

MAGNITUDE OF FOOD INSECURITY IN TRIBAL AREAS
AND FOOD SECURITY MEASURES EXTENDED BY
GOVERNMENT AND ITS IMPACT



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MAGNITUDE OF FOOD INSECURITY IN TRIBAL AREAS AND FOOD
SECURITY MEASURES EXTENDED BY GOVERNMENT AND ITS IMPACT



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C O N T E N T S

Acronyms	i-iii
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Executive Summery	i-ix
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Chapter-I

1. Introduction	1-22
1.1 Concept and Definition of Food Security	
1.2 Components of Food Security Definitions	
1.3 Household and Individual Food Security	
1.4 Community Food Security	
1.5 Food Security is a Global concern	
1.6 Food Security problems in India	
1.7 Food Security status in Orissa	
1.8 Relevance and significance of the study	
1.9 Objectives of the study	
1.10 Methodology	
1.10.1 Universe and the sample	
1.10.2 Sample size and targeted respondents	
1.10.3 Tools design	
1.10.4 Data collection and interpretation	
1.11 Research Personnel	
1.12 Time schedule	
1.13 Limitation of the study	

Chapter-II

2. Review of Related Literature	23-50
--	--------------

2.1 Food Security issues in Global Level

2.2 Food Security issues in India

Chapter-III

3. Profile of the Study Area 51-70

3.1 Rayagada District

3.1.1 Kashipur CD Block

3.2. Mayurbhanj District

3.2.1 Udala CD Block

3.3 Kalahandi District

3.3.1 Lanjigarh CD Block

3.4 Nuapada CD Block

3.4.1 Khariar CD Block

Chapter-IV

4. Food Security Measures Extended by Government 71-90

4.1 Introduction

4.2 Government Interventions Addressing Food Insecurity

4.2.1 Public Distribution System (PDS)

4.2.2 Mid-Day-Meals (MDM) Scheme

4.2.3 Integrated Child Development Scheme (ICDS)

4.2.4 Emergency Feeding Programme

4.2.5 National Food for work Programme

4.2.6 World Food Programme

4.2.7 Grain Bank Scheme

4.2.8 National Rural Employment Guarantee Scheme(NREGS)

4.2.9 Self Employment Programme

4.2.9.1 Swarnajayanti Gram Swarozgar Yojana (SGSY)

4.2.10 Wage Employment Programme

4.2.10.1 Sampoorna Gramin Rojgar Yojana (SGRY)

- 4.2.11 Orissa Tribal Empowerment and Livelihood Programme(OTELP)
- 4.2.12 Swarnajayanti Sahari Rozgar Yojana (SJSRY)
- 4.2.13 Swaymsidha
- 4.2.14 Madhu Babu Pension Yojana(MBPY)
- 4.2.15 National Old Age Pension (NOAP) Scheme
- 4.3 National Food Security Mission(NFSM)
- 4.4 National Food Security Act

Chapter-V

5.	Data Analysis and Interpretation	91-161
5.1	Introduction	
5.2	Socio Economic features of study villages	
5.3	Socio Economic conditions of sample tribal households	
5.3.1	Category of Tribes	
5.3.2	Family Type	
5.3.3	Land and House pattern	
5.3.4	Electricity,Drinking Water and Toilet facilities	
5.3.5	Family size,sex,Age group,Literacy level	
5.3.6	Occupation and Income pattern	
5.3.7	Consumption and Expenditure pattern	
5.3.8	Indebtedness/Loan	
5.4	Views of Sample Households about Food Security problems and implementation of Government Schemes	
5.4.1	Extent of Food scarcity	
5.4.2	Causative factors of food scarcity	
5.4.3	Coping Mechanism adopted during food scarcity	
5.4.4	Consequences of Food Insecurity	
5.4.5	Women's role in family food security	
5.4.6	Households benefited through NREGS	
5.4.7	Households benefited through PDS	
5.4.8	Views of Sample Households on implementation of individual Food Security/ Livelihood Schemes	

Chapter-VI

6.	Major Findings, Suggestions and Conclusion	162-172
	<i>Bibliography</i>	<i>173</i>
	<i>Appendices</i>	<i>176</i>

EXECUTIVE SUMMARY

The present study “Magnitude of Food Insecurity in Tribal Areas of Orissa and the Food Security Measures Extended by Government and its Impact” is an endeavor to assess the extent of food insecurity, factors responsible for food insecurity, impact of government measures to combat food insecurity and suggest remedial measures to overcome the problems towards bringing food security.

The study follows a livelihood based approach to undertake the vulnerability of the people to food security. The broad objectives of the study are (i) to assess the extent of food insecurity in the tribal area, (ii) to identify the reasons of food insecurity and its related causative factors, (iii) to measure the community approach to combat food insecurity without Government intervention and to examine the correlation between livelihoods based approach and food security, (iv) to assess the role and activities of women in family food security, (v) to measure the magnitude of availability, access, utilization and stability on food security measures taken up by the Government as well as NGOs and (vi) to find out the difficulties of implementing food security schemes among the Tribals and to suggest corrective measures so as to ensure food security through different programmes among tribals. Towards fulfilling the objectives, accordingly the study was designed and appropriate methodology was adopted. The study area like blocks and districts were selected having concentration of tribal population with higher proportion of BPL families and priority for KBK districts. In this manner the selected blocks and districts are Kashipur block from Rayada district, Udala block from Mayurbhanj district, Lanjigarh block from Kalahandi district and Khariar block from Nuapada district. The requisite quantitative as well as qualitative data from different stake holders such as tribal households under BPL category, opinion makers like local PRI members, traditional village heads, members from SHGs, representatives from local NGOs/VOs, school teachers, officials connected with the programme, etc. and by organizing Focus Group Discussions among the above stakeholders were collected through separate sets of questionnaires, duly analyzed and presented in report form. The report comprises of six chapters.

In the introductory chapter, brief descriptions about concepts and definitions of food security / food insecurity, food security problems in global level, in the country, food security status of Orissa and relevance and significance of the study have been given. Also in this chapter broad objectives of the study, detailed methodology adopted for conducting the study with sampling methods, designing tools and data collection as well as delimitations of the study were described.

In chapter – II, to get an insight into the problems and to bring better understanding of the problems and its crucial aspects some of the studies and related literature as collected were reviewed.

In chapter – III, profile of the study area indicating socio-economic features such as geographical location, administrative set up, demography, physical resource base, infrastructural facilities, sectoral production, human development indices in respect of selected blocks and corresponding districts were given.

Brief descriptions about various schemes / programmes relating to food security measures as well as livelihood based as are being implemented through central government and state government were made in chapter – IV.

Chapter – V is the core section of the report. Empirical data as collected during the course of field study were presented in this chapter. Data relating to various aspects of the study were duly analyzed, interpreted and discussions on findings were made to derive suitable suggestions.

In chapter – VI, being the concluding chapter, major findings of the study as observed during data analysis and interpretation thereon with suitable suggestions as derived out of discussions were given.

In this summary part of the report the results are given precisely in the following table.

Table – ES : Summary Results of the Study

Sl. No.	Item	Description	Remarks
1	BPL category	• 100 % sample tribal households are under BPL category	Samples selected as per the design of the study
2	Family type	• 99.10% Sample families are nuclear type	-
3	Larger family size	• 49.37% Households have 5 – 7 members • 5.02% Households have more than 7 members	-
4	Landless households	• 25.52% Households are landless	-
5	Land	• 17.99% Households have less than 1 acre of land • 39.33% Households have 1 – 2 acres of land • 17.16% Households have more than 2 acres of land	-
6	Women headed families	• 2.5% Households are women headed	-
7	House type	• 87.61% Households have Kuchha houses • 1.25% Households have Pucca houses under IAJ	IAY and Mo Kudia Yojana yield no results for the poor tribals
8	Literacy	• 69.96% Members of sample tribal families (above 6 years of age) are illiterates	-
9	Drinking water facility	• 100% Households do not have access to piper water supply • 81.59% Households have tubewell facility	-
10	Electricity facility	• 100% Households do not have access electricity at their houses	The schemes like Rajiv Gandhi Grameen Vidyutikaran(RGGVY), Bijy Gram Jyoti and Gopabandhu Grameen Yojana(Bijli, Sadak and Pani) yield no results for the

			tribals in these areas
11	Toilet facility	<ul style="list-style-type: none"> • 100% Households do not have access toilet facilities at their houses or to common toilets at their habitations 	Total Sanitation Campaign yield no results in these areas
12	Irrigation	<ul style="list-style-type: none"> • 9.62 % Households from Udala block have cultivable irrigated land and balance households from Kashipur, Lanjigarh and Khariar do not have cultivable irrigated land 	-
13	Occupation	<ul style="list-style-type: none"> • 57.74% Households are wage labourers • 38.49% Households are cultivators 	-
14	Income	<ul style="list-style-type: none"> • 8.79% Households average income per day per person up to Rs. 3.33 • 41.84% Households average income per day per person Rs. 3.33 to Rs.6.11 • 24.69% Households average income per day per person Rs. 6.11 to Rs. 8.33. • 17.99% Households average income per day per person Rs. 8.33 to Rs. 11.11. • 6.69% Households average income per day per person above Rs. 11.11. 	-
15	Expenditure on food items	<ul style="list-style-type: none"> • 51.88% Households average expenditure on food items per day per person up to Rs.3.33 • 28.03% Households average expenditure on food items per day per person Rs. 3.33 to Rs. 5.55 • 15.90% Households average expenditure on food items per day per person Rs. 5.55 to Rs. 8.93 • 3.35% Households average expenditure on food items per day per person Rs. 8.93 to Rs. 11.11 • 0.84% Households average expenditure on food items per day per person above Rs. 11.11 	-
16	Indebtedness / Loan	<ul style="list-style-type: none"> • 16.32% Households obtained loans for food items during acute scarcity, out of which 8.37% from friends/relatives and 7.95% from private money lenders 	-
17	Extent of food insecurity	<ul style="list-style-type: none"> • 33.89% Households able to arrange two square meals a day throughout the year • 66.11% Households do not able to arrange two square meals a day throughout the year, out of which 48.12% able to arrange for about 6 - 9 months, 9.52% able to arrange for about 6 months and 8.37% able to arrange less than 6 months 	-
18	Acute food scarcity period in the year	<ul style="list-style-type: none"> • July to October or till harvesting of crops are acute food scarcity period 	-
19	Factors responsible for food insecurity	<ul style="list-style-type: none"> • Illiteracy and ignorance among tribal people • Landlessness - 25.52% Households are landless • Abject poverty among tribal population • Lack of irrigation facilities in tribal areas • Less production due to traditional methods of cultivation • Loss of production due to irregular monsoon / frequent occurrence of drought • Indulgence / consumption of liquor • Livelihood :- <ul style="list-style-type: none"> ▫ 70.71% Households viewed for not getting works during the period from August to October ▫ 50.29% Households viewed for not getting sufficient works throughout the year 	-

		<ul style="list-style-type: none"> ▫ 38.07% Households viewed for not getting works even half of the year ▫ 13.81% Households viewed for not getting works even three months in the year • Not getting marketing assistance or proper prices for MFP • High price rise of commodities – due to high price rise unable to purchase food items) 	
20	Community coping mechanism to address food insecurity	<ul style="list-style-type: none"> • No community coping mechanism exists in the areas like Grain Bank, Traditional Kothaghar or Kothajami(land) • No NGO / VO provides any assistance in these areas during acute food scarcity period 	-
	Individual coping mechanism adopted by households during acute food scarcity period	<ul style="list-style-type: none"> • Manage with inadequate food, taking alternate food and even remain hunger in many occasions • Seasonally migration for labour works to nearest urban centres, to other neighbouring districts and even to other states • Making loans from friends / relatives as well as from private money lenders • Mortgaging land in few cases • Gift and exchange 	
21	Consequences of food insecurity among tribals	<ul style="list-style-type: none"> • Manage with very little amount of food (few rice with much of torani), one meal a day or even remain hunger in many occasions • Taking alternate food like liquid forms of mandia, kosala(suan), mango kernel (dried and powdered in liquid form), tamarind seeds(in powder and liquid form), wild roots(kanda), tender parts of bamboo slaps, etc. • Seasonally migrated for labour works to nearest urban centres, mining and construction; n sites, to other districts and even other states • During acute scarcity of food all the members of the family are suffering, but women and girl children are more suffering • Mortgaging of land during acute scarcity of food in few cases • No suicidal cases, starvation deaths, selling of babies, immoral trafficking, distress sale of land or assets are found in the study areas 	
22	Women's role in family food scarcity	<ul style="list-style-type: none"> • Preservation of food items, extension of shelf life of fruit and vegetables, etc. • Mobilizing resources for food through labour works, part time economic activity • Seasonally migrated for labour works • Collection of MFP, selling of farm products and bi-products, collection of mushrooms and wild roots, etc. 	-
23	Impact of related food security schemes of government	<p>(i) PDS :-</p> <ul style="list-style-type: none"> • Almost all the respondent households are well aware of the scheme and their entitlements for the commodities • Except few households all others are procuring the commodities regularly and as per their entitlement. Only few households do not able to collect the commodities regularly due to lack of fund and in some cases the ration shops are located in far away places • From the views of the respondent households Rs. 2-a-kg. rice giving more benefits and helping towards addressing 	The PDS is implemented properly in these areas

		food insecurity. Also some of the stakeholders viewed as Rs. 2-a-kg. rice serves as life line for the poor tribals	
		<p>(ii) <u>MDM Scheme</u> :-</p> <ul style="list-style-type: none"> • Almost all the respondent households are well aware about the scheme • At least one member from about 20 per cent households having children are availing the benefits of one full meal a day. This also mitigate their class room hunger • MDM also gives employment to tribal women as cooks and helper from the locality • Poor tribal households such as landless labourers value the assurance of a free lunch for their children. The contribution of MDM scheme to food security seems to be crucial in tribal areas 	This scheme is implemented properly in these areas
		<p>(iii) <u>ICDS (SNP)</u> :-</p> <ul style="list-style-type: none"> • All the households under study are aware about supplementary nutrition programme under Integrated Child Development Services and their entitlement • Few operational problems are observed such as, in few centres cooked foods are not provided, few AWCs located in far away places, in some centres AWWs are appointed from different localities from far away places and not coming to centres regularly and in some AWCs rations are not getting regularly. Due to above difficulties the targeted beneficiaries are not getting the benefits out of the scheme in these areas • The beneficiaries availing the benefits out of the scheme helping them in addressing food insecurity 	Except few operational problems in few areas, overall the scheme is implemented properly
		<p>(iv) <u>MGNREGS</u> :-</p> <ul style="list-style-type: none"> • The scheme is in operation since April, 2008. Most of the households in these study areas are not aware fully about the scheme, particularly applying for jobs, their entitlement for jobs, type of jobs, etc. • As per the scheme the beneficiaries should get 100 days unskilled wage employment in a financial year, but from the study majority of respondent households reported that even 10 – 15 days jobs have not been assigned to them since operation of the scheme • The scheme is not implemented properly in these areas. If the scheme will be implemented properly this will abolish the food insecurity in these areas and will also act as life line for the poor tribal landless labourers 	The scheme is operating about two and half years back. It is too early to find out its impact. It may yield results in future
		<p>(v) <u>SGSY</u> :-</p> <ul style="list-style-type: none"> • The tribal households under study are aware about the scheme • So far, in 9 villages under study 22 SHGs were formed consisting total members of 236. Capacity building and skill development / skill up-gradation training programmes were organized. But credit linkages and subsidies yet to be done for taking up different activities for income generation 	The scheme is under implementation stage
		<p>(vi) <u>SGRY</u> :-</p> <ul style="list-style-type: none"> • The households are not aware fully about the scheme and they have not benefited under the scheme 	The scheme yields not benefits to the households
		<p>(vii) <u>MBPY</u> :-</p> <ul style="list-style-type: none"> • The households are well aware about the scheme • The beneficiaries covered under the study are availing 	The scheme is properly implemented

		<p>the benefits from the scheme regularly</p> <ul style="list-style-type: none"> • The scheme is implemented in these areas properly and helps in addressing food insecurity in some extent 	
		<p>(viii) NOAP :-</p> <ul style="list-style-type: none"> • The households are well aware about the scheme • The beneficiaries covered under the study are availing the benefits from the scheme regularly • The scheme is implemented in these areas properly and helps in addressing food insecurity in some extent 	The scheme is properly implemented
		<p>(ix) EFP :-</p> <ul style="list-style-type: none"> • Out of four blocks under study, except Udala block, EFP is being implemented in other three blocks • Old, infirm and indigent people from the study areas are aware about the scheme and availing the benefits like cooked meals through AWCs, except in few occasions in some centres food grains were supplied in stead of cooked meals • The benefits availing by the beneficiaries helps in mitigating food insecurity in some extent 	Properly implemented
		<p>(x) OTELP :-</p> <ul style="list-style-type: none"> • This programme is not implemented in these study areas 	-
24	Suggestions	<ul style="list-style-type: none"> • Policy interventions needed as a result of the study include giving land to landless labourers, improvement of rural connectivity, improving literacy particularly women's literacy, implementation of forest rights for tribals, improving irrigation facilities and agricultural production. • Agriculture is the main subsistence of the tribals. Most of the tribal people engaged in agriculture do not possess land and this is one of the prime reasons for acute food scarcity. Therefore, land to landless has been suggested. The uncultivable lands owned by the tribals needs development for use of cultivation. • Irrigation has been the major contributory factor in increasing food productivity. The lack of irrigation facilities for cultivation had been a bottleneck for the poor tribals in these areas. Through the food for work activities creation of dug wells, community ponds and other water bodies can be taken up. These will improve immediate food security through creation of assets, which will increase agriculture productivity and water supply in the areas. Such works are being taken in MGNREGS and the pace of work can be accelerated. • Tribal communities share a symbiotic relationship with forests that are a major source of food, nutrition and livelihoods. Depleting forest based livelihoods has over the years resulted in a poor status of the population in the areas. The community forest management groups should be assisted to take up plantation, rehabilitation of degraded forests, plant nurseries, harvesting NTFT, forest road construction and repair, etc under income generation programmes, besides providing marketing assistance and giving proper prices for MFP. 	

	<ul style="list-style-type: none"> • <u>Public Distribution System</u> :- <ul style="list-style-type: none"> ➤ Quantity of food (rice) be linked with number of members in the family. ➤ Quantity of Rs. 2-a-kg. rice be given @ 35 kg. per month per family under PBL in stead of 25 kg. ➤ Ration shops be located nearby habitation. ➤ SHGs be involved in distribution of commodities in respect of their habitation. ➤ Iodised salt should be included as part of the ration commodities of PDS. All families entitled to concessional food grains should be provided iodised salt at concessional rate. ♦ <u>Mid-day-Meal Scheme</u>:- <ul style="list-style-type: none"> ➤ SHGs be involved in management of MDMS. ♦ <u>Integrated Child Development Services (Supplementary Nutrition)</u>:- <ul style="list-style-type: none"> ➤ Cooked food be supplied regularly in stead of supply of food grains in some centres. ➤ AWCs be located in each habitation. ➤ AWWs be engaged locally preferably from the same village / habitataion. ➤ Regular rations be supplied to the AWCs. ♦ <u>Mahatma Gandhi National Rural Employment Guarantee Scheme(mgnregs)</u>:- <ul style="list-style-type: none"> ➤ Jobs be assigned to job card holders or eligible beneficiaries as per their entitlement, i.e. jobs for 100 in a financial year or unemployment allowance to job seekers if work not provided as per scheme. ➤ In lean season jobs be assigned to job card holders or eligible beneficiaries particularly landless wage labourers at least 15 days in a month. ➤ For implementation of this scheme, the Panchayats play major role and the Gram Sabha (Village Meeting) is the foremost body for approval. Strict monitoring of the performance by PRIs against specific outcomes should be ensured. Greater convergence is also required across departments and programmes with MGNREGA so that sustainable livelihoods can be created. ♦ <u>Orissa Tribal Empowerment and Livelihood Programme (OTELP)</u>:- <ul style="list-style-type: none"> ➤ This programme is not implemented in the study areas and this should be extended to the blocks / areas where food insecurity observed. ♦ <u>Madhu Babu Pension Yojana (MBPY)</u>:- <ul style="list-style-type: none"> ➤ Some deserving persons be included in the list for availing the benefits under the scheme. ♦ <u>Emergency Feeding Programme(EFP)</u>:- <ul style="list-style-type: none"> ➤ All the beneficiaries under the scheme be given cooked food in stead of food grains (as supplied to some areas). ♦ <u>National Old Age Pension(MBPY)</u>:- <ul style="list-style-type: none"> ➤ Some deserving persons be included in the list for availing the benefits under the scheme. • <u>Establishment of Grain Bank</u> - Grain banks should be 	
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		<p>established in as many as villages in tribal areas with active women's SHGs and Watershed committees. This will guarantee adequate food security during lean season.</p> <ul style="list-style-type: none"> • <u>Monitoring</u> - PRIs may be actively involved in the monitoring of PDS. These PRIs should be empowered, trained and facilitated in monitoring hunger as well as schemes implemented to reduce hunger / malnutrition such as PDS, MDMS, ICDS and FFW programmes. This will help strengthen the delivery mechanism and overcome operational inefficiencies and administrative impediments. • SHGs should be strengthened by providing necessary finance and subsidies, technical and marketing supports, skill development so as to set up of their new ventures, because it will not only create work to the group but also increase the income level of the participants this increasing their purchasing power so as to address food insecurity. • <u>BPI Census</u> - Since 1977 there has been lot of changes / creation of new families in tribal areas in below poverty line category. Some deserving families have to be included in the list and the benefits under different schemes can reach to these families. • Research / Evaluation studies may be taken up on implementation of various ongoing schemes related to food security like PDS, MDMS, ICDS, MGNREGS, FFW, EFP, OTELP, etc. Further, more research works needed on special focus areas for enhancing purchasing power of tribal population through sustainable livelihoods to achieve food security in tribal areas. 	
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PREFACE

Food security is a human right as declared the 1996 world food summit in Rome (FAO, 1996 a). Food security is a crucial determinant of human and economic development as reported by UNICEF in 1997. In fact the minimum living standard in a given society should cover not only minimum requirements of food ,shelter and clothing but also the member of the community must have access to essential services including the vital health services , safe drinking water and education . The food security for the poor has so far given confused reports. The economic survey of 1995-96 indicated the sharp fall in the poverty ratio which was attributed to the higher growth and lower inflation. This has changed now. The poverty estimates released by the planning commission showed that population below the poverty line had across the decades. It has been reported that the PDS has failed to provide the food security to the poor. The need of the poor are never met or partially met. It was reported by social activist researchers that the food supplied to the poor at the controlled price is not worth edible .The existing economic level of the people and the support of the local environment decides the ways of meeting the needs. However, not all people living in the locality have similar requirements and therefore the ways they meet these insecurity vary.

Food insecurity can be attributed to a matter of non-availability of food, scarcity caused due to increasing production of food, faulty inventory of food, delay in distribution of food, no control over the regulatory market mechanism in the maintenance of stable price of essential goods, no buying capacity of the consumers and the inefficiency of distribution of food for consumption through existing public distributional channels etc. It may be sum totality of all these or presence or absence of a part thereof. Insecurity of food can be noticed in the quality and quantity of consumption of pulses, vegetables, fruits, fats etc. In poverty striking areas the food insecurity does not assumes impotence so long the cereals are available for consumption. However, insecurity can also be visualized from nutritional point of view. Nutritional insecurity may be noticed in a community with respect to calories and carbohydrates.

Orissa has the unique distinction of having 62 different scheduled tribes of whom there are 13 Particularly Vulnerable Tribal Groups. This section constitutes about 22.13 % of total population of the state which are in various stages of economic development. Notwithstanding the unique socio-cultural practices and indigenous knowledge systems, the scheduled communities suffer from various kinds of vulnerability. Conservative estimate revealed that to combat the menace of stark poverty and acute food insecurity Govt. of Orissa as well as the Union Govt. have been extending different kinds of income generating, income sharing and poverty alleviation programmes . It is a pity that even after pumping of huge resources in the name of food insecurity measures, poverty looms large among tribal communities.

In this backdrop SC & ST Research and Training Institute has undertaken a study titled “**Magnitude of Food Insecurity in Tribal areas and Food Security Measures extended by Government and its impact**” to assess the extent of food insecurity, factors responsible for food insecurity, impact of government measures to combat food insecurity and suggest remedial measures to overcome the problems and ensure food security.

The study follows a livelihood based approach to understand the vulnerability of the people to food security. The broad objectives of the study are (i) to assess the extent of food insecurity in the tribal area,(ii) to identify the reasons of food insecurity and its related causative factors, (iii) to measure the community approach to combat food insecurity without Government intervention and to examine the correlation between livelihood based approaches and food security, (iv) to assess the role and activities of women in family food security, (v) to measure the magnitude of availability, accessibility, utilization and stability on food security measures taken up by the Government as well as NGOs and (vi) to find out the difficulties of implementing food security schemes among the Tribals and to suggest corrective measures so as to ensure food security through different programmes . Accordingly the study was designed and appropriate methodology was adopted to fulfill the objectives. The study area like blocks and districts were selected having concentration of tribal population with higher proportion of BPL families however priority for KBK districts was given. Thus, the selected blocks and districts are Kashipur block of Rayada

district, Udala block of Mayurbhanj district, Lanjigarh block of Kalahandi district and Khariar block of Nuapada district. The requisite quantitative as well as qualitative data from different stakeholders such as tribal households under BPL category, opinion makers like local PRI members, traditional village leaders, members from SHGs, representatives from local NGOs/VOs, school teachers, officials connected with the programme, etc. and by organizing Focus Group Discussions among the above stakeholders were collected through separate sets of questionnaires, These are duly analyzed and presented in report form. The report comprises of six chapters. This study has come up with the efficacy of various food security measures undertaken by Govt. and have identified factors responsible for not achieving the desired result of removing extent of food insecurity among these Vulnerable Communities. On the basis of findings and observations of the study, a set of suggestions have been put forth by the study team to combat the food insecurity crisis among the tribal communities and effective implementation of the measures in a more meaningful manner.

DIRECTOR

LIST OF ACRONYMS

AAY	Antyodaya Anna Yojana
ANM	Auxiliary Nurse Midwife
APL	Above Poverty Line
AWC	Anganwadi Centre
AWW	Anganwadi Worker
BMI	Body Mass Index
BPL	Below Poverty Line
CARE	Cooperation for Assistance and Relief Everywhere
CED	Chronic Energy Deficiency
CFB	Community Foodgrain Bank
EGS	Employment Guarantee Scheme
ESP	Essential Supplies Programme
FAO	Food and Agriculture Organisation
FCI	Food Corporation of India
FFWP	Food for Work Programme
FIARI	Food Insecurity Atlas Rural India
GDP	Gross Domestic Product
GHI	Global Hunger Index
GoI	Government of India
GR	Green Revolution
HRD	Human Development Report

IAASTD	International Assessment of Agricultural knowledge, Science and Technology for Development
ICDS	Integrated Child Development Services
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
IMR	Infant Mortality Rate
JRY	Jawahar Rozgar Yojana
LBW	Low Birth Weight
LDCs	Least Developed Countries
LFL	Low Female Literacy
MDMS	Mid-Day Meals Scheme
MNP	Minimum Need Programme
MoHRD	Ministry of Human Resource Development
MPCE	Monthly Per Capita Consumption Expenditure
MSP	Minimum Support Price
NHDR	National Human Development Report
NIPCCD	National Institute of Public Cooperation and Child Development
NP-NSPE	National Programme of Nutritional Support to Primary Education
NREGA	National Rural Employment Guarantee Act
NREGS	National Rural Employment Guarantee Scheme
NSSO	National Sample Survey Organisation
ODI	Overseas Development Institute
OPHA	Ontario Public Health Association
PDS	Public Distribution System

PMGY	Pradhan Mantri Gramodaya Yojana
PRIs	Panchayat Raj Institutions
RKVY	Rashtriya Krishi Vikash Yojana
RDPS	Revamped Public Distribution System
RTF	Right to Food
SC	Scheduled Castes
SFPs	School Feeding Programmes
SHG	Self Help Group
SNP	Supplementary Nutritional Programme
ST	Scheduled Tribes
TPDS	Targeted Public Distribution System
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational Scientific Cultural Organisations
UNICEF	United Nations International Children's Emergency Fund
UNMDG	United Nations Millennium Development Goal
WB	World Bank
WFP	World Food Programme
WFS	World Food Summit

CHAPTER-I

INTRODUCTION

1.1 CONCEPTS AND DEFINITIONS OF FOOD SECURITY

It appears that we are moving towards global food crisis soon. Right to food assumed its importance when special report of UN got released in 2008. The term "Food Security" originated in international development literature in the 1960s and 1970s. Public interest in global and domestic food security grew rapidly following the world oil crisis and related food crisis of 1972-74. With the African famine of 1984-85, the increase in numbers of people looking for food assistance in developed nations, as reported by churches, community centers and soup kitchens, and the growing numbers of food banks in the United States (U.S.) and Canada, the literature on food security grew rapidly. Over time a large number of different definitions have been proposed. There are approximately 200 definitions and 450 indicators of food security (Hoddinott, 1999). Maxwell and Frankenberger's (1992) report lists 194 different studies on the concept and definition of food security and 172 studies on indicators.

Some individuals and groups have suggested alternatives to the term "food security" in an effort to avoid the perception of "food safety" or to shed the connotation of "food insecurity" being equated with only hunger and poverty. "Food security" is still the most commonly used term among a wide range of advocates working to meet the food needs of individuals, households and communities.

The concept of food security has evolved and expanded over time to integrate a wide range of food-related issues and to more completely reflect the complexity of the role of food in human society. Early definitions focused almost exclusively on the ability of a region or nation to assure an adequate food supply for its current and projected population. The emphasis was on secure access to food for a population, with a singular focus on the role of food as a vehicle for nutrition. However, food holds much more significance to humans than just its nutritional value. It can also have important symbolic, cultural, social and political roles. Food security, as a conceptual goal, has expanded to explicitly include more and more of these roles. The evolution of thinking reflects an attitude that society's goals should reach beyond the ability of a country to produce and import enough food. Issues related to its production, distribution, availability and acceptability have become equally important.

Food security is a flexible concept as reflected in the many attempts at definition in research and policy usage. Even a decade ago, there were about 200 definitions in published writings. (Maxwell, S. & Smith, M. 1992). Whenever the concept is introduced in the title of a study or its objectives, it is necessary to look closely to establish the explicit or implied definition (Masewell, S. 1995).

The continuing evolution of food security as an operational concept in public policy has reflected the wider recognition of the complexities of the technical and policy

issues involved. The most recent careful redefinition of food security is that negotiated in the process of international consultation leading to the World Food Summit (WFS) in November 1996. The contrasting definitions of food security adopted in 1974 and 1996, along with those in official FAO and World Bank documents of the mid-1980s are set out below with each substantive change in definition underlined. A comparison of these definitions highlights the considerable reconstruction of official thinking on food security that has occurred over 25 years. These statements also provide signposts to the policy analyses, which have re-shaped our understanding of food security as a problem of international and national responsibility.

Food security as a concept originated only in the mid-1970s, in the discussions of international food problems at a time of global food crisis. The initial focus of attention was primarily on food supply problems - of assuring the availability and to some degree the price stability of basic foodstuffs at the international and national level. That supply-side, international and institutional set of concerns reflected the changing organization of the global food economy that had precipitated the crisis. A process of international negotiation followed, leading to the World Food Conference of 1974, and a new set of institutional arrangements covering information, resources for promoting food security and forums for dialogue on policy issue (ODI, 1997).

The initial focus, reflecting the global concerns of 1974, was on the volume and stability of food supplies. Food security was defined in the 1974 **World Food Summit** as: *“Availability at all times of adequate world food supplies of basic food stuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices”, (United Nations, 1975).”*

In 1983, FAO expanded its concept to include securing access by vulnerable people to available supplies, implying that attention should be balanced between the demand and supply side of the **food security equation**:

“ensuring that all people at all times have both physical and economic access to the basic food that they need” (FAO, 1983).

In 1986, the highly influential World Bank report *“Poverty and Hunger”* (World Bank 1986) focused on the temporal dynamics of food insecurity. It introduced the widely accepted distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, and transitory food insecurity, which involved periods of intensified pressure caused by natural disasters, economic collapse or conflict. This concept of **food security** is further elaborated in terms of: *“access of all people at all times to enough food for an active, healthy life”*.

By the mid-1990s food security was recognized as a significant concern, spanning a spectrum from the individual to the global level. However, access now involved sufficient food, indicating continuing concern with protein-energy malnutrition. But the definition was broadened to incorporate food safety and also nutritional balance, reflecting concerns about food composition and minor nutrient requirements for an active and healthy life. Food preferences, socially or culturally determined, now became a consideration. The potentially high degree of context

specificity implies that the concept had both lost its simplicity and was not itself a goal, but an intermediating set of actions that contribute to an active and healthy life.

The 1994 UNDP Human Development Report promoted the construct of human security, including a number of component aspects, of which food security was only one (UNDP, 1994). This concept is closely related to the human rights perspective on development that has, in turn, influenced discussions about food security. (The WIDER investigation into the role of public action into combating hunger and deprivation, found no separate place for food security as an organizing framework for action. Instead, it focused on a wider construct of social security which has many distinct components including of course, health and nutrition (Drez, J. & Sen, A. 1989).

The 1996 **World Food Summit** adopted a still more complex definition:

"Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO-1996).

This definition is again refined in The **State of Food Insecurity** 2001:

"Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO. 2002).

This new emphasis on consumption, the demand side and the issues of access by vulnerable to food, is most closely identified with the seminal study by Amartya Sen (1981). Eschewing the use of the concept of food security, he focuses on the entitlements of individuals and households.

The international community has accepted these increasingly broad statements of common goals and implied responsibilities. But its practical response has been to focus on narrower, simpler objectives around which to organize international and national public action. The declared primary objective in international development policy discourse is increasingly the reduction and elimination of poverty. The 1996 WFS exemplified this direction of policy by making the primary objective of international action on food security halving of the number of hungry or undernourished people by 2015.

Essentially, food security can be described as a phenomenon relating to individuals. It is the nutritional status of the individual household member that is the ultimate focus, and the risk of that adequate status not being achieved or becoming undermined. The latter risk describes the vulnerability of individuals in this context. As the definitions reviewed above imply, vulnerability may occur both as a chronic and transitory phenomenon. Useful working definitions are described below.

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.

Food insecurity exists when people do not have adequate physical, social or economic access to food as defined above.

1.2 COMPONENTS OF FOOD SECURITY DEFINITIONS

Several authors have explored the similarities among definitions of food security to identify its *Fundamental components* (Ganapathy et al., 2005; Koc & Dahlberg, 1999; Maxwell & Frankenberger, 1992; Power, 1998). Maxwell and Frankenberger (1992) distilled a range of definitions of food security into the phrase "secure access at all times to enough food". The way that the terms *secure*, *access*, *time*, and *enough* are specifically defined in definitions varies. For example, some have the perspective that *enough* food means enough for survival, while others, particularly those proposing more recent definitions of food security, and conceptualize it as enough food for an active and healthy lifestyle.

Ganapathy et al. (2005) and Power (1998) see the core of food security as a bivariate concept composed of anti-hunger or poverty elimination goals on the one hand and goals related to food system issues on the other. The two dimensions of the concept essentially relate to food access goals in terms of quantity and quality, respectively. An anti-hunger or anti-poverty approach argues that people should have a sufficient quantity of food and/or enough income to access a sufficient quantity. The food system approach expresses a concern with the quality of food that is available, how food is produced and the impact of its production, distribution and consumption on individuals and communities.

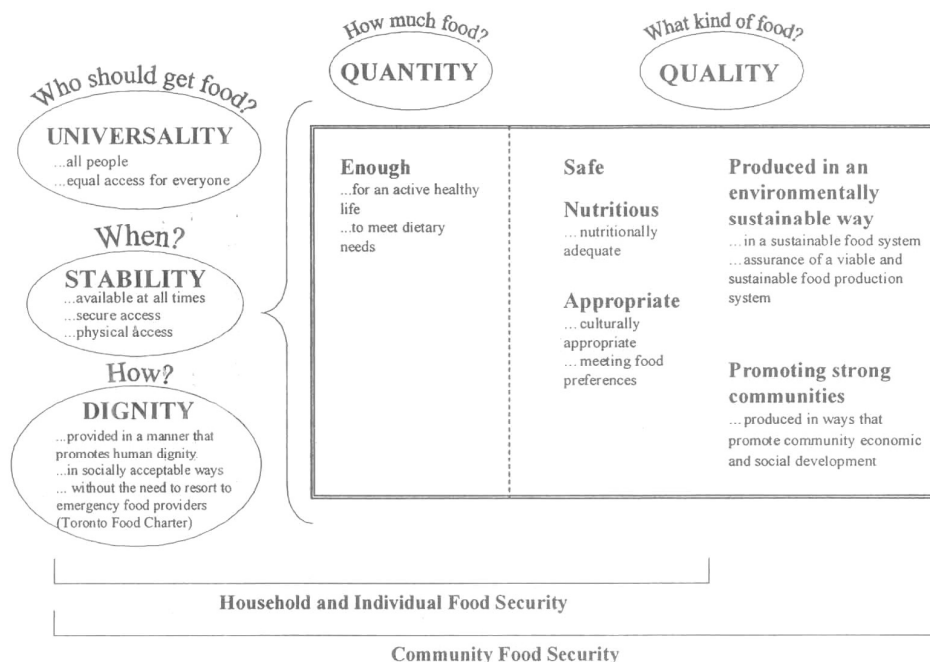
The conceptualization of food security goals by Koc et al. (1999) goes beyond the adequacy of food quantity and quality and extends to the four "A"s availability, accessibility, acceptability and adequacy. Food security requires that a sufficient supply of food be available (quantity) and that it be accessible to all equally. Acceptability addresses food's cultural and symbolic value, that the food available and accessible should respect individual's cultural traditions. The authors define adequacy in terms of the long-term sustainability of food systems (quality, in the broadest sense). A sustainable food system should help to satisfy basic human needs, without compromising the ability of future generations to meet their needs.

If one examines different definitions of food security in terms of answers to questions about the production, distribution and consumption of food in human society, the broadest definitions essentially answer five specific questions. Different concepts of food security differ in the way that their authors answer the following five questions:

Who should get the food	➤ <i>Everyone/ all people (UNIVERSALITY)</i>
When	➤ <i>At all times/ sustained access (Stability)</i>
How?	➤ <i>Through normal food channels/ not from emergency food assistance programs (DIGNITY)</i>
How much food?	➤ <i>Enough/ enough for a healthy active life (QUANTITY)</i>
What kind of food?	➤ <i>Safe and nutritious (QUALITY)</i> ➤ <i>Culturally appropriate (QUALITY)</i> ➤ <i>Produced in environmentally sustainable ways that promote strong communities (QUALITY)</i>

The specific ways that these questions or components are addressed by different definitions can vary based on the geographic focus, conceptual starting point, programming priority or level of analysis of the author(s). The level of analysis is particularly important in understanding the use of the term food security. The term can be used with a focus on food related issues on a number of levels, from global food security to regional, national, community, household and individual. None of these levels of analysis can be cleanly separated from the others but the issues of significance can be very different. An analysis of global food security would look at the ability of the world's food producers to meet the statistically calculated caloric needs of the Earth's six billion residents and may also concern itself with threats to the long-term sustainability and issues of genetic modification, corporate dominance of food production and threats to biodiversity. Figure 1.1 provides a visual representation of the common components of a range of current definitions of food security.

