. * <i>Attendance in PTA meeting.</i> * <i>Relation with SMC members.</i> * <i>Relation with MTA members.</i> * <i>Relation with PRI members.</i> * <i>Personal contact with parents/guardians.</i> * <i>Exchange of thoughts with teachers & subject experts.</i> * <i>Organizing games, sports in the school.</i> Ñ <i>Organizing physical exercises for students</i>
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8.2 Perception and Feedback of Non-Teaching Staff

The modal responses obtained from the non-teaching staff through interview pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: *Model responses of non-teachers obtained through interview*

[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS	SC & ST	JNV
Suitable conditions for performing duties	S	HS	HS
Involvement in co-curricular activities	S	HS	S
Relation with principals and teachers	HS	HS	HS
Relation with students	HS	S	HS
Relation with parents/ community members	HS	S	S
Receiving capacity building training	HU	HU	HS

The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Relation with students, teachers and community was better in ST & SC schools than in EMRSs. They were unhappy that attempts were not taken to provide capacity building training to the non-teaching staff in EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.

The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV, who are regular staff like other teaching staffs, was better compared to EMRSs and ST & SC schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

The service conditions and benefits of staff of EMRS are critical issues for employee motivation. Tables 8.3.1 and 8.3.2 present the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The teachers when get opportunity in other sectors tend to quit the engagement for want of regularization and service conditions. Even a PGT leaves his post when gets scope of engagement as primary school teacher even in the matric/ CT post.

The picture in ST & SC schools was slightly better as the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus.

The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

Table 8.3.1: Model responses of teachers corresponding to Staff service conditions and benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	ABUROAD	NEWAI	NAYAGAON	DHIKILI	KALANDRI
Salary/remuneration to the teaching staff	S	U	S	S	S
Salary/remuneration to the non-teaching staff	A	HU	A	S	S
Service conditions of teachers	S	U	HS	A	S
Service conditions of non-teachers	A	U	S	A	S
Prospect for promotion	A	U	S	S	S
Incentive plan for teachers	U	U	S	U	S
Quarters inside campus	HU	S	S	HS	HS
Incentive plan for non-teachers	U	U	S	S	S
Incentive plan for students	S	S	S	HS	HS

Table 8.3.2: Model responses of non-teaching staff corresponding to Staff service conditions and benefits
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS		SC & ST		JNV
	ABUROAD	NEWAI	NAYAGAON	DHIKILI	KALANDRI
Salary/remuneration to the non-teaching staff	HU	U	HS	S	S
Service conditions of non-teaching staff	HU	U	HS	S	HS
Prospect for promotion	HU	U	U	S	HU
Quarters inside campus	HU	U	S	A	HS
Incentive plan for non-teachers	HU	A	A	A	S

8.4 Students' Perception and Feedback Students are the central characters in any teaching-learning environment. Their perception and feedback are important for developing school practices because all infrastructure and educational inputs and throughputs are meant for them. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment: Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health checkup facilities and hostel accommodation. Students in ST & SC schools also experienced yet more deficiencies. It was astonishing to note that students were not provided with mosquito nets in spite of the fact their environment was more unhygienic. JNV fared much better in most of these parameters and students projected satisfaction over residential conditions.

Table 8.4.1: Percentage of students responding positively to the following School and hostel parameters obtained through Interview

Parameter	EMRS	SC & ST	JNV
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	(N = 20)	(N = 20)	(N = 10)
School and Hostel environment			
Like the school	100	100	100
Conducive hostel infrastructure and accommodation	80	50	100
Classroom and lab furniture adequate	100	100	100
Lab furniture adequate	50	40	80
Good quality food	70	60	70
Good drinking water	80	40	100
Health checkup facilities available	40	25	70
Hostel environment is clean	70	60	80
Toilets and bathrooms are clean	80	80	100
Mosquito net provided	100	100	100
Curricular and Co-curricular activities			
Teachers are supportive of students	100	100	100
Adequate supply of textbooks	100	100	100
Adequate supply of learning materials	100	100	100
Quality of teaching	80	60	90
Activity-based teaching done and TLMs used	60	40	70
Home assignments given	60	30	80
Projects given	50	35	80
Student work corrected regularly	80	50	90
Regular supervised study and remedial classes	70	30	100
Laboratories effectively used	70	50	100
Allowed to ask questions freely	100	100	100
Co-curricular activities promoted	100	100	100
Scope for games and sports	50	30	80
Participation at district and state level encouraged	80	40	100
Student participation			
Student suggestions are solicited in school functioning	50	30	80
Student participate in mess management	70	30	80

Curricular and Co-curricular activities: Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.

Student participation: In all categories of schools' student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs: The FGDs conducted with students' yielded additional information on student concerns. Four FGDs conducted in the two EMRSs involving 45 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave.

There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues.

In the academic front activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening.

Students participate in debates and drawing competitions at different levels but most of the cultural and co-curricular activities are done at the behest of the teachers with students taking very little initiative. Teachers are cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents on guardian contact programme. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, EMRSs practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving 40 students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were not as per the level of satisfaction. Student hostels were ill-equipped having mid-sized rooms with inadequate fan and light points. The quality of food was very poor. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving 14 students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

The parents of the JNV expressed full satisfaction over academic as well as non-academic activities of the school. They also favorably expressed opinion on residential condition of the hostel, quality of food, discipline, remedial coaching and house system adopted in the school and hostel.

**Table 8.5.1: Model responses of community members on facilities extended
To children and their interaction with school staff**

	EMRS (N =10)	SC & ST (N =10)
Facilities for children		
Cleanliness of school environment	100	80
Cleanliness of hostel rooms and environment	70	70
Safety and security of hostels	50	50
Supply of free textbooks	100	100
Textbooks given before academic session	100	100
Children helped to solve academic problems	70	100
Children's results shared with parents	50	50
Children prepared to face competitive examinations	30	40
Quality of meals reasonably good	60	60
Cultural activities involving children	70	100
Opportunities for games and sports	40	50
Children's health problems duly attended	40	50
Non-discriminatory treatment to students	100	100
Interaction with school and staff		
Members' grievances properly received by staff	100	100
Teachers behave well with members	100	100
Member associated with school planning	30	30
Community contributes to school development	40	40

8.6 Views of Educational Administrators

The Assistant Commissioner expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. However they also suggested for further improvement. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the

teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.

8.7 Programme Strengths, Concerns and Suggestions: Stakeholders' Feedback on EMRS

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 8.7.1 for feedback from each category of stakeholders).

Programme strengths (*need to be maintained*). Good school and hostel infrastructure; Residential facilities for students; Favorable PTR; Supply of free textbooks and uniforms and learning materials; Scope for games, sports and co-curricular activities; Engagement of qualified staff; Special attention and coaching to students; Gender and Social equity.

Concerns (*need special attention*). Poor salary and service conditions of the staff; Poor hostel maintenance and cleanliness; Water, power and toilet problems; Poor community involvement in school activities; Lack of regular health worker; Teacher-directed rather than student-initiated activities; Poor attention to build capacities of teachers

Suggestions (*need to be implemented*). Regular employment, proper salary and service conditions of staff; Solving water and power crises; Regular maintenance of hostel building and proper drainage system; Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit; Special measures for improving students' language proficiency; Capacity building of teaching and non-teaching staff; Student involvement in school practices and mess management; Strengthening school-community link.

Table 8.7.1: Strengths and difficulties of EMRS programmer pointed out by stakeholders and their suggestions for strengthening EMRS

Stakeholder	Strengths	Difficulties	Suggestions
Principal	<ul style="list-style-type: none"> •The staff are good and corporative in nature •Maintains of discipline is good and in proper order •Students are hard working 	<ul style="list-style-type: none"> • In sufficient teaching and non-teaching staff • Drinking water facilities • Student safety • Funds are not sanctioned in time. 	<ul style="list-style-type: none"> • Dedicated non-teaching staff should be employed • Vocational course should be provided to the student • More professional teaching staff should be appointed
Teachers	<ul style="list-style-type: none"> • Well discipline and extra classes for learner • To motivate learner for higher education • Activities like social service, scout, NSS, cultural activities, Games, extracurricular activities are conducted to improve the status of the student. 	<ul style="list-style-type: none"> • Quarters are not available for staff. • Language and communication problem. • there is no Playground • There is no Staff Nurse to provided primary health care. • Smart board and TLM not sufficient. 	<ul style="list-style-type: none"> • Primary education should be sound • Need hostel warden according to strength • Water problem should be solved • Teachers quarter need. • Language lab. Is required to improve the communication of the student. • Carrier counselling corner for the students is required • Extra coach are needed to improve the status of the student. • Staff Nurse should be provided for primary health care. • Sufficient Smart board and TLM should be supplied.

Hostel Superintendent	<ul style="list-style-type: none"> • *Food is healthy and hygienic • Electrification is very best. • Health check-up program is satisfactory • *Most suitable atmosphere for study. 	<ul style="list-style-type: none"> • In sufficient drinking water and security guard 	<ul style="list-style-type: none"> • Sufficient drinking water facilities should be done • More security guard should be appointed
Students	<ul style="list-style-type: none"> • *good environment for better education. • *Behaviour and teaching style of the teacher. • *good understanding among both boys and girls. 	<ul style="list-style-type: none"> • No good quality of food, drinking water, toilet, light, in the school. 	
Community Members	<ul style="list-style-type: none"> • *Free accommodation, education, cloths and food • *Help student to improve the carrier • *Teachers are solving the problem 	<ul style="list-style-type: none"> • Misbehave to the cook and hostel staff • Food is not hygienic • Living room condition is not good 	<ul style="list-style-type: none"> • Food should be hygienic • Improve the living room of the students

Chapter 9

SUMMARY OF FINDINGS AND RECOMMENDATIONS

9.1 School and Hostel Infrastructure Facilities

- Each of the EMRS, ST & SC schools and JNV are spread over acres of land with a lot of space for students to move around. All the buildings provided safe habitations for students except that ST & SC schools required regular maintenance and white washing. The EMRS and ST & SC schools did not fare well on hygienic parameters.
- The EMRS had library facilities but no adequate reading room. The conditions of labs, library and reading rooms were better in EMRS and JNV as compared to that of ST & SC schools. On most of the important infrastructure parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.
- Water scarcity was a major problem in the ST & SC schools. Furthermore, drinking water safety was a major concern in ST & SC schools. The cleanliness of toilets and provision of water and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.
- All schools fell short on child-friendly parameters and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required. Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in most schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.
- Each school had entrance gate, boundary wall but due attention was not paid to raising and maintaining gardens and kitchen gardens.
- Proper water harvesting measures should be on focus which will help in gardening.
- Power supply was a major concern in one ST & SC School. On an average, power failure was reported for about 7-8 hours. While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs.
- Nearly 100% of students in ST & SC schools, EMRS and JNV stayed in hostels. The residential situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.
- All schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since most of the teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.
- Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of overhead tanks as per necessity. The toilet condition and cleanliness was poor in ST & SC hostels, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.

- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- Ladies Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- Alternative arrangement for load shedding seems neglected.
- While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

9.2 Staff Profile and Service Condition

- Forty one percent of the teaching and 10% of the non-teaching positions were lying vacant in EMRS compared to 34% and 21% in ST & SC schools and 10% and 0% in JNV.
- The pupil-teacher ratio (PTR) was noticeably very high for EMRS. The PTRs in SC& ST schools was also high in one school i.e. at Nayagaon and Newai, whereas PTR in JNV were good and were as per state norm.
- There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities.
- All the teachers of different types of schools were trained. More number of teachers in all schools taken together had more than 10 years of teaching experience. Teachers in EMRS and teachers in ST & SC schools and JNV in contractual employment were in the habit of leaving their respective schools when better employment opportunities were available.
- Most of the non-teachers in EMRS and ST & SC schools and more than half of non-teachers in JNV did not receive any formal training as required in their respective jobs. Nearly 30% of non-teaching staff had less than 5 years of experience on the job.
- Astonishingly and regrettably, there was no service condition for EMRS teaching and non-teaching staff. All the teaching staff in ST & SC schools were employed on regular basis and all the teachers in JNV were also employed on regular basis. But there was no EMRS society in Rajasthan and the schools were running by government directly by way of deployment of government teachers.
- There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV respectively. The teachers of ST & SC schools and JNV across all levels also received 1.5 times and twice of the gross monthly emoluments of teachers in EMRS, respectively. These noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff.
- Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are major issues of concern and need to be addressed to ensure quality processes and outcomes.
- Capacity building training was given to teachers of EMRS for content knowledge enrichment and teaching practices but the duration was not adequate. The ST & SC School teachers received training as per Government's schedule. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

- The non-teaching staff of EMRS and ST & SC schools received hardly any training. The clerks and CCA had not been trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostels was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.
- The EMRS vision is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

9.3 Student Enrolment and Retention

- The percentages of increase in applications to class VI in 2014-15 with respect to 2012-13 were 39% for EMRS, 81% for ST & SC schools and 49% for JNV. The demand for admission to all types of schools increased over the years except EMRS where there is a declining trend.
- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 50.08, 50 and 3.62 for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- Percentages of increase in applications for entry at Class XI in 2014-15 were
- -44.44% for EMRS and 6.89% for JNV. Students seeking admission in different types of schools increased. While 19.4% of those seeking admission to Class XI in EMRS were admitted, 21.8% were admitted in ST & SC schools and 39.7% were admitted in JNV.
- There seems to be a declining trend in admission in EMRSs. EMRS-Society has not yet been constituted for which there is no specific identity of EMRS. The EMRSs are running by deployment of government teachers who lack the spirit of ownership.
- There is no teacher appointment policy for which quality teachers do not come to such EMRSs that tells upon the suitable quality norms.

- Student attendance in all types of schools was satisfactory. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X was satisfactory. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were around 95% in EMRS, 95% in ST & SC schools and 100% for JNV.
- Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 10% of students admitted to Class VI did not complete their education cycle in 2014-15. The information in respect of students staying out of the school system was not available with the school authorities.

9.4 School and Hostel Educational Climate

- The school campus and classrooms appeared to be clean in JNV. It requires more attention in EMRS & SC /ST schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools and EMRSs.
- While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.
- In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were

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nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.

- Required number of textbooks was distributed in EMRS, JNV registered a figure of 100% distribution of textbooks. The distribution of textbooks in ST & SC schools was not satisfactory.
- The status of EMRS did not turn out to be satisfactory in respect of preparation of lesson plan, activity-based teaching, group-based learning, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools in respect of these school-related activities. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor.
- Mostly TLMs and TLEs which were purchased by the teachers; they were not purchased with a proper plan to cater to students' need and course requirements and were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.
- Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS. The ST & SC schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.
- Adoption of CCE along most of parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.
- Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students. In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying student talents.
- Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels.
- In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box, wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.
- The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.
- On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no

smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.

- The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

9.5 Students' Educational Attainment

- In all the four subjects (English, Mathematics, Science and Social Science), Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- The performance of students from all the three types of schools was not in the satisfactory range. Class VIII students in ST & SC schools scored in the range of only 23% to 27% across four subject areas, while those in EMRS scored in the range of 21% to 29%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 33% to 41% across the four subject areas.
- The ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools with maximum gap being noticed in English language attainment. The ST students in ST & SC schools performed in the range of 23% to 27% while their performance in EMRS was within 21% to 29% and in JNV in the range of 27% to 44%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- The performance of Class X students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 35% to 46%, while those in EMRS showed attainment in the range of 24% to 43%. The students in JNV performed in the range of 49% to 71%. Here the JNV performance is extremely poor.
- Class X ST students in JNV performed better than ST students in SC & ST, who were also better than ST students in EMRS. It was only in English in which ST & SC schools performance did not turn out to be significant
- Though Class XII students in JNV were better than their grade-mates in EMRS. The performance of ST & SC schools, EMRS and JNV narrowed down gradually though JNV students performed better than others.
- The performance level of Class XII students of EMRS was poorer in all subjects i.e. in English, Physics, Chemistry, Mathematics and Biology. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 55.17%. Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over ST & SC schools students who were also better than EMRS students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.
- On the whole the performance of students in EMRS was poor, of those in ST & SC schools below average and of those in JNV, above average. In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in

different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

- In Class X Board examination, more percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools.
- The maximum concentration of students in ST & SC schools was in the 40% to 50% bracket, in EMRS the maximum concentration was in 50% to 60% bracket and in JNV, maximum students scored in the 60% to 70% bracket.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014
- During the last five years, none of the students of JNV, 4% of students of EMRS and 3% of the students of ST & SC schools scored below 40%, while 1% of students of JNV, none of EMRS and none from the SC & STs schools scored above 90%.
- The SC and general students performed almost at an equal level and both groups performed better than ST students. The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.
- In Class XII Board examinations in 2014, maximum number of students scored in 60% to 70% bracket in EMRS, SC& ST schools and JNV. There was huge gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 50% to 60% bracket and maximum number of JNV students scored in the 60% to 70% bracket. Considering the results of last five years, there was a gap of about 10% in student performance level between EMRS and JNV favouring the latter.
- In class XII Board examination in 2014, maximum number of ST and general students scored in 33% to 60% bracket, while maximum number of SC students scored in 60% to 80% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.
- No record is maintained in any category of school where one can track the movement of pass-outs.

9.7 Student Participation in Co-curricular and Social Activities

- More girls than boys participated in co-curricular activities, while more girls than boys participated in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 25% to 30% in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 40% to 50%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.

- None of EMRS students were in NCC, 12% in Scouts and 11% in NSS, while 30% of ST & SC students were in Scouts and NCC and NSS were not adopted in ST & SC schools. Among JNV students, 12% adopted Scouts and 13% were in NSS. 69% in *Shramdan* was carried in all types of schools with maximum student participation in the range of 80% to 100% in social awareness campaign.
- 85% percent of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV and ST & SC were 32% and 20% respectively.

9.8 Schools-Community Linkage

- The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC and MTA members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals or monitoring utilization of funds. Their participation in preparing TLMs was non-existent and in schools' co-curricular activities, very poor.
- The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

9.9 School Monitoring and Supervision

- During the span of last one year, District Social Welfare Officers visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits by authorities to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.
- Class visits by the principals of EMRS appeared to be in the moderate range as there were about 8 visits a month covering classes of 5-8 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively less. Hostel visits were done by the principals about twice a week. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

9.10 Stakeholders' Feedback and suggestions

Teaching and Non-teaching staff

- Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of education focusing on classroom teaching, course completion and terminal examinations

with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counselling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counselling students and maintaining record of success rate of school pass outs.

- Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favourable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.
- In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements. The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.
- The non-teaching staff members of EMRS and ST & SC schools were unhappy that attempts were not taken to provide capacity building training to them. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

Student feedback

- Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV.
- Pertaining to the hostels, the major issues of concern for EMRS students were scarcity of water for daily-routine work, cleanliness of toilets and hostel environment, light, ventilation and accommodation facilities, water accumulation around hostel because of improper drainage system, poor repair and maintenance work, quality of food, health check-up facilities and indoor sports activities. Some expressed fear of bragging in schools and hostels. Students in ST & SC schools also experienced the same deficiencies to a greater degree. It was astonishing to observe that students in ST & SC hostels were not provided with mosquito nets in spite of the fact that their environment was more unhygienic. The students in JNV had a more favourable perception of school and hostel environment and facilities. JNV fared better on most of these parameters.
- Students perceived teachers to be supportive of them and nice to their parents. The major issues inviting unfavourable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, access to computers,

irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes.

- Students' perception of provisions in ST & SC schools was more unfavourable. There was nearly a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback from Community Members

- Most of the community members in relation to EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About one-third of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. They were not directly involved in school planning and were aware that they did not have any contribution towards the school in the form of labour, service or funds.
- The community members' responses in respect of SC and ST schools were less favourable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Views of Educational Administrators

- The District level educational administrators (ADM and PA, ITDA) expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health check-up were necessary for proper policy implementation. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.
- All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 13.7.1). The Table explains itself very well. While

stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 13.7.1 for feedback from each category of stakeholders).

9.11 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

<i>Programme strengths</i> (Need to be maintained).	<i>Concerns</i> (Need special attention).	<i>Suggestions</i> (Need to be implemented)
<ul style="list-style-type: none"> • Good school and hostel infrastructure • Residential facilities for students • Favourable PTR • Supply of free textbooks and uniforms and learning materials • Scope for games, sports and co-curricular activities • Engagement of qualified teaching staff • Special attention and coaching to student • Gender and Social equity. 	<ul style="list-style-type: none"> • Poor salary and service conditions of the staff • Poor hostel maintenance and cleanliness • Water, power and toilet problems • Poor community involvement in school activities • Lack of regular health worker • Teacher-directed rather than student-initiated activities • Poor attention to build capacities of teachers • Adoption of CCE in student assessment 	<ul style="list-style-type: none"> • Regular employment, proper salary and service conditions of staff • Solving water and power crises; Regular maintenance of hostel building and proper drainage system • Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit • Special measures for improving students' language proficiency • Capacity building of teaching and non-teaching staff • Student involvement in school practices and mess management • Strengthening school-community link.

Section 9

Impact of Ekalavya Model Residential Schools in Enhancing the Educational Attainment of ST Children

INTEGRATED REPORT FOR INDIA

(Odisha, Madhya Pradesh, Gujarat, Maharashtra, Rajasthan)

*Prepared
By*

**Scheduled caste and Scheduled Tribe Research and
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Chapter 1

SCHOOL AND HOSTEL INFRASTRUCTURE AND FACILITIES

1.1 School Infrastructure Facilities

Almost all the Ekalavya Model Residential schools have been provided with required land space to accommodate academic, residential and other facilities such as field for games, sports and space for garden, kitchen garden and a lot of space for students to move around. The campus area ranges from 21 across to 30 acres in EMRSs of different and also the same trend is followed in Jawahar Navodaya Vidyalayas. The built up area for academic block and hostels run into about 100,000 sq.ft. to 140,000 sq. ft. The residential space in JNU is 40 sq.ft. per child in comparison with the 32 sq.ft. in case of EMRS. The JNU residential pattern appears to be more conducive with better reading space and as such may be replicated in EMRS. All the buildings provide safe habitations for students except that the EMRS buildings required regular maintenance and white washing. The condition of hostel buildings of EMRS projected a similar picture with inadequate toilet and bathrooms. Poor drainage system was the root cause for unhygienic surrounding and acted as the source for breeding ground of mosquitoes & flies. Students' common room was not available in EMRSs. The building space marked for Principals' room, teachers' common room, office room, kitchen, store room, was poor in EMRSs. In some states there was no auditorium, art gallery for students. Smart class rooms with adoption of e-content was almost absent in all EMRSs which projects inaction to modern way of teaching as adopted in JNVs. Laboratory-space also required a relook for renovation. Library-cum-reading room facility of JNVs was lacking in EMRSs along with required number of books, journals, periodicals and dailies. Gym was absent in EMRSs which was an important parameter to uplift physical fitness of students. In most of the parameters JNU was judged to be better than EMRSs.

Table 1.1.1: School wise Availability of Water and Sanitation Facilities

School	Drinking water			Hand wash		Toilet for Boys					Toilet for Girls					No. of children per toilet	
	Adequate %	Safety %	Major source	Soap available-%	Hand washed before and after meal %	Average No functional	Water facility in toilets %	Cleanliness and condition %	Soap & accessories available -%	Used by all children -%	Average No functional-	Water facility in toilets -%	Cleanliness and condition-%	Soap & accessories available -%	Used by all children -%	Boys	Girls

EMRS	80	90	BW	100	100	07	90	40-60	100	100	09	89	40-60	100	100	37	38
SC & ST	80	50	BW	100	100	05	70	40-60	56	100	07	100	40-60	100	100	55	88
JNV	100	100	BW	100	100	35	100	>60	100	100	15	100	>60	100	100	28	24

- BW: Bore well

Table 1.1.2: School-wise availability of child-friendly and safety facilities (Ramp& rail, slides & swings, playground)

School	Approximate number of children per hand wash point	Ramp & Rail to Blocks (%)	Ramp & Rail to Toilets (%)	Slides & Swings (%)	Playground	Double doors in classrooms	Fire safety (%)
EMRS	70	<40	<40	<40	Only for a few games	NO	<40
SC & ST	93	<40	<40	<40	Only for a few games	NO	<40
JNV	30	<40	<40	<40	Only for a few games	NO	<40

Table 1.1.3: School-wise percentage of availability of boundary Wall, garden, kitchen garden and school gate

	Boundary Wall			Garden			School gate		
	G	M	P	G	M	P	G	M	P
EMRS	30	50	20	10	20	70	56	25	19
SC&ST	23	45	32	18	24	58	65	22	13
JNV	85	15	00	45	32	23	100	00	00

G: Good, M: Manageable, P: poor

- Bore well was the major source of drinking water in all types of schools i.e.in EMRSs, SC& ST schools& JNVs. Drinking water was 80% adequate in EMRSs & ST & SC schools but 100% adequate in JNVs. except JNV there was no provision to supply adequate safe drinking water to all children. Soap was available in all schools for hand wash and all the students of EMRS, JNV & SC&ST schools were using the facility properly.
- Only seven no. of boy's toilets were functioning in academic block of EMRS which were inadequate for students. There was poor supply of water to toilets. The cleanliness of toilets was not ensured. The cleanliness of the toilet in EMRS &ST & SC schools was between 40% to 60%. The condition of toilets in SC &ST schools was poor. Availability of soap& accessories were 56%. Toilet facilities for boys & girls in JNV were satisfactory and better

than EMRS & SC & ST schools. 35 & 15 numbers of functional toilets were available in JNV academic block for boys & girls respectively.

- The ratio of toilets in EMRS was 1:37 for boys & 1:38 for girls, in ST & SC schools was 1:55 for boys & 1:88 for girls and in JNV was 1:28 for boys & 1:27 for girls.
- Adequate nos. of hand wash points were available in JNVs @ 1:30 students per water point, whereas there were 70 nos. of students per hand wash point in EMRS and 93 in case of ST & SC schools.
- Less than 40% Ramp and Rail to blocks were available in all three types of schools i.e. EMRS, SC/ST & JNV. It was also revealed that less than 40% slides and swings were available in all types of schools. Play grounds for various games and sports were not adequate in all types of schools. Playgrounds of JNV were somehow better than EMRS & ST & SC schools but not as per requirement.
- Double doors in classrooms were not available in EMRS, JNV & ST & SC schools. Fire safety was less than 40% in all schools.
- Each and every school had school-gate, boundary wall. School gate of JNV was 100% good in condition where as 65% good in case of ST & SC School & 56% good in EMRS. 85% boundary wall of JNV was good but 23% of ST & SC School & 30% EMRS were in good condition.
- Due attention was not given to raise & maintain gardens & kitchen in all types of schools. Lack of boundary wall and water facility were the major impediments for developing and maintaining the garden and kitchen garden in the school premises.
- Power supply was a major concern for the ST & SC schools & EMRSs. Frequent power cuts were the main problem. JNV had alternative arrangement but ST & SC schools & EMRS had inadequate alternative arrangement. Adequate furniture were not available in laboratory, library in EMRS & ST & SC schools.
- Bore well was the major source of drinking water in all types of schools i.e. EMRS, SC/ST & JNV. Drinking water was 80% adequate in EMRS & ST & SC schools but 100% adequate in JNV. The drinking water was 90% safe in EMRS where as 100% safe in JNV. Soap was available in all schools for hand wash. Hence all the students of EMRS, JNV & SC & ST schools washed their hands after meals. But hand washing before meals was not ensured.

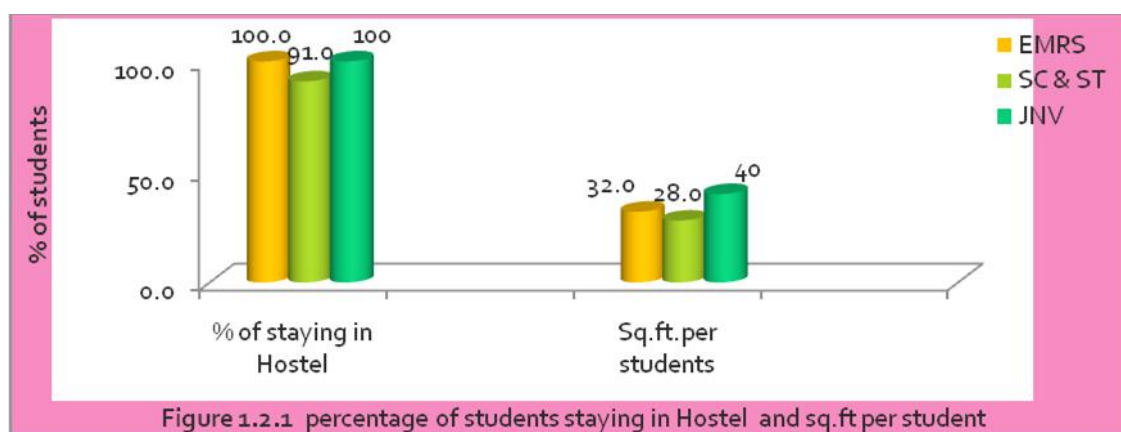
1.2 Hostel Infrastructure and Facilities

Table 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5 given below present information on hostel infrastructure, availability of various types of norms & their conditions, water & sanitation facilities in hostels, presence of child friendly elements && present of hostel boundary wall land about, garden & kitchen gardens.

Table 1.2.1: Overall Physical Infrastructure of Boys' and Girls' Hostels

School type	Student strength		Condition of the hostel			Accommodation space per student	
	No in school	% staying in hostel	Safety (%)	Leaking (%)	Light & ventilation	Sq. ft. per student (app.)	Adequacy

EMRS	3485	100	40-60	20	40-60	32	Inadequate
SC & ST	4570	91	40-60	50	40-60	28	Inadequate
JNV	2346	100	>60	00	>60	40	Inadequate



- 100% of students in EMRS & JNV stayed in hostel but 91% students of ST & SC schools stayed in hostels. 9% students in ST & SC schools were day scholars of nearby village.
- Above 90% hostel condition of JNV was safe, where as 40% to 60% of EMRS & ST & SC schools were safe. Similarly above 60% light & ventilation in JNV was better but 40-60% were better in EMRS & ST & SC schools.