Figure - 1.1 Common Components of Food Security Definitions



1.3 HOUSEHOLD AND INDIVIDUAL FOOD SECURITY

In the early 1980s there was a shift in thinking about food security influenced by the concept of "food entitlement" or the view of food as a basic right. Analyses started to include the concept of stability or assured food access as a fundamental component. A consequence was that an important level of analysis for food security issues was seen as households and individuals. Analysis at this level is concerned primarily with the experiences of hunger and less severe experiences of compromises in the quantity and quality of diets. A great deal of attention has been paid to analyses at this level over the last two decades to determine the numbers of food insecure individuals and to identify factors associated with vulnerability to food insecurity. Chapter Three of this paper will focus on efforts to measure household food insecurity as a proxy for individual experiences.

Much of the understanding of the concept of household food insecurity originated with research among low-income women in upstate New York by Radimer and colleagues in the early 1990s. Radimer et al. (1992) identified that the experiences of household food insecurity can have four dimensions:

- *Quantitative* (not enough food)
- *Qualitative* (reliance on inexpensive non-nutritious food),
- *Psychological* (anxiety about food supply or stress associated with trying to meet daily food needs), and
- *Social* (having to acquire food through socially unacceptable means such as charitable assistance, buying food on credit, and in some cases, stealing).

The four dimensions' of household food insecurity and the five conceptual components of food security are linked. The existence of food insecure households is an example of the absence of universal access to food by all people. Psychological dimensions of food insecurity flow from unstable access. The inability of some households to have stable or sustained access to the food they need because of resource constraints means adults, primarily, may experience anxiety (*psychological effects*) about how to feed themselves and their children. Similarly, the goal of access to food by means that respect human *dignity* is sometimes not possible for food insecure households who must rely on *socially* unacceptable ways to meet their basic dietary needs.

1.4 COMMUNITY FOOD SECURITY

The most recent evolution in the conceptualization of food security has been a shift in focus by many, including many public health authorities, towards a community level focus. Although household and community food security are closely linked, the focus of household food security is physical and economic access to food (Power, 2005). Community food security shares these goals but also acknowledges the importance of economic, environmental and social aspects of the food system.

Community food security definitions have arisen in the last decade in response to the social and economic impact that the current dominant food system may have for individuals, households and communities. The assumption is that an understanding of food insecurity and the development of comprehensive strategies to address it can no longer narrowly focus on experiences at the individual level but must also address the role of food production and distribution in creating environments in which the full range of food security goals can be achieved. Community food security not only stresses sustainability of food systems but can extend its reach to issues of social justice, self-reliance and community economic development including an emphasis on organization and cooperation among all players in local or regional food systems.

The Ontario Public Health Association has become particularly vocal about the concept of community food security. Its 2002 position paper, *A Systemic Approach to Community Food Security: A Role for Public Health* outlines a very broad definition of the term. Its principles are based on the Ottawa Charter for Health Promotion (Canadian Public Health Association, Health and Welfare Canada, and the World Health Organization, 1986) which identified the importance of social determinants of health. The expanded definition encompasses issues in the economic, environmental and social aspects of the food system, issues of adequate incomes for consumers and producers, local and diverse food production, environmental sustainability, protection of local agricultural lands and fish habitat, widespread access to healthy food and food-based community economic development and social cohesion (OPHA, 2002).

The adoption of community food security, as a broader concept, by many public health authorities in Canada was in response to the apparent rise of several food-related problems in the 1990s (OPHA, 2002). Food banks became commonplace and obesity and diabetes rates were on the rise. A growing amount of food industry marketing was promoting highly processed, ready to-eat foods as a way for consumers to maintain their busy lifestyles (Nestle, 2002). At the same time, numerous environmental concerns within the food system were raised, including the need to preserve biodiversity, the health effects of chemical pollutants and the possible environmental impact of the genetic modification of foods.

1.5 FOOD SECURITY IS A GLOBAL CONCERN

In recent decades, demographic and economic growth have challenged the limits of economic, social, and ecological sustainability, giving rise to questions about food security at the global level. Despite technological advances that have modernized the conditions of production and distribution of food, hunger and malnutrition still threaten the health and well-being of millions of people around the world.

The food crisis is now affecting many countries across the world. Millions of people in dozens of countries are unable to afford the food they need, and malnutrition is on the rise. From Egypt to Indonesia, Haiti to Thailand, and across many countries in sub-Saharan Africa, increasingly vociferous public protests over

food prices or shortages have exploded; some governments even fear for their survival (Marc Lacey, 2008).

Access to food is still perceived by many as a privilege, rather than a basic human right, and it is estimated that about 35000 people around the world die each day from hunger. And even large number of people (mainly women, children, and the elderly) suffers from malnutrition. Far from disappearing, hunger and malnutrition are on the increase, even in advanced industrialized countries like Canada, where each year an estimated 2.5 million people depend on food banks. About 30 million people in the United States are reported to be unable to buy enough food to maintain good health. The continuing reality of hunger and the unsustainability of current practices, both locally and globally, make food security an essential concern.

According to the United Nations food and Agriculture Organisation's (FAO's) widely accepted definition,

"Food security", means that food is available at all times; that all persons have means of access to it; that is nutritionally adequate in terms of quantity, quality and variety; and that it is acceptable within the given culture. Only when all these conditions are in place can a population be considered "food secure".

To achieve lasting self-reliance at the national and household levels, initiatives must be founded on the principles of economic feasibility, equity, broad participation, and the sustainable use of natural resources.

In recent years, most of the research initiatives for food security have focused on four key components of the FAO's definition:

- **Availability** - Providing a sufficient supply of food for all people at all times has historically been a major challenge. Although technical and scientific innovations have made important contributions focused on quantity and economies of scale, little attention has been paid to the sustainability of such practices.
- **Accessibility** - The equality of access to food is a dimension of food security. Within and between societies, inequalities have resulted in serious entitlement problems, reflecting class, gender, ethnic, racial, and age differentials, as well as national and regional gaps in development. Most measures to provide emergency food aid have attempted to help the disadvantaged but have had limited success in overcoming and structural conditions that perpetuate such inequities.
- **Acceptability** - As essential ingredients in human health and well-being, food and food practices reflect the social and cultural diversity of humanity. Efforts to provide food without paying attention to the symbolic role of in people's lives have failed to solve food security problems. The dimension of food security is also important in determining whether

information and food-system innovations will be accepted in a country, given the social and ecological concerns of citizens.

- **Adequacy** - Food security also requires that adequate measures are in place at all levels of the food system to guarantee the sustainability of production, distribution, consumption, and waste management. A sustainable food system should help to satisfy basic human needs, without compromising the ability of future generations to meet their needs. It must therefore maintain ecological integrity and integrate conservation and development.

Unfortunately, a number of global economic and ecological problems continue to limit the prospect of global food security. World per capita cereal production (62% of least developed countries' [LDCs'] food consumption), for example, has been increasing only marginally in recent years. In fact, it has even been on the decline in sub-Saharan Africa and in Latin America and the Caribbean, particularly in low income countries struck by economic reforms, natural and other disasters, and other factors. The LDCs' dependence on net food imports has been growing and is set to continue to grow; currently, 104 of 132 LDCs are net importers, although imports have brought little relief overall (Singer, 1997). In sub-Saharan Africa, the number of chronically undernourished people more than doubled in 1970-91, notwithstanding that this region depended on food aid for half its total food imports. The population of this region is expected to more than double by 2020 (de Haen and Lindland, 1997).

Regional and global economic crises and chronic problems of underdevelopment make the situation particularly bad in the developing world. The overall mean per capita income of so-called black Africa, for example, is at its best, no higher than it was in 1960, and the region has less weight in the global economy today than it did in the 1960s (Brandt, 1977). Economic informalisation clearly accompanies an economy's disintegration. Real prices on domestic food markets have increased over the last few years and are set to increase further. To improve food security and global food supplies, policy scenarios of the 2020 Vision Initiative require increased exports of staple foods from industrialised countries to the LDCs (von Braun, 1997). But insufficient purchasing power among the world's poorest 800 million people remains a primary obstacle to such strategies.

Multilateral agreements in trade and investment further threaten the availability and accessibility of food for large segments of the world's population. Many experts agree that the reduction in world surpluses and the increase in international prices encouraged by the Uruguay Round the General Agreement on Tariffs and Trade pose an immediate threat to regions already suffering severe food insecurity. The duration of the threat is unknown.

Global prospects for improving food security are further threatened by environmental limitations on production increases, even in Green Revolution countries, and by growing poverty. In Asia, a large share of the population will soon be without access to adequate food supplies (Zarges, 1997). So, despite the

technical modernisation of food production and distribution, hunger and malnutrition still undermine the health and well-being of millions of people and actually seem to be worsening, particularly among low-income urban residents. This led Dr. Uwe Werblow(1997) of the European Commission in Brussels to recommend favouring production of more traditional food crops in rural areas and developing non-land-using production in peri-urban and urban areas.

The 2009 Global Hunger Index (GHI) report comes in a year in which the world is facing a series of crises-high and volatile food prices combined with financial crunch and economic recession. Unfortunately, these events pose the greatest risk to poor and vulnerable households, with often dire consequences for their food security.

This is the fourth year that the international Food Policy Research Institute (IFPRI) has calculated and analysed this multidimensional measure of global hunger. This series of reports records the state of hunger worldwide and country by country, drawing attention to the countries and regions where action is most needed.

As per the GHI worldwide progress in reducing hunger remains slow. The 2009 GHI has fallen by only one quarter from the 1990 GHI. Southeast Asia, the Near East and North Africa, and Latin America and the Caribbean have reduced hunger significantly since 1990, but the GHI remains distressingly high in South Asia, which has made progress since 1990, and in Sub-Saharan Africa, where progress has been marginal.

Some countries achieved net worthy progress in improving their GHI. Between the 1990 GHI and the 2009 GHI, Kuwait, Tunisia, Fiji, Malaysia. or Turkey had the largest percentage improvements. Angola, Ethiopia, Ghana, Nicaragua and Vietnam saw the largest absolute improvements in their scores.

Nonetheless, 29 countries have levels of hunger that are alarming or extremely alarming. The countries with the highest 2009 GHI scores are Burundi, Chand, the Democratic Republic of Congo, Eritrea, Ethiopia, and Sierra Leone. In most of the countries with high GHI scores, war and violent conflict have given rise to widespread poverty and food insecurity. Nearly all of the countries in which the GHI rose since 1990 are in Sub-Saharan Africa.

The world is currently experiencing both a food and financial crisis, which are linked in complex ways through their implications for food security, financial and economic stability, and political security. Because developing countries are more integrated within world markets through trade, investment flows , and remittances than in the past, the latest food and financial crisis have stronger effects on those countries than during previous crises .The impact is also stronger on the poor and hungry, many of whom are now more closely linked to the wider economy. The international Food Policy Research Institute(IFPRI) estimates that recession and reduced investment in agriculture could push 16 million more children into malnutrition in 2020 compared with continued with high economic

growth and maintained investments(von Braun,2008).Given that children’s under nutrition affects their physical and cognitive development and has implications for their earnings as adults(Hoddinott et al.2008), the crises will have long-lasting negative implications for people’s livelihoods and economic prospects long after prices come down and the financial crisis is resolved.

The International Monetary Fund (IMF) assessed the macro economic vulnerability of low-income countries to the global downturn using four areas of vulnerability: trade, foreign direct investment, aid, and remittances (IMF 2009).Countries were assigned a rank of high, medium, or low overall vulnerability, depending on how much they would be affected by the financial shock and recession.

Table -1.1: 2009 GHI by severity and overall vulnerability to the Global downturn

	≤ 4.9 (low)	5.0 to 9.9 (serious)	10.0 to 19.9 (serious)	20.0 to 29.9 (alarming)	≥ 30.0 (extremely alarming)
High Vulnerability	Albania	Armenia	Ghana	Angola	Burundi
	Croatia	Honduras	Lao PDR	Central African Rep.	Congo, Dem. Rep.
	Kyrgyz Republic		Lesotho	Djibouti	
	Moldova		Mauritania	Haiti	
			Mongolia	Liberia	
			Nigeria	Zambia	
			Sudan		
			Tajikistan		
Medium Vulnerability			Vietnam		
		Azerbaijan	Benin	Bangladesh	Chad
		Georgia	Cameroon	Burkina Faso	Eritrea
		Guyana	Congo, Rep.	Cambodia	Ethiopia
			Guinea	Comoros	Sierra Leone
			Malawi	India	
			Nicaragua	Madagascar	
			Sri Lanka	Mozambique	
				Niger	
				Pakistan	
				Rwanda	
				Tanzania	
Low Vulnerability			Togo		
		Uzbekistan	Bolivia	Guinea-Bissau	
			Gambia, The	Kenya	
			Mali	Yemen , Rep.	
			Myanmar		
			Nepal		
			Senegal		
			Uganda		

Source: Vulnerability data are from IMF (2009), Global Hunger Index-2009, Bonn, Washington D.C., Dublin, October 2009

The countries with highest levels of hunger are also among the most vulnerable to the global downturn (as per table-1.1).For two countries with extremely alarming levels of *hunger-Burundi* and the Democratic Republic of *Congo-vulnerability* to the global downturn is also very high. Diminished aid flows are the greatest source of vulnerability of Burundi, where as shrinking oil revenues pose the biggest threat to the Democratic Republic of Congo .The majority of countries with a GHI between 20 and 30 also show high or medium vulnerability to the downturn. This analysis also points to those countries that need measures to

prevent exacerbation of hunger in the future. Transition economies with a low 2009 GHI (that is, a relatively favourable hunger situation)-Albania, Croatia, Kyrgyz Republic, and Moldova-are highly vulnerable to the financial crisis and recession and need to take steps to prevent an increase in hunger.

Although the poor and the hungry are in general hurt the most by food and financial crisis, the exact impacts at the household level differ widely. Policy responses to the food and financial crisis must take these different impacts into account. Social protection strategies should be designed to mitigate the current shock for the most vulnerable, lay the foundation for sustainable recovery, and prevent negative impacts in the future. Nutrition interventions, such as school feeding programmes and programmes for early childhood and maternal nutrition, should be strengthened and expanded to ensure universal coverage.

It is clear, however, that the current situation of food crisis, financial crunch, and global recession has further undermined the food security and the livelihoods of the poor. The Food and Agricultural Organisation of the United Nations (FAO) projects the number of under-nourished people in the developing world to have increased from 848 million to 1,020 million from 2003-05 to 2009, mainly because of the food crisis and the world economic recession (FAO 2008; FAO 2009). Since the food price hike in 2007-08, prices have been falling, but in many countries they remain above their levels of a couple of years ago. Poor people are now exposed to additional stress stemming from the financial crisis as real wages and household incomes decline, jobs are lost, credit is cut, and remittances dwindle. The global recession has also increased uncertainty about the levels of future aid and funds for social protection, which are essential for avoiding hunger and starvation among the most vulnerable.

An important part of the solution to global hunger is reducing gender inequality. This report compares the 2009 GHI with the 2008 Global Gender Gap Index, which is made up of four sub indices: economic participation, educational attainment, political empowerment, and health and survival. The evidence shows that higher levels of hunger are associated with lower literacy rates and access to education for women. High rates of hunger are also linked to health and survival inequalities between men and women. Reducing gender disparities in key areas, particularly in education and health, is thus essential to reduce levels of hunger.

1.6 FOOD SECURITY PROBLEMS IN INDIA

India is a country of its people, being the world's largest democracy. Indians have had freedom of speech, religion, and the press even since the constitution was adopted on January 26, 1950. Within this democracy people still live everyday being food insecure.

"Food insecurity exists when all people, at all times, do not have physical and economic access to the sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life".

Poverty easily coexists with food insecurity and is the main cause of hunger and malnutrition. Poverty exists when there is lack of income, productive malnutrition, illiteracy, homelessness, inadequate housing, unsafe environment, social discrimination, and many more factors.

Although India has the potential to be producing enough food to its entire population, there have been many setbacks in the past decade including drought and natural disasters. The success or failure of crops is directly related to climate and weather.

In 1999 the Geographical Indicators of Goods (Protection and Regulation) Act was passed by the Indian government. Geographic indicators are defined as indicators that identify a good or originating in a territory where the given quality, reputation, or other characteristics of good essentially attributable to its geographic origin.

The economy is an important part in increasing growth from poverty and malnutrition. India's economy is slowly increasing due to many factors. India has become a part of the global economy. The Millennium Development Goals also known as MDG'S, were adopted in September of 2000 at the United Nations Millennium Summit. The MDGs place human development at the center of social and economic progress, and emphasizes the value of global partnership for development. The MDG agenda for reducing hunger and malnutrition included: strengthening governance of food and agriculture system at the global, country, and local levels, improving public investment for agriculture and rural growth, taking targeted steps to improve nutrition and health, and creating an effective global system for preventing and minimizing disasters. The goals set by the MDG were meant to be achieved by 2015, but the process is slow moving.

Although India has improved its economy over the years since it became a free nation, there are still many improvements that can be made by domestic policies. India inevitably has many problems all over the country. Cultural discrimination and religious tensions are problems that are most likely not going to be solved through domestic policies, but some policies instead have helped. As Mahatma Gandhi said "We must be the change we wish to see". In other words, we have to know what needs to be changed before changes need to be made. Not only should there be new domestic policies, there should also be a simple way to reinforce them. Food and nutritional security can be improved through developments in domestic policies. Although improving and adding domestic policies into the Indian constitution will not directly give the people of India food, it will provide them in the future with means necessary to help themselves and their families become nutritionally stable. The democracy of India is slowly maturing into a prosperous country. The matter of domestic policies is very critical in improving the number of Indians who are food insecure and live in poverty.

India has a long history of government interventions aimed at providing food security for all and fighting hunger, poverty and malnutrition among the vulnerable, especially weaker sections of the society including women and children. Successive governments, since independence, have declared their

commitment to hunger and food security which also finds a mention in the manifestos of every major political party. Yet hunger and malnutrition remain a stark reality for large numbers of people. The slow progress of achievement of basic human development indicators like infant mortality rates, low birth weights, the large numbers of under-nourished and anaemic women and children reflects this basic truth and points to the need for serious introspection. The statistics reveal that every third child in the country is born underweight, over 50 per cent of pre-school children are under-nourished and anaemia is prevalent among 50-90 percent of all pregnant women and 50-70 per cent of all children (ICMR AND NNMB quoted in the Tenth Five Year Plan, GOI).

Not only is the nutrition situation in India dismal as compared to that of other countries, it is significantly lower even than that in famine prone sub-Saharan Africa (Sen, Amartya). Nobel Laureate Amartya Sen attributes this to the persisting gender discrimination in the country. To quote Sen, "Since maternal undernourishment is causally linked with gender bias against women in general in India, it appears that the penalty India pays by being unfair to women hits all Indians, boys as well as girls and men as well as women (ibid). Gender specific nutritional statistics (Ramachandran, P. 2003) reveal that while mortality has reduced by 50 per cent and fertility by 40 per cent over the last four decades, reduction in under-nutrition in the country is only about 20 per cent. There has been no decline in under-nutrition in pregnant women. Over half of all women (57 per cent) suffer from some degree of anaemia, 39 per cent are mildly anaemia, 16 per cent are moderately anemia, and at least 2 per cent are severely anemia (NFH-3, 2004-05).

In 2000, 28.6 per cent of the population of India fell below the National poverty line (on the basis of monthly per capita expenditure), and approximately half of all children and one fifth of the total population were either moderately or severely malnourished (FAOSTAT). Despite sustained economic growth, poverty reduction and centrally-backed targeted policy efforts, India has made less progress in reducing malnutrition over the last decade than have other countries with comparable socio-economic indicators. In addition, regional disparities and economic inequalities within and between states have worsened, despite an overall decline in poverty during the 1990s.

In 2006, more than one third (57 million) of underweight children under five in the developing world lived in India. UNICEF attributes 50 percent of all childhood deaths in India to malnutrition. Hunger tends to be chronic rather than acute, affecting in particular women, adolescent girls, children under five, scheduled tribe and caste communities and people living in remote rural areas.

In 2001-2003 in average, 20 per cent of the total population of India was undernourished. The average calorie consumption marginally increased from 2370 kcal during 1990-1992 to 2470 kcal in 2002-2004. In addition to energy deficiency, a low diversity in the diet is a key issue. Thus, cereals contribute as much as 80 percent for the lowest income decile, compared to approximately 50 percent for the highest.

According to a World Bank report on malnutrition across India, undernutrition related to micronutrient deficiencies alone may cost the country \$2.5 billion annually owing to lowered productivity (Gragnolati et al,2005).A large share of India's population suffers some degree of iron deficiency(anaemia affects 74 per cent of children under the age of three, more than 90 percent of adolescent girls and 50 percent of all women) and a significant proportion suffer Vitamin A and iodine deficiencies(fewer than half of all households use iodized salt).Diseases involving diarrhoea are the second highest cause of death in India, after respiratory diseases .An estimated 700,000 children die annually and the total national infant mortality rate is 62 per 1000 live births. Half of the underweight children of India live in only six states (Maharashtra, Orissa, Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan) where child malnutrition levels exceed those of countries in Sub Saharan Africa.

To address widespread poverty, food insecurity and vulnerability, the Government of India (GoI) has since independence implemented multiple initiatives such as the Integrated Child Development Services (ICDS) Programme, the National Health Programme, and the National Rural Employment Guarantee Scheme and, in recent years, the National Plan of Action on Nutrition. A significant policy lesson has been that while macro-level food self sufficiency has been achieved, partly by establishing national systems for public grain procurement and distribution, as well as an increasing food production. However, this has proved insufficient to ensure micro-level food security for the poor.

The national food policy has been debated particularly as it relates to the question of whether India's general development is better served by ensuring national, state and farming household level 'self sufficiency' in food or whether the persistence of food insecurity despite adequate food availability, points to policy options geared more broadly towards the acceleration of 'pro-poor' growth. The slow progress on food security and nutrition related targets calls for the creation of more effective policies and programmes across multiple sectors.

The Global Hunger Index (GHI) is a tool for regularly tracking the state of global hunger and malnutrition developed by International Food Policy Research Institute (IFPRI) shows that India has made a slow progress towards ensuring food security. India could feed its entire population, but still India has among the highest numbers of hungry children in the world and placed in 66th position out of 88 countries in the GHI 2008.Nearly half of the population still suffers from chronic hunger and under-nutrition.

The results of India State Hunger Index 2008(constructed in a similar fashion as the GHI) highlight the continued overall severity of the hunger situation in India, while revealing the variation in hunger across states within India. It is indeed alarming that not a single state in India is either low or moderate in terms of its index score; most states have a "serious" hunger problem, and one state Madhya Pradesh, has an "extremely alarming" hunger problem. This fact is very much reflective from the following table:

Table-1.2: The Indian States at the Hunger Index and its underlying components

State	Prevalence of calorie under-nourishment	Proportion of underweight children below five years (%)	Under-five mortality rate(deaths per hundred)	India State Hunger Index Rank
Punjab	11.1	24.6	5.2	1
Kerala	28.6	22.7	1.6	2
Andhra Pradesh	19.6	32.7	6.3	3
Assam	14.6	36.4	8.5	4
Haryana	15.1	39.7	5.2	5
Tamil Nadu	29.1	30.0	3.5	6
Rajasthan	14.0	40.4	8.5	7
West Bengal	18.5	38.5	5.9	8
Uttar Pradesh	14.5	42.3	9.6	9
Maharashtra	27.0	36.7	4.7	10
Karnataka	28.1	37.6	5.5	11
Orissa	21.4	40.9	9.1	12
Gujarat	23.3	44.7	6.1	13
Chhattisgarh	23.3	47.6	9.0	14
Bihar	17.3	56.1	8.5	15
Jharkhand	19.6	57.1	9.3	16
Madhya Pradesh	23.4	59.8	9.4	17
India	20.0	42.5	7.4	

Source: India State Hunger Index Report 2008

1.7 FOOD INSECURITY STATUS OF ORISSA

Orissa, the 8th largest State in the country, has a landmass of 1, 55,707 sq. kms, which is 4.74% of India's landmass. As per 2001 census the State of Orissa is the 11th most populous state with a population of 368.05 lakh. The state's share in the National population is 3.58%. Among the backward population, the tribal population of the state is 81, 45,081 constituting 22.13% of the State's population and 9.66% of the tribal population of the country. The total SC population of the State is 60, 82, 063, which accounts for 16.53% of total population of the State and 3.65% of total SC population of the country.

The Orissa Human Development Report 2004 highlights that poverty in Orissa is overwhelmingly a rural phenomenon with significant regional differences within the state. The Southern and Northern regions are among the poorer areas. In Orissa food availability is fair comfortable yet food insecurity is chronic and the state has been placed in the category of "severely food insecure" regions. This has been attributed primarily to a vulnerable rural population with poor livelihood access or livelihoods susceptible to natural disasters. 48% of women suffer from nutritional deficiency while for illiterate women and for poor women this is much higher at around 55%. Over 60% of women and over 70% of children suffer from some degree of anaemia.

As per the estimate of Planning Commission, Orissa is the poorest among all the major states of the country. Through there is a substantial reduction in poverty from 47.15% in 1999-2000 to 39.90% in 2004-05, Orissa still has a high incidence of poverty. The following table shows the percentage of people below poverty line as estimated by Planning Commission for Orissa from 1973-74 to 2004-05 with rural urban break-up. It is observed from the table that while the percentage of

population below poverty line in rural Orissa is decreasing over the years, reduction in urban poverty is slower.

Table-1.3: Percentage of people below poverty line in Orissa

Year	Orissa(%)			India(%)		
	Rural	Urban	Combined	Rural	Urban	Combined
1973-74	67.28	55.62	66.18	56.44	49.01	54.88
1977-78	72.38	50.92	70.07	53.07	45.24	51.32
1983-84	67.53	49.15	65.29	45.65	40.79	44.48
1987-88	57.64	41.53	55.58	39.09	38.20	38.36
1993-94	49.72	41.64	48.56	37.27	32.36	35.97
1999-00	48.01	42.83	47.15	27.09	23.62	26.10
2004-05	39.80	40.30	39.90	21.80	21.70	21.80

Source: Planning Commission, Govt. of India

In food Security Atlas of Rural Orissa prepared by United Nations Food Programme, New Delhi and published by Institute of Human Development, New Delhi during 2008, Food Security Index (FSI) has been developed which shows the ranks of districts by outcomes of food insecurity. The FSI is a composite index covering three dimensions, i.e., Availability, Access and Absorption factors. Districts having higher Index value are considered relatively more food secure compared to districts with lower index values. All variables included in the index are for rural areas, unless otherwise specified. Status of Districts in terms of FSI is shown in the following table.

Table-1.4: States of Districts in Terms of FSI

Extremely Insecure	Severely Insecure	Moderately Insecure	Moderately secure	Secure
Kandhamal	Koraput	Dhenkanal	Kendrapara	Bhadrak
Gajapati	Sundargarh	Jharsuguda	Jajpur	Puri
Rayagada	Mayurbhanj	Ganjam	Balasore	Jagatsinghpur
Nabarangpur	Malkangiri	Sonepur	Bargarh	
	Sambalpur	Nayagarh	Khurda	
	Deogarh		Cuttack	
	Boudh			
	Keonjhar			
	Angul			
	Nuapada			
	Kalahandi			
	Bolangir			

Source: Food Security Atlas of Rural Orissa, 2008, UN Food Programme, New Delhi

The simple correlations between the food security outcome index and the food security index show a positive and significant correlation. In other words, while correlations do not tell the casual factors, they do tell the correlates to food insecurity. Districts that have the highest child mortality and underweight children are also the districts that have a high proportion of agricultural labourers (showing landlessness and poverty), low irrigation, low road connectivity and so on.

1.8 RELEVANCE AND SIGNIFICANCE OF THE STUDY

Despite steady economic growth and development in many parts of the world, a significant proportion of the global population continues to suffer from food insecurity and malnutrition. Every day 799 million people in developing countries-about 18% of the world's population go hungry. In South Asia one person in four goes hungry and in sub-Saharan Africa, the share is high as one in three. India is a home to the largest number hungry people 233 million while sub-Saharan Africa had 183 million, China 119 million, the rest of the East Asia and Pacific 14 million, Latin America 55 million and Arab States 32 million.MDG-1 recognises that hunger and food insecurity are the core afflictions of poor people, and specifically set out to halve the proportion of extremely poor and hungry people in the world.

Hunger is more than just a lack of available food. It is a problem of definition in food entitlement and deprivation in related essential services (health care, education, safe drinking water, and adequate sanitation).Food entitlement differs from food availability in that it indicates what a person can command with income and then consume, rather than what is available in the market. More than three quarters of hungry people are in rural areas of developing countries. About half live in farm households on marginal lands, where environmental degradation threatens agricultural production. Moreover, landlessness is rising in most rural and tribal regions, because of higher farming density and unequal land distribution.

In India today, over 200 million people are hungry and under-nourished, despite the striking progress in agricultural production, the accumulation of surplus food grain in government reserves and the wide network of government sponsored food assistance schemes. India is faced with enormous task of substantially reducing hunger and malnutrition by the year 2007, and is further committed to eradicating hunger by 2015.This would require a comprehensive macro-level effort reinforced by a steady undercurrent of significant micro-level initiatives. In order to expedite the positive effects of development and to arrest the adverse outcomes of hunger and poverty, a deeper and renewed understanding of hunger issues and the efficacy of food-based programmes must be sought.

Orissa is one of the poorer states of India. The people of Orissa largely depend on un-diversified agricultural economy. The poverty rate is 47% in the state. While some of the districts of the state are virtually self sufficient in food grains, there is significant portion of chronic food insecurity associated with particular areas and population groups. Inequalities are greater between the relatively better off coastal areas and more remote and inaccessible southern region. Regional differences are closely linked to differences among the social groups, with poverty among the castes and especially indigenous tribal people being strikingly higher than the other groups.

The pervasive and chronic food insecurity of poor communities in Orissa is captured by anthropometrics measures as over half of the children between 1 and 5 are stunted. Almost half of all adult women and 3 quarters of all children in Orissa

are under-nourished. The infant mortality rate of Orissa is higher than any other state in India. The child malnutrition in Orissa is also significantly higher than the national average. The Scheduled Castes and Scheduled Tribes accounted for 16.53 and 22.13 percent of the total population of the Orissa (2001 Census). Unlike the SCs, the STs are socially and economically more disadvantaged group due to their geographical and cultural isolation from the main stream of population. Habitation in remote difficult terrains and the practice of primarily subsistence forms of agriculture has led to a significant economic backwardness among tribal communities. The percentage of population below the poverty line among STs which was 47.15 in 1999-2000, stands 48.01% in rural sector and 42.83% in urban sector. (Sources: Eleventh Five Year Plan 2007-12 and Annual Plan of Orissa 2007-08, Vol.1).

It is well documented that most poor families in the world spend 80% of their total income on food grains. Further, people often fail to eat enough food only because they do not have sufficient purchasing power. This is more so in case of the Scheduled Tribes people of the country in general and Orissa state in particular. Banishing hunger and ensuring food security has been accepted as the primary responsibility of the Government which is repeatedly endorsed at various national and regional forums. As rapid growth of agriculture is essential for ensuring food security and alleviation of poverty, the food needs and supply of gaps in developing economies are thus considered as development problems. Keeping this in view, special efforts have been taken up by both Central and State Government to provide food security measures in the area where majority of people are in the brink of hunger and starvation. With this backdrop it was proposed to undertake a study of problem of food insecurity among the tribals of Orissa with the broad objective of finding the magnitude of food insecurity in tribal areas of Orissa and the food security measures extended by the Govt. and its impact on the vulnerable groups, and in this context the study has great relevance.

1.9 OBJECTIVES OF THE STUDY:

This study follows a livelihood-based approach to understand the vulnerability of the people to food security. The broad objectives of the study are:

- i. To assess the extent of food insecurity in the tribal area.
- ii. To identify the reasons of food insecurity and its related causative factors.
- iii. To measure the community approach to combat food insecurity without Government intervention and to examine the correlation between livelihoods based approach and food security.
- iv. To assess the role and activities of women in family food security.
- v. To measure the magnitude of availability, access, utilization and stability on food security measures taken up by the Government as well as NGOs.
- vi. To find out the difficulties of implementing food security schemes among the Tribals and to suggest corrective measures so as to ensure food security through different programmes among tribals.

1.10 METHODOLOGY

The present study is empirical and explorative in nature. Considering the objectives, the sampling procedure followed for the selection of the study area and the targeted population groups. Besides, different kinds of tools used for the empirical study have been indicated below.

1.10.1 Basis of selection of study area

The present study confined to the tribal areas of Orissa. Four districts covered under TSP area have been selected and out of these four districts, one block from each district has been selected as study area, such as

<u>District</u>	<u>Block</u>
1. Rayagada	Kashipur
2. Kalahandi	Lanjigarh
3. Nuapada	Khariar
4. Mayurbhanj	Udala

Considering the nature of the study, while selecting the study area (Districts/Blocks) three major aspects have been followed. Firstly, the area should have predominance of tribal population, secondly having higher proportion of families living below poverty line and thirdly preference from KBK districts. Also, for convenience while selecting the districts/blocks, if the area coming in maoist area, nearest to higher concentration of tribal population/percentage of BPL families have been taken.

1.10.2 Sample size and targeted respondents

For the present study, a total number of 240 sample tribal households spread over four sample blocks were covered. The break-up of the 240 sample tribal households was purposefully selected in such a manner that 60 each belong to each block comprising both SHG and non-SHG members, landless labourers, women-headed households, daily wage labourers, cultivators, agricultural labourers, artisans, etc.

Besides the sample tribal households, the empirical study also conducted covering 40 key stakeholders (10 from each block) comprising local PRI members, village traditional head, representative of SHG, representative of local NGO, member of Grain Bank, school teacher, officials of DRDA, ITDA, Block, Civil Supply Office, ICDS, etc. Also few Focus Group Discussions were organized.

1.10.3 Designing Tools

For the purpose of collection of data from primary source, separate tools were developed. For validating the tools, a pilot study was organized and expert opinions were obtained and based on which the tools were modified. Separate tools as designed for different target group of respondents are given below:

- i. For household survey of targeted sample tribal households, a set of questionnaire was designed as given in Appendix-I.
- ii. For interview of key informants, an interview schedule was designed as given in Appendix-II.
- iii. For Focus Group Discussion, FGD guidelines were prepared as given in Appendix-III.
- iv. For collection of village level requisite data, a schedule for sample villages has been prepared as given in Appendix-IV.

1.10.4 Data collection and interpretation

For the present study, requisite information have been collected both from secondary and primary sources.

Secondary data relating to the study have been collected from authentic sources like different offices connected with the study, government publications, related books, journals, magazines, web-searching, etc. Primary data have been collected conducting field survey through visiting/interviewing the targeted groups of respondents. The information as gathered were duly analysed, interpreted and presented in the report form. While interpreting quantitative as well as qualitative data, appropriate statistical techniques were followed.

1.11 DELIMITATIONS OF THE STUDY

- ♦ Although the study is confined to the state of Orissa, but it is limited to 4 C.D. blocks from 4 districts (one block from each district).
- ♦ Considering the nature of the study, the districts and blocks have been selected based on high concentration of tribal population, high proportion of BPL families, preference among KBK districts, etc. However, while selecting the districts or blocks, for convenience of the study team, the moist activity areas have been excluded.
- ♦ The study is limited to food security aspects like food availability and access (both physical and economic access); and other aspects like caloric value of food items and food absorption have not taken into account.

1.12 TIME SCHEDULE

The duration of the research study was for four months and the field study was undertaken during last quarter of the year 2009.

1.13 RESEARCH PERSONNEL AND TRAINING

The research project on “Magnitude of Food Insecurity in Tribal Areas and Food Security Measures Extended by Government and its Impact” was undertaken by a Research Team comprising of one Research Officer, two Research Assistants, six Statistical Assistants of SCSTRTI under the direct supervision of the Director of the Institute, SCSTRTI. Besides, one Technical Consultant was appointed to provide technical guidance in respect of data collection and report writing. Orientation

training on administration of schedules/questionnaires was given to the Research Assistants/Statistical Assistants for proper use of the research tools in collection of data at the field level and processing, compiling and tabulation of data.



CHAPTER – II

REVIEW OF RELATED LITERATURE

Food security problems exist globally. To get an insight into the problems and to bring better understanding of the problems and its crucial aspects, for the present investigation, it was felt necessary to go through some of the studies and related literature which are directly or indirectly concerned with the area. Some of them are outlined below.

2.1 FOOD SECURITY ISSUES IN GLOBAL LEVEL

■ **Suman jeet Singh (2009)** has conducted a research work in the field of global food crisis. The study highlights the various dimensions of global food crisis problems. His article: “Global Food Crisis: Magnitude, Causes and Policy Measures” has published in International Journal of Social Economics in the year 2009, vol.: 36. The purpose of the study was to find out the magnitude and various causes of the global food crisis. Further the aim of the study to suggest policy measures towards the solution of global food crisis regime. The findings are: Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food for a healthy and active life. Unlike nutrition, where treatment is guided by standard protocols based on human nutritional requirements, food security must take into account a wide range of factors such as climate, geography, socio-economic systems, and political structures. The challenges in achieving food security are to reduce poverty, increase food security without further degrading natural resources, and to cope with population growth, rising incomes and inflation, changing food habits, conversion of food crops into biofuels, increasing speculation in the commodity market and urbanization. To solve the problem of global food crisis, a coordinated multi-standard approach is needed. Practical implications of the study as suggested by the author are: Improving food security will help governments to achieve the millennium development goals (MDGs). Food security will not only help to eradicate hunger, it will also help to reduce child mortality and improve maternal health. Most importantly, it will help to break the cycle of poverty.

■ **According to World Development Report (2009)** three out of every four people in developing countries live in rural areas - 2.1 billion live on less than \$2 a day and 880 million on less than \$1 a day – and most of them depend on agriculture for their livelihoods. Poor people who are largely dependant on agriculture are most vulnerable to climate change. Increase in the instances of crop failures and livestock deaths have already resulted in huge economic losses undermining food security in parts of Sub-Saharan Africa. Global warming and increase in the green house gas emissions, deforestation for urbanization, and injudicious use of natural resources are the major causes for climate change; and they will directly or indirectly hamper agricultural production and productivity. This will in turn result in food insecurity and finally result in riots and unrest in different parts of the world. Thus at present, the world is not even on track of achieve the 1996 World Food Summit target of reducing the number of hungry people from 800 million to 400 million by 2015. Moreover, the world food prices have risen 45 per cent in the last nine months. Instances of food riots have already been reported from Egypt, Cameroon, Cote d'Ivoire, Senegal, Burkina Faso, Ethiopia, Indonesia, Madagascar, the

Philippines and Haiti. These reports of riots for food definitely forces us to think whether the respective ruling governments of these countries have actually developed appropriate policy measures for deterrence from such a threatening situation or if actually policies are in place, or whether there was a problem in the implementation part. This also might raise a question in our mind that whether we might see a similar situation in our own country too notwithstanding the well planned stockpile of policies that we have.

❑ **The Global Hunger Index (GHI) Report (2009)** shows that the world is facing a series of crises – high and volatile food prices combined with financial crunch and economic recession. Unfortunately, these events pose the greatest risks to poor and vulnerable households, with often dire consequences for their food security.

This is the fourth year that the International Food Policy Research Institute IIFPRI) has calculated and analyzed this multi-dimensional measure of global hunger. This series of reports records the state of hunger worldwide and country by country, drawing attention to the countries and regions where action is most needed. In this way, the reports support policy advice and advocacy work on both national and international platforms.

It is important to remember that this report offers a picture of the past, not the present. This calculation of the GHI is limited by the collection of data by various governments and international agencies. The 2009 GHI incorporates data only until 2007 - the most recent available. This GHI report therefore does not fully reflect the impact of recent increases in food and energy prices or the economic downturn.