Table 1.2.2: Availability and condition of different types of rooms in boys' and girls' hostels by school type

Types of rooms	EMRS			SC & ST			JNV		
	G (%)	M (%)	P (%)	G (%)	M (%)	P (%)	G (%)	M (%)	P (%)
Superintendent's room /quarters	30	60	10	30	40	30	80	00	20
Dining room	50	10	40	00	60	40	100	00	00
Living room	30	60	10	10	40	50	100	00	00
Kitchen room	10	80	10	00	60	40	80	20	00
Store room	40	40	20	00	75	25	60	40	00
CCA room	00	40	60	00	20	80	20	20	60
Sick room	20	10	70	00	00	100	60	20	20
Prayer room	20	30	50	00	10	90	20	00	80
Auditorium / assembly	N	N	N	N	N	N	00	20	80
Security room	00	00	100	20	10	70	00	80	20

N: No, G: Good, M: Manageable, P: Poor

Table 1.2.3: Hostel-wise Availability of Water and Sanitation Facilities

School	Hostel	Drinking water		Water for bathing & toilet	Overhead tank		Toilet functionality				No. of children per toilet
		Adequate (%)	Major source	Adequate (%)	Adequate (%)	Flow of water to toilets	No functional (%)	Cleanliness and condition (%)	Soap & Accessories available (%)	Used by all children %	
EMRS:	Boys	70	BW	88	44	**	40-60	40-60	80	100	16
	Girls	78	BW	50	33	**	40-60	40-60	80	100	21
SC & ST:	Boys	77	BW	44	33	< 40	< 40	< 40	44	77	20
	Girls	57	BW	42	57	< 40	< 40	< 40	29	71	19
JNV:	Boys	100	BW	100	100	> 60	> 60	> 60	100	100	09
	Girls	100	BW	100	100	> 60	> 60	> 60	100	100	08

BW: Bore well

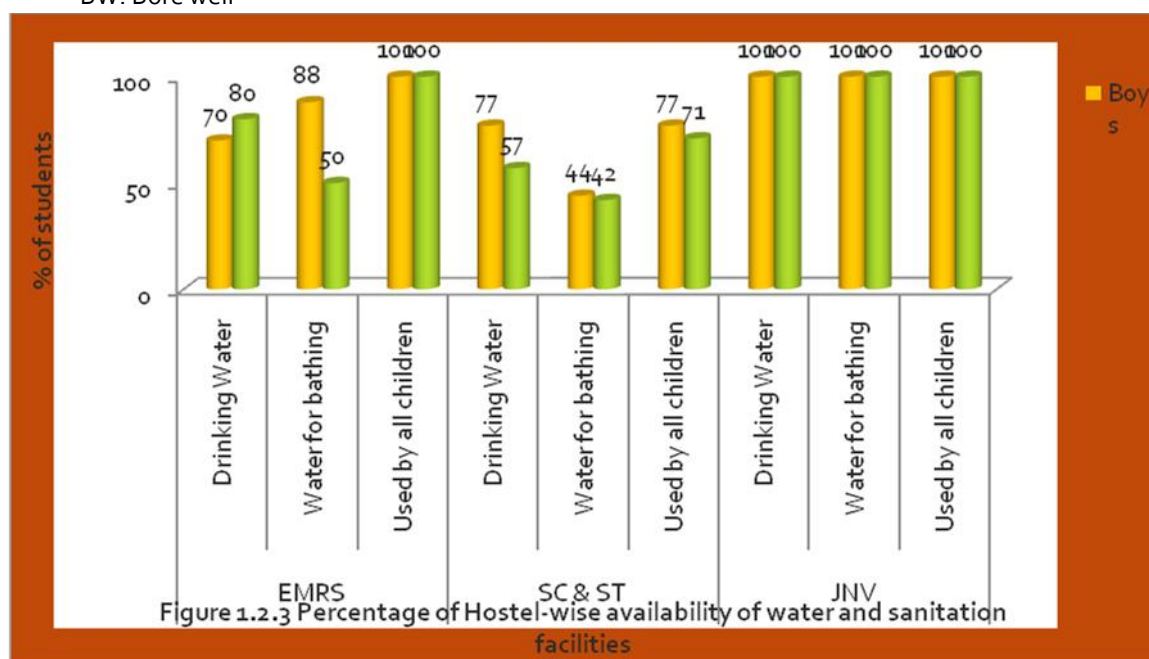


Figure 1.2.3 Percentage of Hostel-wise availability of water and sanitation facilities

- The students of JNV had no problem for their bathing as 100% adequate water was supplied to both the hostels. The girls students in EMRS & both boys & girls students in ST & SC schools had scarcity of water in bathrooms and toilets.
- Supply of water through overhead tank to both the hostels in JNV was 100% adequate but 44% adequate in EMRS boys' hostel, 33% adequate in EMRS girls' hostels, 33% adequate in SC/ST boys' hostel & 57% adequate in SC/ST girls' hostels. There was inadequate flow of water to toilets in EMRS. Flow of water to toilets in SC/ST boys and girls hostel was less than 40% and was less than the EMRS boys& girls hostels.

Table 1.2.4: Hostel-wise Availability of Child-friendly and Safety Facilities (ramp & rail, slides & swings, playground)

School	App. No. of children per hand wash point	Ramp & Rail to Blocks (%)	Ramp & Rail to Toilets (%)	Slides & Swings (%)	Playground (%)	Double doors in hostel rooms (%)	Fire safety (%)
EMRS	31	<40	<40	<40	40-60	00	<40
SC & ST	38	<40	<40	<40	<40	00	<40
JNV	25	<40	<40	<40	>60	00	<40

- Hostels in all types of schools did not fare well on child friendly and safety provision. All lacked disability friendly elements such as ramps, & rails to hostel blocks & toilets. None of the hostel rooms had ramp & rails. Slides & swings were not available in all types of schools. Fire safety in all schools was less than 40% which was inadequate. Availability of playground was above 60% in JNV, 40-60% in EMRS & less than 40% in ST & SC schools.
- Hostels in all types of schools did not have boundary walls & kitchen garden. There was good boundary wall in girls' hostel of JNV. Though garden was available in all types of schools, it was not satisfactory.

Table 1.2.5: Hostel-wise Availability of Boundary Wall, Garden, Kitchen Garden

School	Boundary Wall in girls' hostel		Garden		Kitchen Garden	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
EMRS:	67	33	50	50	10	90
SC&ST	78	22	50	50	10	90
JNV	80	20	80	20	40	60

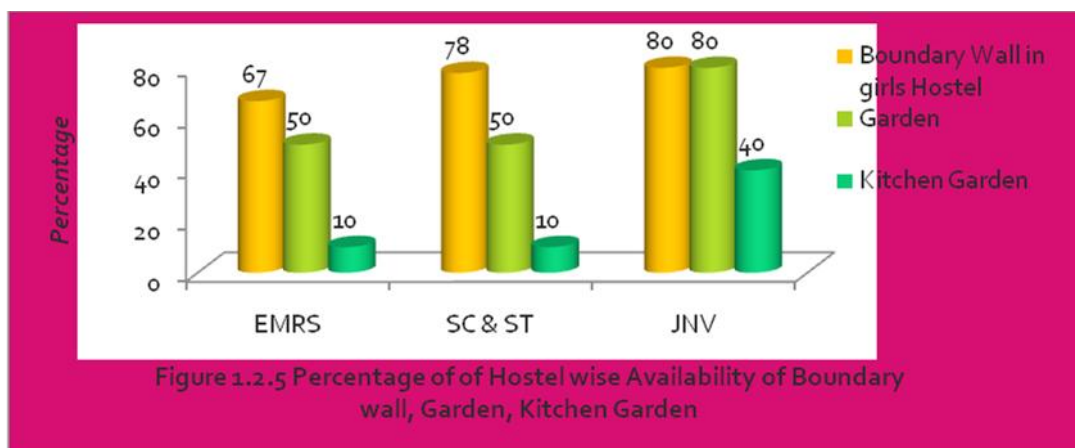


Figure 1.2.5 Percentage of of Hostel wise Availability of Boundary wall, Garden, Kitchen Garden

1.3 Financial Support

Table 1.3.1 reveals that on an average only 94.80% of the funds allocated to EMRS during 2014-15 was spent while spending in JNV reached close to 98% mark. The average spending in the ST & SC schools was about 85.31%. While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, need to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities.

Table 1.3.1: Receipt and use of funds by schools in during 2014-2015

School Type	Total fund received	Utilized	% utilized	Department providing funds
EMRS	13778547	11754834	85.31	MoTA, GOI under article 275 (1)
ST & SC	8991223	8524263	94.80	ST & SC development department
JNV	26971000	26429200	97.99	MHRD, GOI under article 275 (1)

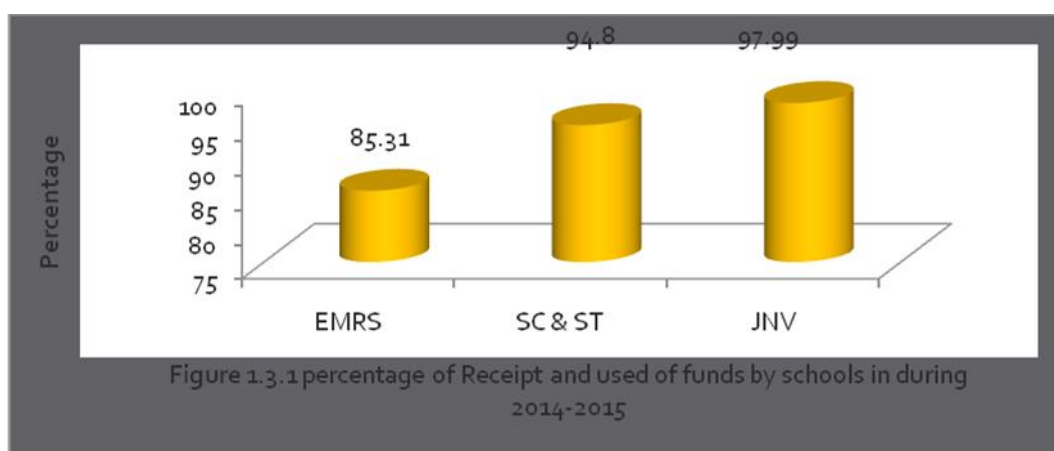


Figure 1.3.1percentage of Receipt and used of funds by schools in during 2014-2015

Chapter- 2 PROFILE OF TEACHING AND NON-TEACHING STAFF

Quality of educational climate in the school can be developed through teacher motivation and engagement with students. Their nature of employment, training status, salary structure and service conditions determine to a large extent their attitude and motivation towards education.

2.1 This chapter presents the profiles of teaching & nonteaching staff, their employment status and service benefits.

Table 2.1.1: Sanctioned Strength and Vacancy Position of Teaching and Non-Teaching Staff

School	Teaching Post		Non-teaching Post	
	Sanctioned Post	Vacancy (%)	Sanctioned Post	Vacancy (%)
EMRS	191	19	117	14
ST & SC	181	38	114	19
JNV	129	06	83	17

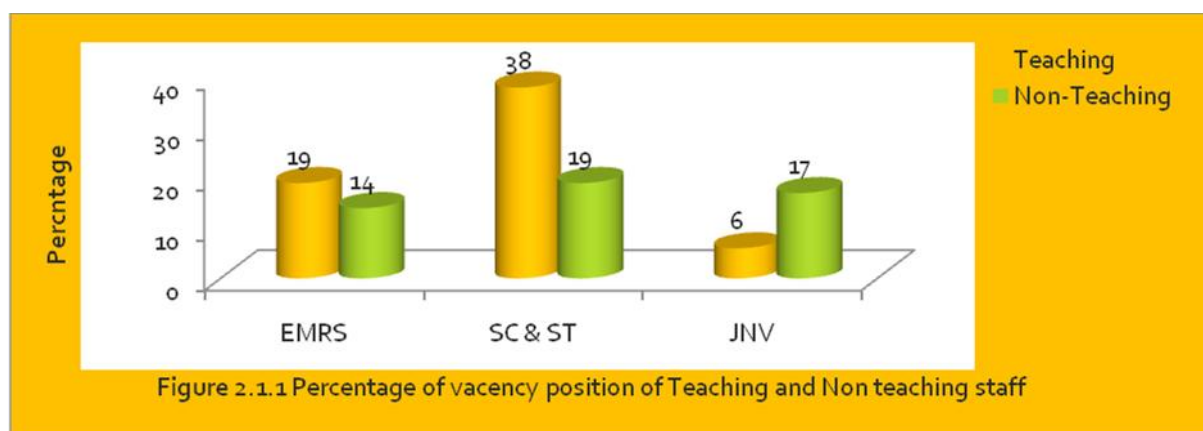


Table 2.1.2: Profile of the Teaching Staff

School	No of Teachers in Position	Pupil-Teacher ratio in School	Category			Training Status		Length of Teaching Experience		
			ST (%)	SC (%)	Gen (%)	Trained (%)	Untrained (%)	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	134	1:27	19	12	69	94	06	53	26	55
ST & SC	106	1:42	28	10	62	87	13	19	12	75
JNV	112	1:21	04	16	80	99	01	19	26	67

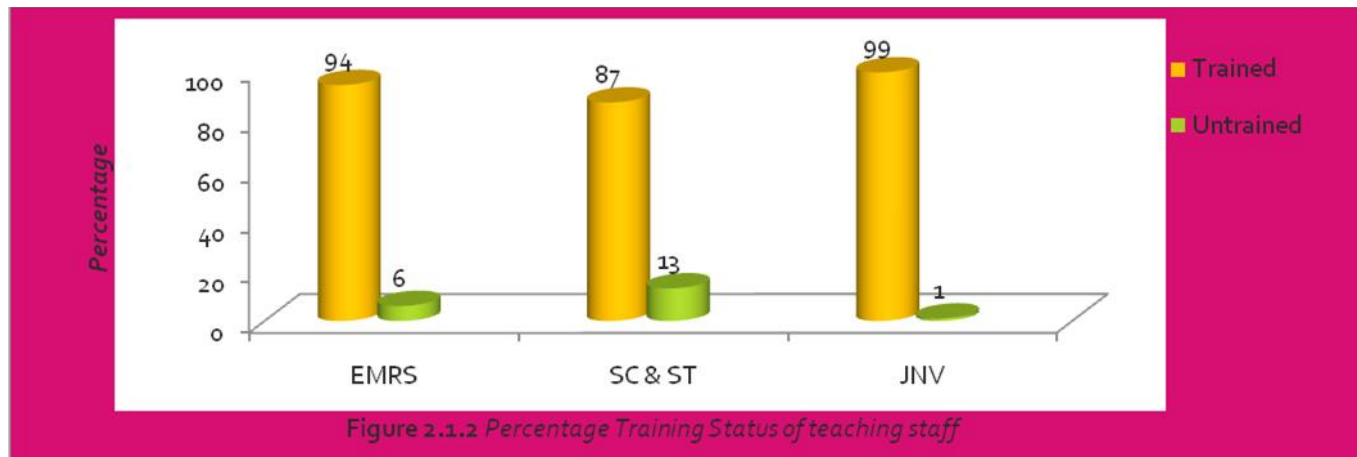
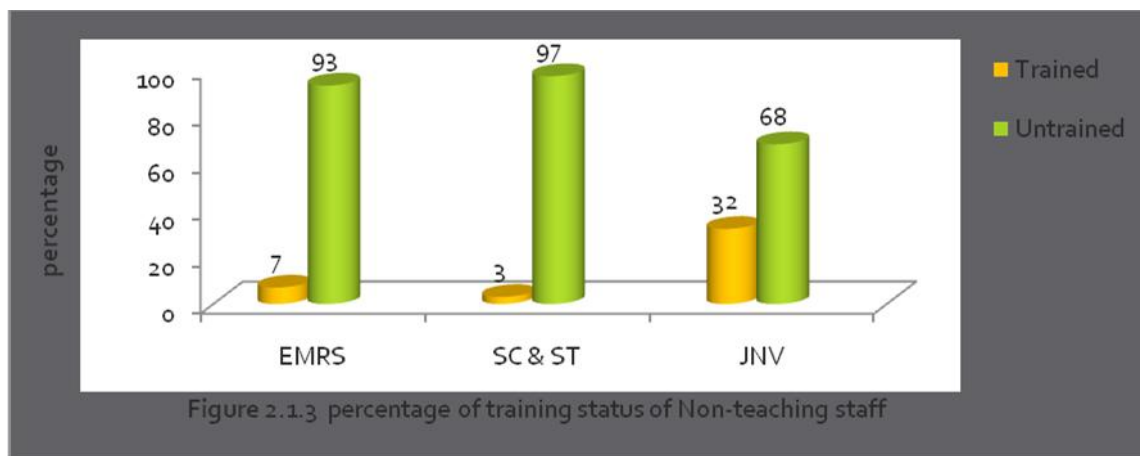


Table 2.1.3: Profile of the Non-Teaching Staff

School	No in Position	Category			Training Status		Length of Experience		
		ST (%)	SC (%)	Gen (%)	Trained (%)	Untrained (%)	1-5 yrs.	6-10 yrs.	More than 10 yrs.
EMRS	93	45	14	41	07	93	46	31	16
ST & SC	93	64	12	24	03	97	22	40	31
JNV	72	18	15	67	32	68	26	17	29



- Table 2.1.1 indicates that 19% of teaching & 14% of non-teaching posts were lying vacant in EMRS compared to 38% & 19%. In ST & SC schools & 06% and 17% in JNV.
- Table 2.1.2 shows that the pupil teacher ratio (PTRs) in JNV and EMRS were good and were as per state norm, but PTR was so high for ST & SC schools which were not as per state norm.
- There was noticeably large number of general category teachers in all types of schools compared to those from to SC/ST communities
- 45% and 64% nonteaching staff belong to ST community in EMRS & ST & SC schools respectively. Only 18% nonteaching staffs were from ST community in JNV. Maximum numbers of non-teaching staff in JNV were from general community. 93% and 97% of non-teaching staff in EMRS, SC & ST had not received any formal training. 46% non-teaching staffs in EMRS, 22% in SC/ST & 26% in JNV had less than 5 years of experience in the job. 31% non-teaching staff in EMRS, 40% in SC/ST, 17% in JNV had less than 10 years of experience & 16% in EMRS, 31% in ST & SC schools & 29% in JNV had more than 10 years of teaching experience.

2.2 Teaching and Non-Teaching Staff: Nature of Employment and Service Benefits

Tables 2.1.1 and 2.2.2 present information on the nature of employment of teaching and non-teaching staff by school type along with their gross monthly emoluments. The percentages of employees engaged on contractual/daily-wage basis by school type are plotted in Figure 2.2.1.

Table 2.2.1: Nature of employment of the teaching staff and service benefits

School	No of Teaching Staff in Position	Nature of Employment			Gross monthly Emoluments/ Salary in Rupees (Range)							
		Regular	Contractual	% contractual	Principal	Vice-Principal	PGT	TGT/Music/ Art	PET	Lab Asst/Asst teacher	Librarian	
EMRS	Maharashtra	25	12	13	52	69109	-	53649	51174	44153	15614	-
	M.P	24	04	20	83	62227	-	-	15525	13500	-	-
	Odisha	31	00	31	100	35000	-	13900-	13500-	13500	13500-	13500

								22240	21600		21600	
	Rajasthan	24	24	00	00	77133	44650	61928	60000	49195	56358	45578
	Gujarat	30	00	30	100	16500	-	10000	7500	6000	-	-
	Total EMRS	134	40	94	70	16500-77133	44650	10000-61928	7500-60000	6000-49195	14850-56358	13500-45578
	ST & SC	106	93	13	12	55603	-	12500-56674	51687	45924	25643	-
	JNV	112	96	16	14	87810-	68428	61986	58098	56656	22463	55265

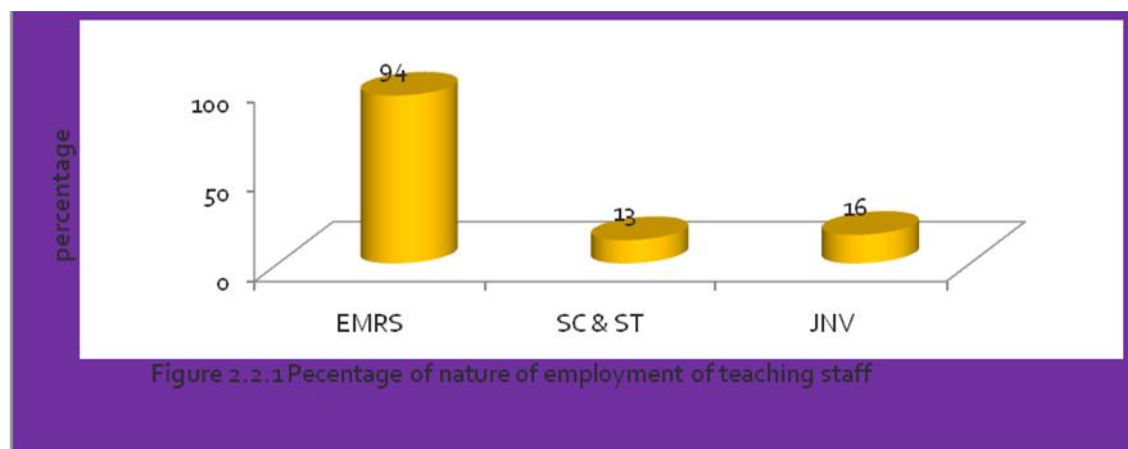
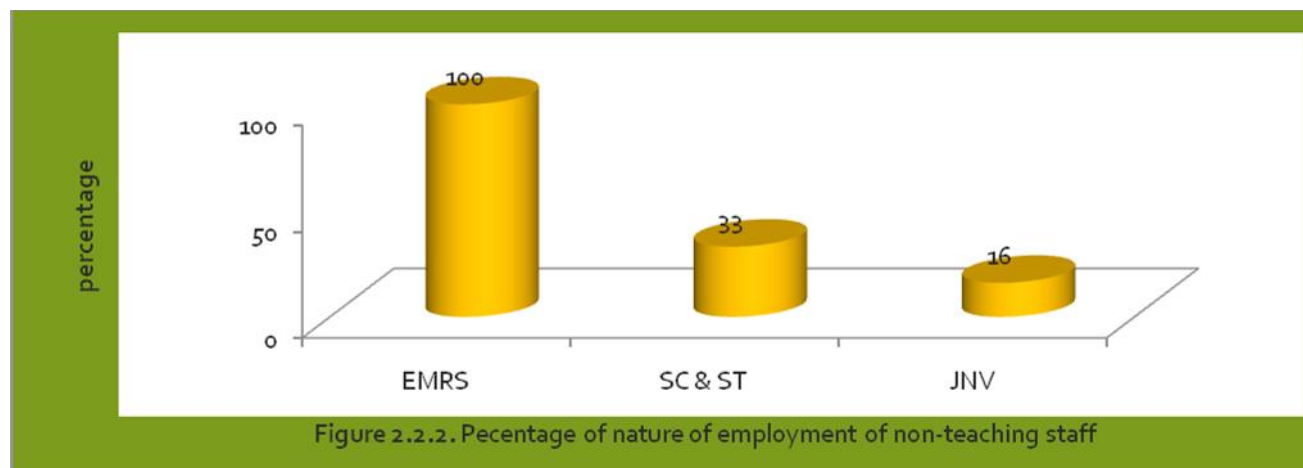


Table 2.2.2: Nature of employment of the non-teaching staff and service benefits

School		Nature of Employment			Gross monthly Emoluments/Salary (Range)									
		Regular	Contractual	(%) contractual	Head Clerk	Accountant	Clerk	Librarian	Warden	Peon Art	Night watchman / Sweeper	CCA	Matron	Staff Nurse/ANM
EMRS	Maharashtra	09	14	61	-	-	26137	-	38430	-	3500	4500	-	23915
	M.P	00	21	100	00	00	5200	-	-	6239	6239	6239	-	-
	Odisha	00	26	100	-	10000	7540	13500	5200	6438	6438	5780	10000	8000
	Rajasthan	05	12	70	-	-	28865	45578	-	-	-	4500	-	-
	Gujarat	00	06	100	-	6000	5500		-	3000	3000	-	-	-
	Total	14	79	85	00	6000-10000	5500-28865	5500-28865	13500-45578	5200	3000-6438	3000-6438	4500-6239	10000
ST&SC		62	31	33	-	32000-43200	5000-27645	-	23166	4000-22113	4000-13451	4000-27409	-	-
JNV		60	12	16	23132-35521	32314	21298-29266	47534-50890	-	27724	18948-19341	20576-26951	7500-28746	44070-45857



- It was regrettable & astonishing that, there was no regular appointment in EMRSs of all the states under study. There was no service condition for the employees and no recruitment policy for teaching & non-teaching staff of EMRSs of all states. The teachers of EMRS were in receipt less remuneration in all states except Maharashtra where the salary structure is as per norms of regular teachers of the state with the exception of status being contractual in nature. The state of Rajasthan has not constituted any EMRS society so far and the school is running with government staff on deputation. In comparison, the staffs of JNV are governed by specific society rules and possess specific service condition and recruitment rules whereas the EMRS schools do not have a central society alike JNV to govern the service condition of the employees.
- There were noticeable differences in monthly remunerations, salary of principals of EMRS, SC/ST & JNV schools. The principal of JNV gets salary 1.5 times more than the principal of SC/ST school & 3-5 times more than that of the principals of EMRSs. Similarly, the teachers & non-teachers are getting less amount of salary in comparison to the teachers & non-teachers of SC & ST School & JNVs.
- Lack of service condition, contractual employments & inadequate monthly salary of teaching & non-teaching employees of EMRS are issues of concern and need to be addressed to ensure quality process & outcomes.

2.3 Capacity Building of Teaching and Non-Teaching Staff

The capacity building training has been provided to JNV staffs regularly, but in EMRS it is inadequate for teachers & totally absent for non-teaching staff. The scenario in ST & SC schools is as well similar to that of EMRS.

The non-teaching staff of EMRS and ST & SC schools received hardly any training. All other non-teaching staff including clerks and CCAs were not trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostel was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures.

EMRS was established with a vision to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/ superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

Chapter 3

STUDENT ENROLMENT, ATTENDANCE AND RETENTION

Educational programme floated in rural and tribal areas are expected to create a community demand for admitting children in these schools which would be reflected to increase number of students seeking admissions through successive years. The objective being to admit more students from SC/ST community in these schools & complete the educational cycle. This chapter discusses the scenario of schools in respect of students seeking admission in schools (table 3.1.1, 3.1.2). Students' strength in schools (table 3.3.1, 3.3.2) and students' retention in schools. (Table 3.4.1).

3.1 Student Admission

Table 3.1.1 lists the number of children seeking admission to different types of schools over the last five years at the entry points to Class VI and Class XI. The percentage increase in 2014-15 with reference to 2012-13 and percentage of students admitted in 2014-15 as percentages of those seeking admission are given in Table 3.1.2 and plotted in Figures 3.1.1 and 3.1.2 for different types of schools.

Table 3.1.1: Number of Candidates Applied and Number of students enrolled at entry points in Classes VI and XI during the last three Years
(NA: Number Applied; NE: Number Enrolled)

School	At Entry point to Class VI							At Entry point to Class XI					
		2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010	2010-11	2011-12	2012-13	2013-14	2014-15	% increase in NA w.r.t to 2010
EMRS	NA	580	649	1177	1534	1364	135	528	566	610	744	731	38
	NE	425	569	549	576	561	32	208	265	280	267	323	55
ST & SC	NA	1242	1228	1469	1952	1701	37	317	310	289	749	909	187
	NE	423	440	483	532	510	21	252	220	218	368	364	44
JNV	NA	14568	12769	11567	14111	16094	10	4576	5820	5195	5535	5184	13
	NE	330	386	372	388	377	14	86	85	146	87	84	-

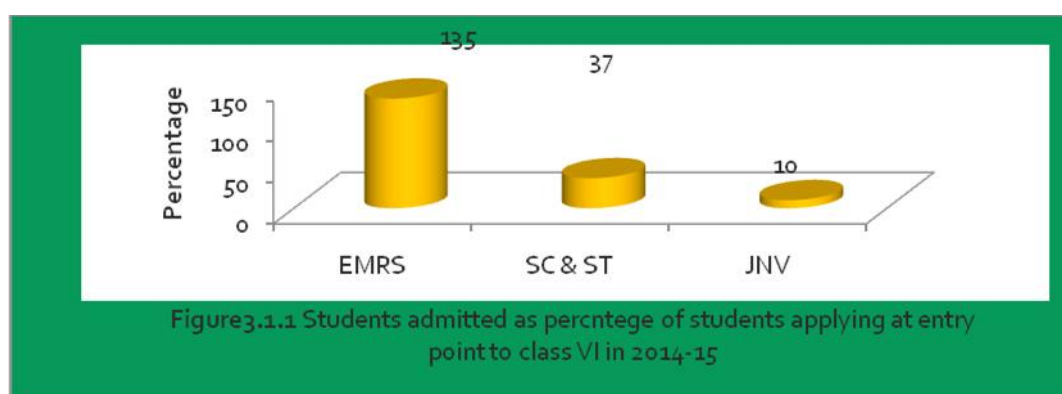


Figure 3.1.1 Students admitted as percentage of students applying at entry point to class VI in 2014-15

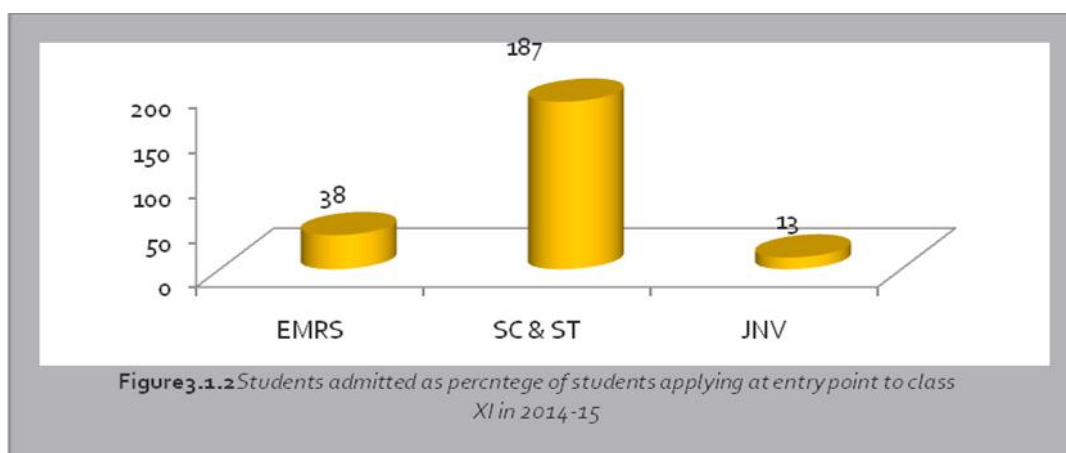


Table 3.1.2 Percentage Increase in application for admission and student enrollment as percentages of application for admission

School type	At entry point of Class VI		At entry point of Class XI	
	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year	%increase in application in 2014 w.r.t. 2012-13	Students admitted in 2014-15 as percentage of applications received in same year
EMRS	30	41	22	44
SC & ST	33	30	159	40
JNV	100	02	07	02

- The average of students seeking admission at entry point of class VI increased over the last 5 years in EMRS. The no of applicants decreased in ST & SC schools in the year 2011-12 but increased in all other four years. In case of JNV, number of applicants decreased in the year 2011-12 & 2012-13 in comparison to the year 2010-11. But the number of applicants increased in the year 2013-14 & 2014-15. The demand for admission to all types of schools increased over the years.
- The demand for admission into JNV was more than demand for EMRS and ST & SC schools.
- The no of students seeking admission at entry at class XI in 2014-15 were 22% for EMRS, 59% for ST & SC schools & 07% for JNV. Students seeking admission in different types of schools increased except JNV. 44% of those seeking admission to class XI in EMRS & 02% were admitted in JNV.

3.2 Student Strength in Schools

Table 3.2.1: School-wise and Class-wise Number of Students, Number of Classrooms and Classroom Space per Student (in sq. ft.)

School		VI	VII	VIII	IX	X	XI	XII	Total
EMRS	N of students	543	576	571	564	521	386	329	3490
	N of Classrooms	13	13	13	13	13	09	08	82
	Per student floor space (in sq. ft.)	9.802							
ST & SC	N of students	395	411	427	917	669	791	780	4420
	N of Classrooms	09	09	09	14	13	13	12	79
	Per student floor space (in sq. ft.)	12.376							
JNV	N of students	375	369	373	386	341	249	226	2319
	N of Classrooms	10	10	10	10	10	07	07	64
	Per student floor space (in sq. ft.)	12.412							

Table 3.2.1 shows class-wise number of students studying at present in different types of schools. Category-wise and gender-wise number of students are reported in Table 3.2.2 and plotted in Figure 3.2.1.

Table 3.2.2: Category-wise and Gender-wise Number of Students by School Type

School	Levels	ST			SC			Gen			School Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
EMRS	Elementary (I-VIII)	855	833	1688	-	-	-	01	02	03	1691
	Secondary (IX-X)	505	519	1024	-	-	-	-	03	03	1027
	Higher Secondary (XI-XII)	308	405	713	-	-	-	-	01	01	714
ST&SC	Elementary (I-VIII)	449	634	1083	26	40	66	25	50	75	1224
	Secondary (IX-X)	712	654	1366	52	57	109	56	72	128	1603
	Higher Secondary (XI-XII)	805	666	1471	29	28	57	20	35	55	1583
JNV	Elementary (I-VIII)	315	189	504	148	71	219	226	170	396	1119
	Secondary (IX-X)	196	85	281	87	41	128	189	133	322	731
	Higher Secondary (XI-XII)	142	48	190	56	25	81	124	75	199	470

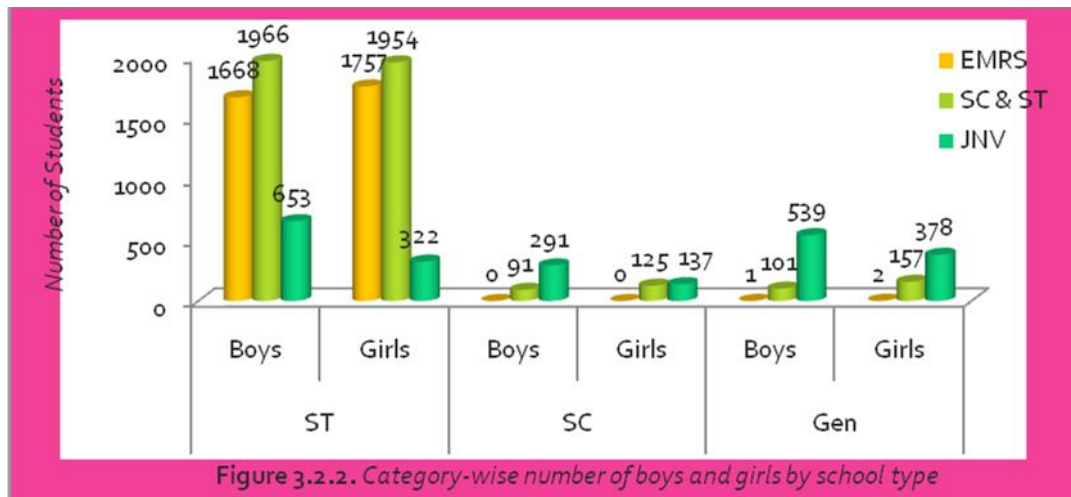


Figure 3.2.2. Category-wise number of boys and girls by school type

- The classroom floor space per student in EMRS was 9.802 sq.ft, in ST & SC schools 12.376 sq.ft & in JNV 12.412 sq.ft. Average number of students per classroom was approximately 43 in EMRS, 56 in SC/ST, 36 in JNV. Generally the no. of students was high in ST & SC schools where as it was exactly correct in case of JNV.
- EMRS was primarily meant for students from the ST community. Only the kids of staff belonging to general community could be admitted. As such maximum students from ST community were studying in EMRS but less number of students belonging to general community were reading in those schools.
- In ST & SC schools, most of the students from ST community were studying but in case of JNV, the students from all the communities were being admitted.

3.3 Student Attendance

Students' attendance & retention in the school till completion of educational cycle are important indicators. Table 3.3.1 present information on students & table 3.3.2 indicates percentage of students completing the educational cycle.

Table 3.3.1: Percentage of average student attendance during the last month

School Type	VI	VII	VIII	IX	X	XI	XII	Total average
EMRS	95.9	92.7	94.1	93.3	97.6	93.62	98.28	95.07
ST&SC	86.57	61.57	87.71	87.8	92.5	89.1	92.9	85.45
JNV	96.6	95.4	94.4	93	96.2	97	96.2	95.54

Table 3.3.2: Number of students admitted at entry points (classes VI and XI) and completing The educational cycle during the last three years

School	Name of the state	No. of students admitted in VI in 2008-09	N of students completing Class X after 5 years	% completing educational cycle in 2012-13	No. of students admitted in VI in 2009-10	N of students completing Class X after 5 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2010-11	N of students completing Class X after 5 years	% completing educational cycle in 2014-15
EMRS:	Students admitted in Class-VI and completing educational cycle in Class-X.	395	359	90.88	402	367	91.29	393	359	91.34
ST&SC		630	313	49.68	646	389	60.21	755	420	55.62
JNV		346	321	92.77	361	331	91.68	350	336	96
School	Name of the state	No. of students admitted in XI in 2011-12	No. of students completing Class XII after 2 years	% completing educational cycle in 20112-13	No. of students admitted in VI in 2012-13	No. of students completing Class XII after 2 years	% completing educational cycle in 2013-14	No. of students admitted in VI in 2013-14	No. of students completing Class XII after 2 years	% completing educational cycle in 2014-15
EMRS	Students admitted in Class-XI and completing educational cycle in Class-XII.	264	258	97.72	287	249	86.75	281	258	91.81
ST&SC		509	353	69.35	490	353	72.04	794	461	58.06
JNV		223	210	94.17	229	223	97.37	232	227	97.84

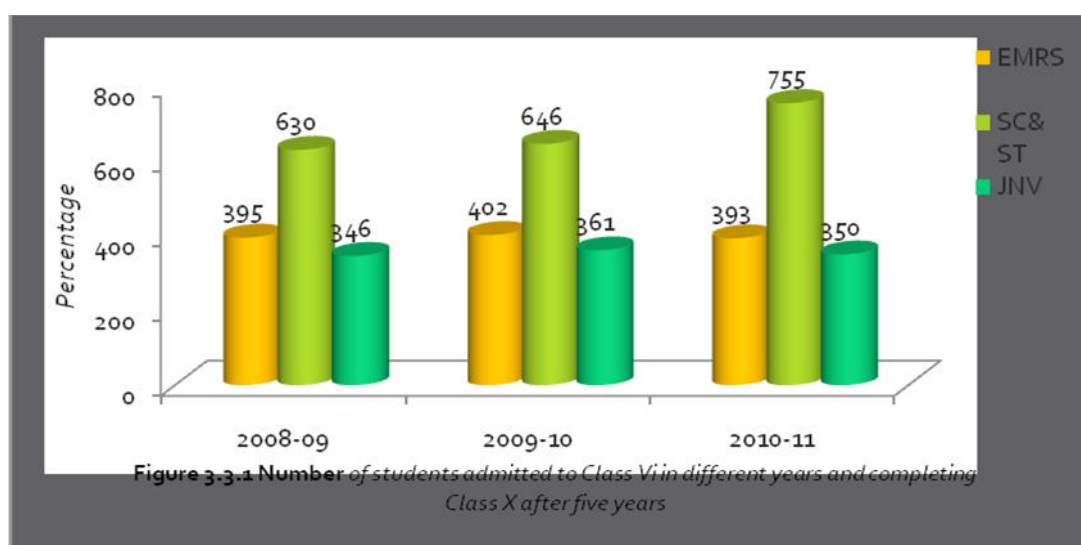


Figure 3.3.1 Number of students admitted to Class VI in different years and completing Class X after five years

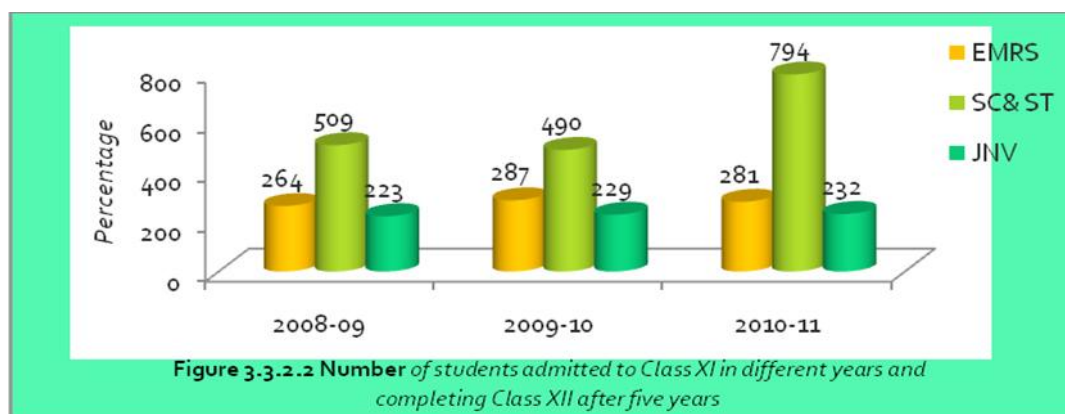


Figure 3.3.2.2 Number of students admitted to Class XI in different years and completing Class XII after five years

- Students' attendance in all types of schools was satisfactory. The average attendance of EMRS was 95.07, SC/ST school was 85.45 and JNV was 95.54. Attendance rate in SC/ST school was less than EMRS & JNV.
- Out of the no of students admitted to class VI in 2010-11, 91.34 completing the educational cycle in class XI were in EMRS, 55.62% in ST & SC schools & 96% in JNV. In the earlier years, students completing educational cycle were more than 90% in both EMRS & JNV but it was 49.68% in ST & SC schools.
- Percentage of students enrolled in class XI in 2013-14 & completed the educational cycle in class XII were 91.81% in EMRS, 58.06% in SC/School & 97.84% in JNV.
- Completion of educational cycle of students in EMRS & JNV over the years was satisfactory & it is not same for ST & SC schools as the performance was very poor in comparison to EMRS & JNV.

3.4 Student Retention/ Dropout

The dropout rate of last 5 years of all types schools are presented in table 3.4.1 & plotted in fig. 3.4.1.

Table 3.4.1: Class-wise total number of students dropping out of school by school type

School	Year	Elementary			Secondary		Higher secondary		Total (year-wise)
		VI	VII	VIII	IX	X	XI	XII	
EMRS	2010-11	11	05	03	01	02	01	00	23
	2011-12	08	10	01	03	02	01	01	26
	2012-13	04	05	00	00	00	02	00	11
	2013-14	11	11	06	01	00	04	06	39
	2014-15	17	19	05	04	02	04	01	52
SC&ST	2010-11	10	11	19	138	03	03	06	190
	2011-12	14	07	10	164	08	10	00	213
	2012-13	09	06	14	85	32	03	00	149
	2013-14	10	07	12	115	01	11	00	155

	2014-15	08	15	07	195	04	10	00	239
JNV	2010-11	-	-	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-	-	-
	2012-13	-	-	-	-	-	-	-	-
	2013-14	-	-	-	-	-	-	-	-
	2014-15	-	-	-	-	-	-	-	-

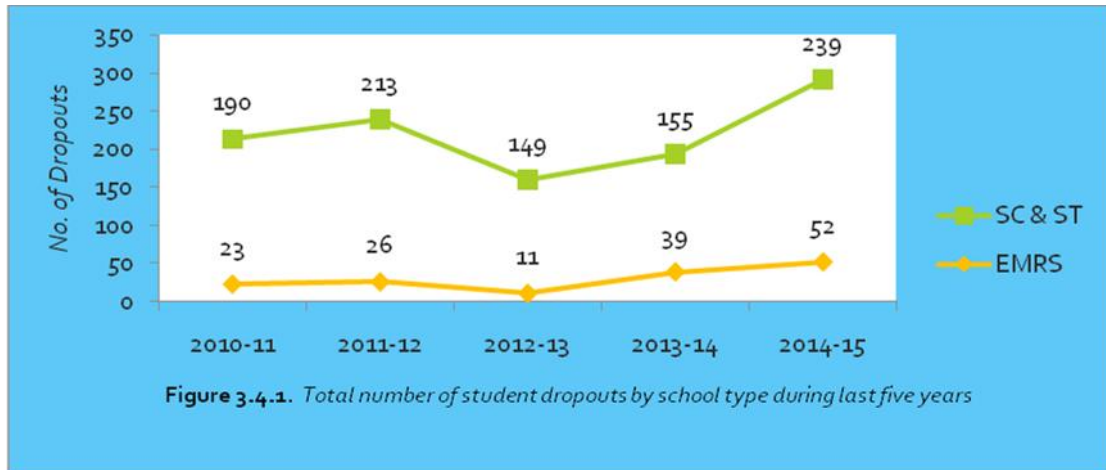


Figure 3.4.1. Total number of student dropouts by school type during last five years

- There was no dropouts in JNV. More no of students' dropouts were of ST & SC schools compared to EMRS. More students of EMRS dropped out at elementary stage compared to secondary & higher secondary levels. Maximum students at secondary level dropped out compared to elementary & higher secondary in ST & SC schools.

Chapter 4

EDUCATIONAL CLIMATE IN SCHOOLS

4.1 School and Classroom Environment

Instructional climates of school includes physical environment of school and classroom, teaching learning process, materials, students development activities and procedure of evaluation, which influences students learning and achievement. This chapter is about the above facts.

Table 4.1.1 presents information pertaining to physical and instructional features of classrooms and schools by school type.

Table 4.1.1: School and classroom environment

School type	EMRS			ST&SC			JNV		
	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)
Building white washed	20	80	00	00	40	60	100	00	00
Cleanliness of campus	40	60	00	00	100	00	80	20	00
Cleanliness of classrooms	60	40	00	40	60	00	80	20	00
Dustbins in classroom	60	00	40	00	00	100	60	20	20
Proper drainage system	20	60	20	00	80	20	40	60	00
First-aid box	80	20	00	80	20	00	100	00	00
Fire safety	00	80	20	00	80	20	00	100	00
Garbage disposal pit	20	60	20	00	80	20	20	80	00
Children's hygienic habits	60	40	00	20	80	00	100	00	00
Information board	00	80	20	00	40	60	60	40	00
Wall magazine	00	40	60	00	00	100	60	40	00
Wall activities	00	20	80	00	40	60	60	00	40
TLM corner in classrooms	00	00	100	00	00	100	00	20	80
Library cum	20	80	00	00	60	40	80	20	00

reading room									
Games equipment	00	80	20	00	60	40	20	60	20
Monthly health check up	20	60	20	40	40	20	60	20	20
Campus beautification	20	60	20	20	20	60	40	60	00
Suggestion box	00	40	60	00	00	100	20	40	40

- The school campus and classrooms were 80% clean in JNV, 60% in EMRS & 40% in ST & SC School. The condition was poor in ST & SC schools compared to EMRSs & JNVs. Drainage system in JNV was better than other two types of schools. It was very poor in ST & SC schools. First aid boxes were available in all types of schools but fire safety measures were inadequate in the schools.
- Monthly health check-up was done in JNV, EMRS & ST & SC schools. All types of schools have inadequate garbage disposal pit & drainage system. The availability of information boards were not adequate in EMRS & ST & SC schools but adequate in JNV. TLM corners were not available in all types of schools. JNV was better in purchasing game equipments. There was almost no suggestion box in schools but where available were not used.

4.2 Teaching-Learning Process, Materials and Equipments

Teaching-learning process, materials like text books, TLM, TLE, Laboratory apparatus etc. are the means to through-puts in educational institutions that help students potentials translate into achievements. This chapter provides information regarding the availability of text books to students and teachers' and students' behaviors in the classroom during the course of teaching.

Table 4.2.1: Class-wise percentage of new textbooks distributed to students as against requirement on the basis of student enrolment

School	School Name	New Textbook Requirement and Distribution	VI	VII	VIII	IX	X	XI	XII	Total
Class-wise percentage of textbook distribution by school type										
EMRS	Odisha		100	94.5	97.2	97.4	100	91.8	97.4	96.5
	Madhya Pradesh		100	100	100	100	100	100	100	100
	Maharashtra		100	100	100	100	100	100	100	100
	Gujarat		100	100	100	100	90	100	100	99
	Rajasthan		100	100	100	100	100	100	100	100

	Total	100	98.9	99.44	99.5	98	98.4	99.5	99.1
SC & ST	Odisha	92.1	94.4	89	37	37.5	-	-	63.5
	Madhya Pradesh	100	100	100	100	100	100	100	100
	Maharashtra	100	100	100	100	100	100	100	100
	Gujarat	-	-	-	100	100	100	100	100
	Rajasthan	100	100	100	100	100	100	100	100
	Total	98.1	98.6	97.3	84.4	87.5	100	100	92.7
JNV	Odisha	100	100	100	100	100	100	100	100
	Madhya Pradesh	100	100	100	100	100	100	100	100
	Maharashtra	100	100	100	100	100	100	100	100
	Gujarat	100	100	100	100	100	100	100	100
	Rajasthan	100	100	100	100	100	100	100	100
	Total	100	100	100	100	100	100	100	100

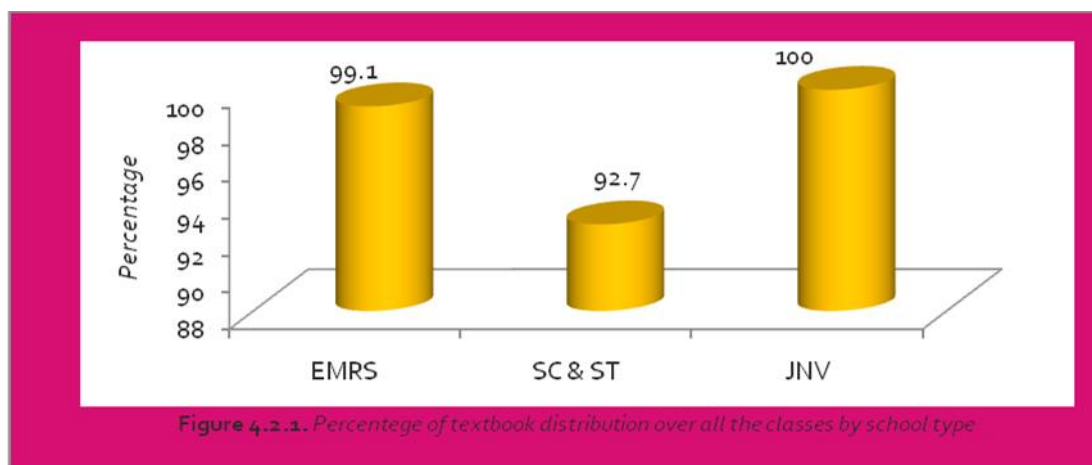


Figure 4.2.1. Percentage of textbook distribution over all the classes by school type

Table 4.2.2: Teaching-learning process and teacher-student behavior in schools

Parameter	EMRS			ST&SC			JNV		
	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)
Seating arrangement and use of classroom space	100	00	00	40	60	00	100	00	00
Adequacy of lesson plan/note	40	20	40	00	40	60	60	20	20
Teaching through activity-based methods	00	20	80	00	00	100	60	20	20

Correction of students'	20	60	20	20	55	25	60	40	00
Home assignments given	60	40	00	20	60	20	80	20	00
Project assignments	20	40	40	00	20	80	100	00	00
Use of e-content in SMART classes	00	00	100	00	00	100	100	00	00
Effective use of laboratories	20	60	20	00	20	80	80	20	00
Using libraries effectively	20	80	00	00	40	60	100	00	00
Courses completed as per schedule	100	00	00	100	00	00	100	00	00
Time table structured and displayed	80	20	00	60	40	00	100	00	00
Academic calendar prepared and displayed	60	40	00	20	40	40	100	00	00
SDP prepared	40	40	20	20	40	40	100	00	00
Topic presentation focused and organized	40	40	20	20	60	20	100	00	00
Demonstrates during teaching	20	60	20	20	60	20	80	20	00
Using blackboard appropriately	40	40	20	20	40	40	60	40	00
Using TLMs while teaching	00	40	60	00	20	80	00	80	20
Initiating group learning	20	20	60	20	20	60	60	20	20
Encouraging students to ask questions	60	40	00	00	100	00	60	40	00
Giving academic feedback to students	40	40	20	00	80	20	60	40	00
Threatening	00	00	100	00	00	100	00	00	100
Students actively listen and participate	60	40	00	20	80	00	100	00	00
Ask questions and express ideas	20	80	00	00	60	40	100	00	00
Students' use of TLMs	00	60	40	00	00	100	20	20	60
Students respond and answer	20	80	00	00	60	40	100	00	00

- 99.1% in EMRS, 92.7% in ST & SC schools & 100% in JNV of the required number of text books were distributed. ST & SC schools in Odisha distributed only 63.5% of text books, which was not satisfactory.
- Seating arrangement & use of classroom space was 100% good in EMRS & JNV but only 40% good in ST & SC schools. Maintenance of lesson plan/ note in JNV was adequate but inadequate in EMRS & ST & SC schools. Teaching through activity and adoption of e-content was only noticed in JNV but not in EMRS & ST & SC schools. Home assignments and correction work was done properly in JNV. It was not satisfactory in EMRS & ST & SC schools. JNV had taken steps for project assignments other than EMRS & ST & SC schools. E-content in smart classes was used in JNV only. Use of laboratories & libraries was adequate in JNV & better than EMRS & ST & SC schools.

- Time table was displayed and strictly followed in EMRS & JNV compared to ST & SC schools. Preparation of academic calendar & SDP was adequate in JNV & EMRS but inadequate in ST & SC schools. Only JNV had been given stress on demonstration during teaching learning activities. Use of TLM, groups learning activities, students encouragement were not satisfactory in all types of schools. Active participation of students was found in JNV only.

4.3 Student Development Activities

Co-curricular activities with classroom activities are essential for personal and career development. Table 4.3.1 presents a set of selected development activities for students and the status of EMRS, ST & SC schools & JNV on those activities.

Table 4.3.1: Student development activities

Activities <i>Name of the states</i>	EMRS					SC & ST					JNV				
	<i>Odisha</i>	<i>Madhya Pradesh</i>	<i>Maharashtra</i>	<i>Gujarat</i>	<i>Rajasthan</i>	<i>Odisha</i>	<i>Madhya Pradesh</i>	<i>Maharashtra</i>	<i>Gujarat</i>	<i>Rajasthan</i>	<i>Odisha</i>	<i>Madhya Pradesh</i>	<i>Maharashtra</i>	<i>Gujarat</i>	<i>Rajasthan</i>
Remedial coaching as per student need	P	N	N	Y	N	N	N	N	N	N	Y	Y	Y	Y	Y
Counselling for behavioural problems	N	P	N	P	P	N	P	N	N	P	N	Y	N	N	Y
Career counselling	P	N	P	Y	P	N	N	N	N	P	N	Y	P	P	N
Identifying and developing student talents	N	Y	P	P	N	N	P	N	N	N	N	Y	Y	Y	P
Coaching for professional courses	P	N	P	N	N	N	N	N	N	N	P	Y	P	P	Y
Self-defence training	Y	N	Y	P	Y	N	N	N	N	N	Y	Y	Y	Y	P
life skills training	P	P	P	Y	Y	P	N	P	N	N	P	P	P	P	Y
Coaching for sports and games competitions	Y	P	P	P	Y	Y	N	P	N	P	Y	Y	Y	Y	Y

Training for musical and artistic talents	Y	N	P	N	N	Y	N	P	N	N	Y	Y	Y	Y	Y
Training on vocational and work education	N	N	N	N	N	N	N	N	N	P	N	N	N	Y	Y
Training students as social change agents	N	N	N	N	Y	N	P	N	N	Y	N	N	N	Y	Y

Y: Yes, N: No, P: Partially done

- Remedial coaching as per student need was strictly followed in JNV but not in EMRS and ST & SC schools. Counselling for behavioural problems career counselling was not satisfactory in all types of schools.
- Coaching for professional courses, life skill training, training on vocational education was not taken into consideration in all types of schools. Few EMRSs & JNVs had given stress on self-defence training.

4.4 Student Evaluation Practices

The students need be evaluated through in 4 formative & 2 summative tests in the curricular areas. Similarly, they should be assessed in other curricular areas & SPQ as per the provision of CCE. Table 4.4.1 presents adoption of CCE in different schools.

Table 4.4.1: Student Evaluation Practices as per CCE

Parameter	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Using summative evaluations	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Using formative evaluations	U	S	S	U	U	U	U	U	U	U	S	S	S	S	S
Assessing through oral questions	S	S	S	S	S	S	U	U	S	U	S	S	S	S	S
Assessing through observations	U	S	S	U	S	U	U	S	U	U	S	S	S	S	S

Using self and peer-assessment	U	S	S	U	S	U	U	U	U	U	U	S	S	U	S
Using parental assessment	U	U	U	U	S	U	U	U	U	U	U	U	U	U	S
Using group assessment	U	U	S	U	U	U	U	U	U	U	U	U	S	S	U
Assessing socio-personal qualities	U	U	S	U	S	U	U	S	U	U	S	S	S	U	S
Maintaining student portfolios and anecdotal records	U	U	U	U	U	U	U	U	U	S	U	U	U	S	U
Using checklists and rating scales	U	U	U	U	U	U	U	U	U	U	U	S	U	S	S
Cumulative progress card for each child maintained	U	U	S	U	S	U	U	S	U	U	S	S	S	S	U
Identifying individual strengths	U	U	S	S	U	U	U	U	S	U	U	U	S	S	U
Quality of feedback to students	U	U	S	S	S	U	U	U	S	U	S	S	S	S	S
Remedial coaching on the basis of CCE	U	U	U	U	U	U	U	U	U	U	S	S	S	S	S

S: Satisfactory, U: unsatisfactory.

- Using summative evaluation was satisfactory in all types of schools and using formative evaluation was satisfactory in JNV compared to EMRS & ST & SC schools. Assessing through oral questions, observation technique were done to some extent in JNV & EMRS.
- Using self and peer assessment & group assessment was not satisfactory in all types of schools. Only JNV assessed socio personal activities of the students.
- Maintenance of student's portfolios, anecdotal records, use of check list & rating scale were not satisfactory in all types of schools. Maintenance of progress card for each child was somehow satisfactory in JNV but unsatisfactory in EMRS & ST & SC schools. Remedial coaching on the basis of CCE was not noticed in ST & SC schools & EMRSs but it was strictly followed in JNV. JNV was the only institution to render quality feedback to students.

Chapter 5

RESIDENTIAL CLIMATE IN HOSTELS

Objective of EMRS include providing support for cogent residential condition to the students and as such the construction of required infrastructure that facilitates the educational, physical and cultural needs of students constitute an essential ingredient for healthy living. Students spent maximum hours a day in hostels than in academic blocks and therefore, the residential climate in the hostel impacts students' motivation, attitude and educational attainment. Hostel provides a platform for intensive interactions among students in both curricular and co-curricular areas enabling them to connect school learning with real-life knowledge. While formal learning occurs in school setup, it is in hostels that students engage themselves in self-paced learning to practice the lessons learnt supported by peer interactions. It is therefore essential that the features of hostel climate be assessed to the extent that they address the physical, cultural and academic needs of students which shapes the life style in positive direction.

5.1 Residential Environment in Hostels

The important parameters of the residential environment in hostels (physical environment and cleanliness, health and safety measures, co-curricular and cultural activities) and the status of EMRS, ST & SC and JNV hostels in respect of these parameters are presented in Table 5.1.1.

Table 5.1.1: Hostel environment or Boys' and Girls' Hostels

Parameter	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Building whitewashed	M	M	M	M	M	P	M	P	M	M	G	G	G	G	G
Cleanliness of hostel campus	M	M	M	M	M	P	M	P	P	M	G	G	G	G	G
Cleanliness of hostel rooms	M	M	M	M	M	M	M	M	M	G	G	G	G	G	G
Light and ventilation in hostel rooms	P	M	G	M	G	M	M	P	P	G	G	G	G	G	G
Garbage disposal pit	P	P	M	M	M	P	M	M	M	M	M	M	M	G	M
Proper drainage system	M	P	M	P	M	M	P	M	P	M	M	M	M	M	G

First-aid box	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Fire safety	M	M	M	M	M	M	N	M	M	M	M	M	M	G	M
Dustbin in hostel rooms	G	N	N	G	G	M	N	N	G	G	G	M	N	G	G
Children's hygienic habits	G	G	G	M	M	M	M	G	P	M	G	G	G	G	G
Using suggestion box	M	N	G	P	N	N	N	P	N	N	M	N	G	G	N
Wall magazine	M	N	N	P	M	P	N	N	N	N	M	N	N	M	G
House system functional	M	N	G	N	N	N	N	N	N	N	G	G	G	G	G
Cultural activities	M	M	G	G	G	N	M	G	G	G	G	M	G	G	G
Inner house competitions	G	M	G	N	N	N	N	N	N	N	G	M	G	G	G
Annual function	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Stationeries supplied	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Play and indoor games equipment	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Health check up	M	P	P	G	P	P	P	P	P	P	G	M	G	G	G
Health cards issued	N	N	N	N	N	N	N	N	N	N	M	N	G	G	G
ANM/Health worker available	N	N	G	N	N	N	N	N	N	N	G	N	G	G	G
Mess committee's functional efficiency	P	M	G	P	P	N	N	N	P	P	P	P	G	G	P
Beautification of hostel campus	P	M	G	P	G	P	M	N	P	P	P	P	G	M	G
Hostel locked during school hours and remedial coaching	N	G	G	G	G	N	G	M	G	G	G	G	G	G	G

G; Good, M: Manageable, P: Poor, N: No.

* Mostly the buildings of the hostel and residential climate in hostels of JNV were better in comparison with that of EMRS with manageable parameters. EMRS hostels needed bi-annual white washing, better campus cleanliness, and hygienic hostel rooms with better ventilation facilities & adequate light points for healthy living.

* The drainage system, garbage disposal pit was extremely unhealthy which acted as major source of mosquito and other insect breeding points. Almost dust bins were rarely seen in dormitories and guidance level in respect of maintenance of hygienic habits was not noticeable.

* Fire safety equipment were inadequate and students as well as teachers lacked the skill of using the device. However, First-aid-boxes were used as and when needed. Publication of wall magazine which is visually a monthly phenomenon were rarely updated in spite of its presence with least articles projecting a degenerated look. Suggestion boxes had a conspicuous presence without being used properly.

* The house system adopted in JNVs was absent in EMRSs of all states sparing EMRSs of Odisha where its presence is for name sake only. Cultural activities and Annual functions were a regular feature in all EMRSs which provides opportunity to the students to unfold their curricular and co-curricular talent. However, health check-up and issue of health cards was done infrequently. Excepting a few EMRSs, engagement of health workers were not done to look after the hygienic aspects of students. In JNV a post of staff nurse seems to be of much help.

* Functionality of Purchase Committee, Mess Committee and student's cabinet were yet to be ensured in EMRSs and ST & SC schools. Campus beautification and developing kitchen gardens were to be given more attention in these schools. JNV was also deficient in these parameters.

5.2 Hostel Kitchen and Food

Hygienic kitchen environment, quality of food and safety are the key elements in any residential accommodation set up. Table 5.2.1 lists out the important kitchen and food parameters and the status of EMRS, ST & SC and JNV hostels in respect of these parameters. These parameters relate to kitchen environment and cleanliness, safety measures and quality of meals and supervision.

Table 5.2.1: Hostel kitchen and food

Parameter	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Kitchen building whitewashed	M	M	M	M	G	P	M	P	P	M	G	M	G	G	G
Cleanliness of kitchen floor	M	M	M	G	G	P	M	P	G	G	G	G	M	G	G
Cleanliness of kitchen equipment and utensils	M	M	M	G	G	M	M	M	G	G	G	G	G	G	G
Cleanliness of dining room	P	M	M	M	m	P	P	P	N	M	G	G	G	G	G
Light and Ventilation	P	P	M	M	g	P	P	P	N	G	G	G	G	G	G
Fire safety for the kitchen	N	N	N	N	N	N	N	N	N	N	G	G	G	G	M
Proper drainage system for kitchen	M	M	P	M	M	M	P	P	M	M	M	M	M	M	M
Cleanliness of hand wash points	M	M	M	M	M	M	M	P	P	M	G	M	M	G	G
Cleanliness of store room	M	M	M	G	G	M	M	M	G	G	M	G	M	G	G
Safety stand for plates	N	N	N	G	N	N	N	N	G	N	G	N	G	G	G
Hand washing points	M	P	M	M	M	M	M	M	M	P	G	G	G	M	G
Aqua guard points for safe drinking water	N	M	N	N	M	N	N	N	N	P	G	G	M	G	G
Kitchen waste clearance	P	P	M	P	M	P	P	P	P	P	M	M	M	M	M

and management															
Smokeless cooking	N	N	N	N	G	N	N	N	N	N	G	G	G	G	G
Hygienic cooking	M	M	G	M	M	P	P	P	M	M	G	G	G	G	G
Approved menu chart displayed	G	G	G	G	G	N	N	G	N	G	G	G	G	G	G
Meals served according to menu chart	N	M	G	M	G	N	N	G	M	G	G	M	G	G	G
Quality of meal	M	P	G	M	M	P	M	M	P	M	G	G	G	G	G
Teachers on duty / mess committee supervision	N	G	N	N	G	N	N	N	N	N	G	G	G	G	G
Procurement procedure duly followed	N	N	N	N	N	N	N	N	N	N	G	G	G	G	G
Serving of food supervised teachers	N	M	G	N	N	N	N	N	N	N	G	G	G	G	G

G; Good, M: Manageable, P: Poor. N: No.