The report does, however, highlight the countries and regions facing the greatest risk in the current context. Twenty-nine countries have levels of hunger that are alarming or extremely alarming. South Asia and Sub-Saharan Africa continue to suffer from the highest levels of hunger, despite some progress since 1990.

Many countries with high rates of hunger are also especially vulnerable to the consequences of the financial and economic crisis - a situation that puts the food security of poor people in these countries at great risk. High rates of hunger. Also tend to go hand in hand with gender inequality in areas such as economic participation, education, political empowerment, and health.

After decades of slow progress in combating global hunger, the number of malnourished people in now rising as a result of recent events. It is our hope that this report will not only generate discussion, but also stimulate action to overcome hunger, extreme vulnerability, and gender inequality worldwide.

❑ **Development as Freedom [Oxford University Press, 1999]:**

The crisis was reaching its peak at the very time of the FAO's world food conference. The concluding declaration was resounding enough: it pledged that "every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop their physical and mental faculties." In pursuit of this large aspiration, the conference proposed a three-point plan to prevent similar crisis in the future:

- The establishment of a world food bank. This would maintain continual access to around 10 million tones of stored grain that could be made freely available in time of need.
- A new International Found for Agricultural Development that would commit \$5 billion a year for ten years to improve tropical agriculture, not least at the level of subsistence farmers. This was more than three times the worldwide investment at that time(though it also represented barely 2% of annual global spending on the military)
- A new food forecasting system that would provide early warning of future crises.

The twelve-day congress in Rome was prominently reported in the world's media; leading figures(including Henry Kissinger, then United States secretary of state)jetted in to speak fine words, while promising little action. Nonetheless, emergency funding in 1974-76(not least by some of the newly oil-rich countries of the Gulf) helped improve the situation in some of the worst affected countries, including Bangladesh.

This reaction helped avert the potential of famine or ameliorate its affects. But little was done to invest in improved food production over the longer term. A food forecasting system was developed by the FAO, which remains effective to this day; but the idea of a world food bank made little progress, and the International Fund for Agricultural Development has never received the resources it needed.

Perhaps most revealing of all was that even at the height of the crisis,world food reserves were still adequate to meet all the demands-the problem was that the food was simply too expensive for the poorest to afford it.The important work of Amartya Sen helped transform understanding of this point,and of the connections between food insecurity,markets and poverty.The logic of Sen's pathbreaking argument was to highlight the importance of political freedom and the free flow of information as a crucial factor in the avoidance of famine.

❑ **World Bank, World Development Report 2008: Agriculture for Development, October 2007:**

The lessons of the early 1970s-both policy and intellectual-are still far from being learned. The problems of food insecurity today, albeit widespread and serious, are not yet of the scale of the early 1970s; but the very fact that they are happening, and on a global scale.

❑ **"The silent tsunami", Economist, 17 April 2008:**

What makes the current crisis even more worrying is the presence of two trends that were either absent or less pressing in the 1970s.First, the role of the now-globalised financial sector, where hedge-fund and other forms of speculation in the food-commodity markets have fuelled the price rises and in effect ,intensified hunger, poverty and instability. This is an unexplored aspect of the world's food problem that demands to be on the agenda of those attempting to solve it.

❑ **Rreport of the International Assessment of Agriculture Science and Technology for Development [IAASTD], 15 April 2008)**

The crisis of 2007-08 is unfolding in an era when the effects of climate change are intensifying-but where the full range of the impact of global warming is yet to be felt (see “A century on the edge: 1945-2045”, 29 December 2008). Even the existing adverse weather phenomena that have been experienced in recent years, that may relate to longer-term climate change (hurricanes, floods, droughts) are likely to be exceeded over the next decade or more. The consequences for food production and human livelihood will be enormous.

The one possible source of optimism in present circumstances is that citizens around the world will use the information and understanding at their disposal to work together to help create the momentum Amartya Sen has written: for serious, sustained action (both emergency and long-term) that can help put food in hungry stomachs. The absence of such action after the crisis of the early 1970s casts a shadow over the present. The fact that the challenge now is in key respects even higher makes the need to find a coherent and effective set of answers all the more pressing. The global public is indeed at the centre of this quest. As

“To eliminate the problem of hunger, the political framework of democracy and uncensored press can make a substantial contribution, but it also calls for activism of the public. Ultimately, the effectiveness of public action depends not only on legislation, but also on the force and vigour of democratic practice. There is a need to move ahead on different fronts simultaneously to eradicate hunger in the modern world. The public is not only the beneficiary of that eradication, but in an important sense, it also has to be its primary instrument. The first step is to see the public as the active agent rather than merely as the long-suffering patient”.

❑ **Fight Hunger : Walk the World campaign is a United Nations World Food Programme initiative:**

An alternative view takes a collective approach to achieve food security. It notes that globally enough food is produced to feed the entire world population at a level adequate to ensure that everyone can be free of hunger and fear of starvation. That no one should live without enough food because of economic constraints or social inequalities is the basic goal.

This approach is often referred to as food justice and views food security as a basic human right. It advocates fairer distribution of food, particularly grain crops, as a means of ending chronic hunger and malnutrition. The core of the Food Justice movement is the belief that what is lacking is not food, but the political will to fairly distribute food regardless of the recipient’s ability to pay.

❑ **Dictatorship and kleptocracy:** As the Nobel Prize-winning economist Amartya Sen has observed that “there is no such thing as an apolitical food problem”. While drought and other naturally occurring events may trigger famine conditions, it is government action or inaction that determines its severity, and often even whether or not a

famine will occur. The 20th century is full of examples of governments undermining the food security of their own nations-sometimes internationally.

When governments come to power by force or rigged elections, and not by way of fair and open elections, their base of support is often narrow and built upon cronyism and patronage. Under such conditions “The distribution of food within a country is a political issue. Governments in most countries give priority to urban areas, since that is where the most influential and powerful families and enterprises are usually located. The government often neglects subsistence farmers and rural areas in general. The more remote and underdeveloped the area the less likely the government will be to effectively meet its need. Many agrarian policies, especially the pricing of agricultural commodities, discriminate against rural areas. Governments often keep prices of basic grains at such artificially low levels that subsistence producers can not accumulate enough capital to make investments to improve their production. Thus, they are effectively prevented from getting out of their precarious situation.

Further dictators and warlords have used food as a political weapon, rewarding their supporters while denying food supplies to areas that oppose their rule. Under such conditions food becomes a currency with which to buy support and famine becomes an effective weapon to be used against the opposition.

Governments with strong tendencies toward kleptocracy can undermine food security even when harvests are good. When government monopolizes trade, farmers may find that they are free to grow cash crops for export, but under penalty of law only able to sell their crops to government buyers at prices far below the world market price. The government then is free to sell their crop on the world market at full price, pocketing the difference. This creates an artificial “poverty trap” from which even the most hard working and motivated farmers may not escape.

When the rule of law is absent, or private property is non-existent, farmers have little incentive to improve their productivity. If a farm becomes noticeably more productive than neighboring farms, it may become the target of individuals well connected to the government. Rather than risk being noticed and possibly losing their land, farmers may be content with the perceived safety of mediocrity.

As pointed out by William Bernstein in his book *The Birth of Plenty*: Individuals without property are susceptible to starvation, and it is much easier to bend the fearful and hungry to the will of the state. If a [farmer’s] property can be arbitrarily threatened by the state, that power will inevitably be employed to intimidate those with divergent political and religious opinions.”

❑ **The challenge of global food price rise**

- FAO, 2008a; 2008b;2008c: Global food prices have been rising rapidly since 2006.FAO’s Food Price Index increased by 8 percent in 2006 compared to 2005 and by 24 percent in 2007 over 2006.Between the first three months of 2007 and those of 2008,the FAO food price index rose by 53 per cent. Between January-April and January-April 2008, the FAO

cereal price index rose by 83 per cent. Over the same period, the index for wheat rose by 126 percent and that for rice by 81 per cent, while the index for coarse cereals registered a rise of 37 per cent. It has been noted by the FAO that this food inflation has pushed an additional 75 million into a state of hunger, bringing the estimated number of undernourished people worldwide to 923 million in 2007.

- Ghosh, 2008; FAO, 2008a: Several factors underline this sharp rise in food prices in the recent past. On the supply side, there has been a fairly long period of stagnation in productivity in cereals, arising in part from a decline in investment in agriculture in many countries under structural adjustment conditionalities and neoliberal policies which dictated a considerable reduction in the proactive developmentalist role of the State. Between 1960 and 1970, global grain yields grew by 2.6 per cent per year on the average. From 1990 to 2007, average annual yields rose by only 1.2 per cent (Jomo, 2008). This has led to a rather slow growth of global cereals production in recent years as compared to earlier decades. With global grain consumption rising faster than production, there has been substantial decline in stocks. The sharp rise in fuel prices has led to sizeable increase in costs of production. Further, the diversion of corn and vegetable oils to bio fuel uses and the accompanying diversion of cultivatable area to bio fuel crops constitute an important factor in the rise of food prices. A key message of the recently released FAO Report on State of Food and Agriculture, which focuses on bio fuel, highlights their role in fueling the food price rise. It states, "Rapidly growing demand for bio fuel feed stocks has contributed to higher food prices, threatening the food security of poor net food buyers in both urban and rural areas". There is also the fact of rising demand for grain resulting from increasing consumption of both grain and meat by sections of the population in countries experiencing rapid economic growth. Climatic changes and more frequent occurrence of extreme weather conditions have played a part in increasing the instability of supply. Finally, there is the role of speculation in commodity futures, especially heightened by the migration of speculators from financial markets in incipient crisis, in pushing up food prices.
- FAO, 2008a: Whatever may be the specific roles played by each of the above factors, the rise in food prices poses a new challenge for policy makers in developing countries. The rise in food prices has already led to both great suffering for the urban and rural poor in many countries as well as considerable social unrest. As already noted, around 75 million have joined the ranks of the 'food insecure' across the developing world. The poor households face increase food insecurity and nutrition deficits. They have to compromise on health, education and other non-food expenditures so as to achieve even survival levels of food intake.
- FAO, 2008a: Indian policy makers have taken several measures to curb the rise in food prices. These include restrictions on exports and on futures

trade in grains as well as efforts taken to improve agricultural productivity by renewed public investment in agriculture. It needs to be recognised that these policies need to be carried forward, and designed with great care. Most important, the proactive role of the State which played a critical role in the success of the Green Revolution between the mid 1960s and the mid 1990s needs to be reasserted, as against the more fashionable and facile view prevalent in recent times that trade and economic liberalization are the tools for achieving food security. As the background paper of the High Level Conference on Food Security organized by the FAO in Rome in June 2008 noted:

Global attention is also now focused on the plight of the poor and hungry. At the national level, governments, supported by their international partners, must now undertake the necessary public investment and provide a suitable environment for private investments, while at the same time ensuring that the most vulnerable are protected from hunger. They must initiate actions to ensure accelerated progress towards the permanent eradication of chronic hunger and malnutrition in the world, making this a fundamental element of their development policies and poverty reduction strategies. For as long as a large number of people remain hungry, the threat of repetition of the current crisis will remain.

❑ **Nobel Laureate Amartya Sen**

“There is no one “world food problem”. There are a number distinct failures, and the focal problem varies from region to region. The distinct problems call for different types of concern, even when there are common predicaments as well. In dealing with the nature, causation and remedying of hunger in the contemporary world, we cannot escape this basic recognition.”

“In analyzing hunger and its consequences, we have to take an adequately broad view of the process of acquiring food and achieving nourishment (and its economic, social and political antecedents), and also of the extensive consequences of nutritional deprivation on the people, the economy and the society”.

2.2 FOOD SECURITY ISSUES IN INDIA

❑ **Swaminathan’s Report on Food Security in Rural India**

Launched on February 20, 2009, State of Food Insecurity in Rural India tries to give a broad indicative picture of the level of food insecurity in different states of the country and the operation of the nutrition safety net programmes. The Report says that the number of undernourished people is rising, reversing gains made in the 1990s. Slowing growth in food production, rising unemployment and declining purchasing power of the poor in India are combining to weaken the rural economy,

“Food security has three components,” says Prof M S Swaminathan.” The first is food availability, which depends on food production and imports. The second is food availability, which depends on purchasing power. The third, food absorption, is a function of safe drinking water, environmental hygiene, primary health care and education.”

The report suggests priority areas of action to help achieve the national and Millennium Development Goal of reducing hunger and malnutrition. While examining the effectiveness of some of the important food-based interventions like the Public Distribution System (PDS), the Integrated Child Development Services (ICDS), and the Mid Day Meal Scheme (MDMS), report recommends following measures for improved performance.

- ♦ A universal PDS with uniform prices affordable to the poor.
- ♦ Allocation of food in PDS should be based on the number of consumption units in the household.
- ♦ Social safety net and agriculture production programmes.
- ♦ The study also highlights larger challenges of climate change and global food price rise. This report uses seven indicators, which directly or indirectly affect the food security and nutritional status of a person. These are based on amount of calories consumed, access to safe drinking water and toilets, women and children who are anaemic.

Composite Index of Food Insecurity of Rural India

According to the report, the composite index of food insecurity of rural India suggests that states like Jharkhand and Chhattisgarh are found in the ‘very high’ level of food insecurity, followed by Madhya Pradesh, Bihar and Gujarat. The better performers include Himachal Pradesh, Kerala, Punjab and Jammu and Kashmir. Andhra Pradesh, Madhya Pradesh, Bihar, Gujarat. Karnataka, Orissa and Maharashtra, Andhra Pradesh and Karnataka find themselves in the category of high food insecurity- a reflection perhaps of the manifestation of the agrarian crisis in the states and its consequent negative impact on the health and well-being of the rural population.

“Nutrition security involving physical, economic and social access to balanced diet, clean drinking water, sanitation and primary health care for every child, woman and man is fundamental to giving all our citizens an opportunity for a healthy and productive life,” said Professor MS Swaminathan, Chairman, MSSRF. To address availability, access and sustainability concerns, the report calls for reorienting India’s economic policies to provide adequate support for agriculture and its vast rural population. Also, appropriate attention should be paid to conservation of common property and biodiversity resources and rehabilitation of wastelands.

Challenges Ahead

Apart from policy shortcoming and failure of delivery mechanisms, there are other challenges potential enough to create hurdles in ensuring food security. These will have long term negative impacts on our prospects of ensuring food security.

- In states like Orissa, Himachal Pradesh, Bihar, Karnataka and Tamil Nadu, Net sown area has been declining. In the process prime agricultural land may shift to non agricultural uses.
- Land degradation has been fairly high in Nagaland, Sikkim and Himachal Pradesh. In some northeastern states, wasteland accounts for 50 percent of the total geographical areas.
- Overexploitation of groundwater has reached danger levels in Punjab, Haryana and Tamil Nadu.
- Some States (Madhya Pradesh for example) show high poverty levels at present, yet natural resources are sufficient to sustain agriculture in future. In other States (Punjab and Haryana) livelihood access is good at present, but natural resources endowments for future sustainability are below par.
- In States like Bihar and Uttar Pradesh, there is an urgent need to diversify livelihoods to non crop and non agricultural enterprises.

The successful implementation of NREGA and the Right to Information Act indicates that the climate is conducive for a far-reaching, right-based legislation to eliminate hunger and deprivation.

In its latest election manifesto the Congress pledged to “enact a Right to Food Law that guarantees access to sufficient food for all people, particularly the most vulnerable sectors of society.” It further pledged that “every family below the poverty line either in rural or urban areas will be entitled by law to 25 kg of rice or wheat per month at Rs. 3 per kg”. Also promised were subsidized community kitchens in all cities for homeless people and migrants with Central government support. And, “along the lines of NREGA we will enact a National Food Security Act.”

Such an act will meet a goal set by Mahatma Gandhi for independent India: ‘the god of bread’ should bless every home and hut. There is an unacceptable extent of under-nutrition and malnutrition in India, which occupies a shameful position in all indices relating to hunger. A large segment of the chronically undernourished belongs to families of small and marginal farmers and landless labour. The position is serious in the case of women and children. Because of maternal and foetal under-nutrition and mal-nutrition, nearly every fourth child born is under-weight. Such low birth weight children suffer many handicaps including impaired cognitive ability. Thus, poor children are denied even at birth an opportunity for the full expression of their innate genetic potential for mental and physical development. This is inexcusable.

The successful implementation of the NREGA and the Right to Information Act indicates that the climate is conducive for a far-reaching, right-based legislation to eliminate hunger and deprivation. Supreme Court rulings reinforce the view that the right to food is basic to achieving the right to life enshrined in Article 21 of the Constitution. One of the terms of reference the UPA government set in 2004 for the National Commission on Farmers was to “work out a comprehensive medium-term strategy for food and nutrition security in the country in order to move towards the goal of universal food security over time.” The NCF held consultations all over India on the pathways to a nutrition-secure India. Its report was submitted on October 4, 2006.

By definition, food security involves every individual gaining physical, economic, social and environmental access to a balanced diet that includes the necessary macro- and micro-nutrients, safe drinking water, sanitation, environmental hygiene, primary healthcare and education so as to lead a healthy and productive life. The food should originate from efficient and environmentally benign production technologies that conserve and enhance the natural resource base of crops, farm animals, and forestry, inland and marine fisheries.

Such a holistic definition requires concurrent attention to the following aspects, too:

Food availability: The government has initiated programmes to increase food production, such as the Rashtriya Krishi Vikas Yojana, the Food Security Mission, and the National Horticulture Mission. Food availability should relate to macro- and micro- nutrients. In addition to protein calorie undernutrition, there is severe micronutrient malnutrition, as for example, of iron, iodine, vitamin A, vitamin B12 and zinc, leading to hidden hunger. The National Horticulture Mission provides an opportunity to introduce horticulture remedies to nutritional maladies. All that is needed is mainstreaming the nutritional dimension in designing the horticulture programme in each agro-climatic area.

The other areas which will need attention are: widening the food basket by including local grain varieties like ragi, jowar, and millets in the public distribution system; the promotion of community gene, seed, food and water banks in each village, and the establishment of community kitchen organized years ago in Pune. These are particularly effective in combating malnutrition in urban areas. The widening of the food basket by including millets, legumes and tubers, which have greater tolerance to adverse conditions, is important in context of climate change.

Food access: The Congress manifesto has said 25 kg of rice or wheat would be provided each month economically underprivileged families at Rs. 3 a kg. With the initiation of the National Rural Employment Guarantee Act (NREGA), the minimum purchasing power for food security is being created in families living below the poverty line. By adopting the support price policy recommended by the NCF, that is, C2(total cost of production) plus 50 per cent as has been done in the case of wheat this year, the purchasing power of small and marginal farmers can be improved. Universalisation of the PDS is an idea whose time has come, since there are adequate grain stocks.

Food absorption: Here, the schemes dealing with drinking water, sanitation, environmental hygiene and so on should be brought together. The Total Sanitation programme and the Rajiv Gandhi Drinking Water Mission, if implemented with community participation through panchayats and nagarpalikas, will make a difference in promoting effective absorption of food in the body, particularly among children.

With such a holistic approach, chronic, hidden and transient hunger can be addressed in a cost effective and meaningful manner. To provide political oversight and to foster a pan-political approach in matters relating to food security, the NCF recommended the establishment of a National Food Security and Sovereignty Board under the chairmanship of the Prime Minister and with members drawn from different political parties, Union Ministers and Chief Ministers. Such a political support and oversight body should become an integral part of legislation.

❑ **NREGA, Food Security & Human Development**

The national Rural Employment Guarantee Act, which came into force in February 2006, now covers all of rural India. It has generated over 450 crore person-days of employment, a major share going to women and Scheduled Caste and Scheduled Tribe families. Over Rs. 35,000 crore has been paid as wages. The priorities of the work to be undertaken include watershed management and water conservation, drought-proofing, flood protection, land development, minor irrigation and rural connectivity. Such work is important to strengthen the ecological foundations of sustainable agriculture. The NREGA is probably the world's largest ecological security programme. A major weakness has been the absence of effective technical guidance and support from agriculture and rural universities and institutes. The union Ministry of Rural Development has taken steps to achieve convergence of brain and brawn, by enlisting the support of Ministries and Departments. Such convergence of expertise for sustainable development will help to enhance farm productivity without causing ecological harm.

What is now needed is a convergence for human development at NREGA sites. India occupies the 132nd position among 179 countries in the UNDP's 2009 Human Development Index. That position may worsen. NREGA workers represent some of the most economically and socially underprivileged sections. Mostly, these workers are undernourished, with poor opportunities for healthcare. Hence, there is need to bring about a convergence of child care, nutrition, health (Rural Health Mission) and education programmes at NREGA SITES. Education can be imparted in the evenings, using the joyful learning techniques available in computer-aided literacy programmes. Such a convergence in sustainable development along with convergence in human development will be creditable.

There is also a need to raise the self-esteem of NREGA workers, making them feel proud of the fact that they are engaged in checking eco-destruction. Due recognition could be given to the NREGA groups that have done outstanding work in water harvesting, watershed development and soil healthcare with "Environment Saviour Awards". This will help spread awareness of the critical role NREGA workers play. To begin with, there could be 10 awards covering distinct agro-climatic zones, each worth Rs. 10 lakh. Since these will be group awards, the money could be divided among the workers, depending on how long they have worked. The NREGA will then help to improve both food security and human development index.

There are uncommon opportunities to erase India's image as the land of the poor, hungry and illiterate. To utilise them, an important requirement is a change in the mindset from patronage to partnership and from undervaluing the human resource to considering our youthful population as our greatest asset.

❑ **Community Food Security Systems Report On The State of Food Insecurity in Rural India (2008):**

Triggered as an immediate response to the prevailing ground level situation, several decentralized initiatives have proved to be effective at the microlevel in mobilising the community and building their capacity to effectively devise mechanisms for food and

livelihood security. Community Foodgrain banks, constitute one such initiative. There is a sizeable literature on CFB experiences of governments and NGOs in India. Government efforts in promoting CFBs have been largely in partnership with local NGOs, since a very high level of community mobilization is necessary. Initiatives spearheaded by NGOs reflect a range of approaches. A few examples are highlighted below:

- In Gujarat, the Self-Employed Women's Association (SEWA) has worked in several villages, especially in the rain fed areas, on agricultural improvements through self-help groups. Women organised into cooperatives undertake collective farming and afforestation. They raise nurseries for improved saplings, as well as high quality seeds, for sale through the SEWA *Gramin Mahila Haat*. They have also facilitated the setting up of community-managed grain banks, based on the principle of 'local procurement and local employment'. A nominal membership fee is charged by way of grain contribution. Excess requirement of grain is met by purchase from the local market at wholesale prices. An active member of the grain bank is linked with livelihood generation activities of SEWA.
- Gramin Vikas Trust(GVT) under a DFID(Department of Funding for International Development, UK)sponsored programme has undertaken extensive watershed development in the States of Gujarat, Rajasthan and Madhya Pradesh, and promoted foodgrain banks in the watershed villages through self-help groups(SHG).
- Seva Mandir in Udaipur district of Rajasthan State has been working with the community for removal of encroachments from common lands through collective effort, and subsequent protection and development of village commons. There is assured fodder and fuel security for the community, and a gradual build up of the Gram Vikas Kosh(Village Fund),administered by a representative village institution, which interfaces for linking with government's food support schemes.
- Deccan Development Society (DDS) in Medak District of Andhra Pradesh (AP) has demonstrated successful regeneration of dry lands through appropriate agriculture done by women's groups. There is emphasis on indigenous cropping and organic processes. Women's groups also manage foodgrain banks in several of these villages setting an example of an alternative PDS with locally consumed grain (sorghum) and not rice or wheat that is distributed under the government PDS.
- Centre for Environmental Concerns (CEC), also operating in AP, has facilitated SHG of women to bring fallow land taken on lease under sorghum cultivation and store the produce in a foodgrain bank for use by them later.
- The Academy of Development Science (ADS) has been setting up grain banks in Raigad and Thane Districts of Maharashtra. The initial corpus of grain is given as a loan to the community, to be repaid in four years. From the fifth year, the bank is expected to become self-sustaining and measures have to be put in place to ensure this.
- In Orissa, Atragamee, Antyodaya and Gram Vikas, to name a few NGOs, have nurtured self-help groups and built up a corpus of food grain through village contributions. Groups are linked with National Bank for Agriculture and Rural

Development (NABARD), Integrated Tribal Development Agency (ITDA) , Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) and others, to access a matching grant and avail of other support including storage facilities. A rather unique and perhaps stand-alone example of a Grain Bank that has developed without any external support or facilitation is the Darfal Grain Bank in operation in Sholapur district of Maharashtra. The bank came into existence in the mid 1960s, at the initiative of people influenced by socialist thinking, to stop exploitation by moneylenders. The village has about 500 households of mixed communities. One has to contribute grain (*jowar*) to become a member shareholder. The accounts are audited, and the management committee elected once in three years decides the terms of lending. Dealing with excess grain etc. The grain bank deals only in jowar and continues to find relevance and thrive even as there are three PDS outlets in operation in the village itself. Attempts at replication by neighbouring villages have, however, ended in failure.

- The M.S. Swaminathan Research Foundation (MSSRF) has been developing models of Gene-Seed-Grain-Water Bank continuum based on sustainable use of available resources for food and livelihood security. Starting with mobilising the village community around the CFB initiative to address the immediate problem of food scarcity, over time attention has moved to improving production and productivity of the land, microwatershed management, facilitating formation and capacity building of SHGs to undertake microenterprise activities (e.g. value-added products from rice, millet), development of village fund for common village development activities, to ensure sustainability of the mechanism, and address other issues pertaining to improving their quality of life. Awareness generation on government programmes for food security through Entitlement Cards listing out the various schemes, has led to instances of these programmes being accessed, e.g. old age pension.

Apart from these, there are a range of efforts to improve agriculture, afforestation, watershed development, which are intended to lead to improved foods and livelihood security. It is important to note however that such initiatives have limited outreach, given the constraints of capacity and resources. The grain bank scheme of the government unfortunately suffers from the weakness of not providing for storage facility for the food grain. Extracted from “*Report on the State of Food Insecurity in rural India*”, M S Swaminathan Research Foundation & World Food Programme, December 2008.

□ **Somkuwar, A. (2009): Food Security-Role of Gram Sabha is Crucial**
Gram Sabha and Food Security

The emerging food scenario underlines the role of Gram Sabha- the most powerful constitutional approaches of democracy at the grassroots level. The Gram sabha can act efficiently to allow the needy to exercise right to food. The most important aspect is that the Gram Sabha draws powers from the Constitution. Its decisions are unchallenged. The food security issue can be effectively and efficiently addressed by active and empowered Gram Sabha, which is expected to be in a leading role in implementation mechanism of the proposed national food security act.

There are a number of reasons how and why Gram Sabha could bring about food security in the needy households. The security of Below Poverty Line families by the Gram Sabha and review the BPL list is the responsibility of Gram Sabha. The monitoring of functioning of fair price shops and making them accountable to the people are the two major tasks Gram Sabha can easily do. Besides, the needy can be helped to exercise their rights to food. The malfunctioning of fair price shops has often been reported. The Gram Sabha can keep a strict vigil over the fair price shops. The right to information is another tool to bring about transparency in stocks. Although, the Government of India has prescribed a system to involve Gram Sabha and Gram Panchayat in food distribution system but educating the Gram Sabha about responsibilities, rights and duties need to be taken up on a war footing. Verification of ration cards by the Gram Sabha and Gram Panchayat is possible with basic trainings either by voluntary sector or directly through the state-sponsored training sessions.

❑ **Role of Women in Family Food Security**

- Deshpande, S.S. (2002): Survey conducted in some villages of Bhopal district showed that 13% rural women are aware of the importance of Soya bean and its nutritional potential, while 18% use it in the form of papad / badi.
- Singh, A. and Pandey, H. (2004): Nearly 80% of farm families are using pokhal, boiled rice, mudi, chura daily in their diet from breakfast to dinner. Almost all the families used pokhal 2-3 times daily. About 98% families were using parboiled rice because of the belief that it was easily digestible and helped in cooling the stomach.
- Yadav, Y.S. and Juneja, C.J. (2000): It is understood that as many about 1,50,000 women are engaged in fish processing houses located in all the marine fish producing centres in the country. Pivotal role in the furtherance of aquaculture. According to some estimates, women comprise 26% of the labour force in agriculture. As far as fisheries is concerned, there is no separate data available but it could be taken that the percentage is almost the same.
- Mishra, S., Sadangi, B.N., Pandey, H. and Das, A.B. (2008): In their article based on a study on “Role of Women in Family Food Security” found that farm women are involved in supply of different type of family food security, as shown below
 - (1) Supply of green leaves through collection of wild green leaves from outside, cultivation of greens in homestead land, etc.
 - (2) Supply of vegetable through kitchen garden. Vegetable fields, etc.
 - (3) Supply of milk and milk products through rearing dairy animal, home made milk products, etc.
 - (4) Supply of animal protein through eggs of hen/duck reared by women, fishes cultivated women, collection of fishes from local water resources, collection of snails, frogs and crabs, etc.
 - (5) Enhancement of shelf-life/storage by fermentation of cereals and pulses, preparation of dry food items, methods for extension of shelf life of fruits and vegetables, frying of pulses, preparation of dry food mixes, preservation of food items, etc.

- (6) Supply of fruits and roots through collection from outside, production at home stead land, etc.
- (7) Supply of other foods through mushroom cultivation, mushroom collection, honey from bee keeping, etc.
- (8) Mobilisation of resources for food through labour work, part time economic activity, selling of farm products and bi-products, etc.

❑ **Hunger Free India-Components of Action Plan**
NCF (2006): “Making Hunger Free History”
Reform of the Delivery System:

The overall approach should be life-cycle based and involve appropriate supplementation programmes. The delivery systems relating to all nutrition support programmes must be structured on the basis of the life cycle starting with pregnant women and 0-2 infants and ending with old and infirm persons. Elected Panchayats and local bodies should be involved in restructuring the delivery system.

Policy must promote the establishment of Community Grain and Water Banks, involving Panchayats and other local bodies. This programme should be based on the principle ‘*store grain and water everywhere*’.

Eradication of Hidden Hunger:

Hidden hunger caused by micronutrient deficiencies must be addressed based on natural food cum food fortification approaches. Food and nutrition security needs to be addressed through integrated complementary strategies, namely dietary diversification, supplementation, food fortification and community and public health measures.

New Deal for the Self-employed

The menu of income-earning opportunities for the self-employed need to be enlarged. This calls for a paradigm shift from microfinance to livelihood finance. SHG Capacity Building and Mentoring Centres should be established.

Enhancing the Productivity and Profitability of Small Holdings:

Agriculture is the backbone of the livelihood security system for two-third of India’s population and farmers constitute the largest proportion of consumers. The smaller the farm, the greater is the need for marketable surplus in order to get cash income. Hence, improving small farm productivity, as a single development strategy, can make the greatest contribution to the elimination of hunger and poverty.

Designing and introducing a Food Guarantee Act:

A national Food Guarantee Act, combining the features of the Food for Work and Employment Guarantee Programmes, will represent a win-win situation both for producers and consumers. Following up on the NREGA and recognizing that the right to food and the right to livelihoods are intimately related, we need to move towards a comprehensive ‘Food Guarantee Act’.

Building a sustainable food security system will require attention to both the availability of sufficient stocks and who control them. A National Food Security and Sovereignty Board with the Prime Minister as Chairperson can help to keep sustainable food security and sovereignty as a National Common Minimum Programme (in the same manner that UN MDGs represent a global common minimum programme for Human Security).

Extracted from “Making Hunger History”, chapter II, Fifth and Final Report, NCF, Vol. I, October, 2006.

❑ World Food Programme (2006): Report on Food and Nutritional Security: Role of Food Assistance in India:

Issues for Future Action:

• Improved Data and Statistics

It is often contended by experts and users of statistics that the figures and numbers are not entirely reflective of reality. Proper data is critical for good decision- making and for formation of public opinion. An issue that was discussed at the State Consultations was the availability of adequate nutritional and consumption data and their veracity. It is possible that sometimes the official figures may be over-estimates and there are vast differences in the figures between different departments or agencies. In a similar vein, erroneous reporting at the field level can often misguide project and programme implementers. For instance under or over reporting of attendance figures in Anganwadi Centres or in Mid-Day Meal schools lead to wrong impression about the impact of the particular scheme.

• Adopting a Community-based User-friendly Nutritional Approach

This could involve promoting practices of eco-forestry, strengthening local production systems and consumption of locally produced nutritious foods, building community-based nutrition security systems by organizing groups of people and mobilizing them to manage and implement food banks etc. Such a strategy is a potential bridge between top-down and bottom-up approaches to development, and can effectively act as a short-term safety net during emergencies and seasonal shocks as well as integrate food and nutritional measures into longer-term development objectives.

• Instilling a Holistic ‘Life Cycle Approach’ Mentality in the Policy Environment and Among Implementers

Achieving a heightened linkage among various schemes and synergies among parallel departments, agencies and field-level local organizations, would be a primary step toward establishing the life-cycle concept. Starting from the poorest of the poor, i.e. with Antyodaya and Antyojana schemes, the coordinated and effective delivery of services to pregnant and nursing mothers, infants, children, adolescents, adult men and women, old, destitute and differently abled groups, would ensure life-time social protection from hunger and starvation to the poor.

- **Overcoming Operational Inefficiencies and Administrative Impediments**

Close monitoring and supervision of programmes, special attention to the quality of food and the regularity of supply would ensure high performance of food schemes. Some of these operational issues can be resolved by adopting local low-cost alternatives to expensive transportation, supply and storage facilities.

- **Decentralisation and Involvement of Rural Institutions**

This was identified as an issue of the highest priority. Devolution of power to Panchayats, Gram Sabhas and other relevant local bodies would lead to better responsiveness from community members and would lend a voice to the beneficiaries in the entire process. Apart from community mobilization, this should ideally lead to a greater transparency and accountability in the programmes. Non-governmental organizations and similar voluntary organizations need special mention, as they can effectively catalyse processes of community mobilization and offer leadership and guidance to remote, alienated communities, where there is a perceived vacuum of direct government interventions or other significant sources of support.

- **Focus on the Service Provider at the Delivery Point**

Further capacity building of Anganwadi workers, teachers at MDM centres etc. and provision of incentives to functionaries such as increased wages, rations, etc. are critical to the improvement of the quality of services at the grassroots levels.

- **Raising Public Awareness**

Generating consciousness about the importance of food measures and their availability and presence is a serious issue. The distribution of Household Entitlement Cards, which would tell households what, how much and where their entitlements are, would be a good strategy.

- **Focus on Intra-Household Inequities and Gender Issues**

This is a social issue that can be addressed through education and empowerment in the long-term, but introduction of small short-term measures such as informal education of adult women and adolescent girls, micro-credit to women entrepreneurs, counseling household members about gender disparities, etc. can be effective.

- **Multi-party Coordination and Collaboration**

It is obvious that in the heterogeneous socio-economic landscape, with numerous differences among the poor and food insecure and their locations, a portfolio approach and an active and dynamic partnership among governments, donors, relief agencies, civil society organisations, voluntary organisations, NGOs, etc. is of supreme importance.

- **Innovative Food Security Initiatives: The Food for Work Programme in Tribal Areas**

WFP (2007): Blessed with bountiful natural wealth and rich in human resources, the forested and tribal dominated areas in the country are, nonetheless, among the poorest

and severely food insecure areas. They are characterized by degraded natural resources, stark poverty, chronic hunger, high indebtedness and heavy out-migration. For the sustainable development of some of these regions, Tribal Development Programmes are being implemented in the States of Chhattisgarh, Jharkhand and Orissa. These were launched by the State government with the objective of ensuring household food security and improving livelihood opportunities based on the sustainable and equitable development of natural resources. The programme is supported by the International Fund for Agricultural Development (IFAD) and the World Food Programme. The latter provides food assistance for a Food For Work (FFW) component.

Given the abysmal poverty in the area, it is no surprise that the FFW activity has become enormously popular. Payment for FFW includes a cash component, 2.5 kg of grains and 200 grams of pulses. The programme, based on the performance of manual labour, is self-targeting towards the poor. It provides 70 days of work in the lean season when food insecurity is high.

Participatory Processes and Community Ownership

The point of departure in this programme, compared to other government programmes is the philosophy that the poor should be enabled to overcome their own poverty. This principle is woven intrinsically into all processes. To this end the project stresses participation of the poor, community ownership and capacity building. Food is given to the community and they take decisions. Inclusion of the most marginalised begins with the planning. All activities are discussed in the gram sabha. The project facilitates them in prioritising, planning and implementing the plans. Valuable lessons in collective decision making, negotiating, handling conflicts and targeting are being learnt.

The most marginalised are for the first time in their lives finding a platform for articulating their views. It is for this reason, that most community assets created under the programme are strategically located so as to benefit poor hamlets and households and there is a significant impact on the food security of a desperately poor population living in remote and inaccessible areas.

Food for Work Activities

Tribal communities share a symbiotic relationship with forests that are a major source of food, nutrition and livelihoods. Empowering the community to engage in forestry related activities that include plantation, rehabilitation of degraded forests, harvesting of Non Timber Forest Produce (NTFP) and other activities like stem dressing, weeding, fire-management measures, and forest road repair has led to increase in yields of NTFP and enhanced food availability.

The list of activities taken up under FFW is very long and *inter alia* includes land development, earth bunding, stone building, gully plugging, pond construction and restoration, backyard plantations, plant nurseries, digging wells and building canals, trenches and check dams. These activities have helped to irrigate large areas. For the first time people have been able to get a second crop of wheat apart from the single rain fed crop of rice that they used to harvest earlier. Many farmers have cultivated vegetables for

the first time in generations. *'Neither our fathers nor our grandfathers ever cultivated these crops'* they say with obvious pride.

In some villages, as for instance in Semra in Chhattisgarh, under the food for work programme, villagers have almost literally moved mountains. They dug a well that has been lined with massive boulders they hauled from nearby hills. Apart from providing work and food for a large number of the poorest, it has helped ease the problem of drinking water for them and their livestock.

Enhanced Production and Productivity

There has been a big boost in production in many villages. In village Sagasai, in Jharkhand, as a result of new sources of irrigation and water harvesting, paddy production through transplantation has become possible. This has doubled yields, enhanced incomes and ensured food security.

Demand driven approaches that give play to people's initiatives throw up as many diverse ways of doing an activity as the activities themselves. They draw on people's intuitive knowledge of local conditions, their creative urges and their innate skills in a way, no top-down programme can. In village Ghangari, in Chhattisgarh, bunding was taken up around fields of the poor. In addition, they had the innovative idea of planting *arhar* (a pulse rich in protein) on the bunding. This not only utilised the land which would otherwise have gone waste, but the roots of the plant also strengthened the bunding which would otherwise have got washed off in the rains, because the field was situated on a slope.

Impact on Migration and Indebtedness

Ask anyone what has been the impact of the food for work programme, and the first answer would be 'people do not go hungry anymore'; the second will certainly be, 'people have stopped migrating for work'. Migration has stopped almost totally, particularly distress migration to far off areas. In Ranchi, the capital city of Jharkhand it is tragic, if common, to see hordes of adolescent tribal girls standing by the main square, waiting for labour contractors who entice them with promises of employment. In project areas migration of adolescent girls from the Ho tribe used to be a common phenomenon. This has almost stopped now. The impact has not been even across the project areas, but there is little doubt that it is one of the most important positive outcomes of the programme.

The other significant impact has been on indebtedness. In fact, the main 'casualty' of the project has been the moneylender. Self help groups have mushroomed in the project areas and as their lending operations expand, the business of the moneylender has been shrinking.

Strengthening of Local Institutions

The most intangible, but the most critical impact of the food for work programme, and one that holds the promise of sustainability, has been the strengthening of people's grass-roots level institutions; particularly the Gram Sabha and SHGs.

The lessons learnt by the village community in decision making, handling, distributing and monitoring the food for work activity has had visible positive spin-offs on other programmes. The impact on improved functioning of the ICDS and schools, for example, is in evidence in several villages.