- Compared to JNVs, cleanliness of kitchen, dining and white washing of kitchen interiors and exteriors were in manageable status in EMRSs. The status of fan & light points in kitchen required more attention. Safe drinking water points and hand wash points were inadequate to accommodate students in EMRSs, whereas the arrangement was properly planned in JNVs.
- Management of kitchen wastes was almost paid least attention in all types of schools. Smokeless Chula (hearths) was absent in EMRSs giving rise to unhygienic condition of the hostel. Like JNVs, no EMRS had trained cooks resulting in sub-standard cooking which adds to students discontentment. Menu chart was not followed strictly and had not been prepared taking students view into confidence.
- In the absence of MOD (Master on Duty) system and house system in hostels, it was noticed that supervision aspect of all hostel facilities, service of quality food was a matter of concern. A healthy habit of providing lunch & dinner to teachers was followed in JNVs which ensured common dining of teachers and students simultaneously there by facilitating supervision of quality of food daily as per menu.

Chapter 6

EDUCATIONAL ATTAINMENT OF STUDENTS AND PROGRESS

6.1 Student Achievement in Curricular Areas

All financial and resource inputs to the school must be judged against the concrete capabilities of students as manifested in their educational attainment, success rate beyond the span of school years and contribution to their community. Tables 6.1.1 through 6.1.9 present their mean achievement level along with standard deviation in various subjects as measured by educational achievement tests prepared for this study, the details of which were presented in Chapter-3 on 'Method and Procedure'. It may be mentioned here that the performance level of the students need not be attributed to the difficulty or easiness of the questions as the questions captured the basic and the minimum competencies as per their syllabi and were prepared by state level experts and resource groups connected with elementary, secondary and higher secondary examination systems. They were instructed to keep the difficulty level of the questions in the range of 0.35 to 0.65 with the mean difficulty level being approximately 0.50 (questions can be answered by about 50 % of students in respective classes).

Students in Classes VIII and X were assessed for their achievement in English, Mathematics, Science and Social Science with respect to competencies mastered at Classes VII and IX levels, respectively, while students in Class XII were assessed on English, Physics, Chemistry, Mathematics and Biology with respect to competencies mastered at Class XI level. 't' values were computed to compare achievement level of ST students studying in different types of schools. The mean achievement levels of students by type of schools are plotted in Figures 6.1.1 through 6.1.8 for easy visual inspection of the relative status of student groups.

The overall achievement of JNV students was found to be better than EMRS students who were better than ST & SC School students. But it is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.

Table 6.1.1: Mean Achievement Level of Class 8 Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	271	7.88 3.44	31.52	278	8.59 3.61	34.36	292	8.25 2.92	33	272	7.49 2.59	29.96

SC & ST	251	6.13	24.52	249	7.26	29.04	249	6.42	25.68	252	6.38	25.52
		2.63			3.14			2.35			2.34	
JNV	158	12.15	48.6	164	12.30	49.2	159	10.19	40.76	164	9.83	39.32
		4.84			5.29			3.53			3.21	

The educational attainment of children is of primary importance with reference to the objectives of the study. All inputs and throughputs into the system are expected to produce desirable learning outcomes in children which would be witnessed in the form of their achievement in various subject areas. Table 6.1.1 reveals that the following important trends concerning the achievement level of Class VIII children.

- In terms of the achievement level of Class VIII students in the subject areas, students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- It may however be mentioned that the performance of students from all the three types of schools was not in the satisfactory range as students in ST & SC schools scored in the range of only 24% to 30% in four subject areas, while those in EMRS scored in the range of 29 % to 35 %. Even if the performance of JNV students was better than those in the other two types of schools, their performance was also not satisfactory, as they scored in the range of 39 % to 50 % in the four subject areas.

Table 6.1.2: Category-wise Mean Achievement Level of Class 8 Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	271	7.88 3.44	31.52	278	8.59 3.61	34.36	292	8.25 2.92	33	272	7.49 2.59	29.96
SC & ST	227	6.19 2.62	24.76	231	7.23 3.22	28.92	230	6.47 2.37	25.88	231	6.28 2.39	25.12
JNV	70	10.32 4.53	41.28	71	11.38 3.96	45.52	73	9.84 3.97	39.36	72	8.76 3.05	35.04
SC Students												
EMRS	No SC Students											
SC & ST	14	4.69 2.78	18.76	10	7.6 1.65	30.4	9	6.44 1.2	25.76	11	6.90 2.25	27.6
JNV	29	10.97 4.29	43.88	33	12.33 4.21	49.32	34	10.14 3.12	40.56	30	9.3 3.00	37.2
General Category Students												

EMRS	No General Category Students											
SC & ST	10	6.5 2.84	26	11	7.27 2.45	29.08	10	6.2 2.25	24.8	10	6.7 1.76	26.8
JNV	59	11.97 4.67	47.88	62	13.74 6.11	54.96	52	10.89 3.71	43.56	62	9.32 2.41	37.28

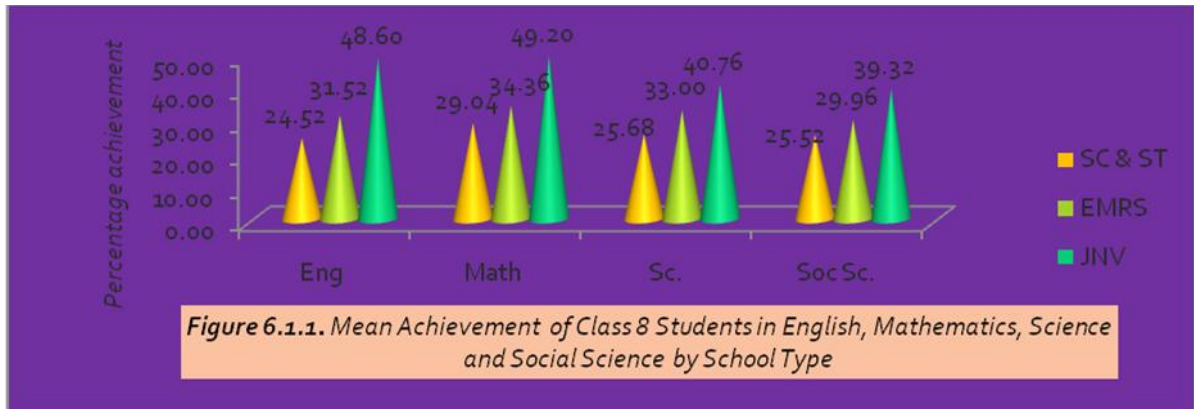


Figure 6.1.1. Mean Achievement of Class 8 Students in English, Mathematics, Science and Social Science by School Type

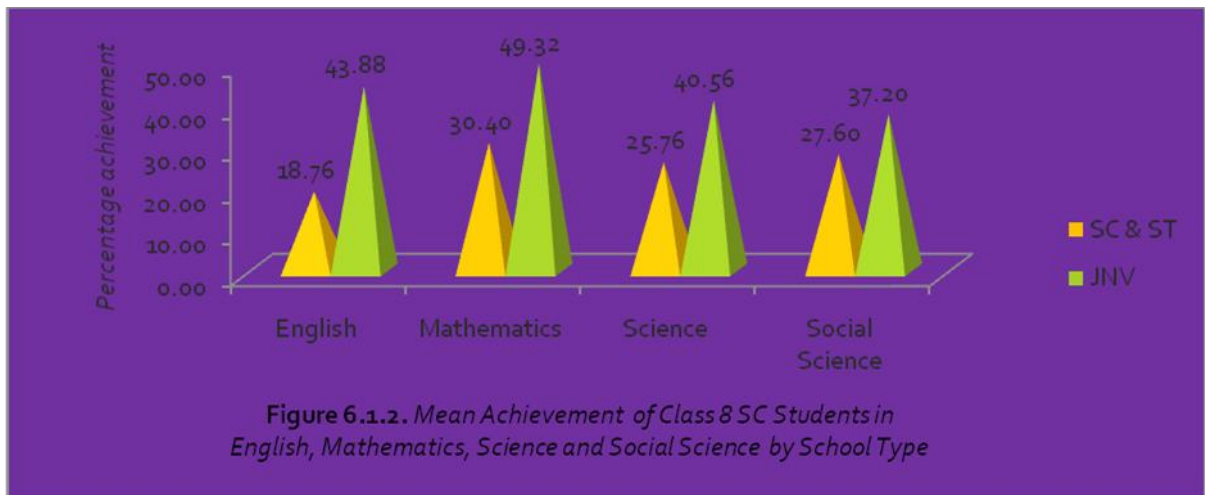


Figure 6.1.2. Mean Achievement of Class 8 SC Students in English, Mathematics, Science and Social Science by School Type

Table 6.1.3: 't' values showing group comparisons across school types in respect of achievement level of Class 8 ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS vs. SC & ST	7.8 6.19	496	6.22**	8.59 7.23	507	4.49**	8.25 6.47	520	7.69**	7.49 6.28	501	5.45**
EMRS vs. JNV	7.8 10.32	339	4.2**	8.59 11.38	347	5.39**	8.25 9.84	363	3.21**	7.49 8.76	342	3.24**

SC & ST	6.19	295	7.26**	7.23	300	8.05**	6.47	301	6.87**	6.28	301	6.32**
vs.	10.32			11.38			9.84			8.76		
JNV												

; Significant at .05 level

; ; Significant at .01 level

- * Category-wise analysis of educational attainment of Class VIII students (Table 6.1.2; Figure 6.1.1) revealed the same trend as was observed for the aggregate data. The t-tests (Table 6.1.3) revealed that the ST students in the JNV performed better than their grade-mates in EMRS, who also performed better than those in ST & SC schools.
- * The performance of ST students in ST & SC schools and EMRS was poor while in JNV, it was relatively better. The ST students in ST & SC schools performed in the range of 24% to 29% while their performance in EMRS was within 29 % to 35 % and in JNV in the range of 39% to 50%. It is difficult to ascertain if one programme was better than the other because students in JNV constituted a screened population and were better to begin with.
- * There were no SC students in EMRS. The performance of SC students in ST & SC schools was slightly better compared to that of ST students while SC students performed almost at lower level than ST students in the JNV (Figure 6.1.2). The performance of general category students was better than other categories.

Table 6.1.4: Mean Achievement Level of Class 10 Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	271	12.51 4.34	50.04	277	8.79 2.89	35.16	277	9.39 2.39	37.56	271	10.71 3.88	42.84
SC & ST	251	8.61 2.79	34.44	256	7.94 2.46	31.76	257	8.61 2.78	34.44	252	9.43 3.03	37.72
JNV	167	15.98 4.59	63.92	171	13.20 4.17	52.8	173	12.17 3.91	50.84	174	12.78 4.08	51.12

- * The performance of students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 31% to 38%, while those in EMRS showed attainment in the range of 35% to 50%. The students in JNV performed in the range of 50% to 64% (Table 6.1.4).

The performance of EMRS students in English was better compared to their performance in other subjects in which their performance was judged to be poor. The students in SC and ST schools performed poorly in all subject areas. Students in JNV scored highest in English followed by Social Science, Science and Mathematics.

Table 6.1.5: *Category-wise Mean Achievement Level of Class 10 Students in English, Mathematics, Science and Social Science in relation to School Type in 2014-15*

School Type	English			Mathematics			Science			Social Science		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students												
EMRS	271	12.51 4.34	50.04	277	8.79 2.89	35.16	277	9.39 2.39	37.56	271	10.71 3.88	42.84
SC & ST	228	8.48 2.78	33.92	232	7.93 2.40	31.72	232	8.71 2.68	34.84	224	9.47 3.01	37.88
JNV	70	15.93 3.83	63.72	70	12.09 4.26	48.36	73	11.17 3.84	44.68	72	12.01 3.57	48.04
SC Students												
EMRS	No SC Students											
SC & ST	10	9.8 2.14	39.2	9	7.67 2.87	30.68	10	7.7 3.43	30.8	12	10.83 2.48	43.32
JNV	27	17 4.00	68	31	11.87 3.96	47.48	30	11.79 4.02	47.16	31	13.64 4.02	54.56
General Category Students												
EMRS	No General Category Students											
SC & ST	15	9.2 3.18	36.8	14	8.78 2.51	35.12	15	6.87 3.60	27.48	16	8.45 3.20	33.8
JNV	70	17.97 3.14	71.88	70	14.58 4.45	58.32	70	13.51 3.81	54.04	71	14.76 3.05	59.04

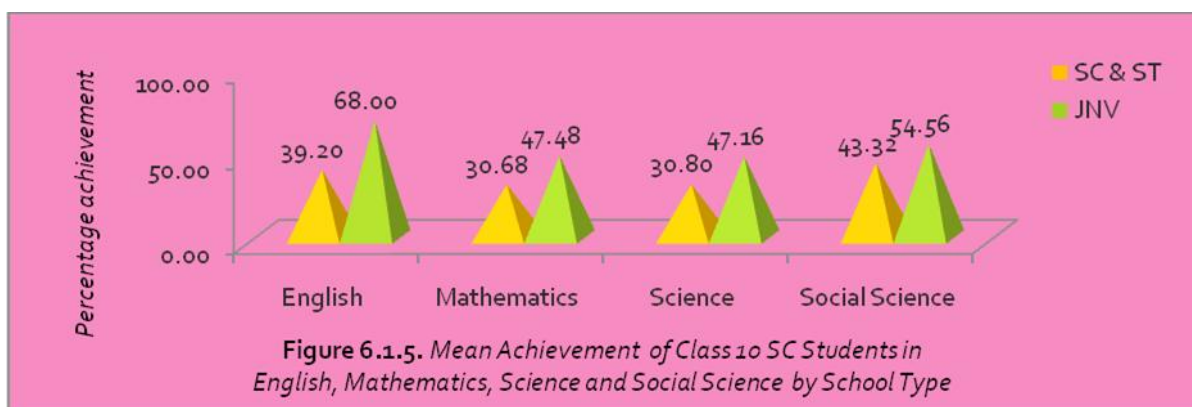
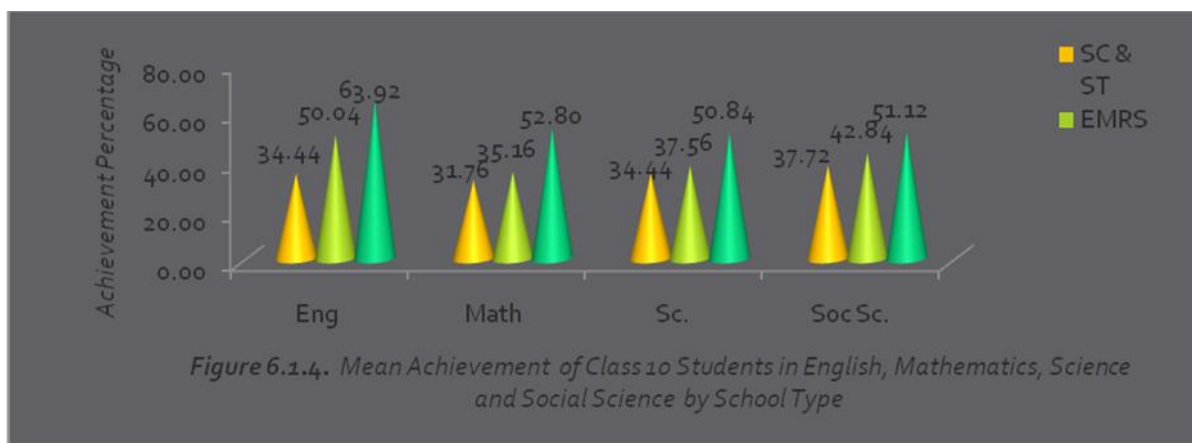


Table 6.1.6: 't' values showing group comparisons across school types in respect of achievement level of Class 10 ST students in different subject areas

School Type	English			Mathematics			Science			Social Science		
	Mean	df	t	Mean	Df	t	Mean	df	T	Mean	df	T
EMRS vs. SC & ST	12.51	497	**	8.79	507	**	9.39	507	**	10.71	493	**
	8.48		12.53	7.93		3.67	8.71		2.99	9.47		4
EMRS vs. JNV	12.51	339	**	8.79	345	**	9.39	348	**	10.71	341	**
	15.93		6.47	12.09		6.13	11.17		3.77	12.01		2.69
SC & ST vs. JNV	8.48	296	**	7.93	300	**	8.71	303	**	9.47	294	**
	15.93		15.11	12.09		7.8	11.17		5.09	12.01		5.45

; Significant at .05 level

; ; Significant at .01 level

* Category-wise analysis revealed that ST students in JNV performed better than ST students in EMRS, who were also better than ST students in ST & SC schools (Table 6.1.5; Figure 6.1.3).

- * t-values indicated that it was only in English between EMRS and JNV and in Social Science between EMRS and ST & SC schools that performance differences of ST children did not turn out to be significant (Table 6.1.6). In all other subject areas, the ST students in JNV were significantly better than ST students in EMRS, who were also noticeably better than ST students in ST & SC schools.
- * On an overall basis, SC students in ST & SC schools and JNV performed better than ST students in their respective institutions. The general category students performed at par with SC students in JNV as well as in ST & SC schools.

Table 6.1.7: Mean Achievement Level of Class 12 Students in English, Mathematics, Physics, Chemistry and Biology in relation to School Type in 2014-15

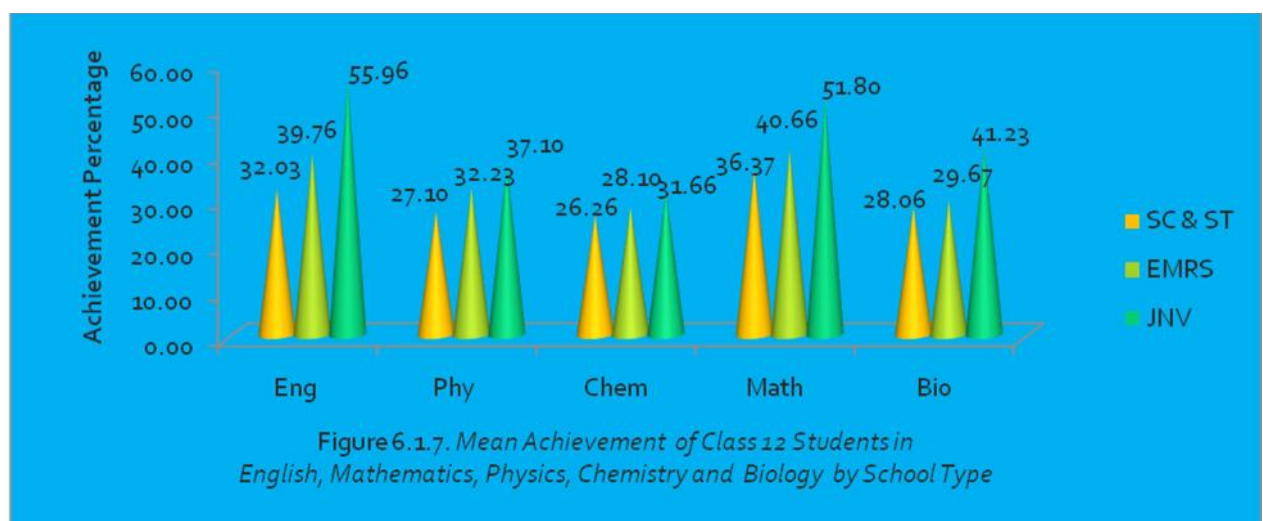
School Type	English			Physics			Chemistry			Mathematics			Biology		
	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
EMRS	184	11.93 3.79	39.76	181	9.67 2.88	32.23	181	8.43 2.99	28.1	113	12.20 4.01	40.66	185	8.90 2.42	29.67
SC & ST	228	9.61 3.01	32.03	228	8.13 2.30	27.1	228	7.88 2.28	26.26	161	10.91 3.58	36.37	204	8.42 2.49	28.06
JNV	139	16.79 3.74	55.96	136	11.13 3.44	37.1	136	9.5 3.16	31.66	96	15.54 4.87	51.8	88	12.57 3.40	41.23

- * The performance trend in Class XII in relation to type of schools was similar to that observed for classes VIII and X in that students in JNV were better than their grade-mates in EMRS and ST & SC schools (Table 6.1.7). However, the differences between EMRS and SC&ST schools were not very prominent as were observed for earlier classes. The performance gap between students in EMRS and JNV are spectacular where JNV students performed better than EMRS students.
- * The performance level of students of ST & SC schools was poorer in all subjects –English, Physics, Chemistry, Mathematics and Biology. The same was also true for students in EMRS except that they scored above 40.66 % only in Mathematics. The performance of students in JNV was also poor in all subjects except physics and chemistry in which their mean achievement level was 37.1 % & 31.66 % respectively. (Table 6.1.7).

Table 6.1.8: Category-wise Mean Achievement Level of Class 12 Students in English, Physics, Chemistry, Mathematics and Biology in relation to School Type in 2014-15

School	English	Physics	Chemistry	Mathematics	Biology
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Type	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%	N	Mean (SD)	%
ST Students															
EMRS	184	11.93 3.79	39.76	181	9.67 2.88	32.23	181	8.43 2.99	28.1	113	12.20 4.01	40.66	185	8.90 2.42	29.67
SC & ST	201	9.56 3.01	31.87	198	8.47 2.34	28.23	202	7.74 2.25	24.9	135	10.97 3.73	36.57	178	8.43 2.51	28.1
JNV	55	15.81 4.21	52.7	50	10.42 3.63	34.73	46	8.69 3.03	28.97	29	13.27 4.89	44.23	36	12.17 3.99	40.57
SC Students															
EMRS	No SC Students														
SC & ST	12	9.5 2.43	31.66	11	8.18 2.27	27.26	11	9.18 2.78	30.6	11	10.63 2.29	35.43	12	8.92 2.27	29.73
JNV	22	16.31 4.06	54.37	23	10.47 2.67	34.9	19	9.21 3.04	30.7	16	14.5 4.19	48.33	14	11.71 3.68	39.03
General Category Students															
EMRS	No General Category Students														
SC & ST	15	9.13 3.58	30.43	19	8.23 2.42	27.43	15	8.62 1.99	28.73	15	10.33 2.42	34.43	14	7.28 2.75	24.27
JNV	59	17.65 3.14	58.83	63	11.84 3.39	39.47	71	10.1 3.21	33.67	51	17.15 4.51	57.17	38	12.81 2.63	42.7



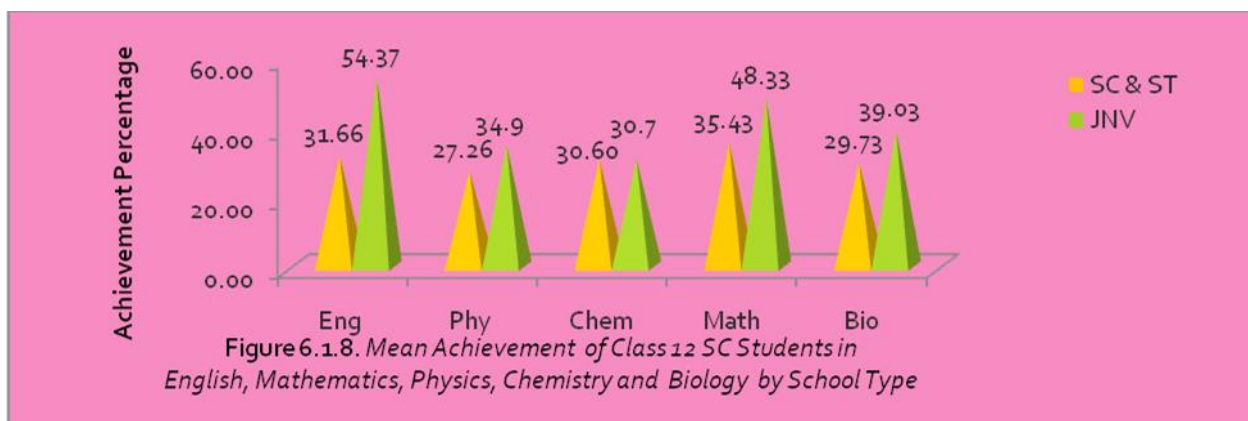


Table 6.1.9: 't' values showing group comparisons across school types in respect of achievement level of Class 12 ST students in different subject areas

School Type	English			Physics			Chemistry			Mathematics			Biology		
	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	t	Mean	df	T
EMRS vs. SC & ST	11.93	383	**	9.67	377	**	8.43	381	**	12.20	246	**	8.90	361	*
	9.56		6.75	8.47		4.43	7.74		2.53	10.97		2.48	8.43		1.82
EMRS vs. JNV	11.93	237	**	9.67	229	**	8.43	225	*	12.20	140	*	8.90	219	**
	15.81		6.13	10.42		3.51	8.69		0.52	13.27		1.08	12.17		4.75
SC & ST vs. JNV	9.56	254	**	8.47	246	**	7.74	246	**	10.97	162	**	8.43	212	**
	15.81		10.31	10.42		3.61	8.69		2	13.27		2.38	12.17		5.41

; Significant at .05 level

; ; Significant at .01 level

- * Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools (Table 6.1.8).
- * t-values revealed noticeable difference between ST students in EMRS and those in ST & SC schools only in English & biology (Table 6.1.9; Figure 6.1.5). The ST students in JNV maintained their initial advantage over the ST students in ST & SC schools in all areas except physics and chemistry. Differences were significant only in English and Mathematics and fell short of them in English and Biology. It is important to mention that performance gap among students in JNV, EMRS and ST & SC schools narrowed down.
- * The trend was almost the same for SC and general students in JNV & ST & SC schools (Figure 6.1.6). The performance differences narrowed down with JNV maintaining a slight advantage in only English and Physics.

On an overall basis, it can be said that in respect of students' educational attainment in elementary and secondary classes, JNV students maintained an advantage over EMRS students who were also better than ST & SC School students. But with increasing years, the

performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.

On the whole the performance of students in ST & SC schools was poor, of those in EMRS, below average and of those in JNV, above average.

In view of the fact, students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.

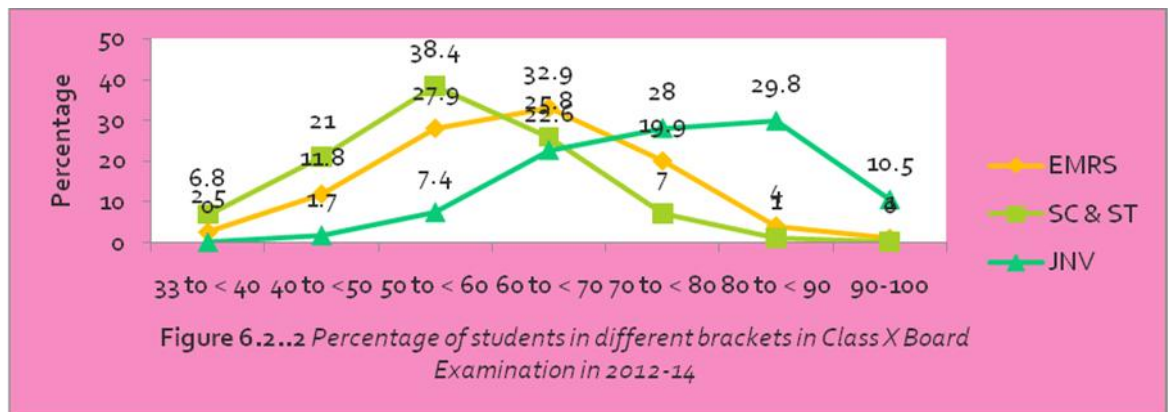
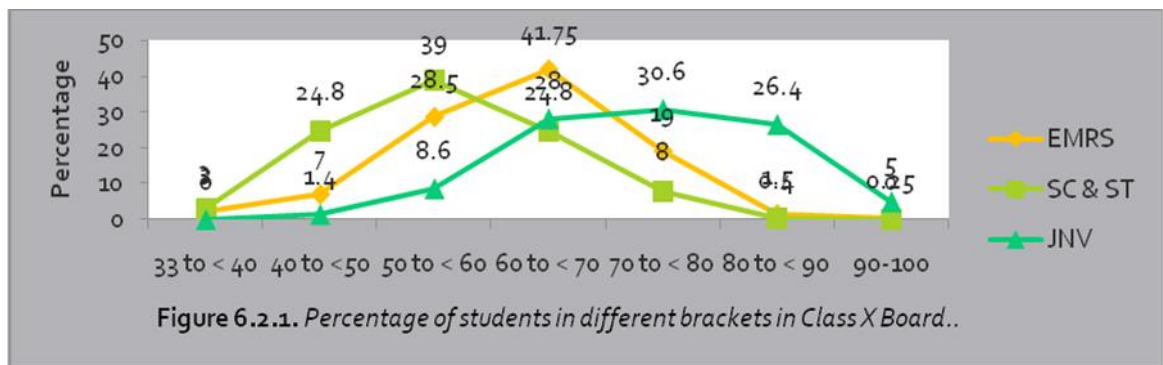
6.2 Student Performance in Terminal Examinations

All teaching inputs in the programme must be judged against the performance of students in Terminal Board examinations at the end of Classes X and XII. The student performance in Class X Board examinations are presented in Table 6.2.1 for the entire student group by school type for the period 2010-14 covering a span of five years. The performance trend in Class X examination is shown in Figure 6.2.1 for 2014 and in Figure 6.2.2 for the five-year period from 2010 to 2014.

Table 6.2.1: Student Performance in Class X Board Examination in relation to School Type during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33-less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	327	315	96.33	3.5	11.5	31.75	29.5	18.75	05	00
	ST&SC	472	355	75.21	8.75	18.5	36.75	26	7.5	2.5	00
	JNV	325	323	99.38	00	2	8.2	28.2	21.4	31.4	8.8
2011	EMRS	335	304	90.74	04	12	37	23.5	15.75	7.25	0.5
	ST&SC	494	367	74.29	11.8	26.6	36.6	23	02	00	00
	JNV	285	285	100	00	1.4	08	16.6	32.6	28	13.4
2012	EMRS	338	312	92.30	4.5	09	25.5	33.75	18.5	7.5	1.2
	ST&SC	527	461	87.47	4.6	22	42.6	23.4	06	1.4	00
	JNV	321	320	99.68	00	01	4.8	19.8	29.2	31.8	13.4
2013	EMRS	376	351	93.35	0.75	17.25	17.5	34.5	27.5	2.5	00
	ST&SC	791	579	73.19	8.8	20.6	35.2	27.4	7	01	00
	JNV	318	318	100	00	2.4	8.8	20.6	24.8	32.6	10.8
2014	EMRS	352	345	98.01	02	07	28.5	41.75	19	1.5	0.25
	ST&SC	776	620	79.89	03	24.8	39	24.8	08	0.4	00

	JNV	338	338	100	00	1.4	8.6	28	30.6	26.4	05
Total	EMRS	1728	1627	94.15	2.5	11.8	27.9	32.9	19.9	04	01
	ST&SC	3060	2382	77.84	6.8	21	38.4	25.8	07	01	00
	JNV	1587	1584	99.81	00	1.7	7.4	22.6	28	29.8	10.5



- * More percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools. In 2014, 2% students in EMRS scored below 40% and .25 % students scored above 90% of marks. 3% of ST & SC School students got less than 40% and none of them got above 90%. In JNV, none of the students got less than 40% and 5% of students got above 90%.
- * The maximum concentration of students in ST & SC schools was in the 50% to 60% bracket, in EMRS the maximum concentration was in 60% to 70% bracket and in JNV, maximum students scored in the 70% to 80% bracket.
- * The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014. Maximum concentration of students was observed in the score brackets of 50% to 60% for ST & SC schools, 60% to 70% for EMRS and 80% to 90% for JNV (Figure 6.2.2). The results obtained from the educational achievement tests

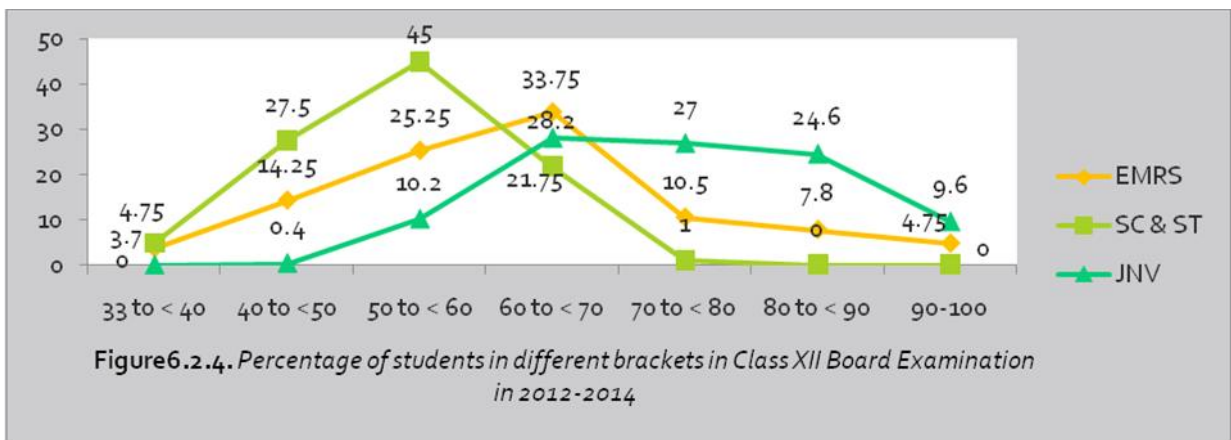
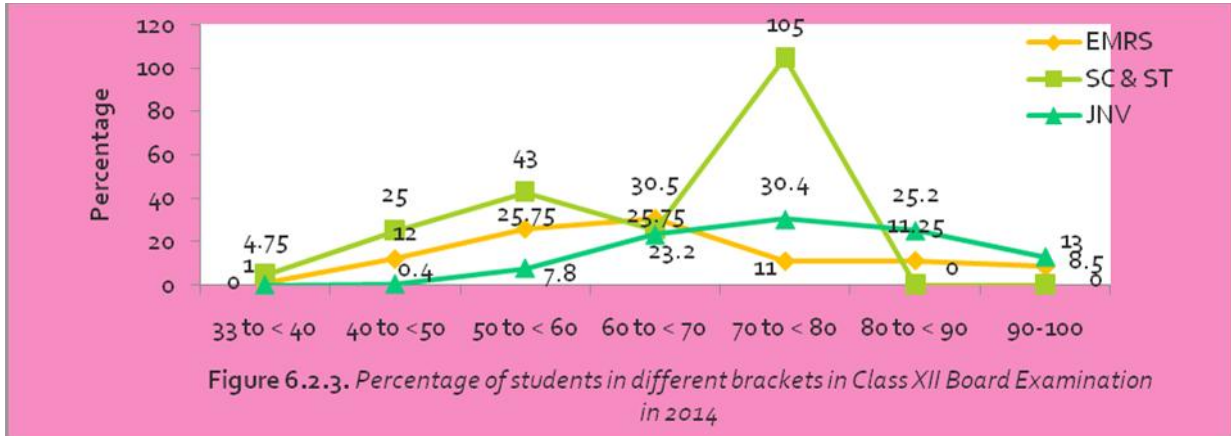
revealed the same relative standing of different types of schools except that the scores in EMRS were approximately 20% less than JNV scores.

- * During the last five years, none of the students of JNV, 2.5% of students of EMRS and 6.8% of the students of ST & SC schools scored below 40%, while 10.5% of students of JNV, less than 1% students of EMRS and none from the SC & STs schools scored above 90%.

The performance level of ST, SC and General category students in Class X Board examinations across all types of schools are shown in Table 6.2.2 and are plotted in Figure 6.2.3 for the year 2014 and in Figure 6.2.4 for a period of three years from 2010 to 2014.

Table 6.2.2: Student Performance in Class XII Board Examination in relation to School Type during the last 5 Years (2010-2014)

Year	School Type	No appeared	No passed	% of Pass	% of students securing marks in Class X Board						
					33-less than 40	40-less than 50	50-less than 60	60-less than 70	70-less than 80	80-less than 90	90-100
2010	EMRS	205	181	88.29	1.3	26	27.7	36	09	00	00
	ST&SC	312	220	70.51	01	38.66	46.68	13.66	00	00	00
	JNV	219	212	96.8	00	00	12.2	45.4	18.4	16.2	7.8
2011	EMRS	220	191	86.81	00	20.66	35	37.66	6.68	00	00
	ST&SC	406	217	53.44	6	37	45	12	00	00	00
	JNV	225	216	96	00	0.8	7.8	36.4	28.4	17.4	9.2
2012	EMRS	248	243	97.98	10.25	17.5	21	30.25	12	05	4
	ST&SC	496	335	67.54	8.66	30.66	49	11.68	00	00	00
	JNV	201	196	97.5	00	0.4	12	17.2	29.4	37	04
2013	EMRS	286	280	97.9	2.5	6.25	27.25	45.25	10	07	1.75
	ST&SC	482	355	73.65	4.75	34.5	52.25	8.5	00	00	00
	JNV	220	205	93.18	00	0.4	10.8	25	29.2	24.6	10
2014	EMRS	313	270	86.26	01	12	25.75	30.5	11	11.25	8.5
	ST&SC	496	392	79.03	4.75	25	43	25.75	10.5	00	00
	JNV	228	223	97.80	00	0.4	7.8	23.2	30.4	25.2	13
Total	EMRS	1272	1165	91.58	3.7	14.25	25.25	33.75	10.5	7.8	4.75
	ST&SC	2190	1519	69.36	4.75	27.5	45	21.75	01	00	00
	JNV	1093	1052	96.24	00	0.4	10.2	28.2	27	24.6	9.6



- * Analysis of performance of ST, SC and general students in all types of schools in Class X board examination in 2014 revealed that the students performed almost better in JNV followed by EMRS and ST & SC schools. 1% of EMRS students, 4.75 % students of ST & SC schools and none from JNV scored below 40 %; where as 13% students of JNV scored above 90% level.
- * Maximum concentration of EMRS students were in 60% to 70% bracket, of ST & SC schools in 50% to 60% bracket and of JNV were in 70% to 80% bracket projecting edge of more 10% difference between SC&ST schools, EMRSs and JNVs in chronology.

The student performance in Class XII Board examination by school type is shown in Table 6.2.3. Figures 6.2.5 and 6.2.6 show students' performance trend for 2014 and for the five-year period from 2010 to 2014, respectively.

Table 6.2.3: Category-wise Student Performance in Class X Terminal Examination in the sampled schools during the Last Three Years (2012-2014)

All EMRSs

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	388	361	93.04	37.68	53.46	8.86
	SC	00	00	00	00	00	00
	General	02	02	100	100	00	00
2013	ST	420	395	94.04	31.14	66.08	2.78
	SC	00	00	00	00	00	00
	General	05	05	100	60	40	00
2014	ST	414	397	95.89	33.50	65.24	1.26
	SC	00	00	00	00	00	00
	General	1	1	100	00	00	100
Total	ST	1222	1153	94.35	34	61.83	4.17
	SC	00	00	00	00	00	00
	General	08	08	100	62.5	25	12.5

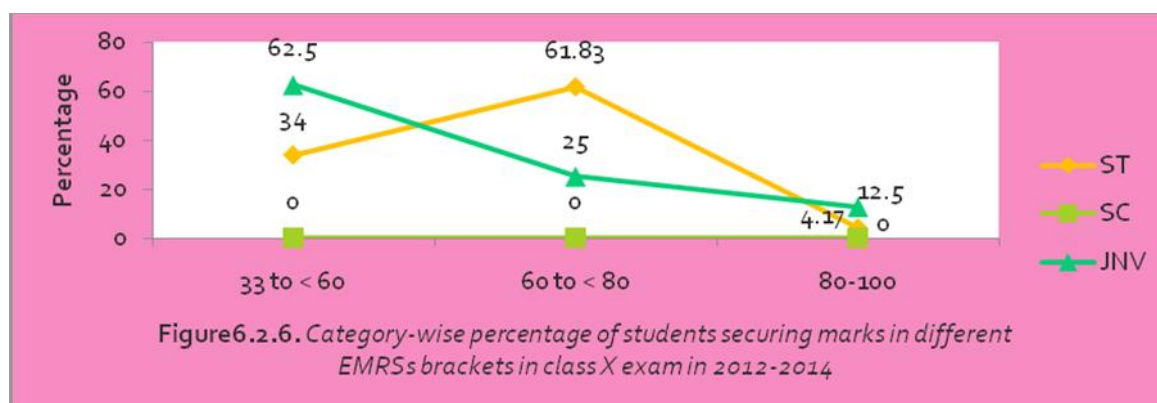
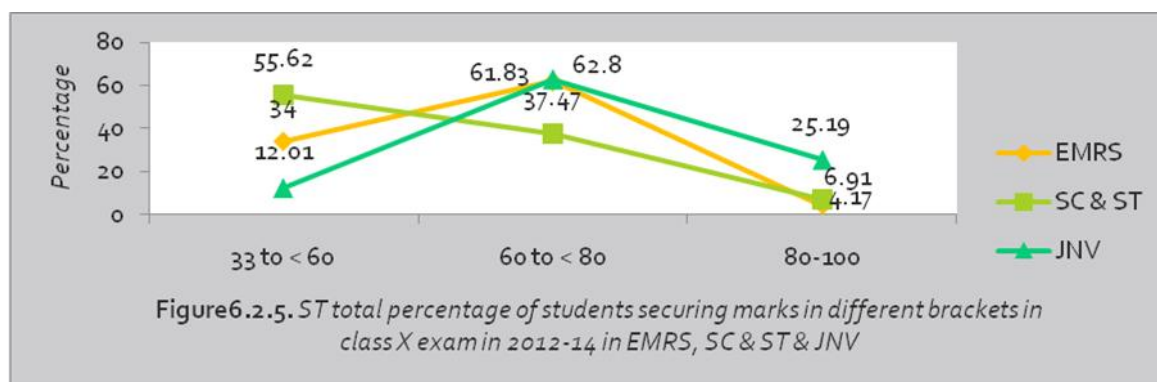
All ST& SC Schools

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	407	350	85.99	52.29	45.14	2.57
	SC	37	35	94.59	74.3	22.85	2.85
	General	33	31	91.17	64.51	35.49	00
2013	ST	686	495	72.15	51.92	43.43	4.65
	SC	50	38	76	73.69	21.05	5.26
	General	45	26	80	75	25	00
2014	ST	680	532	78.23	61.28	26.88	11.84
	SC	44	43	97.72	69.76	23.26	6.98
	General	64	60	93.75	48.33	45	6.67
Total	ST	1773	1377	77.66	55.62	37.47	6.91
	SC	131	116	88.54	72.41	22.42	5.17
	General	142	127	89.43	59.85	37	3.15

All JNVs

Year		No appeared	No passed	% of pass	% of students securing marks in Class X Board		
					33-less than 60	60-less than 80	80-100
2012	ST	128	128	100	3.91	64.84	31.25
	SC	60	60	100	1.67	70	28.33
	General	133	132	99	18.95	40.15	40.90
2013	ST	122	122	100	18.05	52.45	29.50
	SC	56	56	100	14.28	53.57	32.15

	General	137	137	100	22.62	43.8	33.58
2014	ST	135	135	100	14.07	71.12	14.81
	SC	67	67	100	25.37	50.74	23.89
	General	135	135	100	11.12	61.48	27.4
Total	ST	385	385	100	12.01	62.80	25.19
	SC	183	183	100	13.77	58.10	28.13
	General	405	404	99.75	17.56	48.47	33.97



- * Maximum number of students scored in 60% to 70% bracket in EMRS and JNVs both in class XII Board examination in 2014. None of the EMRS students scored below 40% and none from JNV scored below 50%, while only 1.26% of EMRS students scored above 80%, 14.81% of JNV students scored above 80%. There was approximately 10% gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- * The student performance trend observed in 2014 was also true in respect of student performance during the last five years in that maximum number of EMRS students scored in 60% to 70% bracket and maximum number of JNV students scored in the 70% to 80% bracket. 2.5% of the EMRS students scored below 40% and none of the JNV students scored below 40%, while 1% of EMRS students scored above 90% and 10.5% of JNV students scored above 90%. Considering the results of last five years, there was a gap of about 20% in student performance level between EMRS and JNV favouring the latter.

The performance level of ST, SC and General category students in Class XII Board examinations across all types of schools are shown in Table 6.2.4 and are plotted in Figure 6.2.7 for the year 2014 and in Figure 6.2.8 for a period of three years from 2010 to 2014.

Table 6.2.4: Category-wise Student Performance in Class XII Terminal Examination in the sampled schools during the Last Three Years (2012-2014)

All EMRSs

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	248	243	97.98	56.37	40.74	2.89
	SC	00	00	00	00	00	00
	General	00	00	00	00	00	00
2013	ST	286	280	97.90	39.64	56.78	3.58
	SC	00	00	00	00	00	00
	General	00	00	00	00	00	00
2014	ST	312	269	86.21	49.44	40.15	10.41
	SC	00	00	00	00	00	00
	General	01	01	100	00	100	00
Total	ST	846	792	93.61	48.10	46.22	5.68
	SC	00	00	00	00	00	00
	General	01	01	100	00	100	00

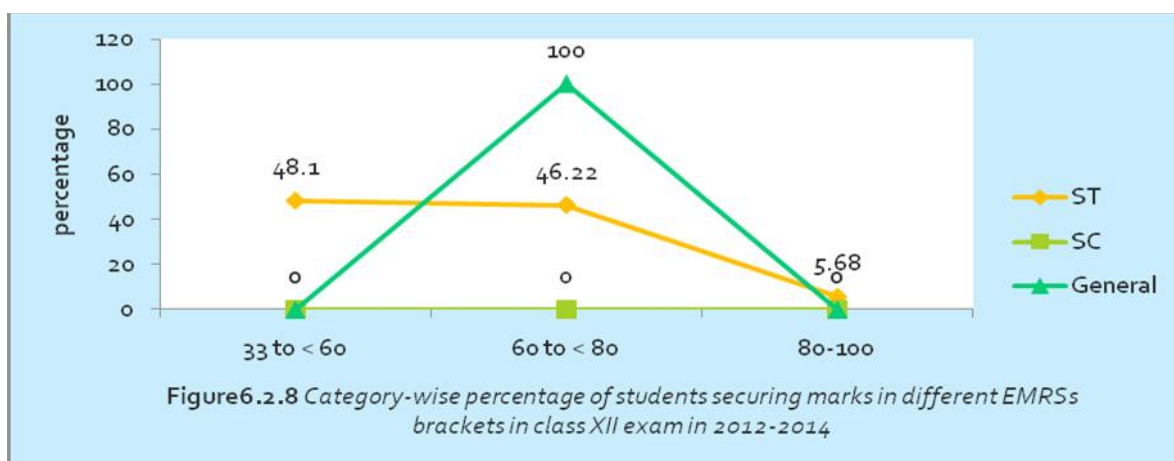
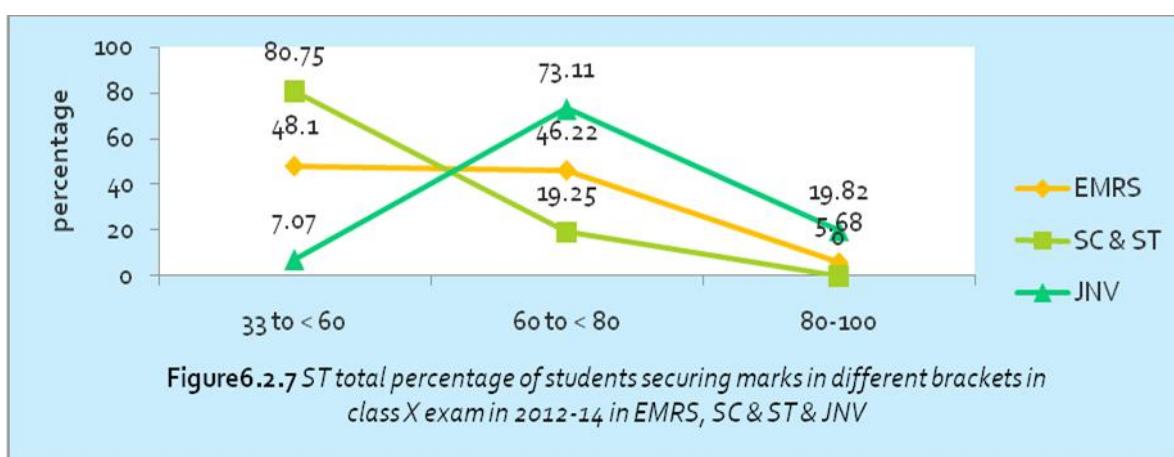
All ST & SC Schools

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	368	237	64.40	85.65	14.35	00
	SC	18	16	88.88	62.5	37.5	00
	General	30	25	83.34	76	24	00
2013	ST	441	314	71.20	82.81	17.19	00
	SC	11	09	81.81	100	00	00
	General	28	23	82.14	78.26	21.74	00
2014	ST	416	322	77.40	75.15	24.85	00
	SC	11	08	72.72	50	50	00
	General	11	09	81.81	44.44	55.56	00
Total	ST	1225	873	71.26	80.75	19.25	00
	SC	40	33	82.5	69.69	30.31	00
	General	69	57	82.60	71.92	28.08	00

All JNVs

Year	School Type	No appeared	No passed	% of pass	N of Class XII students securing % of marks		
					33-less than 60	60-less than 80	80-100
2012	ST	65	62	95.38	11.29	61.29	27.42

	SC	48	48	100	25	37.5	37.5
	General	88	87	98.86	17.24	45.97	39.79
2013	ST	80	74	92.5	6.75	79	13.53
	SC	42	38	90.47	13.15	60.52	26.33
	General	98	93	94.89	26.88	47.31	25.81
2014	ST	79	74	96.20	3.94	76.31	19.75
	SC	42	41	97.61	12.19	70.73	17.08
	General	107	106	99	23.58	50	26.42
Total	ST	224	212	94.64	7.07	73.11	19.82
	SC	132	127	96.21	17.32	55.11	27.57
	General	293	286	97.61	22.72	47.90	29.38



- * In class XII Board examination in 2014, 1% of ST students and 4.75% of SC&ST school students scored below 40%, while none scored below 40%.
- * Maximum number of ST students of EMRS were in 33% to 60% bracket, while maximum number of general students found place in 60% to 80% bracket that projects better performance level of general students over ST students.
- * Considering the Class XII Board examination results over the last three years (2012-14), the general students performed noticeably better than the ST & SC students (Figure 6.2.8).

6.3 Student Participation in Co-Curricular and Social Activities

Participation of students in co-curricular activities, games and sports and social activities has a direct bearing on their progress in curricular and social domains as they can connect their school learning to real-life experiences. Table 6.3.1 shows the percentages of boys and girls in the three types of schools participating in different co-curricular and sports activities. Percentages of students participating in NCC, Scouts and social activities are presented in Table 6.3.2.

Table 6.3.1: Percentage of boys and girls participating in Co-Curricular and Sports activities by School Type

Activity	EMRS		ST & SC		JNV	
	Boys	Girls	Boys	Girls	Boys	Girls
Drawing	30.6	29.2	17	14.4	28	42.6
Singing	14.4	21.8	09	4.8	21.6	39.8
Sewing/ Knitting	00	10	02	05	00	00
Dancing	41.4	40.6	15.33	14.5	23.8	45
Painting	26.4	20.8	40	32	20.75	33.66
Instrumental music	06	5.6	13.5	24	10	21.33
Debate/ Eloquence	11	7.75	20.8	14.8	32.2	43.75
Writing Skill	32.2	32.4	39.2	39.6	45.25	39
G.K. / Quiz	36.2	41.2	31.2	13	18	14.8
Drama	20.25	30	12.6	15.8	13.8	31.66
Football	18.66	19	13.5	08	22	13.2
Volleyball	17.66	9.33	12.5	11.33	32.6	30
Basketball	00	00	10	11	28.66	43
Kho-Kho	25.25	24.6	22	19.2	42.2	45
Badminton	12	08	2.5	6.66	23.5	21
Kabbadi	29.2	28.2	23.75	19.2	35	35.6
Skipping	00	27.66	00	11	00	57
Athletics	22.8	19.2	19	25.8	19.6	10
Karate	17	17	20	22	00	00
Archery	05	02	00	03	09	14
Handball	10.33	22	00	00	00	00
NCC	-	-	-	-	25	25
Scout	-	-	-	-	16	16
NSS	-	-	-	-	35	35
Red cross	-	-	-	-	-	-
Shramdan	-	-	-	-	55	56
Social awareness campaign	-	-	-	-	-	-
Socials service in villages	-	-	-	-	-	-

* It may be observed that both girls and boys across all types of schools participated in co-curricular activities almost in equal proportion. The participation of ST & SC School students was about 5% to 10% in different co-curricular activities. Dancing, writing skill, drawing and G.K. competition invited maximum student participation in the EMRS in the range of 40%

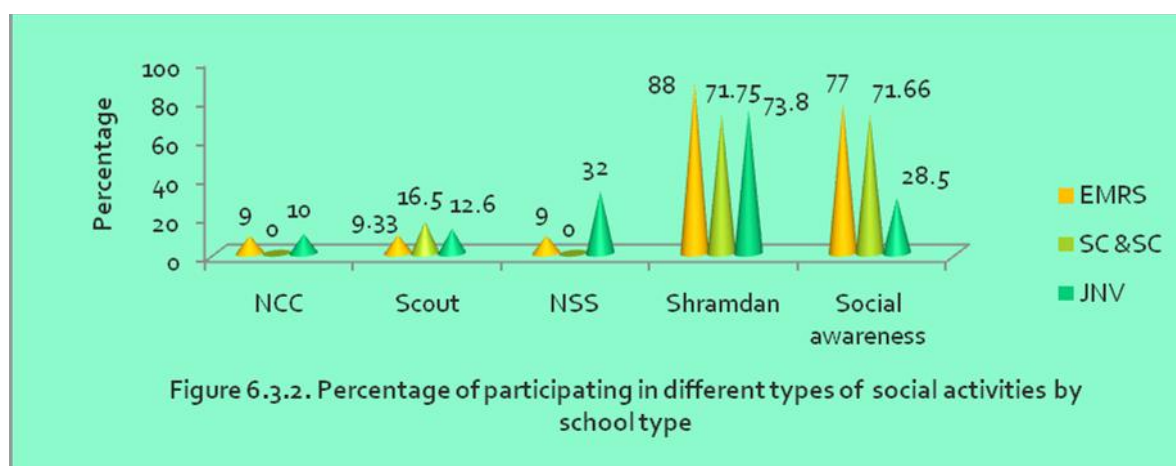
to 48%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.

- * In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, skipping, karate and athletics. The same was also true for the JNV & ST & SC schools. In JNV, a substantial proportion of students participated in basketball, badminton, Volley ball, Kho-Kho and skipping. The participation of students of ST & SC schools was weak.

One of the goals of educational programmes specially designed for and implemented in rural and tribal locations is to prepare students to connect with the community and make contributions to the society. Information in respect of students' participation in social activities is presented in Table 6.3.2.

Table 6.3.2: Percentage of boys and girls participating in Social activities by School Type

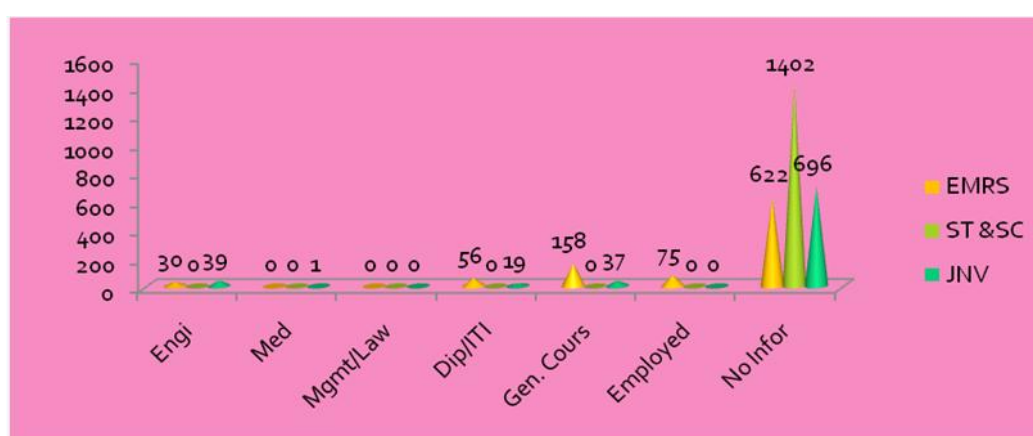
School type	NCC (%)	Scout (%)	NSS (%)	Shramdan (%)	Social awareness campaign (%)	Social service in villages (%)
EMRS	09	9.33	09	88	77	29.33
ST & SC	00	16.5	00	71.75	71.66	36
JNV	10	12.6	32	73.8	28.5	05



- * 9% of EMRS students were in NCC, 9.33% in Scouts and 9% in NSS, while 16.5% of ST & SC students were in Scouts, but NCC and NSS were not adopted in ST & SC schools. Among JNV students 10% were in NCC, 12.6% adopted Scouts and 32% were in NSS. *Shramdan* and social awareness campaign was carried in all types of schools with maximum student participation in the range of 80% to 100%. Carrying social service at village level was better adopted in EMRS (29.33%) and ST & SC schools (36%). But JNV students did not participate well in such activity and there proportion run into 05%. (Table 6.3.2).

Table 6.3.3: Success indicators of school pass outs

	No of pass outs	Engineering (%)	Medical (%)	Management/ Law (%)	Diploma/ITI (%)	General courses (%)	No taking up employment (%)	Information not available (no.) (%)
EMRS	941	30(3.18)	00	00	56(5.95)	158(16.79)	75 (7.97)	622 (66.09)
ST & SC	1402	-	-	-	-	-	-	1402 (100)
JNV	792	39 (4.92)	1 (0.12)	00	19 (2.39)	37 (4.67)	00	696 (87.87)



6.4 Performance in National Talent Search Tests

None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.

6.5 Success Indicators of School Pass Outs

Following the terminal examination at the end of an educational cycle ending in higher secondary education, students' progress in career and life indicates the extent to which the programme turned out to be successful. Teachers are expected to keep a record of the progress of students beyond the educational cycle in the school to appraise themselves and others of the effectiveness of their educational training.

The student's admission rate in EMRS in engineering courses like that of degree courses and diploma courses was 3% to 6%, general courses 17%, and in employment sector within 8% level. In case of JNV the admission rate in engineering courses was limited to 2% to 5% level, general courses to 5% level. The data was partial as no such records were maintained at school level across all types of schools.

In an average, considering the total aspect under study, information in respect of 66.09% pass outs of EMRS, 100% pass outs of ST & SC Deptt. run schools and 87.87% pass outs of JNV were not available for study. The collected information was incomplete and as such the correct proportion could hardly be deciphered from partial data..

Chapter 7

SCHOOL-COMMUNITY LINKAGE

For the community to own the school and strengthen it with support, monitoring and supervision, it is important to establish a strong school-community link to be primarily initiated by the school. Children's knowledge is situated in the local culture and therefore, community knowledge should be brought into schools by initiating community participation in schools' curricular and co-curricular programmes. According to NCF, 2005 school learning must be connected with real-life life knowledge. Furthermore, school as a learning center must also impact the awareness level of the community and engage in making substantial contributions to community welfare. Since school-community linkage is of paramount importance as a sustainability measure for grassroots-level educational intervention, we assessed the level of interaction between the school and the community on some major parameters, the findings in respect of which are presented in this chapter.

7.1 Functioning of SMC and Other School Committees

The involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Table 7.1.1 lists out the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

Table 7.1.1: Levels of SMC and MTA participation in school activities

Parameter	EMRS			SC & ST			JNV		
	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)
Regular meeting of SMC	00	20	80	20	40	40	00	20	80
Implementing resolutions of SMC	00	40	60	00	40	60	20	20	60
Involvement in developing SDP	00	20	80	00	00	100	20	00	80
Monitoring student attendance and drop out	00	20	80	00	00	100	00	40	60
Monitoring student progress	20	00	80	00	00	100	20	00	80
Participation in school's co-curricular activities	20	00	80	00	00	100	00	20	80
Participation in preparing TLMs	00	20	80	00	00	100	00	20	80
Supervising hostels	00	20	80	00	20	80	00	20	80
Supervising quality of meals	00	00	100	00	00	100	40	00	60
Monitoring utilization of funds	00	00	100	00	00	100	00	00	100
Liaoning with other agencies for school development	00	00	100	00	00	100	00	00	100
Regular meeting of MTA	00	00	100	00	00	100	00	00	100
Monitoring student attendance and drop out	00	00	100	00	00	100	00	00	100

Participation in school's co-curricular activities	00	00	100	00	00	100	00	00	100
Working for the safety of girls	00	00	100	00	00	100	00	00	100
Monitoring Meena cabinet and Meena Manch	00	00	100	00	00	100	00	00	100
Coordinating with SHG for catering to girls' hygienic requirements	00	00	100	00	00	100	00	00	100

- * The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- * SMC and MTA were not at all constituted in schools and where available was considered as more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC in EMRS were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and quality of meals, monitoring utilization of funds or in establishing coordination with other agencies. Their participation in preparing TLMs was non-existent and in co-curricular activities, very poor. In JNV the concept of SMC was not followed and the school had a managing committee under the chairmanship of District Collector which decides over-all functioning parameters.
- * The MTA meetings were very infrequent and were also held as a matter of formality. Their involvement in and contribution towards the school was very poor; their cooperation was not also actively sought by the school staff.

7.2 Teachers' Interaction with Community

Table 7.2.1: Teachers' interaction with parents and community members

Parameter	EMRS			SC & ST			JNV		
	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)	Good (%)	Manageable (%)	Poor (%)
Dealing with community members when they visit school	100	00	00	80	20	00	100	00	00
Personal contact with community members	20	60	20	20	40	40	00	60	40
Sharing of students' results with parents	20	80	00	00	20	80	40	60	00
Influencing the community cognitive behavior	00	20	80	00	00	100	00	40	60

It was satisfying to note that the teachers and other employees of all types of schools dealt well with parents and community members.

But while studying the personal contact level, it was revealed that in all most all types of schools it was either manageable or poor status tending towards later. Adequate care was lacking in keeping contact with guardians, closely sharing the results of their wards with them and imparting information about modes of planning for the improvement of the students etc. While ascertaining the role of the school in influencing the community cognitive behaviour, it was observed that this aspect of study was almost poor in all types of schools.

MONITORING AND SUPERVISION

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Following programme implementation at the grassroots-level, several contextual parameters would provide learning experiences for changing its nature and make it more suitable to adapt to field-realities. If properly monitored, lessons would be learnt to keep the stakeholders focused on programme objectives and to assess the nature of support required to strengthen the programme. The monitoring of the school and its activities can be done by educational authorities and community members. This chapter presents the frequency and nature of monitoring of the schools by important stakeholders.