Women's SHGs have become vibrant vehicles of change. They are empowering women in many remarkable ways. For one, they are helping women to become financially sound through income-generating activities. The enhanced availability of water has enabled them to take up diverse income-generating activities. Some women have taken up vegetable cultivation; others are engaged in aquaculture. At the same time SHGs have helped women develop confidence to challenge regressive social norms and attitudes.

The projects are being implemented in the most poverty stricken belt of India. Wherever there is poverty, there is alienation and strife and the projects areas has been the site of frequent violence. In all this the food for work programme has proved invaluable in building trust and confidence and has taken care of the primary need of people – food with dignity. In other words a young labourer, it is a *vardan* or a “gift of God”.

❑ Quantifying the Effects of Food Crisis in India: Some Alarming Statistics

- FAO, 2008: India is home to more than 230 million undernourished people- highest for any country in the world. More than 27 percent of undernourished population globally live in India
- UNICEF, 2008: 43 per cent of children (under 5 years) in the country are underweight. The figure is among the highest in the world and is much higher than the global proportion of 25 percent and also Sub-Saharan Africa figure of 28 percent.
- Ministry of Health, Govt. of India, 2007: The proportion of stunted children (under-5) at 48 per cent is again among the highest in the world. Every second child in the country is stunted.
- (UNICEF): 30 per cent of babies in India are born underweight.
- (UNDP): Malnutrition accounts for nearly 50 per cent of child deaths in India.
- (Min. of Health, 2007, Govt. of India, 2007): Every third adult (aged 15-49 years) in the country is reported to be thin (Body Mass Index less than 18.5).
- (Ministry of Health, 2007): 70 percent of children (under-5) suffer from anemia. More than 80 percent don't get vitamin supplements.
- (Ministry of Commerce, 2007, Govt. of India): While the general inflation declined from a 13-year high exceeding 12 percent in July, 2008 to less than 5 percent by the end of January 2009, the inflation for food articles doubled from 5 per cent to over 11 per cent during the same period
- (UNICEF May, 2008): More than 1.5 million children in India are at risk of becoming malnourished because of rising global food prices.

Source: WFP (World Food Program) India 2009

2.3 FOOD SECURITY ISSUES IN ORISSA

■ **World Food Programme (2006):** Report on Food and Nutritional Security: Role of Food Assistance in India.

Recommendations for Orissa:

Recommendations for strengthening departmental performance of delivering food assistance programmes:

- ICDS-The ICDS is universal in Orissa, yet severely malnourished children should be identified on priority basis. Fortified blended food should be provided in a uniform manner for 300 days in all ICDS programmes. The government should provide buildings for each Anganwadi Centre within 5 years.
- Public distribution System – PDS scheme currently reaches 4.3 million families; Antyodaya reaches 0.5 million of the poorest household among BPL families; Annapurna reaches 64,800 beneficiaries.
- The Government of Orissa should adopt decentralized procurement of foodgrains for which the Government of India should bear the entire associated actual expenditure.
- Salt should be a part of the ration commodities of PDS. All families entitled to concessional foodgrains should be assured appropriate rations cards within 6 months.
- Rural Development – Implement Sampurna Gramin Rojagar Yojana (JGRY + EAS) in most food insecure villages.
- Education- Introduce cooked meals in all schools; Civil Supplies Department to provide budget to advance food transportation costs: goddowns managed by women's SHGs and Mahila Mandals could be constructed from WFP generated funds.
- Integrated Tribal Development Projects – Godowns and grain banks to be constructed in the selected blocks, utilizing infrastructure funds or through a special sanction under Article 235 scheme of the Ministry of Tribal Affairs.
- Establishing Village Food Banks – Grain banks should be established in as many villages as possible with active women's SHGs and watershed committees.
- Construction of Godowns – Godowns should be constructed on a priority basis.
- The Community Forest Management Groups should be assisted to taken up nutritional gardening / plantation under Income Generation Programmes.

■ The agriculture Developments Economics Division of the FAO of the UNO in its study in October-2007 vide paper 07/28 have studied the vulnerability of food insecurity of the State Orissa. They have taken four districts of the state ranging from different regions. They have found out that the proportion of labouring rural house with an average daily energy intake of less than 1800 kcal (less than 75% of the recommended energy level) was found to be 43% in the coastal plains, 57% in the Northern Plains and 69% in the Eastern hills. The vulnerable group category with greatest prevalence of extreme food insecurity was rural artisans house holds. (73%), while more than half of all marginal farming house holds emerged as the most affected by under nourishment (hunger), particularly in the district of Gajapati and Nuapada where it is found that 56% and 80% respectively are under nourish that is less than 1800 kcal. Per day. In India 51.3% People were BPL in

1977-78. Around 36% of people were BPL in 1993-94. It came down to 26% in 1999-00. Further it came down to 22% in 2004-05. It reveals that around 14 crore population crossed the hypothetical barrier within the span of 11 yrs. This means 1.2 crore per year. If we look to population growth, annual average growth of India is 1.4. Taking account of 1.1 billion population of India, there is increasing population of people of BPL by 20 lakhs per annum. The actual estimate of BPL families came down from 1993-94 to 2004-05 is 0.74% per annum. This would further accumulate the BPL numbers. (The Hindu Business Life) This was also raised by Mahes Vyas MD and CEO of Centre for Monitoring Indian Economy in different way.

Proportion of chronically hungry house holds (not getting enough food to eat during any month of the year) has declined by 0.5% in rural areas and 0.1% in urban area. Seasonal hungry house holds (getting enough food only in some months of the year) have also come down from 16 per thousand in rural areas and 3 in per thousand in urban house holds.

■ **Manipadma Jena, (2008) :** Rayagada district in Orissa suffers periodic outbreaks of disease brought on by food scarcity, unemployment and lack of healthcare services. The tribals lack the “voice” to demand accountability from policymakers and service delivery from other agencies. Health authorities in the south Orissa district of Rayagada admitted that 6,000 patients of cholera and gastro-enteritis were treated from the Kashipur block alone in August this year. The state government blamed the outbreak on the consumption of contaminated meat and water from stagnant pools.

Various independent fact-finding teams however found that the cholera epidemic that swept the flood hit tribal hinterlands in Orissa was not a health and sanitation issue alone. The Centre for Environment and Food Security, New Delhi and Sanhati, a federation of 65 non-governmental organisations (NGOs) found that the disaster was mainly due to lack of employment, healthcare services and basic amenities coupled with a corrupt administration.

This is not the first time that Orissa’s administration has been on the defensive over Rayagada’s endemic food insecurity situation. Earlier there were the “starvation deaths” in 2001 followed by the Supreme Court’s intervention on the right to food. Lack of food and nutritional security has been at the centre of severe gastro-enteritis and diarrhea outbreaks and deaths among tribal communities in the state since long, so much so that the substitute “foods” during the scarcity monsoon seasons are accepted as part of the indigenous people’s culture. Absence of Community ‘Voice’ “Voice” is about poor people expressing their interests in an effort to influence government priorities.

Accountability exists when those who frame and implement a society’s rules are answerable to the people who live under those rules. Enhancing voice and accountability could lead to a reduction in poverty, greater ownership and pro-poor policies.

This report sought to find out from the affected district, with specific regard to food security, the existence of communities’ “voices”, that may be seeking to ensure “accountability” in service delivery of the many different schemes being executed to

ensure food security by policymakers, elected representatives, state and grassroots bodies and NGOs. Do the communities or civic groups convey their “voice” to elected policymakers, government executives, NGO functionaries; which methods have been tapped; who have been the conduits of community voice—women’s collectives, village level grain bank groups, village panchayats; how often have the accountability organisation themselves, sincerely, facilitated expression of community voice? Voice of the Gram Panchayat. The gram panchayat is meant and best equipped to act as the voice of the tribal people. The gram sabhas in tribal areas should, according to the Panchayat Extension to Scheduled Areas Act (PESA), be approving schemes, programmes and projects for social, nutritional and economic development prior to these being taken up for implementation by the panchayat at the village level. “In reality, all of these programmes are decided by the central and state governments. The gram sabha only has the power to select the beneficiaries, and approve the village committee leader in whose name the village works will be sanctioned. Here too, anti-socials and local political goons play the decisive role. The beneficiaries are decided in the panchayat office, regardless of gram sabha decisions, depending on the commissions paid”, says social activist Achyut Das in his book *Governance in Tribal Areas: Myths and Truths*.

Other practices too render the gram sabhas practically irrelevant and powerless. Social activist Badal Tah says that in Rayagada gram sabhas are almost never held on the due date. This is deliberate so that a second gram sabha can be organized without proper information and the decisions are passed by the proxy provisions. The sarpanch’s signature taken as a mere technicality or sometimes even demanded.

While the one-third reservation of panchayat seats for women evidently has contributed little to truly empower the tribal women of Rayagada, they are getting relatively more empowered as collectives, and are proving to be effective.

This report has been made possible through financial support from German Agro Action and the European Union, Manipadma Jena (manipadma_jena@yahoo.co.in) is a journalist based in Bhubaneswar.

❑ **Orissa languishes at bottom in hunger parameters**

Despite all pro-poor policies and much-hyped food programmes of the State Government, Orissa continues to languish at the bottom rung of the hunger parameters.

The State stood 66th along with countries like Nigeria and Kenya in the Global Hunger Index-2008 measured by the International Food Policy Research Institute. This reflects the complexity of food insecurity in the State.

The state has been witnessing deficit vis-à-vis requirement in food grains since 1998-99 which zoomed to a high of 39 percent in 2002-03. In 2007-08 it, however, posted a surplus of six percent but for a brief proud as the State again slipped to deficit category in 2008-09 due to devastating floods. A likely drop in foodgrains production looks certain this kharif season due to erratic monsoon.

According to the last BPL census, around 65 percent rural households here could not earn even Rs. 500 per month. Such a meager earning reflects how severely vulnerable the rural populace is to food insecurity especially during the time of climate induced shocks or high inflationary situations.

The Government has launched Rs. 2-a-kilo rice scheme in 2008 to stamp out hunger from the State. But it is more a populist move than a sincere policy decision. For instance, the FAO study on food insecurity in Orissa has revealed that marginal farmers, through BPL households, stand bereft of it due to de-facto expulsion. This assertion stands vindicated when National Sample Survey finds that a whopping 4.3 lakh rural households have been categorized as marginal farmers in the State, but only 24 percent avail the benefits with the rest 64 percent not having any ration card at all.

Casual labourers are also vulnerable. Here too, the eligible beneficiaries stand 1.8 lakh but only 23 percent avail the BPL cards. The reason is they are mainly migrants and mostly on move.

Besides, discouragement by the Government to cultivate coarse cereals like ragi, suan, kandula, and horsegrams has led to non-availability of seeds.

As a result, it snatched a cheap and nutritious food security opinion of the vulnerable farmer and labourer households in tough times.

❑ Overview of Causes of the Agricultural Crisis in Orissa

Rainfall dependency: Declining rainfall levels and increasing fluctuations have had an adverse effect on Small Scale Farming Households and Marginal Farming Households who strongly depend on rainfall. Orissa's 10th Plan target was to exceed treatment of 0.5 million ha of watershed area but the implementation has not been effective.

Irrigation potential not realized: Currently the full irrigation potential in Orissa has not been realized because of inadequate investment, poor infrastructure and ineffective management. Roughly 28 percent of Orissa's gross area planted with crops actually benefits from irrigation at present, compared to the existing potential for irrigation of about 40 percent.

Lack of food security focused research: To date, investment in adaptive research targeting the most food insecure farmers (e.g. crop varieties and planting materials such as ragi, suan, kandula, horsegram and drought proof upland rice varieties, etc.) in low potential areas is negligible due to perceived low commercial returns.

Absence of comprehensive vision: Ongoing institutional reforms and high management turn over in the Department of Agriculture have hampered the emergence of a lasting vision for the sector and its effective implementation.

Lack of rights to common resources and land: Lack of access to common resources such as grazing as well as titles to own land.

Little progress in horticultural development: GoO estimates that, from a production perspective, the coverage potential of horticultural crops may be around 2 million ha from the present level of 320,000 ha.

Lack of attention to animal husbandry: While milk production increased in the late 1990s, the livestock population as a whole actually declined. Orissa imports significant levels of poultry and eggs from Andhra Pradesh.

Declining fish production: Available data suggests that Orissa's fish production has actually declined in recent years due to the limited use of improved technologies, underinvestment in research and lack of infrastructure, etc. Currently, more than 40,000 tons p.a. of fresh water fish is imported from Andhra Pradesh to Orissa as per official estimates.

❑ **Poverty in Orissa-A Life Long Disease** **Orissa in the World Atlas**

In September, 2000, the United Nations Millennium Summit brought out a historic resolution signed by 189 world leaders to reduce hunger and poverty from the world by 2015. This resolution was based on specific goals called Millennium Development Goals (MDG). Foremost among eight was "eradicate extreme poverty and hunger" India is also represented in this forum.

One third of the world's poor live in India. According to the international poverty indicator of US\$1/day, the total number is 350 million, although the official statistics (1999-2000) place the number at 260 million or 26% of the total population. Around 22% populations in India live Below Poverty. The extreme poverty and hunger in India castling in villages where Bharat lives. (72% of total population lives in 5,50,000 lakh odd villages). Orissa among all Indian states tops the incidence of poverty. Orissa emerges in the forefront of all states signifying all indices. Poverty is a condition created by unjust society, denying people access to and control over the resources that they need to live a fulfilled life. Orissa also lives in villages. Almost 85% percent of people live in rural area of the state. Around 42% people in Orissa and 47% people of rural Orissa live below poverty. Although it is the state of mineral resources and it spreads over 6000 sq km area. Iron ore occupies 33% of India's reserve, Bauxite is 50%, Nickel is 95%, chromite is 98% and coal is 24%. Still it is difficult and stupendous task to eradicate poverty in Orissa.

We have succeeded in eradicating poverty by 2.92% between 1993-94 and 2004-05. But in absolute number the people below Poverty has increased from 140.9 lakes in 1993-94 to 151.75 lakes in 2004-05 in Orissa against all India figure of decreased from 2440.31 to 2209.24 lakes. This failure is achieved in time span of eleven years. So the annual average rate of reduction is only 0.265%. With this speed of progress it would be very ambitious projection made by NIRD, that Orissa would have only 4.63% of people below poverty line by 2011-12. This critical analysis has given focus and try to justify that Eradication of Poverty in Orissa is uphealing task.

❑ **Intensive Interventions Project (IIP) for Sustainable Food Security : Koraput, Orissa – An UNWFP Initiative**

The tribal belt of Orissa, comprising the undivided districts of Kalahandi, Bolangir, Phulbani, Ganjam and Koraput, presents an anomalous situation of resource-rich region that is nevertheless characterized by underdevelopment and famine. The last few decades of ‘development’ in these areas have seen repeated droughts leading to famines and steady impoverishment of the bulk of the population, particularly the tribals. The Agricultural Census of Orissa confirms that foodgrain production has been consistently high, with average production figures exceeding the Orissa and National averages. In spite of this, these districts have become notorious for recurrent food crises and starvation deaths. Erratic and insufficient rainfall is only one of the causes of the food insecurity that has become endemic to this region. Tribal communities have over the centuries, evolved systems of dry land farming on hill slopes (known popularly as shifting cultivation or locally as *bogodo or podu*), and several strategies to cope with situations of drought and scarcity. The *podu* system is designed to extract the maximum out of the soil without affecting its productivity. A complex system of soil and water management, and fallow periods of up to 30 years allowed regeneration of the biomass. Flexible crop schedules were practiced and drought resistant varieties of traditional crops were cultivated, with nutrients being returned to the soil through the process of burning. Multicropping of cereals, pulses, and vegetable varieties that could be harvested one after the other for a continuous period of about 6 months, and an extensive system of rainwater storage through tanks ensured food security.

Food security in tribal communities was not solely agriculture dependent. The tribal economy is closely linked with the forests and the combination of shifting agriculture and forest products is known to have ensured food security in the past. An important feature of the traditional tribal economy and culture was that the maximum sustainable yield was maintained both in the forests and the fields through a complex system of rules, regulations and beliefs that did not allow over-exploitation.

Objectives of the Project

- Vulnerable group feeding for women and children to prevent severe malnutrition through VGF.
- Improved education for girls through school feeding.
- Creation of individual and community assets through (FFW).
- Short-term provision of food during shortfalls through FFW and grain banks.
- Pre-positioning commodities to enhance coping mechanisms during crises/disasters.
- Organising women’s groups to strengthen food based initiatives in the community and sustain these initiatives.
- Strengthening of ICDS in the selected areas through capacity building and training.
- Food for education through an intensive campaign for identifying out-of-school children (selected villages) and enabling them to mainstream into the formal school system.

The project, which is being implemented through the NGO Agragamee covers 58 villages in two blocks, i.e. Dastmanpur and Lakshmipur. It will later be extended to two other blocks, Semiliguda and Pottangi. For effective implementation, the villages have been grouped into clusters of 3-4 villages each.

The IIP components include:

- Strengthening the ICDS in the selected area through capacity building and training.
- Food for Work for creating community assets and individual assets for sustainable livelihoods as well as infrastructure development.
- Food for education through intensive campaigns for identifying out-of-school children in the selected villages and mainstreaming them into the formal school system.
- Development of and support to grain banks at village and cluster level through the provision of community level storage.

The Intensive Interventions Project has been able to address the issue of food security in the project areas to a large extent. Through the Food For Work programmes undertaken with the active participation of, and in accordance with, the needs of the people, the project has been able to create community assets, improve the productivity and food security of these villagers. The areas of land development along with the provision of irrigation canals have encouraged the farmers to switch over to cash crops and other vegetable cultivation. The setting up of grain banks has added to further strengthening their food security and also freeing them, to a large extent, from the shackles of the moneylenders. Community participation in the decision-making process in the villages has been a major change, which was also strengthened by the formation of Women's Self Help Groups. As regards the Food for Education component, the programme has been currently launched in two GPs of Semiliguda block.

■ **Danida Livestock Development Project: Koraput, Orissa**

"Reduction of poverty is the fundamental principal of Danish development assistance." Danida's policy on support to livestock development is related to this general policy. Because livestock is an effective conduit for intervention in rural systems, it is a useful sector through which to pursue this fundamental objective. In this context, the ultimate target groups for Danida are:

- The poorer category of livestock owners-usually found among small scale farmers and landless livestock owners.
- Women-the main tenders of most livestock categories and a disadvantaged group in and of themselves.

The strategy is to target these selected groups with appropriate. gender-sensitive initiatives designed around integrated livestock systems, and so make an impact on rural poverty.

Table- 2.1 below shows how the livestock development projects endeavour to intervene in various types of poverty and food insecurity.

Table – 2.1: Categorizing Poverty and Anti-poverty Interventions of Danida Livestock Development Project

Poverty Problem	Poverty Intervention by the Danida Livestock Projects
Low productivity (chronically low returns) Vulnerability(transitorily low returns)	<ul style="list-style-type: none"> - Introduction of income generating activities both in the livestock and agriculture sectors. - Animal health interventions. - Creation of safety nets. - Women Self Help Groups/Village Committees.
Dependency (inability to work)	<ul style="list-style-type: none"> - Social or family welfare (the livestock projects do not have interventions for this category).

Source: Modified from Devereaux, S. (2001) Can Social Safety Nets Reduce Chronic Poverty? IDS Sussex

Basic Measures to Reduce Poverty

Measures to alleviate poverty have many dimensions and vary in different situations. UNDP 1997 states that there is a general agreement that for many of the poor, the most immediate route out of their poverty will be through interventions that directly target the poor and UNDP has identified three main ways to reduce poverty:

- By increasing food consumption or reducing expenditure on food through increased production of staple foods.
- By stimulating demand for the labour or services of the poor through growth in the economy.
- By promoting sustainable improvements to the livelihood of the poor.

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CHAPTER-III

PROFILE OF THE STUDY AREA

The study is confined to four districts in the State of Orissa, i.e. Rayagada, Kalahandi, Mayurbhanj and Nuapada. Out of these four districts one C.D. Block from each districts, v.z., Kashipur, Lanjigarh, Udala and Khariar respectively have been taken as study area. Besides total 10 villages were covered so as to collect the primary data from the targeted groups of respondents. Brief profiles in respect of the selected districts, blocks and villages are outlined below.

3.1 RAYAGADA DISTRICT

Rayagada was a part of the then Vizag District of Madras Presidency till 31.03.1936. After formation of Orissa it was a Sub-division of Koraput district and became an individual district on 2nd October 1992 during the reorganization of the districts by the Government of Orissa. Rayagada, one of the southernmost districts of Orissa is unique not only for its glorious natural beauty but also for its rich cultural heritage. Filled with Sky-kissing mountains, gurgling rivers and streams rich mineral resources justify its identity through primitive tribal cultures. It assumed the status of a Revenue district emerging out of a sub-division under Koraput district. Having its headquarter at Rayagada it has two sub-divisions like Rayagada and Gunupur. Rayagada sub-division has four blocks, namely Rayagada, Kolnara, K.Singpur and Kashipur while Gunupur sub-division has seven blocks, namely Gunupur, Gudari, Ramanaguda, Bisam Cuttack, Muniguda, Chandrapur, and Padmapur. All the blocks are tribal/sub-plan blocks. There is a single Municipality functioning at Rayagada, 2 NACs functioning at Gudari and Gunupur. There are 171 Gram Panchayats, and 2664 revenue villages in the district.

The district of Rayagada with an area of 7073 sq.kms. is located in South-Eastern part of Orissa. It lies between 19° 0' to 19° 58' N latitude and 82° 54' to 84° 2' E longitude. It is bounded by Gajapati district on the East Koraput district on the South-west Kalahandi and Kandhamal districts on the North and Andhra Pradesh state on the South. A map of Rayagada district is shown in Map -1.

3.1.1 *Kashipur C.D. Block*

Kashipur C.D. Block is one among 11 C.D. blocks of Rayagada district and situated at a distance of 80 kms. from the district headquarters Rayagada. This block has an area of 481.86 Sq.kms. with 449 villages of which 416 inhabited and 33 un-inhabited and total numbers of 28844 households.



Map - 1

Socio-economic indicators in respect of the district Rayagada and Kashipur C.D. block have been given in the Table – 3.1.

Table – 3.1 : Socio Economic Indicators of Rayagada District and Kashipur C.D. Block

Item	Unit	Magnitude	
(A) GEOGRAPHICAL INFORMATION		Rayagada District	Kashipur Block
Total Area	Sq.k.m.	7073	481.86
Total Forest Area	Sq.k.m.	2812.33	-
Reserved Forests	Sq.k.m.	771.62	-
Unclassified Forests	Sq.k.m.	0.96	-
Demarcated Protected Forests(DPF)	Sq.k.m.	1147.19	-
Un-Demarcated Forests	Sq.k.m.	0.0	-
Forest under Reserve Deptt.	Sq.k.m.	892.56	-
(B) ADMINISTRATIVE SET-UP			
Subdivisions	No.	2	-
Tahasils	No.	4	-
C.D. Blocks	No.	11	-
Towns(including census towns)	No.	5	-
Municipalities	No.	1	-
N.A.Cs	No.	2	-
Police Stations	No.	12	-
Grampanchayats	No.	171	-
Villages	No.	2667	449
a) Inhabited	No.	2467	416

b) Uninhabited	No.	200	33
Fire Stations	No.	4	-
Assembly Constituencies	No.	4	-
Normal Rainfall	m.m.	1521.8	1466.5
(C) DEMOGRAPHIC FEATURES (2001 Census)			
Total population	No.	831109	121086
Male	No.	409792	59867
Female	No.	421317	61219
S.C. Population			
Total	No.	115665	24216
Male	No.	57265	12043
Female	No.	58400	12173
Percentage to District total population	%		
S.T. Population			
Total	No.	463418	74646
Male		224908	36668
Female		238510	37978
Percentage to District total population	%		
Rural population			
Total	No.	715702	121086
Male	No.	351158	59867
Female	No.	364544	61219
Percentage to total District population	%	86.11	100
Urban Population			
Total	No.	115407	-
Male	No.	58634	-
Female	No.	56773	-
Percentage to total District population	%	13.89	-
Sex Ratio	Females per 000' Male	1028	
Density of population	Per Sq. k.m.	118	-
Decadal Growth rate	%	16.40	-
Total Workers	Nos.	363184	62111
Main Workers	Nos.	249909	35466
Marginal Workers	Nos.	149275	26645
Cultivators	Nos.		
Agrl. Labourers	Nos.		
Literacy Rate			
Persons	%	36.15	33.98
Male	%	48.18	46.32
Female	%	24.56	22.35
S.C.	%	35.18	-
S.T.	%	20.23	-
Population in the age group 0-6 yrs.			
Persons	No.	145493	24924
Male	No.	73451	12596
Female	No.	72042	12328
(D) INFRASTRUCTURE FACILITIES			
Education(DSH of Rayagada 2005 as on 2004-05)			
Primary Schools	No.	1422	168
Teachers	No.	2962	265
Students	No.	88612	12892
Middle Schools	No.	154	20

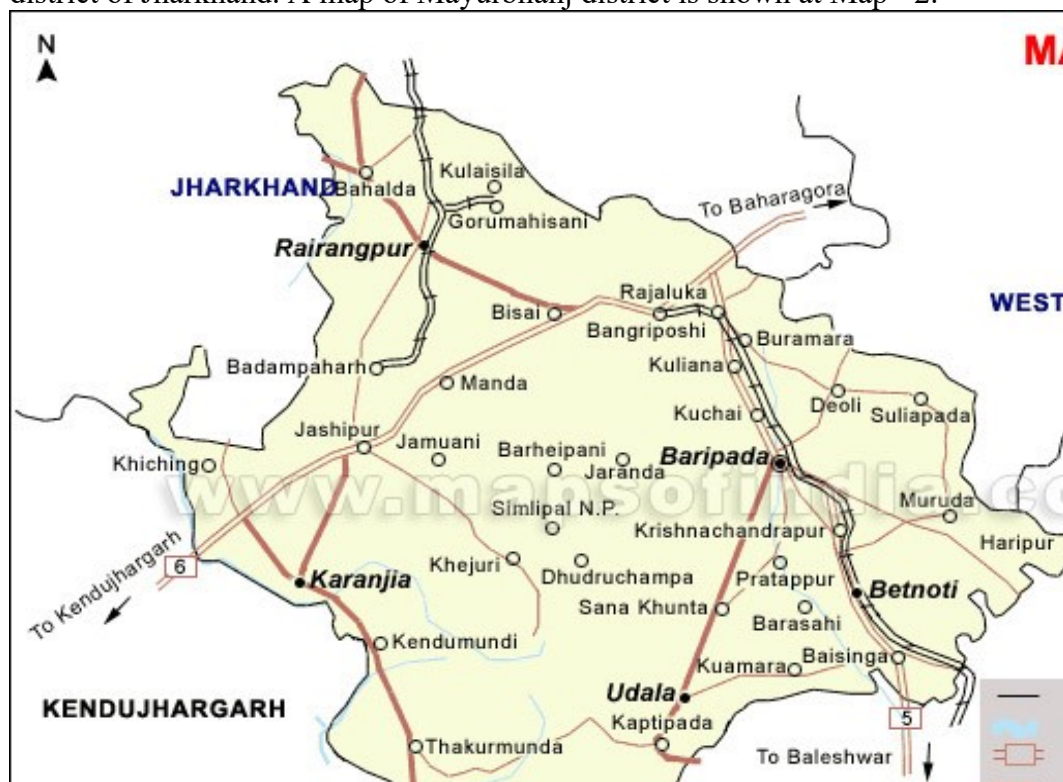
Teachers	No.	752	60
Students	No.	25541	3069
Secondary Schools	No.	75	5
Teachers	No.	622	34
Students	No.	18776	1392
General Colleges	No.	12	1
Lecturers	No.	224	5
Students	No.	5219	122
Healthcare (as on 2004-05,DSH of Rayagada-2005)			
District Head Quarters Hospitals and other hospitals	No.	2	-
Community Health Centre	No.	4	1
Primary Health Centre	No.	41	6
Beds in Hospitals	No.	464	56
Ayurvedic Dispensaries	No.	20	2
Homeopathic Dispensaries	No.	9	-
Road Connectivity(DSH-20005)			
National Highway	Kms.	-	-
Express Highway	Kms.	-	-
State Highway	Kms.	399	-
Major District Roads(MDR)	Kms.	130	-
Other District Roads(ODR)	Kms.	69	-
Rural Roads	Kms.	750	-
G.P. Roads	Kms.	4032	-
Panchayat Samitee Roads	Kms.	751	-
Railway Route	Kms.	117.147	-
Railway Stations	No.	10	-
Veterinary Services(as on 2004-05,DSH of Rayagada-2005)-			
Veterinary Hospitals/Dispensaries	No.	16	2
Veterinary Asst. Surgeons/Addl. VAS	No.	20	2
Livestock Aid Centre(LACs)	No.	85	9
Livestock Inspectors and Techniques	No.	71	5
Artificial Insemination Centers	No.	55	4
(E) Land use Pattern(Year 2004-05)(DSH of Rayagada-2005)			
Forest Area	Area in Hect	92135	3071
Misc. Tree Crops & Groves not included in net area sown	Hect.	6720	327
Permanent Pasture and other grazing lands	Hect.	9112	1589
Cultivable waste	Hect.	10157	1711
Land put to non-agricultural use	Hect.	21896	2546
Barren and uncultivable lands	Hect.	179447	5467
Current fallows	Hect.	42714	14280
Other fallows	Hect.	14653	1944
Net area sown	Hect.	126016	17759
(F) Irrigation Potential(Year 2004-05)(DSH of Rayagada-2005)			
Major/Medium Irrigation Projects:			
Kharif:	Hect.	9824	-
Ravi:	Hect.	2633	-
Monor Irrigation Projects(Flow):			
Kharif	Hect.	16960	663
Ravi	Hect.	1048	183
Lift Irrigation Projects:			
Kharif:	Hect.	3222	62
Ravi:	Hect.	2243	14

(G) PRODUCTION SECTOR			
Agricultural Production(Year 2003-04) (DSH of Rayagada 2005)			
Paddy	2tls.	1629329	190762
Autumn	2tls.	126166	41927
Winter	2tls.	1449577	135219
Summer	2tls.	53386	13616
Greengram	2tls.	1239	-
Blackgram	2tls.	6910	-
Horsegram	2tls.	6360	-
Til	2tls.	10592	-
Groundnut	2tls.	2785	-
Mustard	2tls.	1.46	-
Potato	2tls.	2482	-
Jute	2tls.	-	-
Sugarcane	2tls.	14315	-
Fish Production(year 2003-04) (DSH of Rayagada -2005)			
Fresh water Fish	M.T.	610.53	6.79
Brakish water Fish	M.T.	-	-
Marine water Fish	M.T.	-	-
Total Fish Production	M.T.	610.53	6.79
Milk & Egg Production(as on 2003-04,DSH of Rayagada – 2005)			
Milk	000'M.T.	28.08	
Egg	Lakh Nos.	140.28	-
Meat	M.T.	1003.679	-
S.S.I. Units(D.S.H,Rayagada-2005)-			
Units established(2003-04)-	No.	126	-
Total capital investment	Rs. In lakh	365.35	-
Employment Generated	No.	473	-
Cottage Industries(D.S.H., Rayagada-2005)-			
Units set up(2006-07)	No.	862	-
Total capital investment	Rs. In lakh	227.07	-
Employment generation	No.	1425	-
(H) HUMAN DEVELOPMENT INDICES (OHDR – 2004)			
Human Development Index(HDI)(Range 0-1)		0.443	-
HDI Rank		25 th	-
Gender Development Index(GDI)		0.428	-
GDI Rank		24 th	-
Reproductive Health Index(RHI)(98-99)		0.585	-
RHI Rank		8 th	-
Health Index Rank		26	-
Education Index Rank		28	-
BPL Families(1997)	%	72.03	78.48
(I) PDS(DSH of Rayagada-2005)(as on 2004-05)			
No. of Retail shops	No.	177	17
No. of Beneficiaries covered	No.	598607	111738
Schools having MDM Programme	No.	2491	356
No. of students covered under MDM programme	No.	99107	15504
No. of ICDS Feeding Centres	No.	1830	298
No. of beneficiaries covered under ICDF Feeding	No.	115057	21335
(J) Other Schemes(as on 2004-05,DSH of Rayagada-2005)			
No. of Beneficiaries covered under SGSY	No.	1851	220
No. of Beneficiaries covered under NOAP	No.	25259	4590
No. of Beneficiaries covered under SOAP	No.	18913	1508
No. of Beneficiaries covered under ODP	No.	3485	459

3.2 MAYURBHANJ DISTRICT

In the sixth century B.C. Mayurbhanj formed a part of Utkal. Utkal along with Mayurbhanj tracts formed part of Kalinga under Ashoka as well as Kharavela. The name Mayurbhanj indicates that the state was named after the two medieval ruling families Mayurs and Bhanjas. Also from records it appears that Mayura family were ruling over Eastern India from Bonai to Tamralipti during medieval period and Bhanja ruling family of Mayurbhanj very likely belonged to that family. The Bhanjas of Orissa are very old royal dynasty. According to Prof. Banarjee they are much older than the Gangas and Soumavamsis of Orissa. Mayurbhanj came under British occupation in 1803. With the transfer of power from the hands of the British on the 15th August, 1947, the state Mayurbhanj became an independent unit. On the 17th October 1948 the Maharaja of Mayurbhanj signed an instrument of merger and the administration of state was taken over by the Govt. of India. It was, however, subsequently decided that since Mayurbhanj linguistically and culturally had close links with Orissa it should merge with that state. On the 1st January 1949, Mayurbhanj merged with Orissa and since that date it is administered as one of the districts of Orissa.

The district of Mayurbhanj is located in the North Eastern part of Orissa. It lies between 20° 17' and 22° 34' North latitude and between 85° 40' and 87° 10' East longitude. The district is 559.31 mt. above the sea level. It is bounded on the North by the Singhbhum district of Jharkhand and Midnapur district of West Bengal, on the South by districts Balasore and Keonjhar, on the East by Midnapur district of West Bengal and Balasore district of Orissa and on the West by Keonjhar district of Orissa and Singhbhum district of Jharkhand. A map of Mayurbhanj district is shown at Map - 2.



Map - 2

3.2.1 Udala C.D. Block

Udala C.D. Block is one among 26 C.D. Blocks of Mayurbhanj district and situated at a distance 43 kms. from the District headquarters at Baripada. This block has geographical area of 209.30 sq. kms. with 89 villages of which 88 inhabited and 1 uninhabited, and total number of 14372 households.

Socio-economic indicators in respect of the district Mayurbhanj and Udala C.D. Block have been given in Table - 3.2.