7.3 School and Hostel Monitoring by Educational Administrators and Community Members

Table 7.3.1 reports frequency of monitoring by the educational administrators and community members including SMC members and parents.

Table 7.3.1: Frequency of monitoring and supervision of the school and the Hostel by Educational Administrators and Community members during the 2014-15

Supervision	Number of visits to Schools														
	EMRS					SC & ST					JNV				
States	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
By educational administrators	13	00	07	05	06	12	01	10	03	10	04	02	07	03	03
By community members	00	00	00	03	00	00	00	00	04	00	00	00	00	05	00
Supervision	Boys Hostel														
	EMRS					SC & ST					JNV				
States	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
By educational administrators	13	03	11	18	04	14	02	05	03	03	04	01	03	06	03
By community members	00	00	00	24	00	00	00	00	05	00	00	00	00	08	00

Supervision	Girls Hostel														
	EMRS					SC & ST					JNV				
States	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
By educational administrators	13	03	10	06	03	04	02	03	03	03	13	01	05	06	03
By community members	00	00	00	11	00	00	00	00	05	00	00	00	00	08	00

- * During a span of one year, educational administrators (mostly District Welfare Officers, Assistant Commissioners, and Inspector of schools) visited EMRS and boys' hostels about 3-13 times a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- * The community involvement was extremely weak in that during a span of one year, negligible initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.

7.4 School and Hostel Monitoring by the Principal

Tables 7.4.1 and 7.4.2 provide information on class visits and hostel visits by the principals.

Table 7.4.1: Supervision of class visits by the Principal

Supervision	Month	EMRS					SC & ST					JNV				
		Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Frequency of class visits	Aug, 2014	10	05	09	06	06	08	11	14	20	09	05	04	07	03	02
	Sep, 2014	13	05	06	08	05	08	08	13	17	09	06	08	10	03	02
	Jan, 2015	07	08	10	08	08	08	06	09	25	06	04	10	13	03	02
	Feb, 2015	11	03	03	08	05	08	04	10	21	07	07	06	06	02	02
No. of teachers whose classes have been visited	Aug, 2014	15	12	20	20	04	08	17	25	06	05	11	12	17	15	14
	Sep, 2014	12	17	19	15	03	07	16	25	05	04	10	18	15	13	20
	Jan, 2015	16	13	21	18	05	06	16	23	07	03	12	18	15	18	20

	Feb, 2015	14	12	21	25	04	08	12	26	08	03	13	10	16	14	20
No. of teachers whose classes have not been visited	Aug, 2014	16	12	05	09	08	12	09	03	04	13	07	11	06	06	09
	Sep, 2014	18	07	06	14	19	13	10	03	05	14	08	05	08	12	03
	Jan, 2015	12	11	04	11	17	14	10	05	03	15	06	05	08	03	03
	Feb, 2015	17	12	04	04	18	12	14	02	02	15	05	13	07	07	03

Table 7.4.2: Frequency of hostel visits by the principal

Month	Weekly visits of Boys' Hostel														
	EMRS					SC & ST					JNV				
States	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Aug, 2014	08	05	04	05	03	09	07	03	18	02	03	07	04	08	07
Sep, 2014	08	06	08	05	04	07	10	02	17	05	04	09	05	08	06
Jan, 2015	08	05	03	06	06	10	06	04	19	02	03	10	06	08	05
Feb, 2015	08	08	06	08	02	08	05	02	15	03	04	06	02	08	03

Month	Weekly visits of Girls' Hostel														
	EMRS					SC & ST					JNV				
States	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Aug, 2014	08	05	04	06	03	09	07	04	18	02	02	07	03	08	07
Sep, 2014	08	06	07	07	04	07	10	03	17	05	02	09	02	08	06
Jan, 2015	08	05	05	07	06	10	06	01	21	02	03	10	04	08	05
Feb, 2015	08	08	02	07	02	08	05	01	15	03	03	06	03	08	03

* Class visits by the principals of EMRS appeared to be in the moderate range as there were about 5-10 visits a month covering classes of 3-25 teachers. The number of class visits in ST & SC schools and JNV was comparatively less.

- * The principals in EMRS visited boys' and girls' hostels about 2 to 8 times a week. The same was also true for ST & SC schools. The frequency of hostel visits by the principal of JNV was almost better and on enquiry it was known that superintendents were doing their jobs with the principal being informed almost on a regular basis.
- * The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.
- * In JNV adoption of Master on Duty system (MOD system), House system in hostels and common dining of students and teachers projected a better supervisory angle in comparison with other types of schools.

Chapter 8

STAKEHOLDERS' FEEDBACK AND SUGGESTIONS

The feedback and suggestions of important stakeholders regarding a programme are important for evaluating the effectiveness of an intervention. Besides the outcome indicators such as educational attainment and progress of students in a school system, stakeholders' perception of the school's functioning provides indications regarding the strengths and deficiencies of newly implemented intervention and measures for strengthening it. We have obtained, through interview, the feedback and suggestion of important stakeholders such as the teaching and non-teaching staff, students, educational administrators and community members which are narrated in this chapter.

8.1 Teachers' Perception and Feedback

Fifty six teachers of EMRS, 51 teachers of ST & SC schools and 25 teachers of JNV of different states were interviewed and they were asked to rate their schools and hostels on several parameters. The principals of the sampled schools were also interviewed and their views have been integrated in Table 8.1.1. Their responses are summarized into three categories: satisfactory, average and unsatisfactory.

Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. The table is self-explanatory. It may, however, be pointed out that EMRSs followed a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on hostel and toilet cleanliness, activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counseling services for students, capacity building of teaching and non-teaching staff. While ST & SC schools did not fare well on many counts, JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counseling students and maintaining record of success rate of school pass outs.

Table 8.1.1: Model responses of teachers on important school functioning parameters obtained through interview

	EMRS	SC & ST	JNV
Satisfactory (need to be maintained)	<p>Incentive plans for students.</p> <p>Educational support to meet the distinctive academic needs of children.</p> <p>Educational support to meet the distinctive cultural needs of children.</p> <p><i>Course completion as per syllabus plan.</i></p> <p><i>Preparation of lesson plan and lesson diary.</i></p> <p><i>Activity based learning methods used in transaction of lessons.</i></p> <p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p> <p><i>Use of library by students.</i></p> <p><i>Innovative teaching learning activities.</i></p> <p><i>Encouraging students to ask questions.</i></p> <p><i>Organizing games, sports in the school.</i></p> <p><i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i></p> <p><i>Organizing physical exercises for students.</i></p> <p><i>Organizing programs on arts & aesthetics</i></p>	<p>Incentive plans for students.</p> <p>Educational support to meet the distinctive academic needs of children.</p> <p>Educational support to meet the distinctive cultural needs of children.</p> <p><i>Course completion as per syllabus plan.</i></p> <p><i>Preparation of lesson plan and lesson diary.</i></p> <p><i>Activity based learning methods used in transaction of lessons.</i></p> <p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p> <p><i>Use of library by students.</i></p> <p><i>Innovative teaching learning activities.</i></p> <p><i>Encouraging students to ask questions.</i></p> <p><i>Organizing games, sports in the school.</i></p> <p><i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i></p> <p><i>Organizing physical exercises for students.</i></p> <p><i>Organizing programs on arts & aesthetics</i></p>	<p>Preparing students to contribute to family wellbeing.</p> <p>Preparing students for contribution to the society.</p> <p>Salary / Remuneration to the teaching staff.</p> <p>Service conditions of teachers.</p> <p>Quarters inside the cam pus.</p> <p>Incentive plans for students.</p> <p>Capacity building of the teaching staff.</p> <p>Capacity building of the non-teaching staff.</p> <p>Preparing students for professional educational courses.</p> <p>Preparing students to get jobs in the public and private sectors.</p> <p>Educational support to meet the distinctive academic needs of children.</p> <p>Educational support to meet the distinctive cultural needs of children.</p> <p><i>Course completion as per syllabus plan.</i></p> <p><i>Preparation of lesson plan and lesson diary.</i></p> <p><i>Activity based learning methods used in transaction of lessons.</i></p> <p><i>Use of TLM during teaching learning activities.</i></p> <p><i>Correcting students' work regularly.</i></p> <p><i>Use of library by students.</i></p> <p><i>Using labs effectively.</i></p> <p><i>Innovative teaching learning activities.</i></p> <p><i>Use of e-content in SMART Class.</i></p> <p><i>Special attention to the slow learners (remedial).</i></p> <ul style="list-style-type: none"> • <i>Encouraging students to ask questions.</i>

			<ul style="list-style-type: none"> • <i>Organizing games, sports in the school.</i> • <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> • <i>Organizing physical exercises for students.</i> • <i>Organizing programs on arts & aesthetics.</i> •
Average (need to be strengthened)	<ul style="list-style-type: none"> • Preparing students to contribute to family wellbeing. • Preparing students for contribution to the society. • Salary / Remuneration to the teaching staff. • Salary / Remuneration to the non-teaching staff. • Service conditions of the non-teaching staff. • <i>Mechanism of redressing grievances of the inmates.</i> • <i>Learning atmosphere in the hostel.</i> • <i>Environment cleanliness in the hostel.</i> • Incentive plans for teachers. • Keeping a record of students' success rate in professional examinations. • Keeping a record of professional career of pass outs. • <i>Allowing students to use TLMs.</i> • <i>Exchange of thoughts with teachers & subject experts.</i> • <i>Organizing games, sports in the</i> 	<ul style="list-style-type: none"> • Preparing students to contribute to family wellbeing. • Preparing students for contribution to the society. • Salary / Remuneration to the teaching staff. • Salary / Remuneration to the non-teaching staff. • Service conditions of the non-teaching staff. • <i>Mechanism of redressing grievances of the inmates.</i> • <i>Learning atmosphere in the hostel.</i> • <i>Environment cleanliness in the hostel.</i> • Incentive plans for teachers. • Keeping a record of students' success rate in professional examinations. • Keeping a record of professional career of pass outs. • <i>Allowing students to use TLMs.</i> • <i>Exchange of thoughts with teachers & subject experts.</i> • <i>Organizing games, sports in the school.</i> • <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> • <i>Organizing physical exercises for students.</i> 	<ul style="list-style-type: none"> • Salary / Remuneration to the non-teaching staff. • Service conditions of the non-teaching staff. • Prospect for future promotion. • Incentive plans for teachers. • Keeping a record of students' success rate in professional examinations. • Keeping a record of professional career of pass outs. • <i>Allowing students to use TLMs.</i> • <i>Exchange of thoughts with teachers & subject experts.</i> • <i>Organizing games, sports in the school.</i> • <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> • <i>Organizing physical exercises for students.</i> • <i>Organizing programs on arts & aesthetics.</i> • <i>Organizing social service camps</i> • <i>Encouraging students to ask questions.</i> • <i>Organizing games, sports in the school.</i> • <i>Providing computer knowledge to the learners.</i> • <i>Encouraging students having talents in specific areas.</i> • <i>Transparency in the management of hostel accounts.</i>

	<p><i>school.</i></p> <ul style="list-style-type: none"> • <i>Organizing literary activities (story & essay writing, debate, quiz etc.).</i> • <i>Organizing physical exercises for students.</i> 	<ul style="list-style-type: none"> • <i>Organizing programs on arts & aesthetics.</i> • <i>Organizing social service camps</i> • <i>Encouraging students to ask questions.</i> • <i>Organizing games, sports in the school.</i> 	<ul style="list-style-type: none"> • <i>Mechanism of redressing grievances of the inmates.</i> • <i>Learning atmosphere in the hostel.</i> • <i>Environment cleanliness in the hostel. Nm</i>
Unsatisfactory (need substantial improvement)	<ul style="list-style-type: none"> • Quarters inside the campus. • <i>Using labs effectively.</i> • Preparing students to contribute to family wellbeing. • Preparing students for contribution to the society. • Salary / Remuneration to the teaching staff. • Salary / Remuneration to the non-teaching staff. • Service conditions of the non-teaching staff. • <i>Mechanism of redressing grievances of the inmates.</i> • <i>Learning atmosphere in the hostel.</i> • <i>Environment cleanliness in the hostel.</i> • Incentive plans for teachers. • Keeping a record of students' success rate in professional examinations. • Keeping a record of professional career of pass outs. • <i>Allowing students to use TLMs.</i> 	<ul style="list-style-type: none"> • Quarters inside the campus. • Capacity building of the teaching staff. • Capacity building of the non-teaching staff. • Preparing students for professional educational courses. • Preparing students to get jobs in the public and private sectors. • <i>Using labs effectively.</i> • <i>Use of e-content in SMART Class.</i> • <i>Attendance in PTA meeting.</i> • <i>Relation with SMC members.</i> • <i>Relation with MTA members.</i> • <i>Relation with PRI members.</i> • <i>Personal contact with parents/guardians.</i> 	<ul style="list-style-type: none"> • Incentive plan for teaching and non-teaching staffs. • Keeping record of academic/professional career of pass outs. • <i>Attendance in PTA meeting.</i> • <i>Relation with SMC members.</i> • <i>Relation with MTA members.</i> • <i>Relation with PRI members.</i> • <i>Personal contact with parents/guardians.</i> • <i>Exchange of thoughts with teachers & subject experts.</i> • <i>Organizing games, sports in the school.</i> • <i>Organizing physical exercises for students</i>

8.2 Perception and Feedback of Non-teaching Staff

The modal responses obtained from the non-teaching staff through interview pertaining to their working condition and relation with students, teachers and community are presented in Table 8.2.1.

Table 8.2.1: Model responses of non-teachers obtained through interview
[Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Parameter	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra ^a	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra ^a	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra ^a	Gujarat	Rajasthan
<i>Name of the states</i>															
Suitable conditions for performing duties	S	S	S	S	S	S	S	S	A	HS	HS	HS	HS	HS	HS
Involvement in co-curricular activities	A	A	A	S	S	A	A	A	U	HS	A	S	A	S	S
Relation with principals and teachers	A	S	S	S	HS	S	HS	S	S	HS	S	HS	S	HS	HS
Relation with students	S	S	S	S	HS	S	S	S	S	S	S	HS	S	S	HS
Relation with parents/ community members	A	S	S	S	HS	S	S	S	A	S	A	HS	S	A	S
Receiving capacity building training	HU	HU	U	HU	HU	HU	U	U	HU	HU	S	U	U	U	HS

Table 8.3.1: Model responses of teachers corresponding to Staff service conditions and benefits
 [Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Name of the states	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Salary/remuneration to the teaching staff	U	U	HU	HU	U	S	A	S	S	S	S	S	HS	A	S
Salary/remuneration to the non-teaching staff	U	U	U	HU	HU	A	U	S	S	S	S	S	S	A	S
Service conditions of teachers	HU	U	HU	HU	U	A	S	S	S	A	S	S	HS	A	S
Service conditions of non-teachers	U	U	U	A	U	A	U	S	S	A	S	S	HS	A	S
Prospect for promotion	HU	U	U	HU	U	U	S	S	A	S	S	A	S	S	S
Incentive plan for teachers	U	U	U	A	U	U	S	A	S	U	HS	A	U	S	S
Quarters inside campus	U	A	U	HU	HU	HU	HU	U	A	S	S	S	S	HU	HS
Incentive plan for non-teachers	U	U	U	HU	U	U	HU	U	U	S	A	A	S	A	S
Incentive plan for students	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

The Institution provided suitable conditions conducive to perform duties in JNV better than EMRSs and ST & SC schools ‘

The satisfaction level of the non-teaching employees was better in JNV compared to EMRS and ST & SC schools. Their relationship with students, teachers and community was better in EMRSs than in ST & SC schools. They were unhappy that attempts were not taken to provide capacity building training to the non-teaching staff in EMRS and ST & SC schools. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff of EMRS pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements.

The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.

8.3 Service Conditions and Benefits of Teaching and Non-teaching Staff

The service conditions and benefits of staff are critical issues for employee motivation. Tables 8.3.1 and 8.3.2 present the feedback of teaching and non-teaching staff pertaining to salary, service conditions and benefits.

Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favorable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

Table 8.3.1: Model responses of non-teaching staff corresponding to Staff service conditions and benefits [Highly Unsatisfactory (HU); Unsatisfactory (U); Average (A); Satisfactory (S); Highly Satisfactory (HS)]

Name of the states	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Salary/remuneration to the non-teaching staff	HU	U	U	U	HU	S	U	S	U	S	S	HS	S	A	S
Service conditions of non-teaching staff	HU	U	HU	U	U	S	HU	U	HU	S	S	HS	S	S	HS
Prospect for promotion	HU	U	U	HU	HU	S	U	S	A	S	S	HS	S	S	HU
Quarters inside campus	HU	U	HU	U	U	HU	U	S	A	A	HS	HS	HS	HU	HS
Incentive plan for non-teachers	HU	U	U	U	A	HU	U	S	HU	A	A	U	S	A	S

8.4 Students' Perception and Feedback

Students are the central characters in any teaching-learning environment. Their perception and feedback are important for developing school practices because all infrastructure and educational inputs and throughputs are meant for them. The percentages of students responding positively to important school and hostel parameters are presented in Table 8.4.1.

School and Hostel environment

Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV. The major issues of concern for EMRS students were cleanliness of toilets and hostel environment, quality of food, health checkup facilities and hostel accommodation. Students in ST & SC schools also experienced the same deficiencies. It was astonishing to note

that students were not provided with mosquito nets in spite of the fact their environment was more unhygienic. JNV fared much better in most of these parameters.

Table 8.4.1: Percentage of students responding positively to the following School and hostel parameters obtained through Interview

Parameter	EMRS					SC & ST					JNV				
	Odisha (%)	Madhya Pradesh (%)	Maharashtra (%)	Gujarat (%)	Rajasthan (%)	Odisha (%)	Madhya Pradesh (%)	Maharashtra (%)	Gujarat (%)	Rajasthan (%)	Odisha (%)	Madhya Pradesh (%)	Maharashtra (%)	Gujarat (%)	Rajasthan (%)
Like the school	100	100	100	100	100	95	100	100	80	100	100	100	100	100	100
Conducive hostel infrastructure and accommodation	68	40	70	90	80	45	30	30	63	50	95	40	90	94	100
Classroom and lab furniture adequate	90	50	50	50	100	85	80	50	10	100	100	100	95	70	100
Lab furniture adequate	55	30	55	50	50	35	20	30	00	40	90	60	90	70	80
Good quality food	60	60	70	48	70	35	30	70	30	60	95	20	100	80	70
Good drinking water	82	50	70	70	80	80	35	40	60	40	95	100	90	90	100
Health checkup facilities available	40	30	70	80	40	20	30	20	25	25	85	35	100	80	70
Hostel environment is clean	64	35	50	60	70	25	30	30	20	60	95	55	100	87	80
Toilets and bathrooms are clean	32	40	40	45	80	20	30	25	28	80	90	80	90	92	100
Mosquito net provided	100	100	100	20	100	100	100	100	10	100	100	100	100	50	100
Teachers are supportive of students	96	70	60	80	100	95	60	70	60	100	100	50	95	90	100

Adequate supply of textbooks	100	100	100	100	100	80	100	100	70	100	100	100	100	100	100
Adequate supply of learning materials	36	100	80	30	100	20	50	60	20	100	90	100	90	50	100
Quality of teaching	72	60	50	70	80	70	40	50	50	60	90	100	95	80	90
Activity-based teaching done and TLMs used	23	20	25	30	60	20	20	20	18	40	55	50	95	50	70
Home assignments given	96	30	40	80	60	40	40	30	50	30	100	70	95	95	80
Projects given	45	30	70	37	50	10	40	60	21	35	95	60	95	90	80
Student work corrected regularly	55	40	50	61	80	40	35	40	45	50	80	60	90	90	90
Regular supervised study and remedial classes	72	40	20	75	70	10	30	20	20	30	85	80	90	80	100
Laboratories effectively used	86	30	40	80	70	15	30	30	20	50	90	70	100	90	100
Allowed to ask questions freely	91	60	80	80	100	90	30	60	90	100	90	80	90	95	100
Co-curricular activities promoted	91	60	70	89	100	50	70	70	40	30	95	90	90	90	100
Scope for games and sports	82	30	60	70	50	45	35	60	50	30	80	90	95	70	80
Participation at district and state level encouraged	91	70	60	69	80	75	20	40	65	40	90	100	95	85	100
Student suggestions are solicited in school functioning	23	20	20	25	50	10	30	20	10	30	15	30	50	20	80
Student participate in mess management	45	50	40	58	70	40	25	30	38	30	70	35	20	80	80

Curricular and Co-curricular activities

Students perceived teachers to be supportive of them. The major issues inviting unfavorable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes. Students' perception of provisions in ST & SC schools was more unfavorable. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. JNV was far better in most of curricular and co-curricular parameters.

Student participation

In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however, some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback through FGDs

The FGDs conducted with students' yielded additional information on student concerns. Fifteen FGDs conducted in the EMRSs involving 170 students revealed that students appreciated the school infrastructure and classroom teaching but concerns were raised for classes not being held when some teachers went on leave. Classes were most often not held because of shortage of teachers. Project work, home assignment, correction work were the grey areas in all types of schools including EMRSs.

There were not adequate fan and light points in hostel rooms and quite a number of fans were not working for months together. The repair and maintenance work of the hostels was poor. Water crisis particularly in boys' hostel, stinking toilets and water accumulation around the hostel and kitchen because of improper drainage system were running issues.

Activity-based teaching and use of TLMs were rare occurrences. Students had little access to the computers. Mostly students were left on their own during the time slot for supervised study hours in the evening. Students participated in debates and drawing competitions at different levels but most of the cultural and co-curricular activities were done at the behest of the teachers with students taking very little initiative. Teachers were cooperative and interactive and mistakes, if any, done by students often invited punishment in the form of sit-ups, kneeling down and slapping. Most students expressed their desire to improve their English language proficiency and thought that a well-functioning English language lab would have been helpful to them. Given a chance, they would prefer to join JNVs but some expressed their fear for ragging in those schools.

Teacher interactions with parents and guardians were nice during occasional visits of parents to the schools, but teachers did not visit the parents. While there were play grounds, there were no specific fields for specific games and sports. In general, students' level of satisfaction with school and hostel teaching-learning climate appeared to be average. Like many other schools, these schools practiced a traditional model of education except that student learning was supported with better-than-average infrastructure, residential facilities and human resource input.

FGDs involving 150 students in ST & SC schools revealed an unfavorable educational climate prevailing in schools and hostels. Teaching in these schools were the same as are witnessed in other rural primary and high schools except that students were provided with residential facilities and free meals. There was almost a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were conducted as routine matter. The games and sports activities suffered on account of not having any proper playgrounds and PET teachers. These schools of Gujarat & Rajasthan

projected comparatively better picture. Student hostels were ill-equipped as 40-45 students were staying in mid-sized rooms with inadequate fan and light points with some rooms having no fans at all. The room size, in some states too many inmates sleeping on the floor in close proximity, a bed being shared by more than one or two-tier sleeping arrangement did not allow students to use mosquito nets. In some higher secondary schools of Odisha students were seen staying in rooms marked as different labs. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern.

FGDs involving 82 students in JNV revealed a favorable educational climate prevailing in the school and the hostel. On most of the school parameters, JNV emerged to be better compared to either EMRS or SC and ST school. The students had a more favorable perception of school and hostel environment and facilities.

8.5 Perception of Community Members

Most of the community members in EMRS expressed favorable opinion on functioning of EMRS relating to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About 30 % of the community members interviewed could not recall the issues discussed in PTA meetings and almost ignorant about the functioning of SMCs & their roles and responsibilities.

On the whole the community members carried a favorable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman arrangement should be in place during both day-time and night-time to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. Though they were not directly associated with school planning, their grievances were heard by school authorities. They were aware that community did not have any contribution towards the school in the form of labor, service or funds.

The community members' responses in respect of SC and ST schools were less favorable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

12 community members of JNV were interviewed who carry much higher opinion on all aspects of its functioning. They are extremely satisfied that their students have been admitted in JNV. They expressed that the future of their children are better protected in JNV. While interviewing the students, it was revealed that given the opportunity they would like to join in JNV, which speaks of the public perception on the Institution.

Table 8.5.1: Model responses of community members on facilities extended to children and their interaction with school staff

Name of the states	EMRS					SC & ST					JNV				
	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan	Odisha	Madhya Pradesh	Maharashtra	Gujarat	Rajasthan
Facilities for children															
Cleanliness of school environment	Y	Y	Y	Y	Y	N	Y	N	N	N	-	Y	Y	Y	Y
Cleanliness of hostel rooms and environment	N	Y	Y	Y	Y	N	Y	N	N	Y	-	Y	Y	Y	Y
Safety and security of hostels	N	Y	Y	N	Y	N	Y	N	N	N	-	Y	Y	Y	Y
Supply of free textbooks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y
Textbooks given before academic session	N	Y	Y	N	Y	N	Y	Y	N	Y	-	Y	Y	Y	Y
Children helped to solve academic problems	Y	Y	N	Y	N	N	Y	N	Y	Y	-	Y	Y	Y	Y
Children's results shared with parents	Y	Y	Y	Y	N	N	N	Y	Y	N	-	Y	Y	Y	Y
Children prepared to face competitive examinations	N	N	N	N	N	N	N	N	N	N	-	Y	Y	Y	Y
Quality of meals reasonably good	Y	N	Y	Y	Y	N	N	Y	N	Y	-	Y	Y	Y	Y
Cultural activities involving children	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	-	Y	Y	Y	Y

Opportunities for games and sports	Y	N	Y	Y	N	N	N	N	Y	N	-	Y	Y	Y	Y
Children's health problems duly attended	Y	Y	Y	Y	Y	Y	N	N	Y	Y	-	Y	Y	Y	Y
Non-discriminatory treatment to students	Y	Y	y	Y	Y	Y	Y	y	Y	Y	-	Y	Y	Y	Y
Interaction with school and staff															
Members' grievances properly received by staff	Y	N	Y	Y	Y	N	N	Y	Y	Y	-	Y	Y	Y	Y
Teachers behave well with members	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y
Member associated with school planning	N	N	N	N	N	N	N	N	N	N	-	N	N	N	N
Community contributes to school development	N	N	N	N	N	N	N	N	N	N	-	N	N	N	N

Y: YES

N: NO

8.6 Views of Educational Administrators

Views of the Additional District Magistrate (ADM) and the Project Administrator (PA), ITDA, Assistant Commissioners of different states were obtained wherein they have expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health checkup were necessary for proper policy implementation. Regular counseling and motivational programs for students would make children's stay and learning experiences in the school more enjoyable. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff. They were of the view that due to lack of proper salary structure & service conditions the teachers were continuously in the look out of better employment opportunities and on availing the scope jump to other jobs.

8.7 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme (Table 8.7.1). The Table explains itself very well. While stakeholders approached the issues from their points of view, certain common themes emerged (refer to Table 9.7.1 for feedback from each category of stakeholders).

Programme strengths (need to be maintained). Good school and hostel infrastructure; Residential facilities for students; Favorable PTR; Supply of free textbooks and uniforms and learning materials; Scope for games, sports and co-curricular activities; Engagement of qualified staff; Special attention and coaching to students; Gender and Social equity.

Concerns (need special attention). Poor salary and service conditions of the staff; Poor hostel maintenance and cleanliness; Water, power and toilet problems; Poor community involvement in school activities; Lack of regular health worker; Teacher-directed rather than student-initiated activities; Poor attention to build capacities of teachers

Suggestions (need to be implemented). Regular employment, proper salary and service conditions of staff; Solving water and power crises; Regular maintenance of hostel building and proper drainage system; Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit; Special measures for improving students' language proficiency; Capacity building of teaching and non-teaching staff; Student involvement in school practices and mess management; Strengthening school-community link.

Table 8.7.1: Strengths and difficulties of EMRS programme pointed out by stakeholders and their suggestions for strengthening EMRS

<i>take holder</i>	<i>Strengths</i>	<i>Difficulties</i>	<i>Suggestions</i>
Principal	<p>Remedial and supervised study</p> <p>Opportunity for students to participate in district level events</p> <p>Spreading education with focus on the tribal community</p> <p>Special coaching to students for entry into professional courses</p>	<p>Inadequate salary for the teachers and non-teachers</p> <p>Vacant faculty positions</p> <p>Contractual teacher engagement</p> <p>Lack of transparent transfer policy</p> <p>Water crisis during summer months</p> <p>Erratic power supply, frequent load shedding</p> <p>Lack of ANM leading to improper health care of students</p>	<p>Filling up vacancy positions</p> <p>Regular faculty employment with proper scale of pay and proper service condition</p> <p>Transferring the old teachers</p> <p>Orientation and regular capacity building training to teachers</p> <p>Orienting teachers to implement CCE</p> <p>Installation of overhead water tank and measures to solve water crisis</p> <p>More community involvement in school development activities</p>
Teachers	<p>Coaching to students for medical and engineering and for Math Olympiad</p> <p>Regular literary and sports activities and competitions</p> <p>Residential facilities for students and for some staff</p> <p>Emphasis on co-curricular activities</p> <p>Remedial coaching for weak students</p> <p>Student discipline and respect for teachers</p> <p>Almost 100% students passing terminal examinations</p> <p>Students learning to live together and share</p>	<p>Weak remuneration and incentive plan for teachers</p> <p>Inadequate lab equipments</p> <p>Inadequate teaching-learning materials</p> <p>Higher per-teacher workload because of teacher vacancy</p> <p>Student difficulty pertaining to English language instruction at entry point in Class VI</p> <p>Poor hostel maintenance and inadequate staff quarters</p> <p>Vacancy created by teachers leaving the job because of poor service condition and poor remuneration</p> <p>Insufficient SMART class facility</p>	<p>Regular employment for teaching and non-teaching staff with proper scale of pay and service condition</p> <p>Granting for funds for TLMs</p> <p>Regular SMC meeting and more community involvement</p> <p>Yoga, music and art teaching be paid serious attention</p> <p>Training teachers to implement CCE</p> <p>Strengthening library and more reference books for students</p> <p>Staff-nurse/ health worker needed</p> <p>Bridge course to fresh Class VI students on English language</p> <p>Raising boundary wall in girls' hostels for their</p>

			safety and security
Hostel Superintendent	Students learn good health and hygiene habits NSS, NCC and Scout guide programmes and activities	Water crisis in hostels particularly during summer months Safety and security problems for girls No night watchman/security guards in hostels Frequent power cuts affecting with students' study No vehicle to meet emergency health problems of inmates	Separate boundaries for girls' hostels Engagement of ANM for hostels Installation of overhead water tank and measures to solve water crisis Orientation training to hostel staff on their roles and responsibilities Regular maintenance of hostel buildings Adequate furniture to hostel students for study Vehicle for meeting emergency health problems of inmates
Students	Likable school and hostel environment Games and sports activities for students Provision of textbooks for students Cooperative teachers	Leaking hostel roof and broken window glass Poorly maintained and damaged toilets and poor drainage system Insufficient water for bathing, cleaning and drinking Poor quality food Inadequate fans and light points No activity based learning and infrequent yoga classes No student participation in hostel and mess management Student feedback and suggestions not solicited No parent consultations on school and hostel issues School laboratories not fully functional No counselling to students to deal with personal and interpersonal problems No large and proper play ground Library services are not good	Hostel building and toilets to be properly maintained with adequate light and fan points Water problem to be solved Student participation in hostel and mess management Counselling services to students More teacher-parent interactions to deal with student issues Study tours, Excursions and science exhibitions to be organized Aqua-guard/Water purifier in hostels Written progress reports to be given to students English language laboratory to improve students language proficiency Different fields for different types of sports

		No study tours and excursions Mild punishment given to discipline students	
Community Members	SMC and PTA constituted and members told about their roles and responsibilities Free textbooks and uniforms to children Good school environment No student discrimination Teacher-community interaction relatively good Parental concerns attended by the school Feeling good about having a school in their community Parent/community members' grievances heard Children's health problems attended by teachers	Water and toilet problems in hostels Poor community awareness of SMC functioning and school activities Poor community contribution to school Irregular staff attendance Weak supervision and monitoring by authorities Teachers leaving the school because of poor service condition No guest room for parents coming from a distance to stay overnight	More academic help by teachers to students More community participation in school activities Quality teaching staff required Regularization of the school staff Raising hostel compound particularly for girls Creating provision of coaching for professional courses by reputed institutes Water and power problem requires serious attention Written progress report of children to be shared with parents Regular health check-up and health and security staff for hostels Filling up vacant staff positions Training to CCA for maintaining hygienic standards Spoken English classes for students Connecting the school to highways by proper road
Educational Administrators	<ul style="list-style-type: none"> * Offering a good educational opportunity to the tribal community * Educationally qualified staff * Provision of relatively good infrastructure * Residential facilities for students 	<ul style="list-style-type: none"> * Constraints of fund to address all important requirements * Poor staff initiative to connect school to the community * Water, power and toilet problems * Kitchen condition and food quality 	<ul style="list-style-type: none"> * Staff regularization is evident * Focusing on teacher-parent meetings to foster community linkage * Water and power problem to be attended * Buildings and toilets to be repaired * Capacity building training for teachers * Improving food quality

Chapter 9

SUMMARY OF FINDINGS AND RECOMMENDATIONS

9.1 School and Hostel Infrastructure Facilities

- The EMRSs, ST & SC schools and JNVs are provided with around 20 to 30 spread over acres of land with a lot of space for students to move around. All the buildings provided safe habitations for students except that ST & SC schools required regular maintenance and white washing. The EMRS and ST & SC schools did not fare well on hygienic parameters, however the JNV projected a better picture.
- The EMRS had library facilities but no adequate reading room. The conditions of labs, library were better in JNV as compared to that of EMRS & ST & SC schools. On most of the important infrastructure parameters, JNV was judged to be better than EMRS and EMRS to be better than ST & SC schools.
- Water scarcity was a major problem in most of the EMRSs and ST & SC schools. Furthermore, drinking water safety was a major concern in ST & SC schools & EMRSs. The cleanliness of toilets, running water provision in toilets and detergents inside the toilets were poor in ST & SC schools, manageable in EMRS and relatively better in the JNV.
- All schools fell short on child-friendly parameters except Gujarat Deptt. Schools and in a large measure did not satisfy the disability-friendly provisions because ramps and rails were not available to all blocks and to none of the toilets, even if required. Schools also faltered on maintaining safety standards as attention was not paid to have classrooms with double doors and fire safety measures were maintained for name sake only without having knowledge of teachers & students to handle the same.
- Adequate and appropriate play-grounds for different sports and games as per student needs and attractive child-friendly play-ground equipments such as slides and swings were missing in most schools. Teaching-learning and curricular transactions mostly in classrooms assumed so much importance that they were not properly balanced by games and sports activities.
- Each school had entrance gate, boundary wall but due attention was not paid to raising and maintaining gardens and kitchen gardens.
- Proper water harvesting measures have not been focused to help in gardening.
- Power supply was a major concern in most of the ST & SC schools. On an average, power failure was reported for about 4-5 hours. While furniture was not an issue of concern in EMRS and JNV, the ST & SC schools did not have adequate furniture for laboratories, library and for storing TLMs. TLM corner in classroom was absent in almost all schools.
- Nearly 100% of students in EMRS and JNV stayed in hostels while about 30% of students in ST & SC schools did not stay in hostels. For those who stayed in ST & SC hostels, the infrastructure and accommodation facilities were poor without proper light and ventilation and in many instances not having fans. Many rooms had leaking roofs, and accommodation hardly met safety and child-friendly parameters. The situation was slightly better in EMRS though accommodation space and facilities were still inadequate and the rooms did not fare well with respect to light and ventilation and child-friendly provisions. JNV projected a much better picture compared to ST & SC schools and EMRSs.
- All schools had kitchen and store rooms but ST & SC schools did not have superintendent's room/quarters, dining rooms, rooms for CCA, prayer room or room for security personnel. The JNV had sick rooms but no sick rooms did exist in EMRS and ST & SC hostels. Lack of provision of rooms for the superintendents in ST & SC schools meant very poor monitoring and supervision of hostels. Since most of the teachers and the superintendents were staying in the campus, supervision of hostel facilities was better in EMRS and JNV.