Table – 3.2: Socio Economic Indicators of Mayurbhanj District and Udala C.D. Block

Item	Unit	Magnitude	
(A) GEOGRAPHICAL INFORMATION		Mayurbhanj District	Udala Block
Total Area	Sq.k.m.	10418	209.30 (R)
Total Forest Area	Sq.k.m.	4392.13	-
Reserved Forests	Sq.k.m.	3330.14	-
Unclassified Forests	Sq.k.m.	2.20	-
Demarcated Protected Forests(DPF)	Sq.k.m.	245.06	-
Un-Demarcated Forests	Sq.k.m.	0.0	-
Forest under Reserve Deptt.	Sq.k.m.	-	-
(B) ADMINISTRATIVE SET-UP			
Subdivisions	No.	4	-
Tahasils	No.	9	-
C.D. Blocks	No.	26	1
Towns(including census towns)	No.	4	-
Municipalities	No.	1	-
N.A.Cs	No.	3	1
Police Stations	No.	28	-
Grampanchayats	No.	382	-
Villages	No.	3950	89
a) Inhabited	No.	3748	88
b) Uninhabited	No.	202	1
Fire Stations	No.	6	-
Assembly Constituencies	No.	10	-
Normal Rainfall	m.m.	1648.2	1851.3
(C) DEMOGRAPHIC FEATURES (2001 Census)			
Total population	No.	2223456	66857
Male	No.	1123200	33647
Female	No.	1100256	33210
S.C. Population			
Total	No.	170835	3593
Male	No.	85844	1798
Female	No.	84991	1795
Percentage to District total population	%	7.68	-
S.T. Population			
Total	No.	1258459	49086
Male		631149	26634
Female		627310	24452
Percentage to District total population	%	56.60	-
Rural population			
Total	No.	2067756	66857

Male	No.	1041057	33647
Female	No.	1026699	33210
Percentage to total District population	%	93.00	-
Urban Population			
Total	No.	155700	11712
Male	No.	82143	6091
Female	No.	73557	5621
Percentage to total District population	%	7.00	-
Sex Ratio	Females per 000' Male	980	-
Density of population	Per Sq. k.m.	213	-
Decadal Growth rate	%	17.98	-
Total Workers	Nos.	1028	-
Main Workers	Nos.	619	-
Marginal Workers	Nos.	409	-
Cultivators	Nos.	287	-
Agrl. Labourers	Nos.	394	-
Literacy Rate			
Persons	%	51.91	46.37
Male	%	65.76	59.69
Female	%	37.84	32.96
S.C.	%	53.56	-
S.T.	%	38.80	-
Population in the age group 0-6 yrs.			
Persons	No.	364717	11815
Male	No.	186464	6045
Female	No.	178253	5770
(D) INFRASTRUCTURE FACILITIES			
Education(DSH 2005 as on 2004-05)			
Primary Schools	No.	2301	104
Teachers	No.	4501	195
Students	No.	292921	8226
Middle Schools	No.	1497	24
Teachers	No.	3209	88
Students	No.	118597	2151
Secondary Schools	No.	509	17
Teachers	No.	3962	145
Students	No.	81529	2658
General Colleges	No.	82	4
Lecturers	No.	1238	98
Students	No.	33383	2021
Healthcare (DSH of Mayurbhanj-2007)			
District Head Quarters Hospitals and other hospitals	No.	4	1 (N)
Dispensaries	No.	8	-
Community Health Centre	No.	17	-
Primary Health Centre	No.	85	3
Beds in Hospitals	No.	880	67
Ayurvedic Dispensaries	No.	44	3
Homeopathic Dispensaries	No.	43	1
Road Connectivity(DSH of Mayurbhanj-2007)			
National Highway	Kms.	193	-
Express Highway	Kms.	-	-
State Highway	Kms.	327	-

Major District Roads(MDR)	Kms.	156	-
Other District Roads(ODR)	Kms.	447	-
Rural Roads	Kms.	-	-
G.P. Roads	Kms.	6641	-
Panchayat Samitee Roads	Kms.	1383	-
Railway Route	Kms.	113.55	-
Railway Stations	No.	13	-
Veterinary Services			
Veterinary Hospitals/Dispensaries	No.	42	2
Veterinary Asst. Surgeons/Addl. VAS	No.	59	3
Livestock Aid Centre(LACs)	No.	166	5
Livestock Inspectors and Techniques	No.	175	6
Artificial Insemination Centers	No.	178	4
Other Infrastructure Facilities (as on 2005-06) (DSH of Mayurbhanj-2007)			
Village Electrification	%	72.68	-
Post offices	No.	709	42
Scheduled Commercial Bank branches	No.	140	-
Regional Rural bank branches	No.	57	-
Central Cooperative banks	No.	15	-
Agricultural Credit Coop. Societies	No.	56	4
(E) Land use Pattern(Year 2006-07)(DSH of Mayurbhanj-2007)			
Forest Area	Area in Hect	88589	475
Misc. Tree Crops & Groves not included in net area sown	Hect.	23233	97
Permanent Pasture and other grazing lands	Hect.	33577	712
Cultivable waste	Hect.	49301	1154
Land put to non-agricultural use	Hect.	61848	2131
Barren and uncultivable lands	Hect.	16687	113
Current fallows	Hect.	51856	1692
Other fallows	Hect.	52409	2331
Net area sown	Hect.	320551	10563
(F) Irrigation Potential(Year 2006-07)(DSH of Mayurbhanj-2007)			
Major/Medium Irrigation Projects:			
Kharif:	Hect.	37948	6162
Ravi:	Hect.	4448	215
Monor Irrigation Projects(Flow):			
Kharif	Hect.	27020	3104
Ravi	Hect.	1525	141
Lift Irrigation Projects:			
Kharif	Hect.	10860	80
Ravi	Hect.	6686	48
(G) PRODUCTION SECTOR			
Production of Paddy(Year 2006-07) (DSH of Mayurbhanj-2007))			
Agriculture Production			
Paddy Autumn	Qtls.	802360	16104
Winter	Qtls.	6462153	241347
Summer	Qtls.	219767	5270
Paddy (total)	Qtls.	7484280	262721
Greengram	Qtls.	3232	-
Blackgram	Qtls.	3788	-
Horsegram	Qtls.	2557	-
Til	Qtls.	1495	-
Groundnut	Qtls.	27898	-
Mustard	Qtls.	1319	-

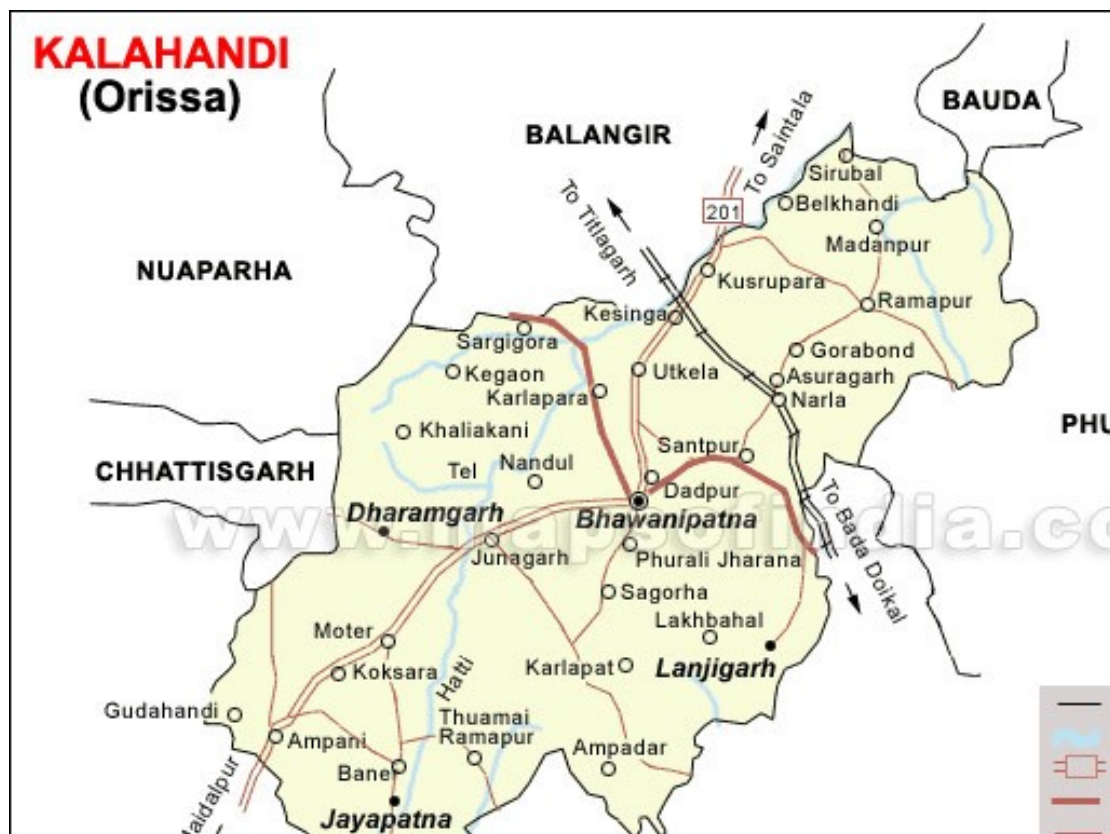
Potato	Qtls.	7003	-
Jute	Qtls.	-	-
Sugarcane	Qtls.	24200	-
Fish Production(District at a Glance 2009)			
Fresh water Fish	M.T.	10386.31	463.43
Brakish water Fish	M.T.	-	-
Marine water Fish	M.T.	-	-
Total Fish Production	M.T.	10386.31	463.43
Milk & Egg Production(District at a Glance 2009)(During 2007-08)			
Milk	000'M.T.	66.21	
Egg	Lakh Nos.	1012.31	-
Meat	M.T.	3585.30	-
S.S.I. Units(DSH , Mayurbhanj-2007)			
Units established(2006-07)	No.	255	-
Total capital investment	Rs. In lakh	738.55	-
Employment Generated	No.	1217	-
Cottage Industries(DSH , Mayurbhanj-2007)			
Units set up(2006-07)	No.	2646	-
Total capital investment	Rs. In lakh	760.30	-
Employment generation	No.	3849	-
(H) HUMAN DEVELOPMENT INDICES (OHDR – 2004)			
Human Development Index(HDI)		0.639	-
HDI Rank		9	-
Gender Development Index(GDI)		0.621	-
GDI Rank		6	-
Reproductive Health Index(RHI)(98-99)		0.549	-
RHI Rank		17	-
Health Index Rank		1	-
Education Index Rank		22	-
BPL Families(1997)	%		
(I) PDS(DSH of Mayurbhanj-2007)(as on 2006-07)			
No. of Retailshops	No.	2176	96
No. of Beneficiaries covered	No.		
Schools having MDM Programme	No.	5000	201
No. of students covered under MDM programme	No.	338925	12301
No. of ICDS Feeding Centres	No.	3138	103
No. of beneficiaries covered under ICDS Feeding	No.	271400	8400
(J) Other Schemes(as on 2006-07, DSH of Mayurbhanj-2007)			
No. of Beneficiaries covered under SGSY	No.	4991	213
No. of Beneficiaries covered under NOAP	No.	19532	720
No. of Beneficiaries covered under SOAP	No.	40404	1805
No. of Beneficiaries covered under ODP	No.	8343	241

3.3 KALAHANDI DISTRICT

The word Kalahandi literally means: "Black Pot" or "Pot of Arts". The pre-historic paintings of red and black colour in the caves of Gudahandi hill and the black-cotton soil of the district signified its name. Klahandi was previously known by the name "Karond" since 1905, when this territory formed a part of the Bengal Presidency, the name Kalahandi was commonly used. Kalahandi merged with the State of Orissa on the First January 1948. The ex-state of Kalahandi together with the ex-state of Patna and Sonapur formed the district of Kalahandi with headquarters at Balangir. On 1st November, 1949 Patna and

Sonepur ex-state areas were separated to form the district of Balangir Patna with (later Balangir) and the ex-state of Kalahandi together with the Nuapada sub-division which formed a part of Sambalpur district since 1st April, 1936 was reconstituted a separate district Kalahandi with headquarters at Bhawanipatna. The present Kalahandi district is the result of the recent reorganization of the district in the State of Orissa during 1992.

Kalahandi districts extends from 19° 8' to 20° 25' North latitudes and from 82°32' 83°47'. East latitudes in Southwestern part of Orissa. It is bounded by the district of Balangir and Nuapada on the North, Nawarangpur, Koraput and Rayagada districts on the South. On the East it is bounded by Kandhamal and Rayagada and on the West by Nawarangpur districts of Orissa and Raipur district of Chhatisgarh State. It covers an area of 7920 sq.km. which constitutes 5.09% of the State's total geographical area. A map of Kalahandi district is given at Map – 3.



Map – 3

3.3.1 Lanjigarh C.D. Block

Lanjigarh C.D. Block is one of among 13 C.D. Blocks of Kalahandi district and situated at a distance of 48 kms. from the District headquarters Kalahandi. This block has geographical area of 401.94 Sq.kms. with 483 villages of which 429 inhabited and 54 uninhabited and total numbers of 17613 households.

Socio-economic indicators in respect of the district Kalahandi and Lanjigarh C.D. block have been given in Table – 3.3.

Table – 3.3: Socio Economic Indicators of Kalahandi District and Lanjigarh C.D. Block

Item	Unit	Magnitude	
(A) GEOGRAPHICAL INFORMATION		Kalahandi District	Lanjigarh Block
Total Area	Sq.k.m.	7920	401.94
Total Forest Area	Sq.k.m.	2538.01	-
Reserved Forests	Sq.k.m.	1449.03	-
Unclassified Forests	Sq.k.m.	0.54	-
Demarcated Protected Forests(DPF)	Sq.k.m.	488.51	-
Un-Demarcated Forests	Sq.k.m.	313.37	-
Forest under Reserve Deptt.	Sq.k.m.	286.56	-
(B) ADMINISTRATIVE SET-UP			
Subdivisions	No.	2	-
Tahasils	No.	7	-
C.D. Blocks	No.	13	-
Towns(including census towns)	No.	3	-
Municipalities	No.	1	-
N.A.Cs	No.	2	-
Police Stationsons	No.	12	-
Grampanchayats	No.	273	-
Villages	No.	2236	483
a)Inhabited	No.	2099	429
b)Uninhabited	No.	137	54
Fire Stations	No.	3	-
Assembly Constituencies	No.	6	-
Normal Rainfall	m.m.	1378.2	-
(C) DEMOGRAPHIC FEATURES (2001 Census)			
Total population	No.	1335494	75145
Male	No.	667526	37077
Female	No.	667968	38068
S.C. Population			
Total	No.	236019	18097
Male	No.	117344	8912
Female	No.	118675	9185
Percentage to District total population	%	17.67	24.08
S.T. Population			
Total	No.	382573	36693
Male	No.	188646	17994
Female	No.	193927	18699
Percentage to District total population	%	34.17	48.83
Rural population			
Total	No.	1235275	75145
Male	No.	615512	37077
Female	No.	619663	38068
Percentage to total District population	%	92.50	100
Urban Population			
Total	No.	100219	-
Male	No.	51914	-
Female	No.	48305	-
Percentage to total District population	%	7.50	-

Sex Ratio	Females per 000' Male	1001	-
Density of population	Per Sq. k.m.	169	-
Decadal Growth rate	000' Nos.	18.09	-
Total Workers	000' Nos.	621	-
Main Workers	000' Nos.	382	-
Marginal Workers	000' Nos.	239	-
Cultivators	000' Nos.	184	-
Agrl. Labourers	000' Nos.	313	-
Literacy Rate			
Persons	%	45.94	28.85
Male	%	62.66	43.16
Female	%	29.28	14.95
S.C.	%	47.12	-
S.T.		34.17	-
Population in the age group 0-6 yrs.			
Persons	No.	217889	15318
Male	No.	109807	7588
Female	No.	108082	7730
(D) INFRASTRUCTURE FACILITIES			
Education(DSH, of kalahandi-2005)(for the year 2004-05)			
Primary Schools	No.	1401	83
Teachers	No.	3235	207
Students	No.	118568	6622
Middle Schools	No.	400	24
Teachers	No.	1583	81
Students	No.	69585	4128
Secondary Schools	No.	261	14
Teachers	No.	2084	104
Students	No.	45170	1824
General Colleges	No.	31	1
Lecturers	No.	388	6
Students	No.	9121	127
Healthcare (DSH of Kalahandi-2005)(For the year 2004-05)			
District Head Quarters Hospitals & other Hospitals	No.	2	
Other Hospitals	No.	7	1
Community Health Centre	No.	6	-
Primary Health Centre	No.	42	3
Beds in Hospitals	No.	426	22
Ayurvedic Dispensaries	No.	20	2
Homeopathic Dispensaries	No.	18	1
Road Connectivity(DSH of Kalahandi-2005)(by the year 2003-04)			
National Highway	Kms.	184	-
Express Highway	Kms.	-	-
State Highway	Kms.	215	-
Major District Roads(MDR)	Kms.	266	-
Other District Roads(ODR)	Kms.	46	-
Rural Roads	Kms.	1061	-
G.P. Roads	Kms.	9955	-
Panchayat Samitee Roads	Kms.	517	-
Railway Route	Kms.	38.476	-
Railway Stations	No.	5	

Veterinary Services (By the year -2004-05) (DSH of Kalahandi-2005)			
Veterinary Hospitals/Dispensaries	No.	21	2
Veterinary Asst. Surgeons/Addl. VAS	No.	33	3
Livestock Aid Centre(LACs)	No.	112	9
Livestock Inspectors and Techniques	No.	112	9
Artificial Insemination Centers	No.	66	2
Other Infrastructure Facilities(By the year 2004-05)(DSH of Kalahandi-2005)			
Village electrification	%	63.6	
Number of Post Offices	No.	306	17
Schedule Commercial Bank branches	No.	80	
Regional Rural Bank branches	No.	44	
Central Co-operative Bank branches	No.	13	-
Agriculture Credit Cooperative Societies	No.	77	3
(E) LAND USE PATTERN (Year 2004-05)(DSH of Kalahandi -2005)			
Forest Area	Area in Hect	61090	15338
Misc. Tree Crops & Groves not included in net area sown	Hect.	2256	332
Permanent Pasture and other grazing lands	Hect.	21361	1873
Cultivable waste	Hect.	22994	4315
Land put to non-agricultural use	Hect.	43544	2783
Barren and uncultivable lands	Hect.	66641	16115
Current fallows	Hect.	55208	3104
Other fallows	Hect.	21387	2631
Net area sown	Hect.	275688	19170
(F) IRRIGATION POTENTIAL (Year 2004-05)(DSH of Kalahandi-2005)			
Major/Medium Irrigation Projects:			
Kharif:	Hect.	83138	-
Ravi:	Hect.	33286	-
Monor Irrigation Projects(Flow):			
Kharif	Hect.	20174	1776
Ravi	Hect.	4147	328
Lift Irrigation Projects:			
Kharif	Hect.	9809	555
Ravi:	Hect.	5579	284
(G) PRODUCTION SECTOR			
Agriculture Production (Year 2004-05)(DSH of Kalahandi-2005)			
Paddy : Autumn	Qtls.	933913	26906
Winter	Qtls.	2402028	96877
Summer	Qtls.	1031052	1430
Paddy (Total)	Qtls.	4366993	125213
Greengram	Qtls.	14554	-
Blackgram	Qtls.	9927	-
Horsegram	Qtls.	19231	-
Til	Qtls.	1882	-
Groundnut	Qtls.	21776	-
Mustard	Qtls.	1849	-
Potato	Qtls.	513	-
Jute	Qtls.	-	-
Sugarcane	Qtls.	198606	-
Fish Production(By the Year 2003-04)(DSH of Kalahandi-2005)			
Fresh water Fish	M.T.	8362.91	-
Brackish water Fish	M.T.	-	-
Marine water Fish	M.T.	-	-
Total Fish Production	M.T.	8362.91	-

Milk & Egg Production(By the Year 2004-05)(DSH of Kalahandi-2005)			
Milk	000'M.T	26.924	-
Egg	Lakh Nos.	378.60	-
Meat	M.T.	2007.006	-
S.S.I. Units(D.S.H, Kalahandi-2005)			
Units established(2006-07)	No.	9	-
Total capital investment	Rs. In lakh	457.73	-
Employment Generated	No.	572	-
Cottage Industries(D.S.H., Kalahandi-2005)			
Units set up(2006-07)	No.	671	-
Total capital investment	Rs. In lakh	147.85	-
Employment generation	No.	671	-
(H) HUMAN DEVELOPMENT INDICES (OHDR - 2004)			
Human Development Index(HDI)		0.606	-
HDI Rank		11	-
Gender Development Index(GDI)		0.579	-
GDI Rank		8	-
Reproductive Health Index(RHI)(98-99)		0.5263	-
RHI Rank		21	-
Health Index Rank		3	-
Education Index Rank		24	-
BPL Families(1997)	%	62.71	80.23
(I)PDS(DSH of Kalahandi - 2005)(as on 2004-05)			
No. of Retailshops	No.	306	13
No. of Beneficiaries covered	No.	206204	14777
Schools having MDM Programme	No.	2847	312
No. of students covered under MDM programme	No.	145750	8949
No. of ICDS Feeding Centres	No.	1163	92
No. of beneficiaries covered under ICDS Feeding	No.	142321	9751
(J) OTHER SCHEMES As on 2004-05 (DSH of Rayagada - 2005)			
No. of Beneficiaries covered under SGSY	Groups	126	-
No. of Beneficiaries covered under NOAP	No.	22825	1465
No. of Beneficiaries covered under SOAP	No.	44284	2664
No. of Beneficiaries covered under ODP	No.	5238	283

3.4 NUAPADA DISTRICT

Nuapada district was created on 1st April 1993 by carving out of the Nuapada Sub division of Kalahandi district. In 1905 when the district of Sambalpur and some feudatory States including Kalahandi were amalgamated with Orissa Division of Bengal Presidency, the government of the Central Provinces opposed merger of Khariar with Sambalpur. In 1936, when the separate province of Orissa was formed, Khariar was added to Orissa and was made a Sub-Division (Nuapada Sub-Division) of Sambalpur district. It continued as a sub-division of Sambalpur district till 1949. On the 1st November 1949, Patna and Sonapur together constituted a separate district and Nuapada sub-division of Sambalpur was added to Kalahandi district. After that the Nuapda sub-division became a sub-division of Kalahandi district till its reorganization as an individual district of Orissa in 1993.

Nuapada district extends from 20° 0' to 21°5' N latitudes and from 82°20' to 82°53' E longitudes in southwestern part of Orissa. It is bounded by Baragarh district and Chattishgarh State in the North, Kalahandi in the South, Bolangir on the East and Chhatisgarh State on the West. It covers an area of 3852 sq.km, which constitutes only 2.47 percent of the total land area of the state. A map of Nuapada district is given at Map - 4.



Map - 4

3.4.1 Khariar C.D. Block

Khariar C.D. Block is one among 5 C.D. Blocks of Nuapada district and situated at a distance of 70 kms. from the district headquarter Nuapada. This block has geographical area of 308.87 Sq.kms. with 116 villages of which 114 inhabited and 2 un-inhabited and total numbers of 21846 households.

Socio-economic indicators in respect of the District Nuapada and Khariar C.D. Block have been given in Table - 3.4.

Table 3.4: Socio Economic Indicators of Nuapada District and Khariar C.D. Block

Item	Unit	Magnitude	
(A) GEOGRAPHICAL INFORMATION		Nuapada District	Khariar Block
Total Area	Sq.k.m.	3852	308.87
Total Forest Area	Sq.k.m.	1849.69	-
Reserved Forests	Sq.k.m.	0.00	-
Unclassified Forests	Sq.k.m.	0.44	-
Demarcated Protected Forests(DPF)	Sq.k.m.	1504.00	-
Un-Demarcated Forests	Sq.k.m.	0.00	-
Forest under Reserve Deptt.	Sq.k.m.	345.25	-
(B) ADMINISTRATIVE SET-UP			
Subdivisions	No.	1	-
Tahasils	No.	2	-
C.D. Blocks	No.	5	-
Towns(including census towns)	No.	2	-
Municipalities	No.	-	-
N.A.Cs	No.	2	2
Police Stations	No.	6	-
Grampanchayats	No.	109	-
Villages	No.	663	116
a)Inhabited	No.	648	114
b)Uninhabited	No.	15	2
Fire Stations	No.	2	-
Assembly Constituencies	No.	2	-
Normal Rainfall	m.m.	1378.2	1024.0
(C) DEMOGRAPHIC FEATURES (2001 Census)			
Total population	No.	530690	93018
Male	No.	264396	46408
Female	No.	266294	46610
S.C. Population			
Total	No.	72296	14491
Male	No.	36061	7224
Female	No.	36235	7267
Percentage to District total population	%	13.56	15.58
S.T. Population			
Total	No.	184221	25537
Male	No.	90901	12550
Female	No.	93320	12987
Percentage to District total population	%	34.65	27.45
Rural population			
Total	No.	500652	93018
Male	No.	249146	46408
Female	No.	251506	46610
Percentage to total District population	%	94.34	
Urban Population			
Total	No.	30038	30038
Male	No.	15250	15250
Female	No.	14788	14788
Percentage to total District population	%	5.66	-
Sex Ratio	Females per 000'Male	1007	-

Density of population	Per Sq. k.m.	138	-
Decadal Growth rate	000' Nos.	13.04	-
Total Workers	000' Nos.	244	-
Main Workers	000' Nos.	131	-
Marginal Workers	000' Nos.	113	-
Cultivators	000' Nos.	83	-
Agrl. Labourers	000' Nos.	113	-
Literacy Rate			
Persons	%	42.00	42.53
Male	%	58.46	59.37
Female	%	25.79	25.92
S.C.	%	43.99	
S.T.		33.12	
Population in the age group 0-6 yrs.			
Persons	No.	84521	18489
Male	No.	42927	9457
Female	No.	41594	9032
(D) INFRASTRUCTURE FACILITIES			
Education(DSH of Nuapada-2005)(for the year 2004-05)			
Primary Schools	No.	623	105
Teachers	No.	1653	295
Students	No.	58581	9975
Middle Schools	No.	218	33
Teachers	No.	555	103
Students	No.	29031	4549
Secondary Schools	No.	117	26
Teachers	No.	896	161
Students	No.	17833	3130
General Colleges	No.	11	2
Lecturers	No.	129	10
Students	No.	3286	316
Healthcare (As on 2004-05) (DSH of Nuapada-2005)			
District Head Quarters Hospitals & other Hospitals	No.	1	
Other Hospitals	No.	1	
Community Health Centre	No.	3	
Primary Health Centre	No.	17	3
Beds in Hospitals	No.	207	5
Ayurvedic Dispensaries	No.	5	-
Homeopathic Dispensaries	No.	10	2
Road Connectivity(As on 2004-05) (DSH of Nuapada-2005)			
National Highway	Kms.	93	-
Express Highway	Kms.	-	-
State Highway	Kms.	40	-
Major District Roads(MDR)	Kms.	52	-
Other District Roads(ODR)	Kms.	233	-
Rural Roads	Kms.	262	-
G.P. Roads	Kms.	4133	-
Panchayat Samitee Roads	Kms.	504	-
Railway Route	Kms.	31.602	-
Railway Stations	No.	3	

Veterinary Services (As on 2004-05) (DSH of Nuapada-2005)			
Veterinary Hospitals/Dispensaries	No.	10	1
Veterinary Asst. Surgeons/Addl. VAS	No.	6	-
Livestock Aid Centre(LACs)	No.	46	8
Livestock Inspectors and Techniques	No.	41	8
Artificial Insemination Centers	No.	31	7
Other Infrastructure Facilities(As on 2004-05) (DSH of Nuapada-2005)			
Village electrification	%	80.9	
Number of Post Offices	No.	112	26
Schedule Commercial Bank branches	No.	28	
Regional Rural Bank branches	No.	19	
Central Co-operative Bank branches	No.	6	1
Agriculture Credit Cooperative Societies	No.	1	-
(E) LAND USE PATTERN (Year 2004-05)(DSH of Nuapada - 2005)			
Forest Area	Area in Hect	31807	1022
Misc. Tree Crops & Groves not included in net area sown	Hect.	840	199
Permanent Pasture and other grazing lands	Hect.	16365	1657
Cultivable waste	Hect.	9474	1562
Land put to non-agricultural use	Hect.	19297	3207
Barren and uncultivable lands	Hect.	9327	1392
Current fallows	Hect.	21176	3990
Other fallows	Hect	7358	730
Net area sown	Hect	129538	17763
(F) IRRIGARION POTENTIAL (Year 2004-05)(DSH of Nuapada - 2005)			
Major/Medium Irrigation Projects:			
Kharif	Hect.	14755	-
Ravi	Hect	4630	-
Monor Irrigation Projects(Flow):			
Kharif	Hect.	6175	1486
Ravi	Hect	1011	240
Lift Irrigation Projects:			
Kharif	Hect.	1840	595
Ravi	Hect	1396	794
(G) PRODUCTION SECTOR			
Agriculture Production (Year 2004-05)(DSH of Nuapada - 2005)			
Paddy : Autumn	Qtls.	433302	26967
Winter	Qtls.	904160	49680
Summer	Qtls.	77392	5232
Total : Paddy	Qtls.	1414854	81879
Greengram	Qtls.	4135	-
Blackgram	Qtls.	7156	-
Horsegram	Qtls.	7925	-
Til	Qtls.	251	-
Groundnut	Qtls.	4194	-
Mustard	Qtls.	21	-
Potato	Qtls.	765	-
Jute	Qtls.	-	-
Sugarcane	Qtls.	424	-
Fish Production(Year 2004-05)(DSH of Nuapada-2005)			
Fresh water Fish	M.T.	2209.15	342.15
Brakish water Fish	M.T.	-	-
Marine water Fish	M.T.	-	-
Total Fish Production	M.T.	2209.15	342.15

Milk & Egg Production(Year 2004-05)(DSH of Nuapada-2005))			
Milk	000'M.T	8.95	-
Egg	Lakh Nos.	66.50	-
Meat	M.T.	646.355	-
S.S.I. Units(D.S.H, Nuapada -2005)			
Units established(2006-07)	No.	21	-
Total capital investment	Rs. In lakh	154.86	-
Employment Generated	No.	104	-
Cottage Industries-			
Units set up(2006-07)	No.	373	-
Total capital investment	Rs. In lakh	146.64	-
Employment generation	No.	496	-
(H) HUMAN DEVELOPMENT INDICES (OHDR - 2004)			
Human Development Index(HDI)		0.581	-
HDI Rank		14	-
Gender Development Index(GDI)		0.561	-
GDI Rank		9	-
Reproductive Health Index(RHI)(98-99)		0.495	-
RHI Rank		26	-
Health Index Rank		5	-
Education Index Rank		25	-
BPL Families(1997)	%	78.31	85.04
(I) PDS (DSH of Nuapada - 2005) (as on 2004-05)			
No. of Retailshops	No.	219	28
No. of Beneficiaries covered	No.	2829148	698658
Schools having MDM Programme	No.	1283	245
No. of students covered under MDM programme	No.	97063	18596
No. of ICDS Feeding Centres	No.	766	148
No. of beneficiaries covered under ICDS Feeding	No.	57200	9900
(J) Other Schemes(as on 2004-05,DSH of Nuapada - 2005)			
No. of Beneficiaries covered under SGSY	Groups		
No. of Beneficiaries covered under NOAP	No.	19750	2917
No. of Beneficiaries covered under SOAP	No.	15514	4510
No. of Beneficiaries covered under ODP	No.	2264	404



Scenic view of a study village

CHAPTER-IV

FOOD SECURITY MEASURES EXTENDED BY GOVERNMENT

4.1 INTRODUCTION:

India has a long history of government interventions aimed at providing food security for all and fighting malnutrition among the vulnerable, especially woman and children. Successive governments, since independence, have declared their commitment to fighting hunger and food security which also finds a mention in the manifestos of every major political party. Yet hunger and malnutrition remain a stark reality for large numbers of people. The slow progress of achievement of basic human development indicators like infant mortality rates, low birth weights, the large number of under-nourished and anaemic women and children reflects this basic truth and points to the need for serious introspection. Current statistics reveal that every third child in the country is born underweight, over fifty percent of pre-school children are under-nourished and anemia is prevalent among 50-90 percent of all pregnant women and 50-70 percent of all children (ICMR and NNMB 1999 quoted in the Tenth Five Year Plan, GoI).

Food insecurity, hunger, malnutrition and poverty are inter-related concepts. The issue of food insecurity and hunger has conventionally been dealt with through anti-poverty programmes. The assumption is that the provision of livelihoods and enhanced earning capacities would automatically lead to eliminating food insecurity and hunger as well as enhancing nutrition levels. However, experience has proved otherwise. Most countries, which have achieved high levels of health and nutrition and a better quality of life in general, have done so through a deliberate focus on food and nutrition interventions, rather than pure economic development.

In order to address the issues relating to food insecurity, hunger, etc. presently a number of programmes/schemes are being implemented through Central Government as well as State Government, and some of which are outlined below.

4.2 GOVERNMENT INTERVENTIONS ADDRESSING FOOD INSECURITY

4.2.1 Public Distribution System (PDS)

The Public Distribution System (PDS) is one of the most significant aspects of food security structure in the Government of India. PDS involves management, maintenance and supply of essential commodities in subsidized prices to the public. It is also an instrument for checking the prices of such commodities in the open market. The central Government assumes responsibility for procurement and supply of essential commodities through the Food Corporation of India (FCI) to all the State Governments/Union Territories, for public distribution at uniform prices through its retail network, namely, Fair Price Shops.

Public distribution of essential commodities has been in existence ever since the inter-war period. The PDS, with its focus on distribution of food grains in urban scarcity areas, has its origin in the sixties (1960s) when the country passed through critical food shortage. PDs had been successfully controlled the price spiral and had ensured access of essential food items to urban consumers. The abundance in national agricultural production in the aftermath of the Green Revolution extended the reach of PDs to rural regions as well. The seventies and later eighties then saw tribal blocks and severe poverty-ridden areas also come within the purview of the PDS.

During the Ninth Five Year Plan Period (1997-2002) targets have been shifted with a view to concentrating on people below the poverty line. Along with it came a broader view of food security, particularly nutritional security ensuring availability, accessibility, acceptability and affordability of a balanced, nutritious diet for all. Added to this came the increased availability of food. Thus PDS acquired another dimension, namely, sustaining high level of food production by fixing Minimum Support Prices at which Food Corporation of India procured grains from the farmers. PDS has since a double role to play. It is not only an instrument for sustaining food productions but also a mechanism for supply of food grains to consumers at subsidized rates.

The PDS, till 1992, was but a general entitlement scheme to all consumers without being target specific. PDS provided rationed quantity of basic food articles (rice, wheat, sugar and edible oils) and other non-food products (Kerosene oil and coal) at below the open market prices to consumers. The system was accessible to all and sundry. The implementation of the PDS was the joint responsibility of the Central Government, State Government / UTs. The Central Government was responsible for procuring, storing and transporting the PDS commodities up to the Central Godowns and making them available to the States/UTs. The FCI as agency is responsible broadly for procurement, storage, movement and distribution of food grains. In addition, the Food and Civil Supplies Corporation or Cooperative Marketing Agencies are also in procurement and distribution.

The Public Distribution System initially had a universal access. Even while continuing the universal targeting, the Government of India launched the Revamped Public Distribution System (RDPS) in June 1992 in 1775 blocks. In the wake of severe criticism that the PDS actually did not reach the intended beneficiaries the Targeted Public Distribution System (TDPS) from June 1997 was introduced with a view to targeting disadvantaged and poor across the country.

Being the only “pan-Indian strategy to ensure physical access to subsidized food for general population,” PDS is not only the spearhead of the Indian Governments anti-hunger campaign, but it is also an important window for channeling other sources of food assistance and for dovetailing with parallel food interventions. With a network of more than 4.62 lakh Fair Price Shops (FPS) annually distributing commodities worth more than Rs.30,000 crore, to about 16 crore families, the PDS in India is perhaps the largest distribution network of its type in the World. This huge network can play a more meaningful role only if the system translates the macro level self-sufficiency in food grains achieved by the country into micro level access, i.e. by ensuring availability of food for the poor households.

The importance of an effective mechanism that ensures availability of food at affordable prices at household level for the poor can hardly be over emphasized. The PDS as it stood earlier, was however, widely criticized for its failure to serve the population below the poverty line, its urban bias, negligible coverage in the states with the highest concentration of the rural poor and lack of transparent and accountable arrangements for delivery. Realising this, during Ninth Plan period, the government streamlined the PDS, by issuing special cards to BPL families and selling food grains under PDS to them at specially subsidized prices with effect from June 1997. The APL households could continue to access 10kg of food grain per family from the TDPS, but at economic cost. These rates were later revised to 90 percent of the economic cost and move recently to 70 percent of the economic cost. Currently, the rate stands at 66 percent of the economic cost (2004).

Under the new scheme, viz. the TPDS each poor family was entitled to 10 kg of food per family per month, which was later increased to 25kg (35 kg from April 2002) at specially subsidized prices. The issue price of food grain for BPL households currently stands at about 45 percent of the economic cost. The identification of the poor is done by the states as per the Planning Commission estimates are based on the percentage of the poor in each state, obviously their number will increase with an increase in overall population. This has resulted in increasing the number of BPL families to 652 lakh as against 596 lakh families originally estimated when the TPDS was introduced in June 1997. The increased level of allocation of food grains for the BPL category is about 147 lakh tonne per annum.

In order to reduce excess stocks, the government has also recently initiated the following measures under TPDS:

- The BPL allocation of food grains has been increased from 20kg to 25 kg per family per month (July 2001) and now stands at 35 kg (April 2002 onwards). The central issue price for BPL families stands at Rs.4.15 per kg for wheat and Rs.5.65 per kg for rice, which is 45 percent of the economic cost.
- The government has decided to allocate food grains to the APL families at the discounted rate of about 66 percent of the economic cost. The issue price of APL wheat has been reduced from Rs.830 to Rs.610 per quintal and that of APL rice from Rs.1,130 to Rs.830 per quintal. Further Antyodaya Anna Yojana, 35 kg of food grain are provided to the poorest of the poor families at highly subsidized rate of Rs.2 per kg for wheat and Rs. 3 per kg for rice. It also needs to be mentioned that Public Distribution System (Control) Order 2001 has been promulgated, which seeks to plug the loopholes in the PDS and make it move efficient and effective.

In Orissa, Public Distribution System commodities are distributed to the consumers through 86.94 lakh ration cards including 71.83 lakh in rural areas were issued under different schemes. There are 64,800 cards circulated under Annapurna schemes, 12,64,720 number of cards under Antodaya Anna Yojana. This apart there are 37,58,714 nos. of BPL and 36,05,309 nos. of APL cards. For smooth functioning of the Public Distribution System 29,322 Fair Price Shops are functioning in the State as on May, 2008 including 821 Cooperative Societies, 3236 Gram Panchayats and 7649 Women SHGs. Out of total 29322 Fair Price Shops, 24848 (84.7%) are in rural areas.

The Targeted Public Distribution System (TPDS) with its focus on the poor is being implemented in the state since June, 1997. Government of India is allocating 97,131 MT of rice for BPL and 56,938 MT of rice for APL families per month under TPDS. The overall scenario of subsidized rice distribution to BPL and APL families during 2006-07 is as follows:

- 1583210 nos. of BPL families in 143 ITDA/ DPAP blocks were entitled to 16 kgs. Of rice per family per month @ Rs.4.75 per kg. and additional 9 kg. of rice @ Rs. 6.30 per kg.
- 2173876 nos. of BPL families in Non ITDP blocks and Non-DPAP blocks and urban areas were entitled for 25 kgs. Of rice @ Rs.6.30 per kg. per month.
- 557251 nos. of APL families of KBK districts were entitled for rice @ 25 kgs. Per month at BPL rate i.e. Rs.6.30 per kg.
- Under “**Antyodaya Anna Yojana**” Government of India are allotting 44260 MT of rice per month. About 1264500 families are being provided 35 kg. of rice per family per month @ Rs. 3.00 per kg.
- Under “**Annapurna Scheme**” the Government of India is allotting 648 MT of rice per month. Under this scheme 10 kg. of rice per family per month free of cost are being supplied to 64800 senior citizens, uncovered under NOAP/SOAP.

(Source : *Economic Survey of Orissa, 2008-09*)

Scheme for supply of PDS rice @ Rs.2/- per kg.

State Government has introduced a new Scheme which envisages distribution of BPL and Antodaya rice @Rs. 2/- per kg. with effect from 1st August , 2008 to all families presently getting rice under various schemes along with all SC/ST boarders in hostels of SC & ST Development Department.

The Scheme will cover about 55.79 lakh beneficiaries entitled to BPL and Antodaya rice as given below:

Table-4.1: Coverage of beneficiaries under BPL and Antodaya Anna Yojana in Orissa

Scheme	Number (in lakh)	Scale of entitlement (per month) (in kg.)	Current consumer price	Revised consumer price
Antodaya Anna Yojana	12.65	35	Rs.3/kg.	Rs.2/kg
BPL families in ITDP /DPAP Blocks	15.84	25	16 kg@ Rs. 4.75/kg. 9kg.@Rs.6.30/kg.	Rs.2/kg.
BPL families in other area	21.75	25	Rs.6.30/kg	Rs.2/kg
Non BPL families in KBK districts	5.56	25	Rs.6.30/kg.	Rs.2/kg
Hostel Boarders	-	15/student	-	Rs.2/kg.

Source: Economic Survey of Orissa 2008-09

Under “**Annapurna Scheme**” the Government of India is allotting 10 kg of rice per family per month free of cost to senior citizens uncovered under National Old Age Pension (NOAP) State Old Age Pension (SOAP)

As a country dependent, significantly on rain-fed agriculture, India has faced periodic droughts. There have been occasions when starvation has been reported despite availability of food grains in the country, consequently food security has occupied a central place in Indian economic policy. The longest running and most widely spread intervention in this regard has been the Public Distributed System (PDS), which seeks to make a minimum quantity of food available to every household even in the remotest parts of the country at an affordable price. This along with a well-developed calamity relief system has ensured that drought and scarcity does not have much impact on the vulnerable population.

4.2.2 Mid-Day Meals (MDM) Scheme

The School Lunch programme, as it exists is not a recent origin. At the global level, the school lunch programme was first introduced in France in the year 1885 by Victor Hugo. The meals were provided on free and payment basis. Since then school lunch programme was introduced in several parts of the world viz., USA(1946), UK(1945), Japan(1947), China(1964-69), Austria(1950), Switzerland(1946) and Singapore(1975).

After World War-II, the McGovern-Dole School Feeding Programme was started in the US for providing food to children in impoverished countries. Organisations such as, Catholic Relief Services, CARE, and WFP are currently reaching 3 million children in nations such as Pakistan, Afghanistan, Kenya and Guatemala, under this initiative. Other developing countries are not an exception to the worldwide trend towards noon-meal programme. The programme received due attention in countries like Indonesia (1967), Thailand (1970), Korea (1973) and Samoa (1980) (Devadas: 1983).

The earliest instance of nutrition support in schools in the country can be traced back to 1925 when the Madras Corporation introduced school lunch programme for poor school children. After that, similar programmes were introduced in Kolkata in 1927, some parts of Kerala in 1941 and Bombay in 1942 (Swaminathan P.,2004). Inspired by the success of school lunch, several other states of the country adopted the programme as a part of school educational development system. The other states adopting the programme were Karnataka, Uttar Pradesh, Haryana(1961), Orissa(1959), Punjab, Rajasthan, Andhra Pradesh (1962), Madhya Pradesh (1965) and Bihar(1965).

Realising the staggering dimension of under-nutrition and malnutrition in childhood, the central and state governments have embarked on several nutrition and health intervention programmes. One such programme is the widely operating school lunch programme. Because, the primary school is the only institution available in every corner of the country with day to day contact with most, if not all families in vicinity, it has become a feasible venue for one of the nutrition intervention programmes. School feeding is a direct approach to improve the nutritional status of children who are in the stage of rapid development, requiring special nutritional requirement(Devdas:1983). In the real sense, school lunch programme, known as Mid-Day-Meals (MDM) programme was launched by P.V.Narasimha Rao, the former Prime Minister of India on August 15,1995 as a national programme. All the states and union territories of the country were encouraged to adopt this programme in primary schools (I-V) for the benefit of the children in the age group of 6-11 years reading in these schools (Rajan & Jay kumar, 1992). In Orissa the

school lunch programme was operating in some form or the other since 1959. In the initial stages maize halwa and milk etc., prepared out of imported milk powder from USA were given to the children. In the latter stages bread and biscuits were provided to the children by UNICEF through CARE and other NGOs. The present form of cooked meals is served to primary school going children since 1995.

The objective of the MDM programme was stated thus:-

The programme is intended to give a boost to universalisation of primary education, by increasing enrolment, retention and attendance and simultaneously impacting on nutrition of students in primary classes (GOI, 1995).

This programme has also the following advantages:-

- It improves physical growth and sound health of children by providing an adequate meal in the school, which will meet at least one third of the daily requirements of calories and nutrients.
- Mid-day-meal scheme enables the children to attend the primary school regularly.
- It increases the enrolment of children in primary schools.
- It prevents dropout of children from primary schools, which has become a concern in the recent years.
- It helps the children understand the relationship between food, nutrition, health and happy life.
- Mid-day-meal programme increase the ability of the children to study well by improving their concentration and perseverance.
- The scheme provides an opportunity to children for social interaction and encourages them to shun differences among themselves due to caste and colour while participating school lunch programme in a common platform.
- Finally the scheme encourages inculcate good habits and proper dealings among school going children of the tender age.

Universally the scheme to cover all states proved difficult since many States were not in a position to meet the expenses that they would incur in building the necessary infrastructure and in the preparation of meals. Some states did not implement the scheme at all. Some states (like Madhya Pradesh) provided uncooked grains at the rate of 3 kg. per month (100 grams per day) per child as take home rations. It took a long time and a change of government for the central government to respond to the fiscal constraints the States faced in providing children a hot cooked meal at school. The scheme was modified only in 2004 to address this issue. It was modified further in 2006, improving its content and providing greater support to states than before.

The Supreme Court Orders

In 2001, a public interest petition was filed by a civil society organisation in the Supreme Court against distributing uncooked grains to school children and against States not implementing MDM scheme. In an interim order dated 28 November 2001, the

Supreme Court ordered that cooked meals had to be given to children and asked all states and UTs to implement the programme of MDM by providing every child in every Government and Government assisted primary schools with prepared mid day meals with a minimum content of 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days. In subsequent orders, the Supreme Court further strengthened the right of children to a midday meals at school. In its order of 20 April 2004, the court observed, inter alia, that:

- The conversion costs for a cooked meal, under no circumstances, shall be recovered from the children or their parents.
- The Central Government shall also allocate funds to meet the conversion costs of food grains into cooked mid-day meals.
- In drought affected areas, mid-day meals shall be supplied even during summer vacation.
- In appointment of cooks and helpers, preference shall be given to Scheduled Castes and Scheduled Tribes.
- The Central Government shall make provisions for construction of kitchen sheds.
- Attempts shall be made for better infrastructure, improved facilities (safe drinking water etc.), closer monitoring (regular inspection etc.) and other quality safeguards as also the improvement of the contents of meals so as to provide nutritious meals to the children of the primary schools.

One of the key Committee of the Common Minimum Programme (CMP), later after adoption by the cabinet, the NCMP, was the following:-

A national cooked nutritious mid-day meals scheme, funded mainly by the Central government will be introduced in primary and secondary schools. An appropriate mechanism for quality checks will also be set up.

Subsequently, in the line with the Supreme Court orders and the NCMP commitments, the Central government released new guidelines for NP-NPSE in 2004.

According to the guidelines, the lunch should provide 300 Kcal and 8-12 grams protein per primary school children per day. This programme was to be implemented in all government (including local bodies) and government-aided primary schools as well as Alternate and Innovative Education (AIE) centers under the EGS. The responsibility for implementing the scheme was vested in the State Government/Union Territories. The Central Government allotted 100 grams of grain per day per child and Rs. 50 per quintal of grains as transportation cost. Total assistance per child per day was Rs.2.21 (Rs.1.11 for food grain, Rs. 1 for cooking cost, 8 paise for transport subsidy, and 2 paise for management, monitoring and evaluation).

New guidelines were issued in 2006. The Guidelines also noted the impact it was having on addressing social and gender inequalities.

Nothing that “Today, the NP-NPSE is the world’s largest school is the world’s largest school feeding programme reaching out to about 21 crore children in over 9.50 lakh schools/EGS centers across the country”, the Guidelines stated the objectives of the scheme as follows:

NP-NPSE, 2006 seeks to address two of the most pressing problems for the majority of children in India, namely, hunger and education by:

- (i) Improving the nutritional status of children in class I-V in Government, Local Body and Government aided schools, and EGS and AIE centers.
- (ii) Encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities.
- (iii) Providing nutritional support to children of primary stage in drought-affected areas during summer vacation.

It is thus evident that, over the last decade or so, the mid-day meals programme has come to say, thanks to government initiatives, judicial interventions and social movements for the right to food. While it may be too early to assess the functioning and the impact of the MDM scheme in a comprehensive manner, especially in terms of long term aspects like nutritional improvement, it is nonetheless useful to undertake a preliminary exploration.

The Mid-Day-Meal programme was introduced in the State since July, 1995 to provide a cooked noon meal to primary school children (Class-1 - V) of all Government and Government aided schools for 210 working days in a year. The scheme aims at increasing enrollment and reducing dropouts in primary schools as well as to improve the nutritional status of the children. From 1st July 2001 cooked meals are being provided to the primary school. Children in the 8 KBK districts (80 blocks including 44 ITDA blocks) and in 74 ITDA blocks in the non-KBK districts. As regards the other blocks, dry ration @ 3 kg of rice per child per month was being supplied. The cooked meal system under this programme was also extended to Boudh w.e.f. 01.04.2002. Since September 2004, as per direction of the Hon’ble Supreme Court Cooked meal is being provided to all the students at all the Government / Government adied primary schools and dry ration system has been dropped.

During 2007-08, the total coverage was 42, 30,818 in 65,528 primary schools including 9, 41,499 students studying in 17,862 primary schools in KBK districts. (*Source: Economic Survey of Orissa, 2008-09*).

4.2.3 Integrated Child Development Services (ICDS)

It is a fact that the development of a nation lies in the development of each and every one of its residents. But for India, the picture is not the same. Children and women constitute its weaker and most suppressed section even though they make a major contribution to our economy. Keeping this crucial fact in view, the Government of India

started several welfare programmes for women and children. In response to the recommendations of inter-ministerial study teams set up by the Planning Commission, and a National Policy for the Children adopted by the government in 1974, the Ministry of Social Welfare drew up a blueprint for Integrated Child Development Services. ICDS is one the most ambitious, multidimensional welfare programmes to reach millions of children and their mothers who are caught in the grip of malnutrition, disease, illiteracy, innocence and poverty.

The Integrated Child Development Services Programme is targeted towards holistic development of the child by providing interventions in nutrition, health and education. It is designed to bring about nutritional benefits to expectant and nursing mothers, women in the reproductive age group, and children below the age of 6 years .The ICDS Scheme was launched on 2 October 1975, in pursuance of the National Policy for Children in 33 experimental blocks across the country. Today, it is one of the largest outreach programmes and has experienced to 5,171 projects covering over 80 percent of the country's development blocks including rural, tribal and even urban slum pockets. It reaches out to 5.2 million mothers and 30 million children under 6 years of age belonging to low income groups. The Government of India proposes to universalize the programme to cover all 5,738 blocks in the country within the next few years (Measham and Chatterjee, 1999).

The programme has both short-term and long-term objectives. It aims at improving the nutritional and health status of children in the age group 0-6 years and to reduce the incidence of malnutrition, morbidity and mortality amongst them. It also seeks to lay the foundations for psychological, physical and social development of the child. It aims at reducing school dropouts. It also tries to enhance the capability of mothers to look after the health and nutritional needs of the child. In addition, the scheme also covers adolescent girls in select blocks of the country.

The strategy adopted by ICDS is one of delivery of early childhood services in an integrated manner so that the overall impact is much greater. The package of services provided by ICDS consists of supplementary nutrition, health check-ups, referral services, non-formal pre-school education for 3-6 year olds, and nutrition and health education for women.

The service provided under the scheme can be divided under three domains- nutrition, health and early childcare and pre-school education. Nutrition services include growth monitoring and promotion where in children below 3 years of age are weighed once a month and children from the age 3-6 years are weighed quarterly and weight for age growth cards are maintained. This exercise helps to detect growth faltering and initiation of timely preventive action.

Table – 4.2: Package of Services under ICDS

Children 6-12 months & 1-3 years	Children 3-6 years	Women 15-45 years, Pregnant & lactating mothers	Adolescent girls 11-18 years
* Supplementary nutrition * Health check-up	* Supplementary nutrition * Health check-up	* Supplementary nutrition * Health check-up	* Supplementary nutrition * Health check-up

<ul style="list-style-type: none"> * Immunisation * Referral * Growth promotion * Vitamin A drops * Iron folic supplement 	<ul style="list-style-type: none"> * Immunisation * Referral * Growth promotion * Vitamin A drops * Iron folic supplement * Non formal pre-School education 	<ul style="list-style-type: none"> * Immunisation * Referral * Growth promotion * Vitamin A tablets * Iron folic supplement * Nutrition and health Education * Antenatal & Postnatal care 	<ul style="list-style-type: none"> * Immunisation * Referral * Growth promotion * Vitamin A tablets * Iron folic supplement * Nutrition and health Education * literacy, recreation, Skill development
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(Source : Food & Nutrition Security, WFP – 2009)

Supplementary food is provided to children up to 6 years of age, pregnant and nursing women, adolescent girls, and malnourished children from low-income families in the community. The nutrient content of the supplement, meant to be consumed at the Anganwadi, is aimed to bridge the gap between the intake and requirement of the beneficiaries. While children up to 6 years are provided supplements of 300 calories and 10-12 grammas of protein, pregnant and lactating women are given supplements of n500 calories and 20-25 grammas of protein. Severely malnourished children are given double the daily supplement provided to other children. The type of food varies from state to state and from project to project. While a hot meal with combinations of cereals pulses, vegetables, oil and sugar is generally prepared at the Anganwadi centre, in some states a ready to eat snack (RTE) with the same ingredients is provided. Besides the supplementary food, vitamin A supplements to children and iron and folic acid tablets to children, pregnant and nursing mothers as well as to adolescent girls are provided.

Nutrition and health education of women between 15-45 years of age has a long-term goal of capacity building amongst them.

Health care includes antenatal care of pregnant women, postnatal care of nursing mothers, care of newborns and health checkups for children under 6 years of age. Referral services to children and pregnant women who need prompt medical attention are also available .The Anganwadi worker is assisted by the health functionaries to perform these duties. Immunisation against vaccine preventable disease like polio, TB, diphtheria etc. is also carried out to protect children from these major preventable causes of child mortality, morbidity and disability. Pregnant women are immunized against tetanus to reduce maternal and neonatal mortality.

Non-formal pre-school education is considered the backbone of the ICDS programme. It focuses on the total development of the child up to 6 years of age. It also includes promotion of early stimulation of children under three through intervention with mothers/caregivers.

In addition to these services, the programme provides opportunities for convergence of other supportive services like safe drinking water supply and sanitation, women's empowerment programmes, adult literacy etc. To strengthen the impact,a number of new initiatives have been taken.These include the Adolescent Girls Scheme(11-18 years),involvement of NGOs and provision of income generating activities.

The ICDS programme is structured around the Anganwadi worker (AWW) based in the Anganwadi centre (AWC) located in the project area, who receives support from health functionaries of the area. The Anganwadi workers, usually local, are responsible for selecting beneficiaries, providing supplementary food, monitoring growth of the children, organizing nutrition and health education classes and maintaining records for immunisation, health status and attendance. A Supervisor usually monitors 20-25 centres and reports to the Child Development Project Officer (CPDO), who is the overall in charge of implementing the programme at the block level. An ICDS project with an average of 100 Anganwadi centres, covers a community development block in a rural area, a tribal development block in a tribal area and a group of slums in an urban area.

Today, it is perhaps the only countrywide programme in the world, functioning on a large scale, requiring multisectoral operations and intersectional linkages for its implementation.

The ICDS is a centrally sponsored scheme implemented through the administrations of state governments and union territories. Although all the administrative expenses are born by the Centre, the expenditure on supplements is met by the state governments from their own funds under the Minimum Needs Programme. At the Centre, the Department of Child Development within the Human Resource Development Ministry is the nodal department responsible for budgetary control and implementation. At the state level, the Secretary of the Department of Women and Child Development, Social Welfare, Health, Rural Development, Community Development, Tribal Welfare or any other nodal department designated by the State governments is responsible for the overall implementation of the programme. Within the state, the administration of ICDS is decentralised at the district, block and village levels. ICDS services are finally delivered to the beneficiaries in the villages through the Anganwadi centre.

The 61st round of the NSSO provides useful information on the reach of and access to ICDS in rural areas. Some data from 61st round of the NSSO are brought together in table – 4.3.

Table-4.3: Percentage of Rural Households with atleast One Member Benefiting from ICDS during the Last 365 Days, 2004-05

State	% hhds with atleast one beneficiary
Andhra Pradesh	4.4
Assam	6.6
Bihar	0.7
Chhattisgarh	14.7
Gujrat	9.8
Haryana	9.4
Himachal Pradesh	5.7
Jammu and Kashmir	2.2
Jharkhand	0.9
Karnataka	4.5
Kerala	7.4
Madhya Pradesh	3.1
Maharashtra	13.2
Orissa	15.5

Punjab	1.3
Rajasthan	1.5
Tamil Nadu	5.7
Uttar Pradesh	0.9
West Bengal	9.5
All India	5.7

Source : NSSO Report No.510, GoI – 2007.

The data as presented in the above table pertains to the percentage of rural households reporting atleast one person benefiting from ICDS, highlights the limited reach of the NSSO in rural India. The reported percentages of course relate to all sample households, whereas the eligible households-those having children below 6 years of age or one or more pregnant women –will be only a subset of all sample households. Even so, it is clear that the reach of ICDS is far from universal. Interestingly, among the States reporting higher coverage are Orissa and Chhattisgarh, States generally regarded as being more backward. Maharashtra, Gujrat, West Bengal, Harayana, Kerala and Assam have a percentage of rural households with atleast one beneficiary of ICDS that is higher than the ‘All India’ average. The really poor performers include Bihar, Jharkhand, Uttar Pradesh, Punjab, Rajasthan and Jammu and Kashmir.

Universalisation of ICDS remains an elusive goal, even though the highest court of the land has directed that it should happen, and the National Common Minimum Programme (NCMP) of the Government of India ‘envisages universalisation of ICDS and Anganwadi centres in each settlement’.

As on 31st March 2006, 6,118 projects had been sanctioned in 35 Sates/UTs of these, 5,659 projects were operational.

In the context of the Supreme Court directive on universalisation of ICDS and the NCMP commitment on this issue, the scheme has expanded from the 5,652 sanctioned projects in the beginning of the Tenth Plan, to 6,291 projects and 10.53 lakh Anganwadi centres, sanctioned up to March 2007. Out of this 5,670 were operational through 7.81 lakh Anganwadi centres by the end of Tenth Plan.

Presently the State of Orissa has achieved universalisation of the ICDS programme by way of coverage of all 314 blocks apart from 12 urban projects in different urban areas through 41,697 Anganwadi centres and 4,819 Mini Anganwadi Centres. All the projects with AWCs have become operational as on 31.03.2008.

Also services under Supplementary Nutrition Programme (SNP) are presently being available in the State of Orissa to about 49.85 lakh beneficiaries comprising of about 42.02 lakh children (6 months to 6 years) and 7.83 lakh pregnant and lactating mothers through a network of 41,697 Anganwadi Centres. Out of these, the State Government provides nutritional support to 38.38 lakh beneficiaries in 22 districts through 244 ICDS projects covering 32022 Anganwadi Centres. World Food Programme (WFP) are providing food assistance to 11.47 lakh beneficiaries in 8 KBK districts covering 82 projects through 9675 AWCs.

4.2.4 Emergency Feeding Programme

The Emergency Feeding Programme (EFP) being implemented in the 8 KBK Districts under the RLTAAP for KBK. Under this programme, old, infirm and indigent people are provided cooked food through the Anganwadi Centres.

4.2.5 National Food For Work Programme

‘ National Food For Work Programme(NFFWP)’ has been launched in the State. Through this programme, works like construction of water harvesting structures, plantation and rehabilitation of degraded forest, distribution of seedlings ,etc. are being taken up by utilizing food grain received from Central Government. During 2006-07, under the programme Rs. 48.30 lakh and 307.145 MT food grain have been utilized. Besides, 182.97 MT food grain and Rs.168.79 lakh have been utilized under NREGS scheme (during 2006-07 up to November 2006) against the allocation of 207.67 MT food grain and Rs.496.70 lakh(Source Economic Survey of Orissa,2008-09).

4.2.6 World Food Programme

Under World Food Programme (WFP), food rations are being provided to labourers engaged in different forestry activities for improving their nutritional status. In order to avail benefits under the programme, a labourer is required to contribute voluntarily Rs.9 from his daily wage for getting a food packet of 2.5 kg of rice and 200 grams pulses. The generated funds are utilised towards meeting the needs of local communities by implementation of micro plan projects and creating public infrastructure such as provision of drinking water, storage godown, concrete roads, renovation of ponds and promotion of pisciculture and renovation of old tanks.

4.2.7 Grain Bank Scheme

The Government of India is implementing a scheme for setting up of Village Grains for providing food security to poor families. State Government has to meet 50% of the transportation cost and the cost towards Value Added Tax.

4.2.8 National Rural Employment Guarantee Scheme (NREGS)

The National Rural Employment Guarantee Act, 2005 is a path breaking legislation, entitling the rural poor guaranteed employment as a means of sustenance averting hunger and distress, ultimately lifting them from the trap of poverty. The NREG Act aims at better livelihood security of households in rural areas of the country by providing at least one hundred days of guaranteed wage employment, in a financial year, to every household whose adult members volunteer to do unskilled manual work. The choice of works suggested in the Act addresses causes of chronic poverty like drought, deforestation and social erosion, so that the process of employment is maintained on a sustainable basis. This was the first time a country had passed a law of this nature and scale, guaranteeing livelihood security to rural households. Parliament enacted it expressing the consensus of the states to use fiscal and legal instruments to address the

challenges of unemployment and poverty. The rationale for such legislation was based on the need to provide a social safety net to rural households as well as to create assets that rejuvenate the natural resource base of their livelihood. In an economy, where 60 percent of the people depend on agriculture for livelihood, a major share of the rural population is vulnerable to the vagaries of monsoon as an overwhelming share of the gross cropped area is rain-fed.

The significance of NREGA lies in the fact that it operates at many levels. It creates a social safety net for the vulnerable by providing a fallback employment source, when other employment alternatives are scarce or inadequate. It adds a dimension of equality to the process of growth. It creates a right-based framework for wage employment programmes by conferring legal entitlements and the right to demand employment upon the workers and makes the government accountable for providing employment in a time bound manner. By prioritizing natural resource management, and emphasizing the creation of durable assets it holds the potential of becoming a growth engine for sustainable development of an agriculture-based economy. Although the programme is not confined to BPL families, experience shows that it is mainly the poor households willing to do manual labour, who seek employment under NREGA.

This Act provides the necessary safety net for job seeking rural poor in a way different from the conventional approach as it is based on non-negotiable rights which empower the people, enforce accountability and transparency in implementation and by creating rural infrastructure of durable nature hastens up economic growth by reducing poverty. In accordance with this Act, NREG scheme in centre and Orissa Rural Employment Guarantee Scheme in Orissa was framed and operated.

This scheme, in the first phase came into operation in 19 districts of the State w.e.f. 2nd February, 2006 and subsequently the scheme is in implementation in full swing in all the 30 districts at present. The salient features of the scheme are:

- 100 days unskilled wage employment to a rural family in a financial year.
- Equal wage for men and women.
- Bar on contractors and labour displaying machines.
- Participatory planning and identification of works through Palli Sabha.
- Payment of wage on weekly basis but not later than 15 days.
- Unemployment allowances to job seekers if work not provided to job seekers within 15 days of application.
- GP / PS / ZP are involved in planning and execution of NREGS works.
- Social audit by village committee regarding the expenditure.
- Registration and providing job card in G.P.

During 2007-08, about 48.95 lakh households of 24 districts have registered under the programme out of which 42.69 lakh job cards were issued. In this period, about 430.90 lakh man-days employment were provided to 12.17 lakh households including 158.05 lakh man-days for women, 88.09 for SC and 179.17 lakh man-days for ST. During the period, 65,468 numbers of projects were taken up under the programme, out of which 5,557 projects were completed with an expenditure of Rs.690.76 crore (including food grain).

An amount of Rs.1, 03,492/- has been paid as unemployment allowances to 543 households belonging to four blocks of Bolangir, Kalahandi and Nawarangpur districts. A performance of NREGS during 2006-07 and 2007-08 is given below.

Table 4.4: Performance under NREGS in Orissa during 2006-07 and 2007-08

Sl. No.	Achievement	2006-07	2007-08
	Physical		
1	No. of district covered	19	24
2	Household registered(cumulative)	28.77 lakh	48.95 lakh
3	Job card issued to H.H.(cumulative)	25.93 lakh	42.69 lakh
4	Employment demanded by households	14.07 lakh	12.59 lakh
5	Employment provided to No. of households	13.94 lakh	12.17 lakh
6	Employment Generated(in person days)	799.34 lakh	430.90 lakh
7	Average no. of days provided work/h.h.	57	35.4
8	No. of project taken up	308200	65468
9	No. of project completed	30478	5557
10	Funds available(cash)	Rs. 890.0 cr.	Rs. 792.0 cr.
11	Expenditure(cash)	Rs. 733.47 cr.	Rs. 690.59 cr.
12	Total Expenditure(including food grain)	Rs. 770.71 cr.	Rs. 690.76 cr.
13	Unskilled wages(out of total expenditure)	Rs. 421.98 cr.	Rs. 353.11 cr.
14	Unemployment allowance	-	Rs. 1,03,492

Source: Panchayati Raj Department, Govt. of Orissa.

NREGA renamed after Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):

The Prime Minister Dr. Manmohan Singh while addressing the National Convention to commemorate the 50th Anniversary of launching Panchayati Raj and observing 2009-10 as year of Gram Sabha in New Delhi on 2nd October 2009 has stated that” I am pleased that the Union Cabinet has decided to change the name of *National Rural Employment Guarantee Act (NREGA)* to *Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)*. Mahatma Gandhi gave more emphasis on Gram Swaraj. To name NREGA after him, is a humble tribute from us to the Father of the Nation”.

4.2.9 Self Employment Programme

Swarnajayanti Gram Swarozgar Yojana (SGSY):

In order to improve the economic status of the rural poor, several anti poverty programmes / self employment programmes like Integrated Rural Development Programmes (IRDP), Development of Women and Children in Rural Area (DWCRA), Training for Rural Youth for Self Employment (TRYSEM), Ganga Kalyan Yojana (GKY), Million Well Schemes (MWS) etc. were in operation till end of 1998-99. These schemes are amalgamated and a new scheme named Swarnajayanti Gram Swarozgar Yojana (SGSY) came into being on 1st April 1999. It is a Centrally Sponsored Self Employment Programme which aims at increasing the income level of families (Swarozgaries) above the poverty line (with income of Rs. 2000/- P.M.) in three years by providing them income generating assets through a mix bank credit and Govt. subsidy. The scheme focuses of social mobilization of rural poor into

Self Help Groups (SHGs), their capacity building, skill up-gradation and training assistance for taking up different activities, credit linkage, infrastructure technology and marketing support. BPL families in rural areas are the target group. Physical and financial achievements under SGSY in Orissa by the end of 2007-08 are given in table – 4.5.

Table-4.5:-Physical and financial achievement under SGSY in Orissa by the end of 2007-08

Year	Financial			Physical	
	Expenditure (Rs. In lakh)	Per capita investment(Rs.)	Subsidy credit ratio	Target	Achievement
1999-00	7457.65	19880	1:1.75	99583	74633
2000-01	9780.81	22004	1:1.86	99094	86171
2001-02	6138.55	21885	1:1.78	53755	59233
2002-03	5499.02	22396	1:1.69	45293	48925
2003-04	6699.20	21437	1:1.58	54348	59289
2004-05	8281.82	23878	1:1.64	58229	65712
2005-06	8073.92	26048	1:1.80	58229	63904
2006-07	8611.11	29448	1:2.25	66250	68687
2007-08	11694.96	29362	1:2.26	81656	87171

Source: Economic Survey of Orissa, 2008-09.

4.2.10 Wage Employment Programme

Sampoorna Gramin Rojgar Yojana (SGRY)

Persistence of poverty is attributed mainly due to lack of employment in rural areas. To reduce unemployment in rural areas Sampoorna Gramin Rojgar Yojana (SGRY), a Centrally Sponsored Wage Employment Programme came into existence with from 25th September 2001 by amalgamating two other wage employment programmes namely, Jawahar Gram Samrudhi Yojana (JGSJ) and Employment Assistance Scheme (EAS). The Primary objective of the scheme is to provide additional and supplementary wage employment and thereby providing food securing and improving nutritional level in rural areas. Creation of durable community, social and economic assets and essential infrastructure in rural areas are the secondary objectives. Under this scheme wages are paid through a mix of at least 5 kg of food grain and minimum 25% in cash.

Food grains have been supplied to the rural landless agricultural labourers under special component of SGRY to meet the exigencies arising act of natural calamity to ensure food security in drought and flood affected areas. Physical and financial achievements of SGRY in Orissa by the end of 2007-08 are given in table – 4.6.

Table-4.5:-Physical and financial achievement of SGRY in Orissa by the end of 2007-08

Year	Financial			Physical		
	Fund available	Expenditure made	% of achievem ent	Employment generated (lakh man-days)	Target (lakh man-days)	% of achievem ents
2002-03	368.4	329.5	89	599.0	568.5	105
2003-04	403.9	386.1	96	618.6	639.2	97
2004-05	397.7	362.9	91	553.9	595.7	93
2005-06	359.9	357.4	99	556.0	689.9	81
2006-07	136.7	132.2	97	183.6	183.6	100
2007-08	76.58	68.65	90	74.17	88.27	84

Source: Economic Survey of Orissa-2008-09.

4.2.11 Orissa Tribal Empowerment and Livelihood Programme (OTELP)

Orissa Tribal Empowerment and Livelihood Programme (OTELP) came into existence on 2nd October, 2004 with financial assistance from DFID, IFAD and WFP. The programme aims at ensuring sustainable improvement in livelihood and food security of poor tribal livelihoods and food security of poor tribal households through promoting a more efficient equitable self managed and sustainable exploitation of the natural resources at their disposal through off farm / non-farm enterprise development.

The programme is scheduled to be implemented in 30 backward tribal blocks of 7 districts over a period of 10 years. In the first phase, the programme is being taken up in 10 blocks of 4 districts, viz. Daringibadi and Tumudibandha of Khandhamal District, T. Rampur and Langigarh of Kalahandi district, Rayagada, Gumma and Nuagarh blocks of Gajapati district and Narayanpatna, Badhugaon and Laxmipur blocks of Koraput district. Currently the implementation of Ph-II of the programme has been started, which will cover 9 additional blocks in the existing districts and 11 blocks in the districts of Rayagada, Malkangiri and Nawarangapur. The programme supports land and water management, forestry management, Agriculture and Horticulture Development on watershed basis with involvement and participation of self help groups, user groups and other stake holders.

4.2.12. Swarna Jayanti Sahari Rozgar Yojana (SJSRY)

Swarna Jayanti Sahari Rozgar Yojana(SJSRY) is a Centrally Sponsored Plan Scheme funded on 75:25 basis between Central Government and State Government. This scheme was launched on 1.12.1997 by subsuming earlier urban poverty alleviation programme namely Urban Basic Services for the Poor(UBSP),Nehru Rozgar Yojana(NRY) and Prime Minister's Integrated Urban Poverty Eradication Programme(PMIUPEP).It aims at providing gainful employment to urban poor through self-employment ventures and wage employment. The target group comprises of urban poor having monthly per capita income below Rs.490/- with special focus on SC, ST, Minorities and disabled persons. This programme consists of special sub schemes namely:

- (i) Urban Self Employment Programme(USEP)
- (ii) Urban Wage Employment (UWEP).

(i) Urban Self Employment Programme(USEP):

Urban Self Employment Programme (USEP) aims at providing self employment to urban poor through setting up of Micro Enterprises relating to servicing, manufacturing and small business. Under this programme skill up- gradation training is also being imparted to the urban poor relating to servicing, manufacturing as well as in local craft need. Besides, the programme also focused on unemployed women and children in groups for economic activities suited to their skill, attitude and local condition through Development of Women & Children in Urban Areas (DWCUA) component.

(ii) Urban Wage Employment (UWEP):

The Urban Wage Employment Programme(UWEP) aims at creating opportunities for wage employment for the unskilled urban poor beneficiaries through operation of socially and economically useful, public assets.

4.2.13 Swaymsidha

The swaymsidha programme has been introduced in the State with the prime aim of improving the socio-economic condition of women, especially in the tribal dominated KBK districts of Orissa. For this purpose, 36 blocks have been selected in eight KBK districts and in the district of Boudh considering the density of tribal population and incidence of poverty. Highlights of Swayamsidha scheme are as follows:

- Launched in 2001 in 36 blocks of 9(nine) districts.
- 100 SHGs to be formed in each block
- 50 village societies shall be formed in each block need not be registered.
- Lot of emphasis on capacity building and training.
- Cost of project per block is Rs.14.20 lakh and for the state Rs.78 lakh.

As on March, 2008, 3600 Women Self Help Groups (WSHGs) have been formed with 54,000 members covering 1777 villages of 653 GPs. Mostly, the members of these Women SHGs have preferred the major income generating activities viz. vegetable cultivation, small business, goatary, paddy processing, weaving etc.

4.2.14 Madhubabu Pension Yojana (MBPY)

The State Government has introduced “Madhu Babu Pension Yojana” (MBPY) by merging two pension schemes viz. “Old Age Pension Rules 1989” and “Disability Pension Rules 1985” which come into effect from 1st January 2008. All the beneficiaries who were covered under State Old Age Pension (SOAP) scheme and ODP scheme in the State are now being treated as beneficiary under MBPY w.e.f. 01.01.2008.

A person who is a permanent resident / domicile of Orissa and has not been convicted of any criminal offence and whose family income from all sources not exceeding Rs. 12,000/ P.A. and belong to any one category as stated below is entitled for the pension @ Rs. 200/- P.M.

A person shall be eligible to pension under MBPY, if he/she

- i) is of 60 years of age and above.
- ii) or is a widow (irrespective of age).
- iii) is a leprosy patient with visibly signs of deformity (irrespective of age).
- iv) is a person of 5 years of age of above and unable to do normal work due to deformity.
- v) a widow of an AIDS patient.
- vi) an AIDS patient identified by State / District AIDS Control Society.

4.2.15 National Old Age Pension (NOAP) Scheme

National Old Age Pension (NOAP) scheme is one of the component of “National Social Assistance Programme” (NSAP) being implemented in the State since 15th August 1995. Under the scheme, elderly destitute of 65 years of age and above, having no regular means of assistance are being paid with monthly pension at the increased rate of Rs. 200/- per month from 1st April, 2006.

NOAP scheme has been re-launched as Indira Gandhi National Old Age Pension (IGNOAP) scheme by Government of India w.e.f. 19.11.07; where in the criteria for selection of beneficiaries have been modified. As per revised criteria, all persons of 65 years or above and who are below poverty line (BPL) will be covered under IGNOAP as against the earlier criteria of destitute persons under NOAP.

4.3 NATIONAL FOOD SECURITY MISSION (NFSM)

In view of the stagnating food grain production and an increasing consumption need of the growing population, Government of India has launched this centrally Sponsored Scheme, '*National Food Security Mission*' in August 2007.

The major objective of this scheme is to increase production and productivity of wheat, rice and pulses on a sustainable basis so as to ensure food security of the country. The approach is to bridge the yield gap in respect of these crops through dissemination of improved technologies and farm management practices.

Major Components of NFSM

NFSM will have three components

- i. National Food Security Mission-Rice (NFSM-Rice)
 - ii. National Food Security Mission-Wheat (NFSM-Wheat)
 - iii. National Food Security Mission-Pulses (NFSM-Pulses)
- Total financial implications for the NFSM will be Rs.4882.48 crores during the XI Plan (2007-08-2011-12).Beneficiaries farmers will contribute 50% of cost of the activities/work to be taken up at their/individual farm holdings.
 - Beneficiaries can choose to draw loans from the Banks, in which case subsidy amount prescribed for a particular component for which the loan availed will be released to the Banks.
 - The implementation of the NFSM would result in increasing the production of rice by 10 million tones, wheat by 8 million tones and pulses by 2 million tones by 2011-12.It would also create additional employment opportunities.

States covered under NFSM

- 133 districts of 12 States(AP, Assam, Bihar, Chhattisgarh, Jharkhand, Karnataka, MP, Orissa, Tamil Nadu, U.P. and West Bengal) will be covered under NFSM-Rice.
- 138 districts of 9 States(Punjab ,Haryana, UP, Bihar, Rajasthan, MP, Gujarat, Maharashtra and West Bengal) will be covered under NFSM-Wheat.

- 168 districts of 14 States (AP, Bihar, Chhattisgarh, Gujrat, Karnataka, MP, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Punjab, Haryana, UP and West Bengal) will be covered under NFSM-Pulses.
- 20 million hectares of rice ,13 million hectares of wheat and 4.5 million hectares of pulses are included in these districts that roughly constitute 50% of cropped area

4.4 NATIONAL FOOD SECURITY ACT

The proposed National Food Security Act may be an important step towards eradicating hunger and reducing malnutrition in the country. While presenting the Union Budget 2009-10 the Finance Minister Mr. Pranab Mukherjee had announced that the work on this has began in right earnest. Implementation of this Act will ensure that every Below Poverty Line (BPL) card holder gets 25 kg of either rice or wheat at Rs.3 at kg every month.

The proposed National Food Security Act is a commendable initiative of the Government. This law would hopefully realize dreams of Mahatma Gandhi to provide food to every human, a goal that was inserted and enshrined in Constitution of India as Right to life (Article – 21), sixty years ago (Arabi, u., 2009). This legislation is perhaps the first of its kind after NREGS. If this law is implemented effectively, it can be a landmark in the economic, constitutional and social-political history of India. Hopefully, the government would undertake this challenge in positive manner and implement this law to eradicate the blot of hunger and poverty.



CHAPTER- V

DATA ANALYSIS AND INTERPRETATION AND DISCUSSIONS ON FINDINGS

5.1 INTRODUCTION

In this chapter, empirical data as collected during field survey relating to various aspects of the study were analysed and interpreted. The findings as observed during course of data analysis and interpretation were made thereon and discussed so as to derive suitable suggestions out of the discussion.

5.2 SOCIO-ECONOMIC FEATURES OF STUDY VILLAGES

For the present study total 9 villages from selected four C.D. Blocks and four Districts have been randomly and purposefully taken for collection of primary data. Minimum of two villages have been taken from each block taking into consideration that at least one village should be nearer to block headquarter and other faraway from the block headquarter. The villages taken from the selected C.D. Blocks and Districts have shown below:

<u>District</u>	<u>Block</u>	<u>Village</u>
Rayagada	Kashipur	Panbandh Talapadikhel
Mayurbhanj	Udala	Adipur Balichatra
Kalahandi	Lanjigarh	Ladang Bedagorn Mahapeta
Nuapada	Khariar	Khairbadi Sunamundi

Socio-economic features in respect of the villages taken for the study are given in the following table.

Table-3.5: -Socio-economic features of selected villages of four blocks under study

Sl. No.	Description	Unit	Kashipur C.D. Block		Udala C.D. Block		Lanjigarh C.D. Block			Khariar C.D. Block	
			Name of Villages		Name of Villages		Name of Villages			Name of villages	
			Panbandh	Talapadikhel	Adipur	Balichatra	Ladang	Bedagorn	Mahapeta	Khairbadi	Sunamundi
Location and general facilities:											
1	Distance from Block Hqrs.(in km)		25	7	27	15	29	20	22	30	13
2	Distance from Dist. Hqrs.(in km)		55	83	50	46	77	65	67	100	80
3	Post Office (in the village/nearest distance in km.)		Tikri-4km.	Kashipur - 7km.	1	0km	14km.	6km.	6km.	3	4

4	STD Booth(in the village/nearest distance in km)		Tikri-4km	Kashipur - 7km.	3	7	14km.	20km.	22km.	3	1
5	Bank(in the village/nearest distance in km)		Tikri-4km	Kashipur - 7km.	7	7	14km.	20km.	22km.	20	5
6	Market Place(in the village/nearest distance in km)		Tikri-4km	Kashipur - 7km.	3	7	5km.	6km.	6km.	3	1
	Demography:										
7	Scheduled Tribes(Community-wise)				Santal	Santal	Kulia Kandha	Kulia Kandha	Kulia Kandha	Kandha	Sabar
	a)		Kondh								
	No. of HHs		100	81	77	62	27	13	17	24	34
	Total Population		519	511	344	345	121	56	80	108	143
	Male		261	272	188	182	58	31	38	58	82
	Female		258	239	156	163	63	25	42	50	61
	b)				Bhunjia	Kolha				Gandha	
	No. of HHs		-	-	11	45	-	-	-	17	
	Total Population		-	-	54	248	-	-	-	77	
	Male		-	-	33	128	-	-	-	41	
	Female		-	-	21	120	-	-	-	36	
	c)					Kol-Lohara				Sabar	
	No. of HHs		-	-	9	4	-	-	-	18	
	Total Population		-	-	45	22	-	-	-	81	
	Male		-	-	25	12	-	-	-	43	
	Female		-	-	20	10	-	-	-	38	
	d)					Bathudi					
	No. of HHs		-	-		3	-	-	-		
	Total Population		-	-		15	-	-	-		
	Male		-	-		8	-	-	-		
	Female		-	-		7	-	-	-		
	Total S.T.(all communities)										
	Total No. of HHs		100	81	97	114	27	13	17	59	
	Total Population		519	511	443	630	121	56	80	266	
	Total Male		261	272	246	330	58	31	38	142	
	Total Female		258	239	197	300	63	25	42	124	
8	Scheduled Caste(Community-wise):										
	a)		Damba		Nil	Nil		Dombo		Nil	Nil
	No. of HHs		Nil	19			-	27	-		
	Total Population		-	144			-	119	-		
	Male		-	79			-	62	-		
	Female		-	65			-	57	-		
	b)										
	No. of HHs		-	-			-	-	-		
	Total Population		-	-			-	-	-		
	Male		-	-			-	-	-		
	Female		-	-			-	-	-		
	c)										
	No. of HHs		-	-			-	-	-		
	Total Population		-	-			-	-	-		
	Male		-	-			-	-	-		
	Female		-	-			-	-	-		
	Total S.C.(all communities)							Dombo			
	Total No. of HHs		Nil	19			-	27	-		
	Total Population		-	144			-	119	-		
	Total Male		-	79			-	62	-		
	Total Female		-	65			-	57	-		

9.	Other Castes										
	a)		Gouda		Bindhan i	Mohan ta		Sundhi		Gou da	Gou da
	No. of HHs		5	4	1	2	-	9	-	13	13
	Total Population		16	34	4	12	-	51	-	58	55
	Male		9	19	3	7	-	26	-	31	32
	Female		7	15	1	5	-	25	-	27	23
	b)							Raju			Paik a
	No. of HHs		-	-			-	10	-		8
	Total Population		-	-			-	59	-		34
	Male		-	-			-	31	-		20
	Female		-	-			-	28	-		14
	c)										
	No. of HHs		-	-			-	-	-		
	Total Population		-	-			-	-	-		
	Male		-	-			-	-	-		
	Female		-	-			-	-	-		
	Total Other Castes:										
	Total No. of HHs		5	4	1	2	-	19	-	13	21
	Total Population		16	34	4	12	-	110	-	58	89
	Total Male		9	19	3	7	-	57	-	31	52
	Total Female		7	15	1	5	-	53	-	27	37
10.	Total No. of HHs in the village		104	104	98	116	-		-	72	55
	Total Population(all categories)		535	689	447	642				324	232
	Male		270	370	249	337				173	134
	Female		265	319	198	305				151	98
11.	Total Literates				196	282				90	111
	Literacy Rate										
	male				127	185				70	71
	female				69	97				20	40
	Other Facilities:										
12.	Total no. of ST households under BPL category(as per BPL census 1997)		79	46	48	45	19	-	12	28	20
13.	Total no. of BPL tribal families issued with Job card under EGS		79	92	23	22	22	12	14	25	14
14.	Availability of GP level food security facility(other than PDS)		-	-	No	No	-	-	-	No	No
15.	Grain Bank Facility		No	No	No	No	No	No	No	No	No
16.	Food security facility through kothaghar		-	-	No	No	-	-	-	No	No
17.	Location of Ration Shop:										
	- in the village		No.	No.	No	No	No	No	No	No	No
	- located at a distance(in km)		Tikri-4km.	7km.	1km.	3km.	5km.	14km.	14km.	3km.	3km.
18.	SHGS										
	- Total Active SHGs		3	2	2	6	-	3	1	3	2
	- Total number of Members in SHGs		38	26	20	60	-	32	10	30	20

19.	<u>Electrification</u>										
	- Electrified or not		No	No	No	No	No	-	-	No	Yes
	- No. of domestic connections		-	-		No	-	-	-	No	10
20.	<u>Drinking Water(Source)</u>										
	a)Traditional										
	Pond		No	No			-	-	-		
	Well		No	No	2	2	-	-	-	2	
	Stream/Nalla		One	One		1	Yes	Yes	Yes	1	
	Other		No	No			-	-	-		
	b)Modern										
	Tubewell		Three	Three	6	5	Yes	Yes	Yes	5	4
	Tap		No	No			-	-	-		
	Sanitary Well		No	No			-	-	-		
	Bore well		No	No			-	-	-		
21.	<u>Educational Institutions</u>										
	UP school										
	- In the village		Yes	No	No	Yes	No	No	No	Yes	No
	At a distance of (in kms.		-	2	1	-	2	1	1	-	2
21.	<u>Health Institutes</u>										
	-in the village		Nil	Nil	No	No	-	-	-	No	No
	-located at a distance(in km)		PSH at Tikri	PSH at Kashipur	8	3	14km.	20km.	22km.	3	1
22.	<u>Heathl Service Providers(in the village)</u>										
	-ANM		At Maliguda 5km	At SiadiMal 7km.	3	3	4km.	2km.	4km.	3	5
	-Traditional Dai				1	3	-	7km.	2km.	3	1
	-Asha		At Dudukabah al 2km.	Talapadi khal	0km	0km	2km.	2km.	4km.	3	0km
	-VHW		At Tikri 4km	At Kashipur 7km.	-	-	13km.	20km.	22km.	-	-
23.	ICDS Centre/Sub-Centre										
	-In the village		Yes	Yes	No	No	-	-	-	No	No
	-Located at a distance (in km.)		-	-	2	3	2.	2.	4.	3	3
24.	Percentage of institutional delivery		Nil	50%	-	-	-	-	-	-	-
25.	Total Children(0-3 years)		43	38	27	34	7	2	6	24	15
26.	Total Children(3-6 years)		63	36	23	42	8	4	8	20	20
27.	Total Malnourished Children(0-3 years)		4	1	-	-	12	1	3	-	-
28.	No. of elderly population above 60 yrs. if age without livelihood		18	14	28	11	4	2	2	5	12
29.	No. of disabled persons without livelihood		3	4	8	3	3	-	1	8	6

5.3 SOCIO-ECONOMIC CONDITIONS OF SAMPLE TRIBAL HOUSEHOLDS

While studying the food security problems of the tribals it was pertinent to gather background information like socio-economic conditions, etc. in respect of the tribal households. As per the design of the study 240 sample tribal households from BPL category have to be covered for the purpose of the study. During the course of field survey total 239 sample tribal households from BPL lists were covered consisting 60 each from Kashipur, Udala and Lanjigarh C.D. blocks and 59 from Khariar C.D. block. Socio-economic aspects in reaspect of the sample tribal households as collected, are presented in the following paragraphs.