- Drinking water was adequate for all boarders in all hostels but it was only in JNV that students got adequate water for bathing and toilet work. In EMRS and ST & SC schools, students did not have enough water for daily routine activities and continuous flow of water into toilets because of non-availability of required number of overhead tanks as per necessity. The toilet condition and cleanliness was poor in ST & SC hostels, manageable in EMRS and good in JNV. The ratio of children to toilets was satisfactory in EMRS and JNV but not in ST & SC schools.
- Hostels in all types of schools did not fare well on child-friendly and safety provisions. All hostels lacked disability-friendly elements such as ramps and rails to hostel blocks and toilets. None of the hostels had slides and swings or double doors in rooms to escape fire hazards. No fire safety measures were in place in ST & SC schools while fire-safety measures were inadequate in EMRS as well as JNV.
- Ladies Hostels in all types of schools did not have boundary walls or proper garden or kitchen garden. Absence of boundary walls particularly in girls' hostels rendered them unsafe for girls and prone to outside interference. Concern for having boundary walls particularly in girls' hostels was raised by parents, community members and school principals.
- Alternative arrangement for load shedding seems neglected in all types of schools except JNV.
- While schools lacked many facilities, it is difficult to reconcile that money allocated was not fully spent; the reasons need to be ascertained and procedural delay, if any, to be corrected keeping in view that substantive gains cannot be sacrificed for unthinking adherence to procedural formalities. It was observed that per child cost of JNV was higher than EMRS.

9.2 Staff Profile and Service Condition

- The pupil-teacher ratio (PTR) was noticeably very high for EMRS. The PTRs in ST & SC schools was also high in ST & SC School, manageable in EMRS and good in JNV. There was noticeably large number of general category teachers in all types of schools compared to those from the SC and ST communities.
- About 6% of teachers in EMRS, 13% in ST & SC schools and 1% in JNV were not trained. Nearly 50% of teachers in all schools taken together had less than 5 years of teaching experience. Teachers in EMRS and teachers in ST & SC schools and JNV in contractual employment were in the habit of leaving their respective schools when better employment opportunities were available.
- All the non-teachers in EMRS and ST & SC schools and more than half of non-teachers in JNV did not receive any formal training as required in their respective jobs. Nearly 50% of non-teaching staff had less than 5 years of experience on the job. The non-teaching staffs of JNV were found to be trained.
- Astonishingly and regrettably, there was no service condition for EMRS teaching and non-teaching staff in any State. In Madhya Pradesh recruitment policy is followed.
- There were noticeable differences in gross monthly emoluments of the principals with the principals of ST & SC schools and JNV respectively. The teachers of ST & SC schools and JNV across all levels also received better monthly emoluments than teachers in EMRS. These noticeable differences worked to the disadvantage of EMRS teachers and had a depressing effect on their motivation and commitment. The picture in respect of the monthly emoluments of the teaching and non-teaching staff across different types of schools was almost the same as that observed for the teaching staff.
- Contractual employment, lack of service conditions and inadequate monthly emoluments of the EMRS teaching and non-teaching staff are major issues of concern and need to be addressed to ensure quality processes and outcomes.
- Capacity building training was given to teachers of EMRS for content knowledge enrichment and teaching practices but the duration was not adequate. The ST & SC School teachers received training as per Government's schedule. Except for the teachers of Navodaya Vidyalaya, the teachers in EMRS and ST & SC schools did not receive training on computer knowledge. The

principals of EMRS and ST & SC schools were not given training on educational administration procedures and accounts maintenance.

- The non-teaching staff of EMRS and ST & SC schools received hardly any training. The clerks and CCA had not been trained as a result of which the official documents were not maintained properly and the quality of preparation of food in the hostels was not satisfactory. Training on child rights and protection issues was not imparted to the security personnel. The non-teaching staff in JNVs received training as per their job-requirements from time to time. Most of the staff and students were not given any training for the proper use of first-aid and fire safety measures in all types of schools.
- The EMRS vision is to prepare students as contributing members to their families and the society. Attempts to empower students to realize this vision was absent as none of the staff were trained on how to inculcate a befitting attitude and orientation in students. The warden/superintendent, the security personnel, attendants and CCA of the hostels were not trained on skills necessary for ensuring a positive child-friendly climate in a residential set up with sensitivity to hygienic and child-right parameters and for comfortably interacting with parents, when they came up with grievances.

9.3 Student Enrolment and Retention

- The demand for admission to all types of schools increased over the years except EMRS where there is a declining trend.
- Percentages of students who were admitted to Class VI in 2014-15 as against the applications received were 41%, 30%, and 2 % for EMRS, ST & SC schools and JNV, respectively. There was more demand for JNV followed by EMRS and ST & SC schools.
- There seems to be a declining trend in admission in EMRSs. EMRS-Society has not yet been constituted in Rajasthan for which there is no specific identity of EMRS. The EMRSs are running by deployment of government teachers who lack the spirit of ownership.
- There is no teacher appointment policy for which quality teachers do not come to such EMRSs that tells upon the suitable quality norms. The poor salary structure also adds to the misery. Student attendance in all types of schools was satisfactory. Percentage of students admitted to Class VI in 2010-11 and completing the educational cycle in Class X was satisfactory. Percentage of students admitted to Class XI in 2013-14 and completing the educational cycle in Class XII were around 91% in EMRS, 60% in ST & SC schools and 91% for JNV.
- Completion of educational cycle by 95% to 100% of students in EMRS and JNV over the years can be considered satisfactory. The picture, however, is not the same for ST & SC schools as nearly 55% of students admitted to Class VI did not complete their education cycle in 2014-15. The information in respect of students staying out of the school system was not available with the school authorities. The dropout rate in ST&SC schools was higher.

9.4 School and Hostel Educational Climate

- The school campus and classrooms appeared to be clean in JNV. It requires more attention in EMRS & SC /ST schools. Dustbins were made available inside the classrooms in EMRS and JNV, but not in ST & SC schools. Initiative for school campus beautification was missing in ST & SC schools and EMRSs..
- While first-aid boxes were available in all schools, the fire safety measures were either non-existent or inadequate. Monthly health check-up was done infrequently in EMRS and ST & SC schools. All schools suffered on account of having adequate garbage disposal pit and proper drainage system.
- In all schools, no TLM corner was evident in classrooms, information board and wall magazine were not updated, games and sports equipments were not adequate, wall activities were nearly absent and suggestion boxes were not used by the students. The library-cum-reading room was good in JNV, manageable in EMRS and not evident in ST & SC schools.
- Required number of textbooks were distributed in EMRS, JNV registered a figure of 100% distribution of textbooks. The distribution of textbooks in ST & SC schools was not satisfactory.

- The status of EMRS did not turn out to be satisfactory in respect of preparation of lesson plan, activity-based teaching, group-based learning, regular correction of students' work, project assignments and use of e-content in SMART classes, while the situation in respect of these parameters were more unsatisfactory in ST & SC schools. JNV was relatively better compared to other schools in respect of these school-related activities. The classrooms were teacher-directed in all types of schools and student participation was either manageable or poor.
- Mostly TLMs and TLEs which were purchased by the teachers; they were not purchased with a proper plan to cater to students' need and course requirements and were not available in classrooms for ready use by the teacher while teaching. They were mostly purchased, not collected or developed with the participation of students or the community. Students hardly got opportunities to handle the TLMs themselves.
- Coaching for professional courses and sports competitions, training for musical and artistic talents, and training on life skills and self-defence were evident to some degree in EMRS, but personal and career counselling and training on vocational and work education were not evident in EMRS. The picture in JNV in respect of the student development activities was more or less the same as that of EMRS. The ST & SC schools appeared to be weak on many fronts except that training for life skills and artistic talents and coaching for sports competitions were available to students to some extent.
- Adoption of CCE along most of parameters was unsatisfactory in all types of schools. Only summative evaluations on half-yearly and yearly basis were done. The unit tests conducted at different phases during the instructional period were not used in a formative sense in EMRS and ST & SC schools as remedial coaching was not planned on the basis of students' strengths and weaknesses. Formative assessments were done to some extent in JNV.
- In respect of the methods of assessment, oral as well as written questions were used but assessments through observations, peers, parents, anecdotal records, checklists and rating scales were missing in EMRS and ST & SC schools. Only assessment through observations and assessment of socio-personal qualities was practiced to some extent in JNV.
- Group-based assessments and assessment of socio-personal qualities were not evident in EMRS and ST & SC schools. The cumulative progress cards were not properly maintained and the quality of feedback to the students was not satisfactory. There were no initiatives to identify the strengths of individual students. In the JNV, cumulative progress cards were maintained, the quality of student feedback was reasonably good, but no initiative was evident in identifying student talents.
- Health check-up schedule was irregular in EMRS and ST & SC hostels and no ANM/ health worker was available except in JNV. Children's hygienic habits were good in EMRS and JNV and manageable in ST & SC hostels during academic hours.
- In EMRS, house system was functional and cultural activities and annual functions were held. Students hardly used suggestion box. Wall magazine was not updated and play equipments were not adequate. Except a few cultural activities and annual function, the ST & SC hostels were weak on many fronts. The picture in JNV was more or less the same as that of EMRS.
- The mess committees consisting of students were not functioning efficiently in any of the hostels across different types of schools. The presence of students in remedial classes was not ensured by locking up the hostel rooms in EMRS and ST & SC hostels.
- On many parameters of kitchen environment and cleanliness, the condition in EMRS was manageable while that in ST & SC hostels was poor and that in JNV was good. There was no smokeless cooking in EMRS and the drainage system was poor, dining hall cleanliness was unsatisfactory and hand washing points were inadequate. In JNV, there were smokeless kitchen, clean kitchen and dining rooms and adequate hand washing points, but the drainage system was not up to mark.
- The quality of meals and supervision by teachers were unsatisfactory in EMRS and ST & SC hostels and relatively satisfactory in JNV. Unlike in EMRS and ST & SC schools, the quality of

meals is better monitored in JNV as teachers in charge of remedial classes in JNV take lunch with the students. The structure of the dining hall is such that teachers' dining table is placed in the middle with the dining spaces for boys and girls being located on either side.

- Presence of teachers during dining hours and a common lunch and dinner with students facilitates quality cooking and better supervision of meals and dining.

9.5 Students' Educational Attainment

- In all the four subjects (English, Mathematics, Science and Social Science), Class VIII students in JNV performed better than their grade-mates in EMRS and ST & SC schools, while the EMRS students scored better than those in ST & SC schools.
- The performance of students from all the three types of schools was not in the satisfactory range. Class VIII students in ST & SC schools scored in the range of only 24% to 29% across four subject areas, while those in EMRS scored in the range of 29% to 34%. Even if the performance of JNV students was better than those in the other two types of schools, their performance was not also satisfactory, as they scored in the range of 39% to 48 % across the four subject areas.
- The performance of Class X students in JNV was the highest followed by their grade-mates in EMRS and ST & SC schools. The students in SC and ST schools performed in the range of 31% to 37%, while those in EMRS showed attainment in the range of 35 % to 50%. The students in JNV performed in the range of 50% to 63%. Here the JNV performance is extremely poor.
- Class X ST students in JNV performed better than ST students in SC & ST, who were also better than ST students in EMRS. It was only in English in which ST & SC schools performance did not turn out to be significant
- Though Class XII students in JNV were better than their grade-mates in EMRS. The performance of ST & SC schools, EMRS and JNV narrowed down gradually though JNV students performed better than others.
- The performance level of Class XII students of EMRS was poorer in all subjects i.e. in English, Physics, Chemistry, Mathematics and Biology. The performance of students in JNV was also poor in all subjects except in English in which their mean achievement level was 55.17%. Student category-wise analysis revealed the same trend in respect of ST, SC and general students as was observed for the entire student group in respective schools.
- On an overall basis, it can be said in respect of students' educational attainment that in elementary and secondary classes, JNV students maintained an advantage over ST & SC schools students who were also better than EMRS students. But with increasing years, the performance gap narrowed down at the post-secondary stage. The trend observed for the entire student group was also observed in respect of ST, SC and general category students separately.
- On the whole the performance of students in EMRS was poor, of those in ST & SC schools below average and of those in JNV, above average. In view of the fact students in JNV were selected through a rigorous assessment procedure and students in EMRS constituted a screened population and students in ST & SC schools were from general population, it is difficult to ascertain which programme produced greater impact because students in different schools had differing levels of competence and motivation to begin with. The outcomes in examinations cannot be judged independent of pre-existing group differences.
- In Class X Board examination, more percentages of students in JNV were towards the higher end of the score continuum compared to the percentages noticed for EMRS and ST & SC schools.
- The trend in respect of the results in Class X Board examination during the last five years was same as that observed in 2014
- During the last five years, none of the students of JNV, 2.5 % of students of EMRS and 6.8 % of the students of ST & SC schools scored below 40%, while 29% of students of JNV, 4 % of EMRS and 1% from the SC & STs schools scored above 90%.

- The SC and general students performed almost at an equal level and both groups performed better than ST students. The performance trend of ST, SC and general students over the last three years (2012-14) was almost the same as was observed in 2014.
- In Class XII Board examinations in 2014, maximum number of students scored in 50% to 60% bracket in EMRS and JNV. There was huge gap in students' scores in Class XII examination between EMRS and JNV students favouring the latter.
- In class XII Board examination in 2014, maximum number of ST and general students scored in 60% to 80% bracket, while maximum number of SC students scored in 60% to 80% bracket. The ST and general students performed better than SC students and general students had a slight advantage over ST students.

9.6 Success Rate in NTS and Progress of Student Pass outs

- None of the schools kept any record of the number of students appearing in NTS examinations and information regarding their success rate. The teachers did not encourage students to appear in NTS examinations nor did they provide any help to students in the form of guidance and coaching. It may be that teachers and students considered the NTS examination as a very tough examination and did not properly estimate the competencies of students vis-à-vis competencies tested in NTS examinations.
- No record is maintained in any category of school where one can track the movement of pass-outs.

9.7 Student Participation in Co-curricular and Social Activities

- Both boys and girls almost in equal proportion participated in co-curricular activities and in games and sports activities. Student participation was higher in JNV compared to EMRS and EMRS promoted more student participation than ST & SC schools.
- The participation of ST & SC School students was about 40 % in different co-curricular activities. Dancing and G.K. competition invited maximum student participation in the EMRS in the range of 50% to 60%. Drawing, painting, debating and writing competitions invited maximum student participation in the JNV.
- In EMRS, there was more student participation in football, volley ball, kho-kho, kabbadi, karate and athletics. The same was also true for the JNV except that more EMRS students compared to JNV students went into athletics. In JNV, a substantial proportion of students participated in basketball, badminton and skipping. The participation of students of ST & SC schools was weak; about 15% of boys participated in football, volleyball and kabbadi.
- Nine percent of EMRS students were in NCC, 9% in Scouts and 9% in NSS, while 16.5% of ST & SC students were in Scouts. Among JNV students, 12.6% adopted Scouts and 32% were in NSS. 71% to 88% in *Shramdan* was carried in all types of schools with maximum student participation in the range of 28 % to 100% in social awareness campaign.
- Seventy seven percent of EMRS students were involved in carrying out social awareness campaigns and 6% were involved in doing social service in villages, while the corresponding figures for JNV and ST & SC were 28 % and 71 % respectively.

9.8 Schools-Community Linkage

- The participation of the community in school and hostel activities in all types of schools was very negligible because of poor educational awareness of the community, the distance of their habitations from the school and engagement in economic activities for earning livelihood. They came to school when asked by the principal/teachers.
- SMC and MTA were constituted in each school more as a matter of formality. The SMC and MTA meetings were infrequent and were conducted procedurally in conformity with the guidelines issued by higher authorities. The members in SMC were mostly from nearby places in all types of schools and most of their wards in ST & SC schools were day-scholars. The SMC and MTA members were not involved on their own or their cooperation was not sought for school development planning, monitoring student attendance and progress, supervising hostel and

quality of meals or monitoring utilization of funds. Their participation in preparing TLMs was non-existent and in schools' co-curricular activities, very poor.

- The teachers did not show any serious interest in keeping contact with the community members or in soliciting their input for school development. When community members visited school either on their own or upon invitation by the principal, the school staff behaved well with them, listened to their concerns and clarified issues pertaining to students and their respective wards. The teachers appeared to have minimally influenced the awareness level, belief system, and attitudinal dispositions of the community towards governance, social and educational issues.

9.9 School Monitoring and Supervision

- During the span of last one year, District Welfare Officers, Assistant Commissioners visited EMRS and boys' hostels about once a month. The same was true for ST & SC schools except that girls' hostels were visited less often. The number of visits by authorities to JNVs was comparatively less. Visits were mostly checking, supervising and information gathering initiatives rather than academic and programme supportive endeavours.
- The community involvement was extremely weak in that during a span of one year, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side.
- Class visits by the principals of EMRS appeared to be in the moderate range as there were about 8 visits a month covering classes of 5-8 teachers. The number of class visits by in ST & SC schools and the JNV is was comparatively less. Hostel visits were done by the principals about twice a week. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities.

9.10 Stakeholders' Feedback and suggestions

Teaching and Non-teaching staff

- Teacher ratings revealed that JNV was functioning better on many school and hostel parameters as compared to ST & SC schools with EMRSs coming in between. Analysis of teachers' responses revealed that EMRS was more or less following a traditional model of education focusing on classroom teaching, course completion and terminal examinations with very little or no emphasis on activity-based teaching and use of TLMs, cumulative student progress report, implementing CCE, school-community linkage, counselling services for students, capacity building of teaching and non-teaching staff and hostel and toilet cleanliness. The ST & SC schools did not fare well on many counts. JNV had also areas which needed substantial improvement such as maintaining student profile and cumulative progress report, using CCE in true spirit, maintaining TLM corners, initiating school-community interaction, innovative teaching-learning practices, being in contact with subject experts, counselling students and maintaining record of success rate of school pass outs.
- Except for incentive plans for students, teachers in EMRSs showed dissatisfaction on all the parameters. Being in contractual employment with consolidated pay, they were not satisfied with their monthly salary, service conditions, prospect for promotion, incentive plans for teaching and non-teaching staff, and provision of quarters inside the campus. The level of dissatisfaction was noticed more for non-teaching employees. These were major issues having possible consequences of depressing their level of motivation and engagement in school development work. The picture in ST & SC schools was slightly better in that the staff projected a comparatively favourable perception pertaining to their salary and service conditions. But they were not satisfied with the incentive plans and provision of quarters inside the campus. The staff in JNV appreciated their salary structure, service conditions, incentive plans, prospect for promotion and provision of quarters inside the campus.

- In EMRS, like the teachers, the non-teaching members wanted their employment to be made regular. All categories of non-teaching staff pointed out water crisis as major issue requiring serious attention. The staff at the clerical level did not perceive teachers to be as involved in school development work as expected. The office space was inadequate for efficient functioning. The cook, the sweepers and peons felt that their consolidated pay was not commensurate with their workload which caused enough physical stress. The cooks faced problems because of kitchen having leaking roof, not having smokeless oven, working for more than 14 hours a day to live up to student food requirements. The perception of the non-teaching staff in ST & SC schools did show the same trend as observed for EMRSs. The conditions were more unhygienic and the number of supporting staff including cook and the sweeper was much less compared to the student strength. The perception and feedback of the non-teaching employees in JNV was better compared to EMRSs and ST & SC schools.
- The non-teaching staff members of EMRS and ST & SC schools were unhappy that attempts were not taken to provide capacity building training to them. The involvement of non-teaching staff in co-curricular activities needed to be strengthened.

Student feedback

- Students liked their schools and wanted to spend time in the school. The environment was better in EMRSs as compared to ST & SC schools but was not as good as that of the JNV.
- Pertaining to the hostels, the major issues of concern for EMRS students were scarcity of water for daily-routine work, cleanliness of toilets and hostel environment, light, ventilation and accommodation facilities, water accumulation around hostel because of improper drainage system, poor repair and maintenance work, quality of food, health check-up facilities and indoor sports activities. Some expressed fear of bragging in schools and hostels. Students in ST & SC schools also experienced the same deficiencies to a greater degree. It was astonishing to observe that students in ST & SC hostels were not provided with mosquito nets in spite of the fact that their environment was more unhygienic. The students in JNV had a more favourable perception of school and hostel environment and facilities. JNV fared better on most of these parameters.
- Students perceived teachers to be supportive of them and nice to their parents. The major issues inviting unfavourable feedback from EMRS students pertained to inadequate supply of learning materials, lack of TLM use and activity-based teaching, access to computers, irregular correction of students' work, lack of group-based projects and lack of supervised study and remedial classes.
- Students' perception of provisions in ST & SC schools was more unfavourable. There was nearly a complete absence of any recent innovative educational practices such as activity-based teaching, remedial teaching, projects, student profile and progress reports and assessment as per CCE. The cultural and co-curricular activities were rare. There were very poor supply of learning materials, almost no project work and no supervised study and remedial classes, inadequate use of laboratories and inadequate scope for games and sports. Non-functional toilets and inadequate water inside the campus forced students, even girls to bathe in the nearby-river and use open fields as toilets. The quality of food was very poor and cooking was often done in open space without any regard to hygienic parameters. The institutions appeared to have been primarily motivated by a concern to provide food and shelter to the less privileged with education being a matter of secondary concern. JNV was far better in most of curricular and co-curricular parameters.
- In all categories of schools, student voices were not reflected much in planning teaching-learning practices and school development work. There was, however some degree of student participation in mess management. Most of the activities were initiated by teachers and were performed under the guidance and direction by teachers. It thus appears that student empowerment activities on many of the life-skill competencies were missing in schools.

Feedback from Community Members

- Most of the community members in relation to EMRS shared that the issues discussed in SMC and PTA meetings related to student attendance, infrastructure and civil work necessities, school campus beautification and performance of students in general. School development plan and SSA grant utilization did not form a part of the discussion. About one-third of the community members interviewed could not recall the issues discussed in PTA meetings. On the whole the community members carried a favourable impression about EMRS. They suggested that hostels, particularly those for girls, should have boundary walls and watchman to ensure safety and security; schools should have regular teachers for quality teaching; textbooks should be supplied before the academic session and coaching to students to face competitive examinations should be provided. They were not directly involved in school planning and were aware that they did not have any contribution towards the school in the form of labour, service or funds.
- The community members' responses in respect of SC and ST schools were less favourable compared to that of EMRS. The members wanted more safety for girls, quality food and hygienic cooking; better hostel accommodation; water, electricity and toilet problems to be solved; opportunities for games, sports and cultural activities; and children's results to be shared through progress cards.

Views of Educational Administrators

- The District level educational administrators expressed satisfaction over the school and hostel infrastructure, management policies for EMRS, the quality of education imparted to the tribal children. Frequent supervision, capacity building of the staff, evaluating teachers for quality teaching, weekly checking of hostel facilities and quality of meals, regular health check-up were necessary for proper policy implementation. There is a requirement of more funds to be allocated for school and hostel maintenance and construction of boundary walls in hostels. It was considered important that the teaching and non-teaching staff in EMRS be employed on a regular basis with proper service conditions. The school-community link needed to be strengthened at the initiative of the school staff.
- All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize the goals of programme.

9.11 EMRS Programme Strengths, Concerns and Suggestions

All the important stakeholders provided feedback on the strength and issues of concern of the EMRS programme for tribal children and put forth their suggestions for improvement to realize

the goals of programme. While stakeholders approached the issues from their points of view, certain common themes emerged.

<i>Programme strengths</i> (Need to be maintained).	<i>Concerns</i> (Need special attention).	<i>Suggestions</i> (Need to be implemented).
<ul style="list-style-type: none"> • Good school and hostel infrastructure • Residential facilities for students • Favourable PTR • Supply of free textbooks and uniforms and learning materials • Scope for games, sports and co-curricular activities • Engagement of qualified teaching staff • Special attention and coaching to student • Gender and Social equity. 	<ul style="list-style-type: none"> • Poor salary and service conditions of the staff • Poor hostel maintenance and cleanliness • Water, power and toilet problems • Poor community involvement in school activities • Lack of regular health worker • Teacher-directed rather than student-initiated activities • Poor attention to build capacities of teachers • Adoption of CCE in student assessment 	<ul style="list-style-type: none"> • Regular employment, proper salary and service conditions of staff • Solving water and power crises; Regular maintenance of hostel building and proper drainage system • Strengthening laboratories, Adopting innovative educational practices including CCE in true spirit • Special measures for improving students' language proficiency • Capacity building of teaching and non-teaching staff • Student involvement in school practices and mess management • Strengthening school-community link.

Section 10

RECOMMENDATIONS

The Ekalavya Model Residential School (EMRS) scheme was implemented by the Ministry of Tribal Affairs, GOI in the format of Jawahar Navodaya Vidyalays to provide quality middle, high school, and higher-secondary education to meritorious tribal students of remote tribal locations across tribal-dominated regions of the country. This research was instituted to assess the status of EMRSs with respect to infrastructure facilities, quality of educational and residential climate, children's learning outcomes and stakeholders' perception of services offered, with a view to applying mid-course corrections, if necessary, to strengthen the programme. The sample consisted of 10 EMRSs with two EMRSs selected from each of the states of Odisha, Madhya Pradesh, Maharashtra, Gujarat and Rajasthan which taken together account for about 67% of the tribal population in India. The status of the EMRS scheme was examined by comparing its impact to that of 10 sampled Ashram schools and 5 sampled JNVs drawn from the same district locations in these five states.

The findings revealed that JNVs emerged as better teaching-learning institutions compared to EMRS on most of the infrastructure and educational parameters, and that EMRSs were better than the Ashram schools for ST & SC children. In terms of infrastructure facilities, teaching-learning climate, children's educational attainment and stakeholders' feedback, the status of EMRS came in between JNV, which was operating at the higher end and ST & SC schools, which were operating at the lower end. Besides providing information on its present level of functioning, the status assessment of EMRSs was envisioned to generate policy-changing suggestions to strengthen the EMRS programme. The suggestions offered below may be given due cognizance for orienting the EMRS scheme to the benefit of all important stakeholders including students, staff, community members and monitoring officials with a view to realizing the vision for which the scheme was launched.

Actionable Recommendation Points in Brief

- 1. A guideline on educational management in EMRS along with academic calendar*
- 2. A central/ state level resource team to provide academic monitoring*
- 3. EMRS monitoring schedule to be used to strengthen programme*
- 4. One or two academic counsellors in each EMRS*
- 5. Uniform service conditions and regularization of staff*
- 6. Career advanced plans and incentive schemes for staff*
- 7. Rating teachers on content and pedagogic competence and teacher accountability*
- 8. Addressing problems of water scarcity and power failure*
- 9. Land management and rain-water harvesting*
- 10. Adequate street lighting and paved roads from and to different blocks*
- 11. Residential quarters for staff*

12. *Strengthening school and hostel hygienic parameters*
13. *Learning-supportive residential accommodation and climate*
14. *Child-friendly, disabled-friendly and safety measures in school and hostels*
15. *Boundary walls in girls' hostels*
16. *Building staff capacity on innovative educational practices*
17. *Strengthening remedial coaching and coaching for professional courses*
18. *A library-cum-reading room in the school*
19. *SMART classes and effective use of laboratories*
20. *English Language Lab and courses on English speaking*
21. *No compromise on using CCE for student assessment*
22. *Focus on life-skills, vocational and self-defence and yoga training*
23. *A mini-gym in the school/ hostel*
24. *SMC/ MTA to be sensitized on their school-related roles and responsibilities*
25. *Increase in per-child fund allocation*

10.1 Service Conditions and Service Benefits of Teaching and Non-teaching Staff : Raising Staff Commitment

An educational institution is known for its teachers and quality of teaching. In any educational institution, quality of teaching is a throughput variable mediated by teachers to generate expected level of student learning outcomes. The quality emanates largely from the competency and commitment level of the teachers, who are supported by the system with appropriate service conditions and incentive plans. Employment in regular jobs, monthly remuneration commensurate with roles and responsibilities, opportunity for career advancement and capacity building provisions are teacher-empowerment variables connected to deliver quality professional service. Almost all the teachers in EMRSs were on contractual employment without having service conditions and career advancement opportunities and with salary packages that fell much short of their counterparts in JNVs and Ashram schools. The teachers in EMRSs were all the time on the lookout for better jobs elsewhere that resulted in more competent teachers being pushed out of the system. Those who remained in the system did their job with a great sense of dissatisfaction. Consequently, their engagement with students were procedural than substantive. Even the principals who are expected to guide the programme were on tenure appointments with consolidated salary much lower than that of the principals or even seniors teachers of the Ashram schools and JNVs. On most counts that are vital for work motivation, the teachers in EMRSs were placed unfavorably. The same was also true for the non-teaching staff of EMRSs.

Furthermore, the monitoring and supervision mechanism varied across states. In the absence of a central mechanism to directly oversee the functioning of EMRSs across the country, there was hardly any uniformity in rules and regulations. The state governments appeared to have taken the scheme as just another opportunity for schooling the tribal children without due regard to the vision

that scheme wished to materialize. Against this backdrop, due cognizance may be accorded to the following.

- i. *There needs to be a set of uniform service conditions for the teaching as well as the non-teaching staff working in EMRSs across the country* clearly specifying service-related provisions of the staff along with staff accountability parameters to realize the visions of EMRS scheme.
- ii. *The Ministry of Tribal Affairs may consider forming a Society at the central level, similar to Navodaya Vidyalay Samiti (NVS) under MHRD, to monitor all the EMRSs as this new innovative scheme was patterned in the format of JNVs and is expected to realize its vision along the lines of JNVs.*
- iii. *The engagement of teaching and non-teaching staff needs to be made regular; contractual appointment should be avoided as far as possible except in circumstances, which necessitate such appointments for compelling reasons.*
- iv. *Career advancement plans for the staff need to be clearly stipulated along with competencies expected of teachers to avail of such opportunities.*
- v. *The staff structure needs to be uniform across all EMRSs in the country with provisions for appointing staff (such as security staff, health staff, librarian, PET, lab assistants etc.) to cater to all specific purposes that the EMRS was visualized to provide under the scheme.*
- vi. *Regular capacity building training for the teaching and the non-teaching staff along with opportunities for teachers to be in close contact with experts in different knowledge domains is to be instituted on a priority basis.*

10.2 School Infrastructure Facilities: Strengthening Input Measures

Quality learning is backed by quality infrastructure. Though, in general, the Infrastructure inputs to EMRSs were better compared to that for standard government-run schools in the state, their maintenance was not as expected. The EMRSs did not fare well on hygienic, child-friendly, disabled-friendly and safety parameters. The toilets were not properly maintained, ramps and rails were not available to all blocks, classrooms did not have double doors, fire-safety measures were inadequate and power failure for about 5-6 hours a day was a common occurrence. The schools also did not fare well in respect of number of classrooms, teachers' common room, students' common room, vice-principal's room, visitor's room, sick room, library-cum-reading room, assembly hall, art gallery, well-equipped laboratories and shed for security men. While schools lacked many facilities, it is difficult to reconcile that the funds allocated to the schools were not utilized fully during the financial year. The following suggestions may be helpful to upgrade the infrastructure facilities in EMRSs.

- i. *The building layout plan implemented in the construction of EMRSs in Gujarat may be adopted for construction of EMRSs in future in other locations across the country.*
- ii. *The per-child fund allocation for EMRS falls much short of that for JNV and therefore, needs to be reviewed with reference to the expectations from the EMRS scheme in conformity with the target objectives.*

- iii. *Adequate number of classrooms (14 classrooms, one for each of the two sections in every class from VI to XII) along with well-equipped laboratories and spacious library-cum-reading room are required.*
- iv. *The residential quarters for all teachers and selected non-teaching staff are to be made available in the school premises to ensure frequent student contact and guidance and to effectively implement remedial class provisions for students.*
- v. *In conformity with the provisions stipulated for EMRS, each school should have varieties of room space such as visitor's room, sick room, staff common room, students' common room, library-cum-reading room and assembly / general purpose room.*
- vi. *EMRSs required adequate number of support staff such as sweepers, health workers and watchmen to keep the toilets and school building clean and to ensure health check-up of students on a regular basis.*
- vii. *Ramps and rails must be made available to each block of the schools. The schools should have slides, swings and other child-friendly games equipments and indoor games room.*
- viii. *Fire-safety measures need to be strengthened with each classroom having double doors and staff and students being trained on fire-safety measures.*
- ix. *Water scarcity and power failure are major problems. Adequate number of overhead tanks and generators/ inverters/ solar panels would be helpful to partially address the problems of water scarcity and electricity.*
- x. *Due attention need to be paid for land management in EMRS campus and rain water harvesting. There can be ponds to withhold rain water flowing out of the campus and water from the ponds can be used for raising flower and kitchen gardens. A running track close to the boundary wall around the campus can be prepared for use by the inmates. Furthermore, separate play grounds can be developed for separate games and sports.*
- xi. *It is important to assess the reasons for which funds allocated to EMRSs were not utilized fully during the financial year, particularly when the schools lacked many facilities. It is expected that procedure delay, if any, be corrected keeping in view that substantive academic gains cannot be sacrificed for unthinking adherence to procedural formalities.*

10.3 Hostel Infrastructure and Residential Climate: Providing Student-friendly Accommodation

Students spend about 14-16 hours a day in hostels. Hostel residential climate has a great deal of influence on student motivation, attitude and educational attainment. Hostel provides a platform for intensive interactions among students in both curricular and co-curricular domains enabling them to connect school learning with real-world knowledge. It is in hostels that students engage themselves in self-paced learning to practice the lessons learnt in schools, supported by peer interactions. It is therefore essentials that hostel infrastructure and climate should be student-friendly and should address the physical, cultural and academic needs of students. The following aspects need to receive attention of educational administrators and planners to upgrade the residential climate of the hostels.

- i. The major problems confronting hostels pertained to water scarcity and power failure. Lack of running water supply to toilets and bathrooms rendered the environment unhygienic. *The problems can be addressed by installing overhead tanks and generators/ inverters/ solar panels in each hostel and making adequate provisions of solar lanterns for students.*
- ii. The accommodation space for hostel inmates was inadequate and facilities were not up to mark as students did not have study tables, all the light and fan points were not functional and air ventilation in rooms was poor. It is important that *school authorities ensure conducive accommodation facilities and RCC tables inside hostel rooms following the pattern adopted in JNV.*
- iii. *The hostels need to satisfy child-friendly, disabled-friendly and safety parameters.* There need to be adequate fire safety measures, double doors in each hostel room, indoor games room, recreation or hostel common room, sick room, visitors' room, water purifier systems, ramps and rails to each hostel block and room, window mosquito nets, marked space for drying clothes and incinerator for disposal of girls' sanitary napkins in the hostels.
- iv. For proper monitoring of hostel facilities, *there should be office rooms in boys' and girls' hostels, residential quarters for the warden, care-taker, security and support staff inside the school premises and contractual plumbers and electricians to attend to repair work which at present continues to be neglected.*
- v. The safety of girls was major concern raised by the community members, parents as well as the school authorities. *There is a necessity to construct boundary walls around girls' hostels.*
- vi. The community members and the staff felt that the hostels lacked facilities to meet emergency health requirements of students. *The school authorities may consider hiring a vehicle on contractual basis to carry sick students for medical treatment and to meet other emergency requirements of the school and hostels.*
- vii. *There need to be paved roads leading from the hostel blocks to the dining hall and the school with proper lighting* to help students avoid poisonous insects and snakes during night time as they come to school for remedial classes and to the dining hall for dinner.
- viii. *House system and the system of Master on Duty (MoD) as followed in JNVs may be followed in EMRSs* to inculcate a social sense of responsibility in students.
- ix. *Hostel wall magazine and an annually published magazine of the hostels* containing students' writings would be encouraging students to engage in creative writing and build on their success experiences. Daily newspapers and monthly magazines should be made available to students in hostels.
- x. *The kitchen in EMRSs needs to be smoke-free with proper fire safety measures. The garbage disposal provisions in the form of compost pits and drainage system for draining out water from the kitchen and bathrooms need to be immediately taken care of by the school authorities.* The schools may have sewage treatment plant.
- xi. *The students' committee for mess management need to be made functional* and frequent student feedback on quality of food must be sought from students, though teachers would

be primarily responsible for supervising quality of food along with kitchen and dining hall facilities.

10.4 Teaching-Learning Processes and Activities: Upgrading Key Pedagogic Interventions

The teaching-learning environment prevailing in schools impacts student motivation and engagement in learning, the outcomes of which are noticed in the educational attainment level of students. The constructive framework that forms the basis of National Curriculum Framework suggests that teaching-learning must be student-driven and interactive and student assessment should be dynamic rather than static. Student assessment must be done on a continuous and comprehensive basis using methods, tools and techniques of CCE to holistically capture student attainment in all domains – curricular, co-curricular and socio-personal. This study assessed the educational attainment level of students and teaching-learning climate in EMRSs.

On an overall basis, the educational attainment level of JNV students in elementary and secondary classes was better than that of EMRS students, who were better than the students of ST & SC schools. But with increasing school years, the performance gap between students from different categories of schools narrowed down, though the JNV students maintained an edge over students from EMRS and SC & STs schools. Category-wise analysis of student groups revealed the same trend in respect of ST, SC and general category students as was observed for the entire student group across all states. On the whole, the performance of students in ST & SC schools was poor, of those in EMRS, below average, and of those in JNV, above-average.

In Class X terminal examination, maximum students of EMRS were found in 60% to 70% bracket, while maximum student concentrations in ST & SC schools and JNVs were found in 50% to 60%, and 70% to 80% brackets, respectively. In Class XII terminal examination, maximum EMRS students performed in the range from 50% to 60% as compared to JNV having maximum student concentration in 60% to 70% bracket. On an average, student performance in EMRSs was 10% lower than that of students in JNV and 10% higher than that of students in ST & SC schools.

The students' level of educational attainment needs to be understood with reference to the teaching-learning conditions prevailing in schools with a view to highlighting the corrective steps that need to be taken to improve the teaching-learning process with focus on EMRSs.

- i. In view of the fact that educational attainment level of EMRS students fell short of what was expected under the EMRS scheme, serious attention must be paid to boost the educational processes in EMRSs with due provisions and monitoring of the teaching-learning activities in schools by *setting up resource teams at the central as well as state levels. The resource teams would be responsible for hand-holding support to teachers and academic monitoring of the EMRSs.*
- ii. Special focus must be placed on *distribution of textbooks to students at the beginning of the academic session*
- iii. Immediate steps need to be taken *to build the capacities of the teaching staff to update their instructional skills and procedures on a list of selected school climate indicators* in which the EMRS were found to be weak (lesson plans and activity-method based teaching, use of

TLMs and TLM corner in classrooms, teacher demonstrations during teaching, student-centric rather than teacher-directed classrooms, initiating group learning, home and project assignments with regular correction and feedback to students, use of e-content in SMART classes, clarifying student doubts, remedial coaching, teaching learning equipments, effective use of laboratories and libraries, wall magazine and wall activities, use of co-curricular activities for curricular learning, use of suggestion box etc.). *The resource team would update teachers in adopting student-friendly and learning-supportive teaching climate in schools and would frequently oversee the implementation of innovative educational practices at the school level.*

- iv. *The resource team may be called upon to rate teachers on the effective use of student-friendly innovative educational practices on a cumulative basis, which would be given due weightage at the time of teacher promotions.*
- v. *One or two counselors may be recruited for each EMRS, whose primary responsibility would be to counsel students on personal problems, identify and develop student talents, coordinate programmes on self-defence, life-skills and vocational training for students, deal with the academic problems of slow learners, maintain teacher-community contact, organize programmes for career counseling and coaching to senior students, guide teachers in the implementation of CCE, maintain students' profile and cumulative progress report and design student development activities.*
- vi. *In EMRSs, which are affiliated to CBSE and follow English-medium instruction, English Language Lab and courses on English speaking would be extremely helpful to students. Many students expressed the need to have this lab and coaching on English speaking.*
- vii. *The weakest teaching-learning domain in EMRSs is the implementation of CCE not just for student assessment but also to use CCE as means to plan all instructions and monitor students' learning progress. It is important that teachers be trained on the effective use of CCE as a means for improving the educational climate in schools and consequently the student learning outcomes. The role of the counselor and the resource team is extremely important for effecting changes in teaching-learning practices with a view to enhancing students' educational attainment level.*
- viii. *All students did not and were not encouraged to participate in varieties of co-curricular and social activities such as drawing, singing, dancing, drama, debate, quiz, games, sports, cultural celebrations, social awareness campaigns and social services in villages. Annual art and science exhibitions can be arranged. These activities are important to connect school learning to real-life knowledge so that their curricular learning would be stabilized with a personal world perspective. While all the teachers would be involved, the counselor and the PET in coordination, can design, implement and monitor the co-curricular activities to link them to students' curricular learning.*
- ix. *An important objective of EMRS is to enable students to avail of facilities in higher educational courses and jobs in government and public sector undertakings. Astonishingly the students were not encouraged to appear in NTS examinations, nor did the staff keep any record of students appearing in NTS. Full information on the career progression of the pass outs from EMRS was not available with school authorities. The initiatives in the*

direction of student development activities were not noticed. *The counselor, if engaged in each EMRS, will be responsible for maintaining student profiles and monitor student development activities so that this important objective of EMRS would be realized.*

10.5 School-Community Linkage: Empowering Community Ownership

For the community to own the school and strengthen it with support and monitoring, it is important to establish a strong school-community link to be primarily initiated by the school. Children's knowledge is situated in the local culture and therefore, community knowledge should be brought into schools by initiating community participation in schools' curricular and co-curricular programmes. According to NCF, school learning must be connected with real-life life knowledge. Furthermore, school as a learning center must also impact the awareness level of the community and engage in making substantial contributions to community welfare. Since school-community linkage is of paramount importance as a sustainability measure for grassroots-level educational intervention, the involvement of SMC in school activities and school development planning is stipulated as a measure to strengthen community ownership of schools. Steps need to be taken to encourage the level of SMC and MTA participation along important cross-cutting parameters of school functioning.

- i. SMC/ MTA/ Community participation in school activities was negligible. The district-level administration / resource team need to monitor school-community linkage by remaining present in the SMC/ PTA meetings and by sensitizing them to their roles and responsibilities in school functioning. *The SMC / PTA meetings need to be conducted in every quarter.*
- ii. *A clear annual agenda for staff involvement in raising the awareness level of the community and students' social awareness campaigns and social service measures need to be formulated in consultation with SMC / MTA/ community members to effect changes in their attitudinal dispositions towards governance, social and educational issues.*

10.6 Monitoring and Supervision: Nurturing with Programme Supportive Mechanism

Monitoring is a key process to effectively implement a program in the field not just for purposes of supervision but to provide support to the staff on a continuous basis. Following programme implementation at the grassroots-level, several contextual parameters would provide learning experiences for changing its nature and make it more suitable to adapt to field-realities. If properly monitored, lessons would be learnt to keep the stakeholders focused on programme objectives and to assess the nature of support required to strengthen the programme. While the monitoring of the school and hostels by the educational authorities was in the moderate range, no monitoring or supervision initiative was taken by the community members even including the SMC members. They visited the school for specific meetings when called by the principal to be given information on school activities with little participation from their side. The monitoring as a formal procedural exercise by authorities was alright but the extent of support provided to improve facilities and realize programme objectives was uncertain as it owed more to individual's commitments than to systemic procedural formalities. It is important to consider instituting the following supervision and monitoring procedure to regulate and upgrade the educational and residential climate in the schools and hostels.

- i. *First of all, a guideline may be prepared at the central / state level in consultation with school authorities and staff documenting all aspects of educational management in EMRSs clearly outlining the curricular, co-curricular and social expectations from the school. The guideline along with an academic calendar would help staff to focus their attention on what and how the objectives of EMRS scheme can be realized.*
- ii. *The educational authorities were observed to have been performing a supervising, not a monitoring role. It is not only that the educational authorities including the district-level officials and school principals would supervise the schools on a regular basis, the resource team, if constituted, would have the primary responsibility of providing academic monitoring to schools on a monthly basis along the criteria suggested in the format given below.*
- iii. *The community members are not yet aware of the facilities provided to the school under the EMRS scheme and their roles and responsibilities towards the schools. They occasionally connect to school as and when asked by the school authorities to follow procedural formalities. Since community monitoring of the school is almost non-existent, the resource team in collaboration with the counselor can sensitize the community members, particularly the members of the SMC, and build their capacity to monitor how the school is implementing the facilities provided under the EMRS scheme.*
- iv. *The monitoring format outlining the important parameters of school's functioning can be used by the monitoring personnel to ascertain the status of the school on a quarterly basis and assess how the school is progressing over time. The exercise would sensitize the school staff to all the important educational parameters along which improvements are expected. About three to four easily achievable targets can be taken up for each quarter and staff, administrative and financial resources can be mobilized to achieve these targets. As success experiences would pile up, the school staff would be empowered with a sense of achievement motivation to lead the programme from the front.*

EMRS MONITORING SCHEDULE

- ✓ *Observe about five EMRSs in a month. Spend about 3 to 4 days in the school. Observe about 10 classroom/ laboratory- based transactions. Observe the school and the hostel along the parameters given in the format. Take one or two demonstration classes.*
- ✓ *Interact with staff, students and community members. Share your observations with the staff in a non-threatening manner.*
- ✓ *Decide the activities to be taken up for the next quarter in consultation with the staff. Preferably, share your observations with the SMC members / SMC president.*
- ✓ *Prepare two copies of the report: (i) one for the school, (ii) one for your office record. Share the observations with the district-level officials, if required.*

<i>Dates of visit:</i>

• **Summary Statement** (Fill up the table after you have completed the monitoring activity)

<i>Dimension</i>	School Environment (18)	Curricular Programme (30)	Co-curricular Programme (12)	Hostel Infrastructure and Residential Climate (30)	School-Community Link (05)	School Management (05)	Total (100)
<i>No. of "Yes" responses</i>							
<i>Percentage</i>							

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Name of the School: District:..... State:

No. of Teachers	No. of teachers present throughout the duration of visit	No. of non-teaching staff	No. of non-teaching staff present throughout the duration of visit

Class	VI	VII	VIII	IX	X	XI	XII	Total
Attendance								
Percentage								

A. SCHOOL ENVIRONMENT

<i>Indicator</i>	<i>Status</i>		<i>Comments, if any</i>	<i>One/Two activities for the next quarter</i>
	<i>Yes</i>	<i>No</i>		
School compound is clean				
Garden is maintained				
Kitchen garden				
Adequate Drinking water				
Toilets clean and properly used				
Information Board properly filled				
Child-friendly elements (slides, swings, see-saw etc.)				
Ramp and Rail to all blocks				
Classrooms named				
Classrooms are clean				
Dustbin in each classroom				
Children show cleanliness habits				
Textbooks available with every child				
Different playgrounds for different games and maintained				
Generators/ Inverters working				

Adequate fire safety measures				
Stationeries supplied to students				
Suggestion Box				

B: CURRICULAR PROGRAMME

Feature	Status		Comments, if any	Two/ Three activities for the next quarter
	Yes	No		
Teacher knows every child by name and social background				
Adequate classroom /seating space				
Language used by teachers understood by children				
Courses covered according to scheme				
Lesson notes maintained and used in classroom transactions				
Adequate TLMs available and used by children and teachers				
TLM corner in each class				
Activity-based teaching followed				
Wall activities used for learning				
Lab furniture adequate and labs effectively used				
Library effectively used				
Home and project assignments given and regularly corrected				
Students actively participate in learning				
Seating arrangement done as per activity				
Students ask questions freely				
Peer learning encouraged in classroom				
Counseling facilities for students				
Self-defense training given				
Life-skills training given				
Children's products displayed				
Subject-wise Activity and Question Bank available				
Use of e-content in SMART classes				
Unit test done according to scheme				
Unit Test results recorded and shared with students				
Unit test results shared with parents				
Unit test results used to improve student performance				
Progress Card regularly maintained				
Teaching provision to cater to the learning needs of CWSN and low achievers				
Initiative for developing students talents				

CCE tools and techniques followed in student assessment				
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C: CO-CURRICULAR PROGRAMME

Feature	Status		Comments, if any	One/Two activities for the next quarter
	Yes	No		
Prayer held in time				
News of the Day read in the prayer class				
All teachers present in the prayer class				
Health check up done in the last month				
School cabinet functional				
Physical Educational activities / Sports done as specified in time table				
Work experience activities (handicrafts, clay modeling, cleaning etc.) done in school regularly.				
Debates, essay, quiz, seminar/guest talk done monthly				
Art education facilities (dance, song, drawing etc.)				
Science/ Math exhibitions done in the school during the last year				
Club activities (reading club, nature club etc) conducted in school				
Co-curricular performance reflected in progress card				

D: HOSTEL INFRASTRUCTURE AND RESIDENTIAL CLIMATE

Featur	Status		Comments, if any	Two-three activities for the next quarter
	Yes	No		
Hostel furniture adequate				
Hostel campus is clean and hygienic				
Sick room				
Visitors' room				
Office room				
Indoor games room				
Water purifier system and safe drinking water				
Running water to toilets and bathrooms				
Compost pit and proper drainage system				
Fire safety				
Safety of girls				
Ramps and rails to hostel blocks and rooms				
All fan and light points working				
Solar lanterns supplied				
Generator/ inverter/solar panels				

House system functional and inner house competitions held			
Cultural activities			
First-aid box			
Wall magazine			
Regular health check up			
Food served according to menu			
Quality of meal good and supervised			
Mess committee functional			
Cooking is hygienic			
Smokeless kitchen			
Kitchen clean			
Dining hall clean			
Utensils clean			
Soap at hand wash points			
Children practice hygienic habits			

E: SCHOOL-COMMUNITY LINK

<i>Feature</i>	<i>Status</i>		<i>Comments, if any</i>	<i>One activity for the next quarter</i>
	<i>Yes</i>	<i>No</i>		
SMC meeting held regularly				
Resolutions of SMC meetings implemented				
SMC and MTA meeting held and children's performance discussed				
Community members participate in co-curricular activities				
SMC monitors the utilization of grants				

F: SCHOOL MANAGEMENT

<i>Features</i>	<i>Status</i>		<i>Comments, if any</i>	<i>One activity for the next quarter</i>
	<i>Yes</i>	<i>No</i>		
School development plan prepared involving SMC				
Activities done according to Annual Calendar				
School programme adequately monitored by authorities				
All grants properly and timely utilized				
Grant utilization shared with community members				

DEMONSTRATION LESSON BY MONITORING PERSONNEL

<i>Features</i>	<i>Status</i>		<i>Comments, if any</i>	<i>Brief description of the topic and the innovative strategy followed</i>
	<i>Yes</i>	<i>No</i>		
Demonstration class was given by				

monitoring personnel /experienced teachers				
Teachers were present in the demonstration class				
Follow up discussion with teachers after demonstration class				

PROGRESS MADE AFTER PREVIOUS MONITORING EVENT

- Monitoring done during last two months

<i>Sl no</i>	<i>Monitoring personnel</i>	<i>Date</i>	<i>Suggested activities in the last monitoring</i>	<i>Progress made</i>
1.				
2.				
3.				
4.				

H: REMARKS AND SUGGESTIONS BY THE MONITORING PERSONNEL

- Did you discuss your observations with the teachers? Yes / No
- Did you discuss your observations with the SMC members? Yes / No
- Any innovative TLMs and pedagogic practices observed. Yes/No

<i>Innovative TLMs and practices observed</i>	<i>Key Initiator(s)</i>

- Important issues raised by teachers:

<i>Issues</i>	<i>Suggestions by Inspecting Officer</i>
1.	
2.	
3.	

- Five important activities to be taken up for the next quarter

1.	
2.	
3.	
4.	
5.	

Signature of the Principal:

Signature of the Monitoring Personnel
Date:

References

1. Biswal, G.C. (1991). *Needs and Problems of a Tribal Community in Orissa with regard to Education: An In-depth Study*. Doctoral Dissertation in Education, Baroda: Centre of Advanced Studies in Education.
2. Bhukya, D. (2014). Empowerment of Tribal Women through Education in Andhra Pradesh. *International Journal of Innovative Technology and Adaptive Management*. Vol.1 (5)
3. Desai, B. & Patel, A. (1981). *Ashram Schools of Gujarat: An Evaluative Study*, Tribal Research and Training Centre, Gujarat Vidyapeeth, Ahmedabad.
4. Ekka, E.M. (1990). *Development of Tribal Education in Orissa: After Independence*, Ph.D. (Edn.), Utkal University, Bhubaneswar.
5. Garnaik, I. & Barik, N. (2012). Role of Ashram Schools in tribal education: A study of a Block in Jharsuguda district. *Odisha Review (October)*, 85-89, Govt. of Odisha
6. Gautam, V. (2003). *Education of Tribal Children in India and the Issue of Medium of Instruction: A Janshala Experience*. UN/Government Janshala programme, Delhi,
7. Geddam, M. S. (2015). A study on Ekalavya Model Residential Schools (EMRS) in tribal education. *Voice of Research*, Volume 3, Issue 4, 20-26.
8. Geetha, R. & Revathi, K. (2012). A Study on Tribal Education and Development. *Research Journal of Social Science and Management*, Vol.2 (8).
9. Jayaswal, M. Sinha, S.K., Kumari, K. & Arora, A. (2003). Parental Support and Academic Achievement in Tribal School Students of Jharkhand. *Journal of all India Association for Educational Research*. Vol.15(3-4)
10. Jha, P. (1985). *An Evaluative Study of the Hostels and Ashrams for Tribal Girl Students*, Tribal Research Institute, Bhopal.
11. Joshi, S.D. (1980). *Educational Problems of the Scheduled Castes and Scheduled Tribes of Baroda District*, MS University, Baroda.
12. Joy, J. & Srihari, M. (2014). A Case study on the School dropout of Scheduled Tribe students of Wayanad District, Kerala. *Research Journal of Educational Sciences*, Vol. 2(3), p.1-6
13. Kamble, P.R. (1992). *A Critical Study of the Effect of the facilities given by the Government to the Backward Class Pupils in Primary Schools in Davgad Taluka, Maharashtra*. M. Phil Dissertation.
14. Masavi, M. (1976). *Wastage and Stagnation in Primary Education in Tribal Areas*, Tribal Research and Training Institute, Gujarat Vidyapeeth, Ahmedabad.
15. Ministry of Tribal Affairs, GOI (2014). *Annual report 2013-14*, Ministry of Tribal Affairs: GOI.
16. NCERT. (1995). *Effectiveness of Various Interventions for Improving Tribal Education*, Department of Education, Ministry of Human Resource Development, Government of India.
17. Patnaik, N. (2005). *Primitive tribes of Orissa and their development strategies*. New Delhi: DK Print World.
18. Parvathamma, C. (1984). *Scheduled Castes and Scheduled Tribes: A Socio-Economic Survey*, Ashish Publishing House, New Delhi, p.15.

19. Pratap, D.R. & Raju, C.C. (1973). Study of Aided Elementary Schools of Srikakulam, Visakhapatnam, East Godavari and West Godavari Districts of A. P., Tribal Cultural Research and Training Institute, Hyderabad.
20. Revathi, K. & Geetha, R. (2012). A study on tribal education and development. *The International Research Journal of Social Science and Management*, 2 (8), pp 1-7.
21. Sahoo, L. K. (2011). Socio-economic profile of tribal populations in Mayurbhanj and Keonjhar districts. *Orissa Review (May)*, 63-68, Govt. of Odisha
22. Sahu, (2014). Challenging issues of Tribal Education in India. *IOSR Journal of Economics and Finance (IOSR-JEF) Vol 3 (2)*, pp 48-52.
23. Sen, A. (2007). *Development as freedom*. London: Oxford University Press
24. Srivastava, R. (1981). Problems of Early Schooling of Tribal Children, D. Phil (Edn.), Allahabad University
25. Sujatha, K. (1999). *Education of India Scheduled Tribes. A study of community schools in the district of Vishakhapatnam, Andhra Pradesh*. Paris: International Institute of Educational Planning, UNESCO
26. Tripathi, C.B. (1981). Educational Development of Scheduled Castes and Scheduled Tribes of Madhya Pradesh since Independence to 1973, Office of the Zonal Director, Backward Classes, Welfare (Central Zone), Ministry of Home Affairs, Bhopal.

Appendices

Appendix –I

Experts and Resource persons preparing the achievement tests in a workshop (February 20 to 22, 2015)

Subject area	Experts/RPs	
<u><i>Achievement tests for Classes VIII and X</i></u>		
<i>English</i>	Dr. Pramathes Das, Former Dy. Director, TE & SCERT, Baidyanath Rout, Former Expert in English, BSE, Pranakrushna Mohanty, Retired Headmaster Satyajit Mohapatra, Headmaster, Jew Vidyapitha, Cuttack Lalindra Amanta, Resource Person, ELTI, Odisha Gadadhar Behura, Resource Person ELTI, Odisha	Expert Expert Resource Person -do- -do-
<i>Mathematics</i>	Madanmohan Mohanty, Former Expert in Mathematics, BSE, Odisha Rajendra Ku Mohapatra, Asst. teacher, Tapoban High School, Bhubaneswar Dr. Padmalaya Nath, Asst. teacher, Jatani UPS, Khordha Smt. Kakali Dash., Math TGT(PCM), D.A.V. School, Bhubaneswar	Expert Resource Person -do- -do-
<i>Science</i>	Fakir Swain, Former Expert in Science, BSE, Odisha krushna Chandra Rout, EMRS, Rampur Santosh Tripathy, Teacher, Biragovindapur UPS, Puri Smt. Girija Nandini Ray, . TGT, Science, D.A.V.School, Bhubaneswar	Expert Resource Person -do- -do-
<i>Social Science</i>	Prabhakar Pradhan, Former Expert in Social Science, BSE, Odisha Santosh Parida, CRCC, Bhubaneswar Dr. Ajay kumar Swain, Former CRCC, Ranpur, Nayagarh Smt. Rutuparna Praharaj, .TGT Science, D.A.V.School, Bhubaneswar	Expert Resource Person -do- -do-
<u><i>Achievement tests for Classes XII</i></u>		
<i>Physics</i>	Chinmaya Padhi, Teacher, St .Xaviers' High School, Bhubaneswar B.K. Panda, PGT, BJB English Medium School, Bhubaneswar	Resource Person -do-
<i>Chemistry</i>	Santosh Kumar Sahoo, Teacher, St. Xavirs, High School, Bhubaneswar Santha Panigrahy, PGT, BJB English Medium School, Bhubaneswar	Resource Person -do-
<i>Mathematics</i>	Bibhuti Bhusan Behera, Lecturer in Mathematics, Hi-tech Sc. College, Bhubaneswar Sri Amit Kumar Jha, .PGT Math, KIIT, International School, Bhubaneswar	Resource Person -do-
<i>Biology</i>	Sandhyarani Pradhan, PGT, BJB English Medium School, Bhubaneswar Rasabihari Sahoo, Lecturer in Zoology, Hi-tech Sc. College, Bhubaneswar	Resource Person -do-

Prof. U. N. Dash, Former Professor of Psychology, Utkal University and University of Delhi and Dr. M. M. Mohanty, Former Director, State Institute of Educational Management and Training, Dr. Neena Dash, Consultant for the project and Mr. S. S. Sahoo, Former District Education Officer and Research Associate for the project guided and supervised the preparation of Achievement Tests and Information and Interview Schedules.