5.3.1 *Category of Tribes*

Community-wise sample tribal households covered during the course of field survey in four blocks are shown in table – 5.2. It can be revealed from table 5.2 that in Kashipur and Lanjigarh blocks 60 households each belonging to Kondh and Kutia Kondh communities respectively, while in other two blocks, in Udala out of 60 households 36 belong to Santal, 21 of Kolha, 2 of Kol-Lohra and 1 of Sabar communities and in Khariar block, out of 59 households, 39 belong to Sabar, 14 of Kandha and 6 of Gond communities.

Table – 5.2: Community-wise Tribal Households surveyed in four sample blocks

Sl. No.	Name of the tribal community	Name of the block				Total of all blocks (in no./%)
		Kashipur	Udala	Langigarh	Khariar	
1	Santal	-	36	-	-	36 (15.06)
2	Kolha	-	21	-	-	21 (8.79)
3	Kol-Lohara	-	2	-	-	2 (0.84)
4	Sabar	-	1	-	39	40 (16.74)
5	Kandha	-	-	-	14	14 (5.86)
6	Gond	-	-	-	6	6 (2.51)
7	Kondh	60	-	-	-	60 (25.10)
8	Kutia Kondh	-	-	60	-	60 (25.10)
	Total	60	60	60	59	239 (100)

5.3.2 *Family Type*

In table – 5.3, type of families in respect of 239 sample tribal households covered during the course of study are given in block-wise. It is observed that, out of total 239 families 237 (99.16%) are nuclear type and only 2 are joint type, and that too in Kashiupur block.

Table – 5.3: Type of families under study in four sample blocks

Type of Family	Name of the block				Total of all blocks (in no. / %) (N = 239)
	Kashipur (N = 60)	Udala (N = 60)	Langigarh (N = 60)	Khariar (N = 60)	
Nuclear	58 (96.97%)	60 (100%)	60 (100%)	59 (100%)	237 (99.16)
Joint	2 (3.33%)	NIL	NIL	NIL	2 (0.84)

5.3.3. Land and House pattern

Block-wise distribution of sample tribal households in respect of their land and house are depicted in table – 5.4.

Table – 5.4 : Block-wise distribution of sample tribal households In respect of land and House in four sample blocks

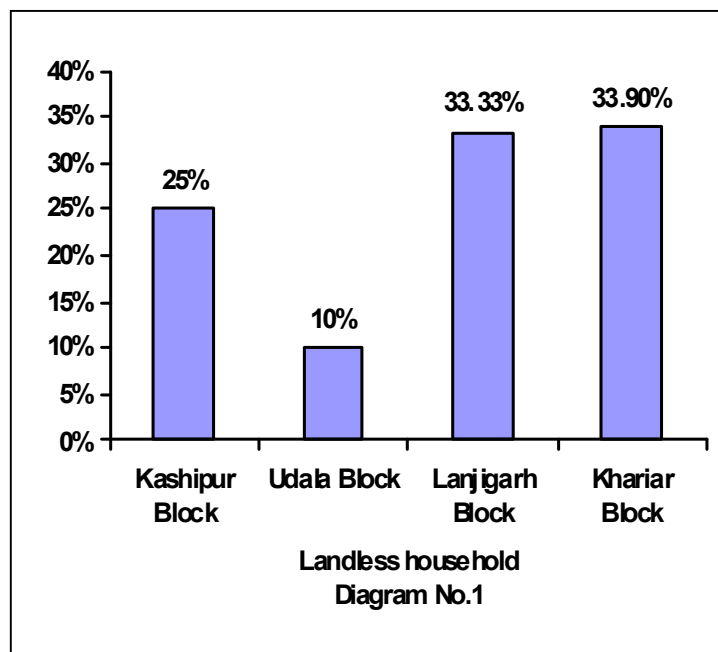
Description	Name of the block				Total of all blocks (In no. /%) (N= 239)
	Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
	(N= 60)	(N= 60)	(N= 60)	(N= 59)	
(1)	(2)	(3)	(4)	(5)	(6)
(A) Land:					
No. of HHs having no land (other than house)	15 (25.00)	6 (10.00)	20 (33.33)	20 (33.90)	61 (25.52)
No. of HHs having own land:					
Less than 1 acre	4 (6.67)	28 (46.67)	5 (8.33)	6 (10.17)	43 (17.99)
1-2 acres	19 (31.67)	23 (38.33)	22 (36.67)	30 (50.85)	94 (39.33)
More than 2 acres	22 (36.67)	3 (5.00)	13 (21.67)	3 (5.08)	41 (17.16)
(B) No. of HHs having cultivable irrigated land:					
Less than 1 acre	-	12 (20.00)	-	-	12 (5.02)
1-2 acres	-	11 (18.33)	-	-	11 (4.60)
More than 2 acres	-	-	-	-	-
(C) No. of HHs having cultivable un-irrigated land:					
Less than 1 acre	4 (6.67)	18 (30.00)	5 (8.33)	6 (10.17)	33 (13.80)
1-2 acres	19 (31.67)	16 (26.67)	22 (36.67)	30 (50.85)	87 (36.40)
More than 2 acres	22 (36.67)	1 (1.67)	13 (21.67)	3 (5.08)	39 (16.32)
(D) House					
No. of HHs having own house on own land	56 (93.33)	54 (90)	54 (90)	45 (76.27)	209 (87.45)
No. of HHs having own house on Govt. land	4 (6.67)	2 (3.33)	6 (10.00)	14 (23.73)	26 (10.88)
No. of HHs having own house on leased land	-	3 (5.00)	-	-	3 (1.25)
No. of HHs staying on rent	-	1 (1.67)	-	-	1 (0.42)
(E) Type of House:					
No. of HHs having Kuchha house	38 (63.33)	56 (93.33)	60 (100)	53 (89.83)	207 (86.61)s

No. of HHs having partly kuchha and partly Pucca house	21 (35.00)	1 (1.67)	-	5 (8.47)	27 (11.29)
No. of HHs having Pucca house	1 (1.67)	3 (5.00)	-	1 (1.69)	5 (2.09)

5.3.3(a) Land

Landless households

From the data as presented in item (A) of table – 5.4 it is revealed that out of total 239 sample tribal households 61(25.52%) do not possess any land other than houses. On block-wise analysis it can be observed that both in Lanjigarh and Khariar blocks about one third sample tribal households i.e. 33.3% and 33.90% respectively have no land followed by Kashipur block 25% and lowest in Udala block 10%, as shown in diagram – 1.



Households owing land

So far as land is concerned, it is observed from item (B) of table – 5.4 that, total about 18 per cent of sample tribal households possess less than one acre of land, about 40 per cent possess one to two acres and about 17 per cent possess more than two acres of land.

In respect of cultivable irrigated land, it is observed from the table that only in Udala block out of 60 sample tribal households 12 (20%) possess less than one acre and 11(18.33%) possess one to two acres. In other three blocks the households do not possess any cultivable agricultural land as there is no irrigation facility in the area.

In respect of cultivable un-irrigated land it is observed that maximum of households i.e. about 36 per cent possess 1 – 2 acres, about 16 per cent possess more than 2 acres and about 14 per cent possess less than one acre of land.

5.3.3(b) House

From item (D) of table – 5.4 it is revealed that out of 239, majority of 209 (87.45%) households have their own houses on their own land, 26 (10.88%) have their houses on government land, 3 (1.25%) have their houses on leased land and only 1 (0.42%) is staying on rent.

So far as type of house is concerned, it can be seen from item (E) of table – 5.4 that out of 239, majority of households, i.e. 207 (86.61%) have Kuchha houses, 27 (11.39%) have partly pucca and partly kuchha houses and only 5 (2.09%) have pucca houses, as shown in diagram – 2. While analysing block-wise data, it is observed that, 60 (100%) houses in Lanjigarh block have kuchha houses followed by 56 (93.33%) in Udala block, 53 (89.83%) in Khariar block and 38(63.33%) in Kashipur block. Only 3 houses in Udala block and one each house in Kashipur and Khariar blocks respectively are made of pucca under Indira Awas Yojana. Rest of the houses are partly pucca and partly kuchha in three blocks except in Lanjigarh block.

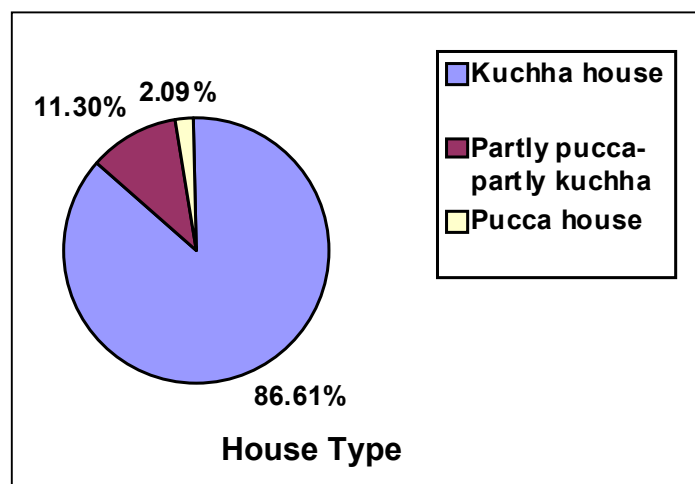


Diagram -2

From the above analysis it may be observed that only 5 (2.09%) out of total 239 sample tribal households benefited under Indira Awas Yojana (IAY) and rest of them are deprived of the benefits under IAY.

5.3.4 Electricity, Drinking Water and Toilet facilities

In table – 5.5, data relating to electricity, drinking water and toilet facilities in respect of sample tribal households are shown.

Table – 5.5 : Electricity, Water and Toilet facilities in respect of sample tribal Households in four sample blocks

Description	Name of the block				Total of all blocks (In no. /%)
	Kashipur (In no. /%) (N= 60)	Udala (In no. /%) (N= 60)	Langigarh (In no. /%) (N= 60)	Khariar (In no. /%) (N= 59)	
(A) No. of houses electrified	Nil	Nil	Nil	Nil	Nil
(B) Source of drinking water:					
Piped(tap)	-	-	-	-	-
Tubewell	57 (95.00)	19 (31.67)	60 (100)	59 (98.33)	195 (81.59)
Well	-	29 (48.33)	16 (26.67)	-	45 (18.82)
Pond	-	-	-	-	-
Stream	24 (40.00)	19 (31.67)	-	-	43 (17.99)
Any Other	-	-	-	-	-
(C) Availability of safe drinking water:					
Nearby House	57 (95.00)	23 (38.33)	60 (100.00)	49 (83.05)	189 (79.07)
Within half km. of distance		14 (23.33)	-	10 (16.95)	24 (10.04)

Half km. to one km. of distance	-	22 (36.67)	-	-	22 (9.20)
One km. to two km. of distance	3 (5.00)	1 (1.67%)	-	-	4 (1.67)
More than two km. of distance	-	-	-	-	-
(D No. of HHs having toilet facilities	Nil	Nil	Nil	Nil	Nil

5.3.4(a) House Electrification

From the data as presented in item (A) of table – 5.5 it is observed that in all the sample tribal households of all the four blocks area debarred with electricity facilities.

5.3.4(b) Drinking Water

So far as sources of drinking water are concerned, it can be seen from item (B) of table – 5.5 that out of 239 sample tribal households in all the four blocks 195 (81.59%) are collecting drinking water from tube well. While considering block-wise data it is observed that, except in Udala block where tube well facility availed by only 31.67% of households, majority of households, i.e. about 98 per cent availing tube well facilities for collection of drinking water. In Udala block majority of households, i.e. about 48 per cent using wells or streams as their main source of drinking water. Also it is observed that there is no piped water supply available to any of the blocks / areas.



Regarding availability of drinking water facilities it is observed from item (C) of table – 5.5 that about 80 per cent sample households are getting drinking water nearby their houses, about 20 per cent are getting within half km. to one km. distance and only about 2 per cent are getting within 2 kms. of distance.

5.3.4(C) Toilet Facility

From item (D) of table – 5.5 it may be seen that no toilet facility is available for the sample tribal households in all the blocks / areas under study.

From the above analysis it may be observed that the facilities like electricity, individual or common toilets, piped water, sanitary wells are still distance dreams of the people in these areas, and the schemes like Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), Biju Gramya Yojana, Kutir Jyoti, Integrated Rural Energy Programme (IREP), Total Sanitation Campaign (TSC), etc. are not yielding any result for the poor tribals in these areas.

5.3.5 Family Size, Sex, Age Group, Literacy Level, etc.

In table – 5.6 block-wise distributions of sample tribal households in respect of their family size, sex, age groups, literacy level, etc. are depicted.

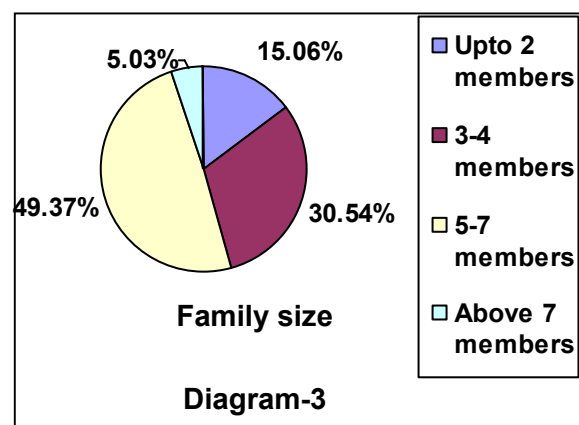
Table 5.6 : Family size, sex, age, and literacy level, etc. of the sample tribal Households in four sample blocks

Description	Name of the block				Total of all blocks (In no. /%)
	Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
	(N= 60)	(N= 60)	(N= 60)	(N= 59)	(N= 239)
<u>(A) Family size:</u>					
Up to 2 members	7 (11.67)	5 (8.33)	14 (23.33)	10 (16.95)	36 (15.06)
3-4 members	18 (30.00)	19 (31.67)	16 (26.67)	20 (33.90)	73 (30.54)
5-7 members	33 (55.00)	31 (51.67)	29 (48.33)	25 (42.37)	118 (49.37)
More than 7 members	2 (3.33)	5 (8.33)	1 (1.67)	4 (6.78)	12 (5.02)
<u>(B) SEX</u>					
Male	146	154	127	135	562 (50.40)
Female	148	145	135	125	553 (49.60)
Total	294	299	262	260	
<u>(C) Age Group</u>					
0-6 yrs.	72	45	50	33	200 (17.94)
7-15 yrs.	72	51	69	62	254 (22.78)
16-45 yr.	126	144	104	110	484 (43.41)
46-60yrs.	12	29	20	29	90 (8.07)
Above 60 yrs.	12	30	19	26	87 (7.80)
<u>(D) Literacy(above 6 yrs of age)</u>	(N = 222)	(N = 254)	(212)	(N = 227)	(N = 915)

Illiterates	239	157	225	159	780 (69.96)
Up to class-III	35	64	307	35	441 (39.55)
Up to M.E.	18	37	-	33	88 (7.89)
Up to HSC	1	33	-	29	63 (5.65)
Above HSC	1	8	-	4	13 (1.17)
(E) Disabled persons	-	1	-	13	14 (1.26)
(F) Woman headed families	-	-	-	6	6 (10.17)

5.3.5(a) Family Size

Regarding size of the family in respect of sample tribal households, from item (A) of table – 5.6 it can be seen that out of total 239, majority of 118(49.37%) households having 5 – 7 members followed by 73 (30.54%) having 3 – 4 members, 36 (15.06%) having up to 2 members and 12 (5.02%) having more than 7 members. This may be seen in diagram – 3.



5.3.5(b) Sex

Item (B) of table – 5.6 shows that from total 239 families under study in all the four blocks, out of 1115 members 562 are males and 553 are females. In analyzing block-wise it is found that in Kashipur block out of 60 families 146 male members and 148 female members, in Udala block out of 60 families 154 male members and 145 female members, in Lanjigarh block out of 60 families 127 male members and 135 female members and in Khariar block out of 59 families 135 male members and 125 female members.

5.3.5(c) Age group

Considering age group of family members it is revealed from item (C) of table – 5.6 that, total in all blocks out of 1115 family members maximum of 484 (43.41%) are in the age group of 16 – 45 years followed by 254 (22.78%) are in the age group of 7 – 15 years, 200 (17.94%) are in the age group of 0 – 6 years, 90 (8.07%) are in the age group of 46 – 60 years and 87 (7.80%) are in the age group of above 60 years of old.

5.3.5(d) Literacy level

Literacy levels of family members of all the respondent households have been taken those who are above 6 years of old. As shown in item (D) of table – 5.6, these members constitute 915 in total of all blocks and out of which illiterates found 580 (63.39%) followed by literates up to Class – III 171(18.69%), literates up to M.E. standard 88 (9.62%), literates up to H.S.C. 63 (6.88%) and above H.S.C. only 13 (1.42%). Literacy levels of family members total in all blocks (above 6 years of age) are shown in diagram – 4.

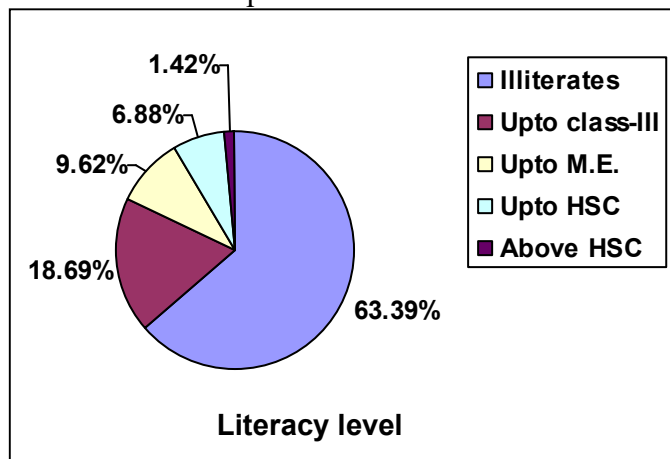


Diagram-4

5.3.5(e) Disabled person

From item (E) of table – 5.6 it is observed that out of total 14 disabled persons only one person belongs to Udala block and 13 persons belong to Khariar block.

5.3.5(f) Women headed families

As per the data given in item (F) of table – 5.6, out of 239 sample tribal households only 6 households in Khariar block found women headed families.

5.3.6 Occupation and income pattern

Block-wise distribution of occupation and income pattern of sample tribal households in four sample blocks under study is made in table – 5.7

Table - 5.7: Block-wise distribution of occupation and income of sample tribal Households of four sample blocks

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Primary Occupation:					
	▪ Farm Cultivation(Cultivator)	32 (53.33)	24 (40)	31 (51.67)	5 (8.47)	92 (38.49)
	▪ Animal Husbandry(Specify)	-	-	-	-	-
	▪ Village craft	-	-	-	-	-
	▪ Forest Collection	-	-	-	-	-
	▪ Wage labourer	27 (45.00)	36 (60.00)	26 (43.33)	49 (83.05)	138 (57.74)
	▪ Service	-	-	-	1 (1.69)	1 (0.42)
	▪ Business	-	-	-	-	-

	▪ Any other(specify) (old age pension)	1 (1.67)	-	3 (5.00)	4 (6.78)	8 (3.35)
2	Secondary Occupation					
	▪ Animal Husbandry(specify)	-	-	-	-	-
	Goatery	-	-	-	-	-
	Piggery	-	-	-	-	-
	▪ Village Craft(Specify)	-	-	-	-	-
	▪Any other(specify)					
	Wage Labour	35 (58.33)	21 (35.00)	33 (55)	4 (6.78)	93 (38.91)
	Forest Collection	12 (20)	14 (23.33)	23 (38.33)	21 (35.59)	70 (29.29)
3	Average annual income (from all sources)					
	▪ Up to Rs. 3000	-	-	-	-	-
	▪ Rs. 3001 to Rs. 6000	5 (8.33)	-	7 (11.67)	9 (15.25)	21 (8.79)
	▪ Rs. 6001 to Rs. 11000	33 (55.00)	4 (6.67)	42 (70.00)	21 (35.59)	100 (41.84)
	▪ Rs. 11001 to Rs. 15000	14 (23.33)	24 (40.00)	11 (18.33)	10 (16.95)	59 (24.69)
	▪ Rs. 15001 to Rs. 20000	8 (13.33)	20 (33.33)	-	15 (25.42)	43 (17.99)
	▪ Above Rs. 20000	-	12 (20.00)	-	4 (6.78)	16 (6.69)

5.3.6(a) Primary occupation

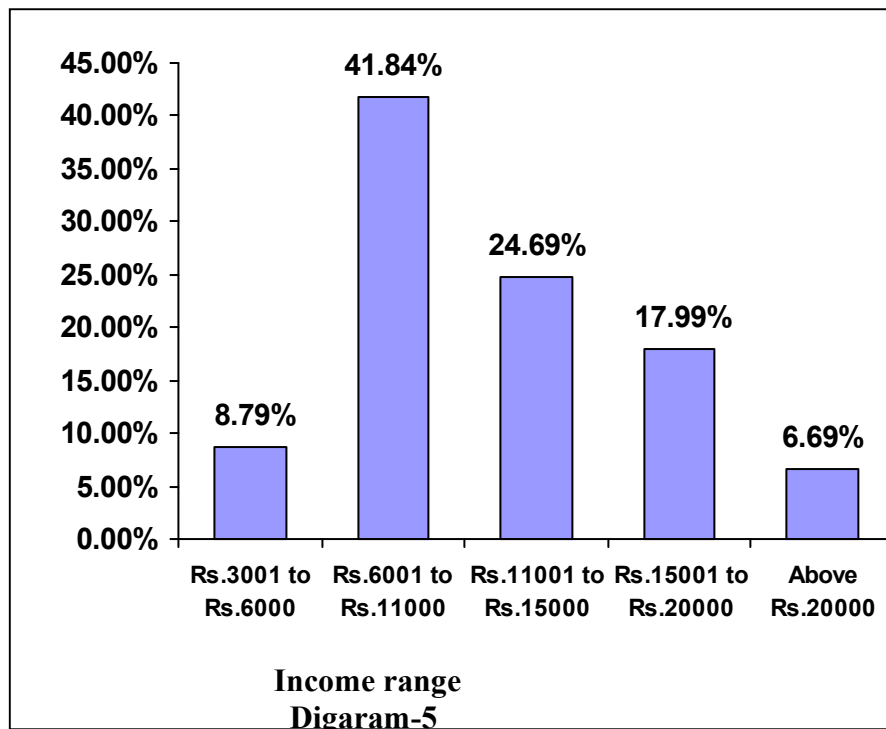
As regards primary occupation of sample tribal households, it is revealed from item (1) of table – 5.7 that cultivators are found more than 50 per cent i.e. 53.33% in Kashipur block and 51.67% in Lanjigarh block, whereas in Udala block it is 40% and lowest of 8.47% in Khariar block. Wage labourers / agricultural labourers are found highest of 83.05% in Khariar block followed by 60.00% in Udala block, 45.00% in Kashipur block and 43.33% in Lanjigarh block. Other occupations like animal husbandry, village craft, minor forest collection, business, etc. are found not opted by the respondent households in all the four sample blocks. Service-holder is found only one person in Khariar block. Some of the old age pensioners, i.e. one per son in Kashipur block, 3 persons in Lanjigarh block and 4 persons in Khariar block treated their old age pension as primary source of income. In analyzing data in respect of total of all sample blocks it is revealed that labour class constitute highest percentage of 57.74% followed by cultivators of 38.49% and service only 0.42%.

5.3.6(b) Secondary occupation

On analysis of data as presented in item (2) of table – 5.7 it is observed that the respondent households are remain engaged only in two types of secondary occupations like wage labour and minor forest collection. Out of total of all sample blocks 38.91% respondent households engaged as wage labourers and 29.29% as forest collection. It may be stated here that those who are cultivators as their primary occupation are remain engaged as wage labourers when there is no farm or cultivation activities. It is further to be stated that the respondent households are not remain engaged in any other secondary occupations like animal husbandry, village craft, etc.

5.3.6(c) Income

Block-wise data relating to average annual income of the respondent households are depicted in item (3) of table – 5.7. It is revealed from the data that out of total in all blocks majority of households i.e. 100 (41.84%) are in the average annual income range of R. 6001 to Rs. 11000 followed by 59(24.69%) households are in; the range of Rs. 11001 to Rs. 15000, 43(17.99%) are in the range of Rs. 15001 to Rs. 20000, 21(8.79%) are in the range of Rs. 3001 to Rs. 6000 and 16(6.69%) are in the range of above Rs. 20000 as shown in the diagram – 5.



On analysis of data in block-wise it is observed that highest range of income group of households i.e. income level above Rs. 20000 are found only 12 (20.00%) in Udala block and 4(6.78%) in Khariar block.and lowest range of income group of households i.e. Rs. 3001 to Rs. 6000 are found 5(8.33%) in Kashipur block, 7(11.67%) in Lanjigarh block and 9(15.25%) in Khariar block and maximum numbers of households are found medium range of income group i.e. between Rs. 6001 to Rs. 20000.

Data relating to occupation and income in respect of respondent households as analysed above clearly give the understanding about their standard of living. So far as occupation is concerned it can be observed that majority of respondent households possess about 1 – 2 acres of un-irrigated cultivable and about 25 per cent of households do not possess any land. Cultivation, wage labour and minor forest collection are found major source of income. On analysis of data in respect of income of the respondents it can be seen that out of total 239 households, 21 (8.79%) households' average annual income found within the range of Rs. 6000. Considering maximum of Rs. 6000 of average annual income it comes to Rs. 500 per month per family and Rs. 16.16 per day per family and assuming 5 members in a family the income per person per day comes to Rs. 3.33 only.

Similarly, out of total 239 sample households majority group i.e. 100 (41.84%) are found within income range of Rs. 6001 to Rs. 11000. Considering the maximum of Rs. 11000 of average annual income it comes to about Rs. 917 per month per family, Rs. 30.56 per day per family and Rs. 6.11 per day per person. Considering annual income range of Rs. 11001 to Rs. 15000 and calculating in the above manner the income per person per day comes to Rs. 8.33 and Rs. 11.11 per person per day for the households income range up to 20000. Only in case of 16(6.69%) households whose average annual income range is found above Rs. 20000, the income per person per day comes to above Rs. 11.11.

Also from the above analysis it can be observed that in total in all blocks :

- 6.69 % households' average income per day per person comes to above Rs.11.11.
- 17.99% households' average income per day per person comes in the range of Rs. 8.33 to Rs.11.11.
- 24.69% households' average income per day per person comes in the range of Rs. 6.11 to Rs. 8.33.
- 41.84% households' average income per day per person comes in the range of Rs. 3.33 to Rs. 6.11.
- 8.79% households' average income per day per person up to Rs. 3.33.

5.3.7 Consumption and Expenditure pattern

Data relating to consumption and expenditure pattern of sample tribal households in block-wise are depicted in table – 5.8.

Table- 5.8: Distribution of sample tribal households in respect of annual Consumption pattern and average expenditure of four sample blocks

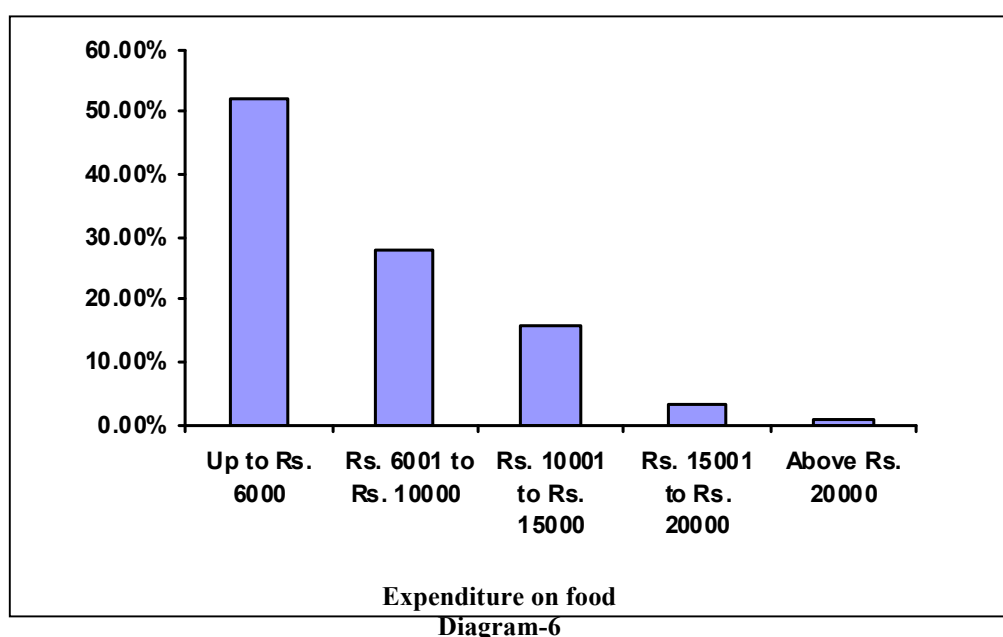
Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Food:					
	▪ Up to Rs. 6000	20 (33.33)	30 (50.00)	43 (71.67)	31 (52.54)	124 (51.88)
	▪ Rs. 6001 to Rs. 10000	27 (45.00)	13 (21.67)	15 (25.00)	12 (20.34)	67 (20.03)
	▪ Rs. 10001 to Rs. 15000	10 (16.67)	12 (20.00)	2 (3.33)	14 (23.73)	38 (15.90)
	▪ Rs. 15001 to Rs. 20000	3 (5.00)	3 (5.00)	-	2 (3.39)	8 (3.35)
	▪ Above Rs. 20000	-	2 (3.33)	-	-	2 (0.84)
2	Fuel					
	▪ Up to Rs. 1000	52 (86.67)	3 (5.00)	55 (91.67)	30 (50.85)	140 (58.58)
	▪ Rs. 1001 to Rs. 2000	8 (13.33)	32 (53.33)	5 (8.33)s	24 (40.68)	69 (28.87)

	▪ Above Rs. 2000	-	25 (41.67)	-	5 (8.47)	30 (12.55)
3	<u>Clothing</u>					
	▪ Up to Rs. 1000	48 (80.00)	3 (5.00)	60 (100)	15 (25.42)	126 (52.72)
	▪ Rs. 1001 to Rs. 2000	10 (16.67)	36 (60.00)	-	34 (57.63)	80 (33.47)
	▪ Rs. 2001 to Rs. 3000	2 (3.33)	21 (35)	-	10 (16.95)	33 (13.81)
	▪ Rs. 3001 to Rs. 5000	-	-	-	-	-
	▪ Above Rs. 5000	-	-	-	-	-
4	<u>Children's Education</u>					
	▪ Nil	37 (61.67)	-	50 (83.33)	-	87 (36.40)
	▪ Up to Rs. 1000	23 (38.33)	34 (56.67)	10 (16.67)	31 (52.54)	98 (41.00)
	▪ Rs. 1001 to Rs. 2000	-	21 (35.00)	-	26 (44.07)	47 (19.67)
	▪ Rs. 2001 to Rs. 3000	-	5 (8.33)	-	2 (3.39)	7 (2.93)
	▪ Rs. 3001 to Rs. 5000	-	-	-	-	-
	▪ Above Rs. 5000	-	-	-	-	-
5	<u>Health care/Medical</u>					
	▪ Nil	7 (11.67)	-	8 (13.33)	-	15 (6.28)
	▪ Up to Rs. 1000	53 (88.33)	9 (15.00)	52 (86.67)	1 (1.69)	115 (48.12)
	▪ Rs. 1001 to Rs. 2000	-	37 (61.67)	-	52 (88.14)	89 (37.24)
	▪ Rs. 2001 to Rs. 3000	-	14 (23.33)	-	6 (10.17)	20 (8.37)
	▪ Rs. 3001 to Rs. 5000	-	-	-	-	-
	▪ Above Rs. 5000	-	-	-	-	-
6	<u>Social Functions:</u>					
	▪ Up to Rs. 1000	46 (76.67)	11 (18.33)	60 (100)	38 (64.41)	155 (64.85)
	▪ Rs. 1001 to Rs. 2000	14 (23.33)	30 (50.00)	-	18 (30.51)	62 (25.94)
	▪ Rs. 2001 to Rs. 3000	-	16 (26.67)	-	3 (5.08)	19 (7.95)
	▪ Rs. 3001 to Rs. 5000	-	3 (5.00)	-	-	3 (1.26)
	▪ Above Rs. 5000	-	-	-	-	-
7	<u>Entertainment of guests:</u>					
	▪ Nil	-	-	-	-	-
	▪ Up to Rs. 1000	55 (91.67)	47 (78.33)	56 (93.33)	57 (96.61)	215 (89.96)
	▪ Rs. 1001 to Rs. 2000	5 (8.33)	12 (20.00)	4 (6.67)	2 (3.39)	23 (9.62)
	▪ Rs. 2001 to Rs. 3000	-	1 (1.67)	-	-	1 (0.42)
	▪ Above Rs. 3000	-	-	-	-	-
8	<u>Litigation, Rents & Taxes:</u>					
	▪ Nil	15 (25.00)	-	20 (33.33)	-	35 (14.64)
	▪ Up to Rs. 1000	45 (75.00)	6 (10.00)	40 (66.67)	20 (33.90)	111 (46.44)
	▪ Rs. 1001 to Rs. 2000	-	54 (90.00)	-	39 (66.10)	93 (38.91)
	▪ Rs. 2001 to Rs. 3000	-	-	-	-	-
	▪ Above Rs. 3000	-	-	-	-	-
9	<u>Other Purposes(Specify)</u>					
	Drinks & Intoxicant	-	-	-	-	-
	NIL	-	3 (5.00)	-	6 (10.17)	9 (3.77)

Up to Rs.1000	57 (95.00)	37 (61.67)	58 (96.67)	50 (84.75)	202 (84.52)
Rs.1000-Rs.2000	3 (5.00)	20 (33.33)	2 (3.33)	3 (5.08)	28 (11.72)

5.3.7(a) Food

From the data as presented in item 1 of table – 5.8 it is revealed that total in all blocks majority of respondent households, i.e. 124 (51.88%) out of 239 incurring expenditure up to Rs. 6000 on food items annually followed by 67 (28.03%) in the range of Rs. 6001 to Rs. 10000, 38(15.90%) in the range of Rs. 10001 to Rs. 15000, 8(3.35%) in the range of Rs. 15000 to Rs. 20000 and only 2(0.84%) in the range of above Rs. 20000. The above data also presented in diagram – 6.



Further, on analysis of above data about expenditure on food in respect of respondent households in total of all blocks it can be observed that, out of total 239 respondent tribal sample households more than 50 per cent, i.e. 124(51.88%) are incurring up to Rs. 6000 on food per annum. Considering this as average annual consumption on food it comes to Rs. 500 per month per family and Rs. 16.16 per day per family; and assuming 5 members in a family the expenditure on food per person per day comes to about Rs. 3.33 only. Similarly, taking the expenditure range of Rs. 6001 to Rs. 10000 it comes to Rs. 3.33 to Rs. 5.55 per day per person, in the expenditure range of Rs. 10001 to Rs. 15000 it comes to Rs. 5.55 to Rs. 8.93, in the expenditure range of Rs. 15001 to Rs. 20000 it comes to Rs. 8.93 to Rs. 11.11 and in the expenditure range of above Rs. 20000 it comes to above Rs. 11,11. While analyzing block-wise it can be observed that maximum of households of Lanjigarh block are coming within the lowest category of annual expenditure on food, i.e. within the range of up to Rs. 10000 than other blocks.

So based on the data as presented in item 1 of table – 5.8 and analysis thereon the overall findings area :

- 51.88 households' average expenditure on food per day per person comes up to Rs. 3.33.
- 23.03% households' average expenditure on food per day per person comes in the range of about Rs. 3.33 to Rs. 5.55.
- 15.90% households' average expenditure on food per day per person comes in; the range of Rs. 5.55 to Rs. 8.93.
- 3.35% households' average expenditure on food per day per person comes in the range of about Rs. 8.93 to Rs. 11.11.
- 0.84% households' average expenditure on food per day per person comes to above Rs. 11.11.

5.3.7(b) Fuel

Considering annual expenditure on fuel, as data presented in item 2 of table 5-8 it is observed that, majority of households in Kashipur and Lanjigarh blocks are incurring less amount, i.e. in the initial range of up to Rs. 1000, whereas in Udala block majority of households incurring comparatively more amount on fuel.

5.3.7(c) Clothing

Regarding annual expenditure on clothing in respect of the respondent households it is observed from item 3 of table 5-8 that, majority of households in total of all blocks, i.e. 126 (52.72%) are incurring only up to Rs. 1000 followed by 80(33.47%) within the range of Rs. 1001 to Rs. 2000 and 33 (13.81%) within the range of Rs. 2001 to Rs. 3000. On block-wise analysis it is observed that 100% respondent households in Lanjigarh block and 80% of respondent households in Kashipur block incurring very less amount on clothing, i.e. within Rs. 1000 per annum and majority of respondent households in Udala block 36(60.00%) and Khariar block 34(57.63%) incurring Rs. 1000 to Rs. 2000 on clothing annually.

5.3.7(d) Children's education

On analysis of data as presented in item 4 of table – 5.8 in respect of sample tribal households about annual expenditure on their children's education, it is revealed that, out of total 239 respondent households 87(36.40%) are not incurring any expenses, whereas 98(41.00%) households incurring up to Rs. 1000, 47(19.67%) incurring in the range of Rs. 1001 to Rs. 2000 and only 7(2.93%) incurring in the range of Rs. 2001 to Rs. 3000. On block-wise analysis it is revealed that in two blocks, i.e. Lanjigarh and Kashipur blocks maximum of 83.33% and 61.67% respectively are not incurring any expenses towards children's education, whereas more than 50% of households in Udala and Kashipur blocks are incurring more expenses, i.e. in the range of Rs. 1001 to Rs. 3000 towards children's education.

5.3.7(e) Healthcare / Medical

As per the data presented in item 5 of table – 5.8 relating to expenditure on healthcare / medical in respect of sample tribal households it is observed that total in all sample blocks majority of households, i.e. 115(48.12%) incurring up to Rs. 1000 only followed by 89 (37.24%) incurring within the range of Rs. 1001 to Rs. 2000 and 20(8.37%) incurring within the range of Rs. 2001 to Rs. 3000. It is also revealed that 15(6.28%) are not incurring any amount on healthcare / medical expenses and that too 7 in Kashipur block and 8 in Lanjigarh block. On block-wise it can be revealed that majority of households in Kashipur and Lanjigarh blocks incurring very less amount, i.e. within the range up to Rs. 1000 in comparison to other two blocks.

5.3.7(f) Social functions

Towards expenditure on social functions it is revealed from the data as presented in item 6 of table – 5.8 that majority of households in all the sample blocks except Udala incurring lowest range of expenditure, i.e. up to Rs. 1000 per annum. Also in Udala block 3 households incurring highest range of expenditure, i.e. Rs. 3001 to Rs. 5000 per annum on social functions, and rest of the households incurring medium range of expenditure, i.e. between Rs. 1001 to Rs. 3000.

5.3.7(g) Entertainment of guests

From the data as presented in item 7 of table – 5.8 it is revealed that majority of households, i.e. 215 (89.96%) in total of all the sample blocks are incurring up to Rs. 1000 annually towards entertainment of guests followed by only 23 (9.62%) in the annual expenditure range between Rs. 1001 to Rs. 2000, and only one household in Udala block in the range between Rs. 2001 to Rs. 3000.

5.3.7(h) Litigation, Rents and Taxes

Relating to annual expenditure on litigation, rents and taxes, it can be observed from item 8 of table – 5.8 that 15 (25.00%) and 20(33.33%) households in Kashipur and Lanjigarh block respectively are not incurring any expenditure on the above items, whereas majority of households, i.e. 54(90.00%) and 39(66.10%) in Udala and Khariar blocks respectively are incurring in the range between Rs. 1001 to Rs. 2000. Rest of the households in all the sample blocks are incurring up to Rs. 1000 on litigation, rents and taxes.

5.3.7(i) Alcohol / intoxicant

Towards annual expenditure on alcohol / intoxicant, as per the data presented in item 9 of table – 5.8 in respect of respondent households, it is observed that except 9 households 3 from Udala block and 6 from Raigarh block all other households incurring expenses up to Rs. 2000, and out of which majority of households 2002(84.52%) from total of all sample blocks incurring only up to Rs. 1000.

5.3.8 Indebtedness / Loan

In table – 5.9 distribution was made in respect of sample tribal households about their indebtedness / loan.

Table– 5.9 : Distribution of sample tribal households in respect of indebtedness / loan of four sample blocks

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%) (N= 60)	Udala (In no. /%) (N= 60)	Langigarh (In no. /%) (N= 60)	Khariar (In no. /%) (N= 59)	
1	<u>For Food items :</u>					
	▪ From relatives/friends	12 (20.00)	-	8 (13.33)	-	20 (8.37)
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	18 (30.00)	-	1 (1.69)	19 (7.95)
	▪ From other source(specify)	-	-	-	-	-
2	<u>For Clothing</u>					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
3	<u>For children's education</u>					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
4	<u>For medical expenses</u>					
	▪ From relatives/friends	-	-	-	1 (1.69)	1 (0.42)
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	1 (1.69)	1 (0.42)
	▪ From other source(specify)	-	-	-	-	-
5	<u>For agriculture purpose</u>					
	▪ From relatives/friends	5 (8.33)	-	4 (6.67)	-	9 (3.77)
	▪ From Govt	2 (3.33)	-	3 (5.00)	-	5 (2.09)
	▪ From bank	-	8 (13.33)	-	7 (11.86)	15 (6.28)
	▪ From Private money lender	-	1 (1.67)	-	-	1 (0.42)
	▪ From other source(specify)	-	-	-	-	-
6	<u>For Business Purpose</u>					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
7	<u>For creation of assets:</u>					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
8	<u>For social functions (marriage, festivals, etc....)</u>					
	▪ From relatives/friends	2 (3.33)	-	4 (6.67)	-	6 (2.51)
	▪ From bank	-	-	-	-	-

	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
9	For litigation, rents & taxes:					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-
10	For any other purpose(specify):					
	▪ From relatives/friends	-	-	-	-	-
	▪ From bank	-	-	-	-	-
	▪ From Private money lender	-	-	-	-	-
	▪ From other source(specify)	-	-	-	-	-

5.3.8(a) For food items

From the data as given in item 1 of table – 5.9 it is revealed that out of total 239 sample tribal households only 39 have obtained loans for food items from different sources. From Kashipur and Lanjigarh blocks 12 (20.00%) and 8(13.3%) households obtained loans from relatives / friends, whereas 18 (30.00%) households from Udala block obtained loans from private money lenders and only 1(1.69%) households from Khariar block has obtained loan from private money lender.

5.3.8(b) For clothing

The respondent households are not making any loan towards clothing as shown in item 2 of table – 5.9.

5.3.8(c) For children's education

From the data as shown in item 3 of table – 5.9 it is observed that no respondent households obtained any loan towards their children's education.

5.3.8(d) For healthcare / medical expenses

As per the data presented in item 4 of table – 5.9 it can be observed that except 2 households from Khariar block, no households from other three sample blocks have availed loan towards healthcare / medical expenses, out of these two households one obtained loan from relative and another from private money lender.

5.3.8(e) For agriculture purpose

Data relating to indebtedness in respect of sample tribal households towards agriculture purpose it is revealed from item 5 of table – 5.9 that, out of total 239 households only 30 have availed loans from different sources. Out of these 30 households 5(8.33%) households from Kashiupur block and 4 (6.67%) households from Lanjigarh block availed loans from relatives / friends, whereas 8 (13.33%) households from Udala block and 7 (11.86%) from Khariar block availed loans from banks and only one household from Udala block availed loan from private money lender.

5.3.8(f) For business purpose

From the data as presented in item 6 of table – 5.9 it is revealed that the respondent households have not availed any loan for business purpose.

5.3.8(g) For creation of assets

As per the data shown in item 7 of table – 5.9 it is observed that the respondent households have not made any loan for creation of assets.

5.3.8(i) For litigation, rents and taxes

From the data as presented in item 9 of table – 5.9 it is found that the sample tribal households have not made any loan towards their expenses on litigation, rents and taxes.

5.3.8(j) For any other purpose

As per the data shown in item 10 of table – 5.9 it is observed that the respondent households have not availed any loan towards other purposes than as stated in items 1 to 9 in table – 5.9

5.4 STATEMENT OF VIEWS OF SAMPLE TRIBAL HOUSEHOLDS ABOUT FOOD SECURITY PROBLEMS AND IMPLEMENTATION OF GOVERNMENT SCHEMES

In the present study, data relating to food security problems and government strategies to over the problems, have been collected from sample tribal households are presented and analysed in the following paragraphs.

5.4.1 Extent of food scarcity

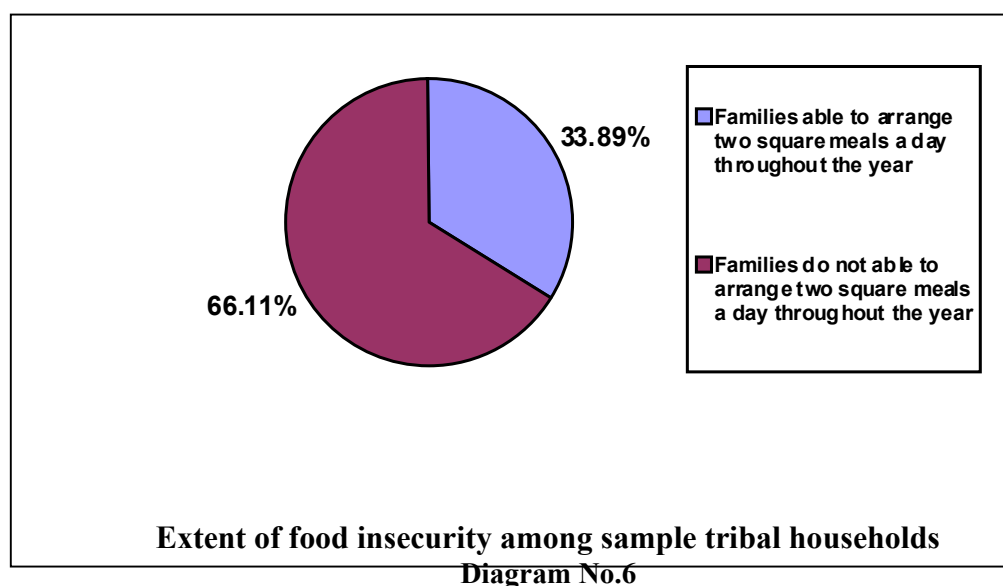
Data relating to extent of food scarcity among sample tribal households of four sample blocks under study are depicted in table – 5.10.

Table – 5.10 : Extent of food insecurity among sample tribal families in four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 60)	
1	Families able to arrange two square meals a day throughout the year	24 (40.00)	20 (33.33)	22 (36.67)	15 (25.42)	81 (33.89)
2	Families do not able to arrange two square meals a day throughout the year	36 (60.00)	40 (66.67)	38 (63.33)	44 (74.58)	158 (66.11)
	a)able to arrange for about 6-9 months	17 (28.33)	40 (66.67)	14 (23.33)	44 (74.58)	115 (48.12)
	b)able to arrange for about 6 months	11 (18.33)	-	12 (20.00)	-	23 (9.62)

	c)able to arrange for less than 6 months	8 (13.33)	-	12 (20.00)	-	20 (8.37)
3	Acute food scarcity period in the year	(N1= 36)	(N1= 40)	(N1= 38)	(N1= 44)	(N1= 158)
	a) June – October	36 (100.00)	8 (20.00)	30 (78.95)	8 (18.18)	82 (51.90))
	b) July – October	-	32 (80.00)	8 (21.05)	36 (81.82)	76 (48.10)

From the data as presented in item 1 and 2 of table – 5.10 it is revealed that, out of total 239 respondent households from all the sample blocks 81 (33.89%) are able to arrange two square of meals a day and balance 158 (66.11%) are unable to arrange two square of meals a day throughout the year. This can also be seen in diagram – 7.



As per the data given in item 2 of table – 5.10 it is also observed that out of total respondent households majority of them, i.e. 115(48.12%) are able to arrange two square of meals a day for about 6 – 9 months in the year followed by 23(9.62%) for about 6 months and 20(8.37%) for less than 6 months.



On block-wise analysis of data in respect of the respondent households those who are able to arrange two square of meals a day throughout the year as given in item 1 of table – 5.10 it is observed that, maximum of 24(40.00%) households are found in Kashipur block followed by 22(36.67%) in Lanjigarh block, 20(33.33%) in Udala block and minimum of 15(25.42%) in Khariar block. Similarly, in respect of the respondent households those who are unable to arrange two square of meals a day throughout the year, as per data given in item 2 of table – 5.10 it is observed that, maximum of 44(74.58%) households are found in Khariar block followed by 40(66.67%) in Udala block, 38(63.33%) in Lanjigarh block and minimum of 36(60.00%) in Kashipur block. From item 2(a) of table – 5.10 it is revealed that maximum of 44(74.58%) households in Khariar block are able to arrange food for their family members about 6 – 9 months out of the year followed by 40(66.67%) households in Udala block, 17(28.33%) in Kashipur block and 14(23.33%) in Lanjigarh block. From item 2(b) of table – 5.10 it is revealed that 12 (20.00%) respondent households in Lanjigarh block and 11 (18.33%) in Kashipur block area able to arrange food for their family members about 6 months; and from item 2(c) of table – 5.10 it is revealed that 12(20.00%) respondent households in Lanjigarh block and 8(13.33%) respondent households in Kashipur block are able to arrange food for their family members less than 6 months out of the year.



Data relating to acute food scarcity period out of the year when the respondent households are suffering, are collected and presented in item 3 of table – 5.10. It is observed from the data that, out of the respondent households who are unable to arrange food for their family members throughout the year, maximum of 36(100%) respondent households in Kashipur block followed by 30(78.95%) in Lanjigarh block and minimum of 8(20.00%) in Udaloa block and 8(18.18%) in Khariar block have stated June to October as the acute food scarcity period for them, whereas maximum of 36(81.82%) respondent households in Khariar block followed by 32(80.00%) in Udala block and minimum of 8(21.05%) in Lanjigarh block have stated July to October as the acute food scarcity period for them.

5.4.2 Causative factors of food scarcity

During the study views from the sample tribal households were collected relating to the factors responsible towards food scarcity in the areas of the study. The views as collected on causative factors of food scarcity among sample tribal families in four blocks under study are presented in table – 5.11.

Table – 5.11: Causative factors of food scarcity among sample tribal families in Four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigah (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Related to livelihood:					
	a)Not getting sufficient work during the period from August-October	37 (61.66)	50 (83.33)	42 (70.00)	40 (67.80)	169 (70.71),66)
	b)Not getting sufficient works throughout the year	18 (30.00)	29 (48.33)	40 (66.67)	32 (54.24)	119 (50.29)
	c) Not getting works even half of the year	22 (36.67)	31 (51.66)	20 (33.33)	18 (30.51)	42 (17.57)
	d) Not getting works even three months in a year	15 (25.00)	-	18 (30.33)	-	33 (13.81)
	e)Unable to collect MFP due to restriction	8 (13.33)	-	-	-	8 (3.35)
	f)Unable to sell the MFP due to marketing problems	7 (11.67)	-	-	-	7 (2.93)
	i)Not get the proper prices of the MFP	38 (63.33)	-	41 (68.33)	-	79 (33.05)
2	Related to high price rise of commodities					
	a) Due to higher price rise unable to purchase the food items	60 (100)	60 (100)	60 (100)	59 (100)	239 (100)
3	Other factors					
	a)Less production from agricultural land due lack irrigation facilities	36 (60.00)	60 (100)	47 (78.33)	59 (100)	202 (84.52)
	b) Natural calamities like drought/irregular monsoon	43 (71.66)	39 (65.00)	53 (88.33)	48 (81.35)	183 (78.57)

5.4.2(1) Related to livelihood

Livelihood and income are the important factors and are directly related to food security. Higher is the livelihood pattern or income lower will be food insecurity. Generally in tribal areas, livelihood related problems are many. During the study, views of sample tribal households were collected on livelihood related issues and presented in item 1 of table – 5.11.

As per the data presented in item 1(a) of table – 5.11 it is revealed that out of total 239 respondent households 169(70.71%) have viewed on not getting work during the period from August to October. On block-wise analysis it is revealed that maximum of 50(83.33%) households from Udala block followed by 42(70.00%) from Lanjigarh block, 40(67.80%) from Khariar block and 37(61.66%) Kashipur viewed on the above.

From the data as presented in item 1(b) of table – 5.11 it is revealed that, about 50 per cent respondent households out of total 239 in all the sample blocks have stated as not getting sufficient work throughout the year. On block-wise analysis it is revealed that maximum of 40(66.67%) respondent households from Lanjigarh block followed by 32(54.24%) from Khariar block, 29(48.3%) from Udala block and minimum of 18(30.00%) from Kashipur block have viewed on the above.

From item 1(c) of table – 5.11 it is observed that about 38 per cent of respondent households from total of all sample blocks have stated that they are not getting works even half of the year. On block-wise analysis it is also revealed that 31(51.66%) respondent households from Udala block, 22(36.67%) from Kashipur block, 20(33.33%) from Lanjigarh block and 18(30.51%) from Khariar block have given the same views.

Data relating to the views of the respondent households as shown in item 1(d) of table – 5.11 on not getting works even three months in a year are observed in respect of 15(25.00%) and 18(30.33%) respondent households of Kashipur block and Lanjigarh and Lanjigarh block respectively.

As per the data given in item 1(e) of table – 5.11 on the views of respondent households regarding unable to collect MFP due to restriction it is found that only 8(13.33%) respondent households of Kashipur block have stated the above.

Similarly, on the views of unable to sell the MFP due to marketing problems as shown in item 1(f) of table – 5.11 only 7(11.67%) respondent households of Kashipur block have stated it.

Regarding the point on not get proper price of MFP as per data presented in item 1(g) of table – 5.11, it is found that 38(63.33%) and 41(68.33%) respondent households from Kashipur block and Lanjigarh block respectively have given their views.

5.4.2(2) Related to high price rise of commodities

From the data as presented in item 2(a) of table 5 – 11 relating to high price rise of the commodities it is revealed that 100 per cent of respondent households from all the four blocks under study have expressed their views that they are unable to purchase food items due to high price rise.

5.4.2(3) Other factors

On the point of less production from agricultural land due to lack of irrigation facilities it is revealed from the data as presented in; item 3(a) of table – 5.11 that, about 85 per cent of respondent households out of total of all blocks and from individual blocks like 36(60.00%) from Kashipur, 60(100%) from Udala, 47(78.33%) from Lanjigarh and 59(100%) from Khariar respondent households have stated the above views.

From the data as given in item 3(b) of table – 5.11 it is observed that out of 239 respondent households from total of all blocks and from individual blocks like 43(71.66%) from Kashipur block, 39(65.00%) from Udala block, 53(88.33%) from

Lanjigarh block and 48(81.35%) from Khariar block have viewed on loss of crops due to natural calamities like frequent drought and irregular monsoon.

5.4.3 Coping mechanism adopted during food scarcity

In table – 5.12 data relating to coping mechanism as adopted by the sample tribal households during food scarcity period as collected are presented.

Table – 5.12 : Coping mechanism adopted by the sample tribal families during food scarcity period in four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Coping mechanism adopted by the Individual family					
	a) Adjust with inadequate food/alternate food	60 (100)	30 (50.00)	60 (100)	35 (59.32)	185 (77.41)
	b) Seek help from friends and relatives	8 (13.33)	10 (16.67)	12 (20.00)	8 (13.56)	38 (15.90)
	c) Seasonally migrated for labour	15 (25.00)	40 (66.67)	21 (33.33)	45 (76.27)	121 (50.63)
	d) Gift and exchange	22 (36.67)	-	19 (31.67)	-	41 (17.15)
2	Community coping mechanism during food scarcity					
	a) Grain Bank	-	-	-	-	-
	b) Other community coping mechanism like Kothaghar	-	-	-	-	-
3	Families benefited through VO/NGO during food scarcity	-	-	-	-	-
4	Through other methods Families benefited during food scarcity	-	-	-	-	-

5.4.3(1) Coping mechanism adopted by individual family

5.4.3(1)(a) Adjust with inadequate / alternate food

As per data presented in item 1(a) of table – 5.12 it is revealed that majority of 185(77.41%) respondent households out of 239 in all sample blocks adjust with inadequate food and / or alternate food during scarcity. In block-wise analysis it may be observed that 100 per cent of respondent households in Kashipur and Lanjigarh blocks, 35(59.32%) in Khariar and 30(50.00%) in Udala block adjust with inadequate food and / or alternate food during scarcity period.

5.4.3(1)(b) Seek help from friends / relatives

From the data as shown in item 1(b) of table 5.12 it is revealed that 38(15.90%) respondent households out of total in all blocks seek help from friends and relatives during food scarcity period. On block-wise analysis it can be observed that 12 (20.00%)

respondent households in; Lanjigarh block followed by 10(16.67%) in Udala block, 8(13.56%) in Khariar block and 8(13.13%) in Kashipur block seek help from friends and relatives during scarcity period.

5.4.3(1)(c) *Seasonally migrated for labour*

From item 1(c) of table – 5.12 it is observed that about 50 per cent out of the total respondent households from all the sample blocks seasonally migrated for labour due to non-availability of labour work locally. While analyzing block-wise it may be observed that maximum of respondent households from Khariar block and from Udala block, i.e. 45(76.27%) and 40(66.67%) respectively and minimum of 33.33% and 15(25.00%) from Lanjigarh and Kashipur blocks respectively are migrating for labour work.

5.4.3(1)(d) *Gift and exchange*

During food scarcity period, out of total respondent households from all sample blocks 41(17.15%) are following the practice of gift and exchange. On block-wise analysis it is revealed that only 22(36.67%) and 19(31.67%) households from Kashipur and Lanjigarh blocks respectively are following the practice of gift and exchange during food scarcity period.

5.4.3(2) *Community coping mechanism*

5.4.3(2)(a) *Grain bank*

From the study it is revealed that in all the sample villages of four blocks there is not a single grain bank is operating.

5.4.3(2)(b) *Kothaghar*

Earlier in tribal villages traditional community grain bank like “Kothaghar” system was operating in the village community in collective manner so as to help the needy villagers / families during scarcity. But during the present study it is found that in all the villages of four sample blocks under study there does not exist a single Kothaghar in any village under study.

5.4.3(3) *Non-government / voluntary organisation*

As per the view of the respondent households there is not a single organization in voluntary / non-government sector is coming forward to help the needy families during food scarcity period.

5.4.4. *Consequences of food insecurity*

Views related to consequences of food insecurity as were collected from the respondent households are given in table – 5.13.

Table – 5.13 : Statement of Consequences of food insecurity among sample Tribal households of four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Remain hunger or taking in-adequate food during scarcity	3 (5.00)	-	5 (8.33)	-	8 (3.34)
2	Member of the family who are more sufferer when food is not available					
	a) Women and girl children	43 (71.66)	38 (63.33)	47 (78.33)	41 (69.49)	169 (70.71)
	b) Every member in the family	17 (28.33)	22 (36.66)	13 (21.66)	18 (30.50)	70 (29/29)
3	Causes of malnutrition under nourishment in the family	-	-	-	-	-
4	-Suicidal cases	-	-	-	-	-
5	-Starvation death cases					
6	Cases of selling of babies	-	-	-	-	-
7	Cases of distress sell of assets/land during food scarcity period	-	-	-	-	-
8	Mortgaging land during food scarcity period	2(3.33)	-	1 (1.66)	-	3 (1.25)

5.4.4 (1) Remaining hunger or taking an-adequate food

From the data it is revealed that only few cases, i.e. 3 (5.00) households in Kashipur block and 5(8.33%) households in Lanjigarh block remain in hunger or manage with one meal a day during acute food scarcity period.

5.4.4(2) Members of family who are more suffer

5.4.4(2)(a) Women and girl children

As per the data presented in item 2(a) of table – 5.13 it is revealed that response received from 169(70.71%) respondent households out of total of all block, and individual block-wise 43(71.66%) households from Kashipur block, 38(63.33%) from Udala block, 47(78.33%) from Lanjigarh block and 41(69.49%) from Khariar block that during food scarcity period women and girl children are more suffering than other members in the family.

5.4.4.(b) Every member in the family

As per data given in item 2(b) of table – 5.13, it shows that out of total in all blocks 70(29.28%) households, and from individual blocks 17(28.33%) households from Kashipur block, 22(36.66%) from Udala block, 13(21.66%) from Lanjigarh block and 18(30.50%) from Khariar block responded with the view that during food scarcity period every member in the family is equally suffering.

5.4.4(3) Causes of malnutrition /under-nourishment

On the above aspect no response has been received from the respondent households.

5.4.4(4) Suicidal case

Regarding suicidal case due to food insecurity, no response has been received from the respondent households.

5.4.4(5) Starvation death case

Regarding starvation death case due to food insecurity, no response has been received from the respondent households.

5.4.4(6) Cases of selling babies

Regarding cases of selling babies due to food insecurity, no such response has been received from the respondent households.

5.4.4.(7) Cases of distress sell of of assets / land

Regarding cases of distress sell of assets / land during food scarcity period it is observed from the study that no such response has been received from; the respondent households.

5.4.4(8) Mortgaging land

From the data as presented in item 8 of table – 5.13 it is observed that out of total 239 respondent households only 3 cases, 2 in Kashipur block and one in Lanjigarh block have been reported mortgaging land during food scarcity period.

5.4.5 Women's role in family food security



Food stuff preserved by a tribal woman

Statement of views in respect of women's role in family food security have been obtained from the sample tribal households and presented in table – 5.14.

Table – 5.14 : Statement of women's roll in family food security among sample Tribal families in four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	Remain engaged as labourer	40 (66.67)	40 (66.67)	42 (70.00)	25 (42.37)	147 (61.51)
2	Migrated for labour	-	20 (33.33)	-	15 (25.42)	35 (14.64)
3	Engaged child/children in economic activity	-	1 (1.66)	-	3 (5.00)	4 (1.67)
4	Seasonal food preservation	60 (100)	48 (80.00)	60 (100)	53 (89.83)	221 (92.47)
5	Other Arrangement	-	-	-	-	-

5.4.5(1) Remain engaged as labourer

As per the data presented in item 1 of table – 5.14 it is revealed that more than 60 per cent, i.e. 147(61.51%) women from respondent households out of total in all blocks 239, are remain engaged as labourers towards supporting family income as well as to meet partial fulfillment of family food security. On block-wise analysis it is also revealed that highest of 42(70.00%) women from respondent households in Lanjigarh block followed by 40(66.67%) each from Kashipur and Udala blocks and lowest of 25(42.37%) in Khariar block are found remain engaged as wage labourers.

5.4.5(2) Migrated for labour

In tribal areas women also take important roles in order to bring family food security during scarcity. As per the data presented in item 2 of table – 5.14 it is revealed that women from 20(33.33%) and 15(25.42%) respondent households in Udala and Khariar blocks respectively are migrating for labour work during scarcity period.

5.4.5(3) Engaged children in economic activity

In order to support family income during scarcity children are also involved in economic activities. It may be observed from item 3 of table – 5.14 that in Udala block only one household and in Lanjigarh block 3 households responded on the issue of engaging children in economic activities.

5.4.5(4) Seasonal food preservation

Women in general are in the practice of preserving food in many ways. From the study also it is revealed from the data as given in item 4 of table – 5.14 that out of 239 total respondent households 221(92.47%) have responded in favour of seasonal food preservation by the women. From block-wise analysis it is found that 100% respondent

households from each of Kashipur and Lanjigarh blocks, 48(80.00%) from Udala block and 53(89.83%) from Khariar block have viewed in favour.

5.4.6 Households benefited through NREGS

National Rural Employment Guarantee Scheme (NREGS) presently renamed as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) aims better livelihood security of households in rural areas by providing at least one hundred days of guaranteed wage employment in a financial year.

During the study views of the sample tribal households as were collected relating to the benefits received through MGNREGS are presented in table – 5.15.

Table – 5.15 : Distribution of sample tribal households benefited through NREGS in four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (In no. /%)
		Kashipur (In no. /%)	Udala (In no. /%)	Langigarh (In no. /%)	Khariar (In no. /%)	
		(N= 60)	(N= 60)	(N= 60)	(N= 59)	
1	a) Families obtained job cards under NREGS.	49 (81.67)	48 (80.00)	48 (80.00)	39 (66.10)	184 (76.99)
	b) Families do not obtained get cards under NREGS	11 (18.33)	12 (20.00)	12 (20.00)	20 (33.90)	55 (23.01)
2						
	Assigning jobs to the job card holders	(N1 = 49)	(N1= 48)	(N1=48)	(N1=39)	(N1=184)
	a) No. of card holders aware about applying for job					
	b) Number of card holders applied for job.	-	45 (93.75)	-	20 (51.28)	65 (35.32)
	c) Number of card holders assigned job.	42 (85.71)	25 (52.08)	39 (81.25)	15 (38.46)	121 (65.76)
	d) No. of days of jobs assigned :- ▪ Even 15 days of jobs have not assigned to the card holders since beginning of the scheme	49 (100.00)	48 (100.00)	48 (100.00)	39 (100.00)	184 (100.00)
	e) Number of card holder receiving cash for the assigned jobs	42 (100.00)	25 (100.00)	39 (100.00)	15 (100.00)	121 (100.00)
	f) No. of card holders receiving kind (food grain) for the assigned job.	-	-	-	-	-
	g) No. of card holders receiving cash and kind (both) for the assigned job.	-	-	-	-	-

5.4.6(1) Job cards

Since operation of the scheme during 2006-07, as per the data shown in item 1(a) and 1(b) of table – 5.15 it is revealed that out of total 239 sample tribal households from all the four sample blocks 184(76.99%) have obtained job cards under the scheme and balance

55(23.01%) have not obtained job cards. While analyzing block-wise it is revealed that in three blocks like Kashipur, Udala and Lanjigarh about 80 per cent households obtained job card while in Kashipur block it is only about 66 per cent.

Copy of a Job Card provided to a beneficiary

5.4.6(2) Assigning jobs

Before assigning jobs the job card holders are required to apply for jobs. From the views of the respondent households on awareness about applying for jobs it is revealed that the job card holders from Kashipur and Lanjigarh blocks are not aware about it whereas out of the job card holders 93.75% from Udala block and 51.28% from Khariar block are aware about it.

As per the data presented in item 2© of table – 5.15 it is observed that out of total 184 job card holders from all the sample blocks 121(65.76%) have been assigned jobs. On block-wise analysis it is observed that out of the job card holders 42(85.71%) from Kashipur block, 25(52.08%) from Udala block, 39(81.25%) from Lanjigarh block and 15(38.46%) from Khariar block have been assigned jobs. It can also be revealed that those who have not applied for jobs, particularly the job card holders from Kashipur and Lanjigarh blocks, have been assigned jobs.

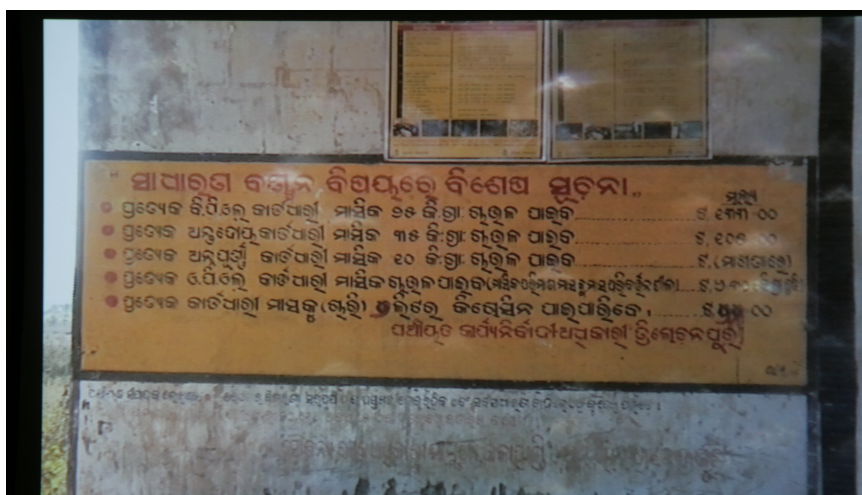
The data as presented in item 2(d) of table – 5.15 relating to number of days of jobs assigned to the job card holders gave a shabby picture. The scheme is operating since beginning of the financial year 2006-07 and as per the scheme each job of the card holders should have been assigned for 100 days of jobs in a financial year. But from the response of the sample households it is found that cumulatively since operation of the scheme (during more than three years period) even 15 days of jobs have not assigned to each of the beneficiary under the scheme. It can also be seen from the data that all the job card holders have given their views in the same manner. Also our research staff have physically verified some of the job cards and found that no entries have been in job cards regarding assigning jobs.

Regarding payment of wage by cash or kind for the jobs assigned to the beneficiaries, it is observed from the data as presented in items (2e), (2f) and 2(g) that cash payment was made for the assigned jobs to the beneficiaries. On the issue of payment

of wage it is also found necessary to mention here that during the field study it has been reported by some of the job card holders to our research staff that even they have been assigned for about 15 days of jobs but they have been paid at much lower rates. Therefore, from the above analysis it can be concluded that the scheme is not properly implemented in the areas and the benefits out of the scheme are not reached to the targeted beneficiaries.

5.4.7 Households benefited through PDS

The Public Distribution System (PDS), as we know it today, is widely recognized to be a key instrument of household food security. The PDS could be called the flagship of public food delivery system in the country. It is the oldest and also the widest in terms of coverage. In our state the government has introduced a new scheme envisaging distribution of BPL and Antodaya rice Rs. 2/- per kg. with effect from 1st August 2008 to all families earlier getting under various schemes.



In the present study data relating to the benefits availed by the sample tribal households were collected and presented in table – 5.16.

Table – 5.16 : Distribution of sample tribal families receiving/losing benefits under PDS in four blocks under study

Sl. No.	Description	Name of the block				Total of all blocks (in no. / %) (N=239)
		Kashipur (in no. / %) (N = 60)	Udala (in no. / %) (N=60)	Langigarh (in no. / %) (N=60)	Khariar (in no. / %) (N=59)	
1	Families aware about benefits of the scheme:					
	yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	no	-	-	-	-	-
2	Families aware about their entitlement of the commodities under the scheme					
	yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)

	no	-	-	-	-	-
3	Families benefited under the scheme:					
	a)Lifting the commodities regularly	46 (76.66)	60 (100.00)	54 (90.00)	59 (100.00)	217 (90.7979)
	b) Lifting the commodities as per their entitlement	49 (81.66)	60 (100.00)	48 (80.00)	59 (100.00)	216 (90.37)
	c)Utilising the commodities in the families fully	-	-	-	-	-
	yes	49 (81.66)	60 (100.00)	48 (80.00)	59 (100.00)	216 (90.37)
	no	-	-	-	-	-
4	Families losing benefits under the scheme:					
	a)Unable to lift the commodities due to lack of fund.	3 (9.00)	-	5 (8.33)	-	8 (3.35)
	b) Unable to lift the commodities as the store is located in far away.	7 (11.66)	-	5 (8.33)	-	12 (5.02)
	c)Not lifting the commodities as the ration card is mortgaged.	-	-	-	-	-
	d)Lifting the commodities but selling to others.	-	-	-	-	-
5	Commodities available under the scheme are inadequate for the family.	9 (15.00)	25 (41.66)	17 (28.23)	24 (40.00)	75 (31.38)

5.4.7(1) Awareness about benefits under the scheme

From the data as presented in item 1 of table – 5.16 it is revealed that 100 per cent respondent households are aware about the benefits under the scheme.

5.4.7(2) Awareness about entitlement of the commodities under the scheme

From the data as presented in item 2 of table – 5.16 it is found that 100 per cent of the respondent households are aware about their entitlement of the commodities under the scheme.

5.4.7(3)(a) Households benefited under the scheme

As per the data presented in item 3a) of table – 5.16 it is found that out of total of 239 respondent households in all sample blocks 217(90.79%) are lifting the commodities regularly under the scheme. On block-wise analysis it is also found that 100 per cent respondent households from Udala and Khariar blocks are lifting the commodities, whereas 46(76.66%) from Kashipur block and 54(90.00%) from Lanjigarh block are lifting the commodities regularly under the scheme.

5.4.7(3)(b) Lifting the commodities as per Entitlement

From the data as presented in item 3(b) of table – 5.16 it is found that total of 216(90.37%) respondent households from all the sample blocks lifting the commodities as per their entitlement. On block-wise analysis it is found that 100 per cent respondent households from Udala and Khariar blocks are lifting the commodities under the scheme as per their entitlement, 49(81.66%) from Kashipur block and 48(80.00%) from Lanjigarh block are lifting the commodities as per their entitlement.

5.4.7(3)(c) Utilisation of commodities in the families

It is observed from the data as shown in item 3(c) of table – 5.16 that all the respondent households who are lifting the commodities as per their entitlement are utilizing fully for their household consumption.

5.4.7(4) Households losing benefits under the scheme

5.4.7(4)(a) Unable to lift the commodities due to lack of fund

As per the data presented in item 4(a) of table – 5.16 it is found that out of the sample tribal households 3(5.00%) from Kashipur block and 5(8.33%) from Lanjigarh block are unable to lift the commodities due to lack of fund.

5.4.7(4)(b) Unable to lift the commodities as the store is located in far away

From the data as presented in item 4(b) of table – 5.16 it is observed that out of the sample tribal households 7(11.66%) from Kashipur block and 5(8.33%) from Lanjigarh block are unable to lift the commodities because of the store is located in far away.

5.4.7(4)(c) Mortgaging ration cards

It is revealed from the data as presented in item 4(c) of table – 5.16 that not a single respondent household has mortgaged his ration card.

5.4.7(4)(d) Selling of rations to others

From the data as given in item 4(d) of table – 5.16 regarding selling of commodities by the households to others, no such case is observed.

5.4.7(5) Available commodities are inadequate to families

As per the data given in item 5 of table – 5.16 it is found that out of total 239 respondent households 75(31.38%) have expressed their views on inadequacy of commodities as available under the scheme to their families. Also on block-wise analysis it is found that maximum of households, i.e. 25(41.66%) from Udala block followed by 24(40.67%) from Khariar block, 17(28.23%) from Lanjigarh block and 9(15.00%) from Kashipur block have viewed in the above manner.

5.4.8 Statement of views of sample tribal households on implementation of individual food security / livelihood schemes

In order to assess the impacts of various food security measures taken by government to combat food security, during the course of field study individual scheme-wise views of the sample tribal households as were collected about the implementation of various food security / livelihood support schemes in respect of different aspects are depicted in table – 5.17.

Table – 5.17 : Statement of views of sample tribal households about implementation of various food security / livelihood support schemes

Sl. No.	Description	Name of the block				Total of all blocks (in no. / %) (N=239)
		Kashipur (in no. / %) (N = 60)	Udala (in no. / %) (N=60)	Langigarh (in no. / %) (N=60)	Khariar (in no. / %) (N=59)	
1	Households availing benefits out of the schemes					
	a) PDS Antodaya /Annapura	60 (100.00)	60 (100.00)	60 (100.00)	60 (100.00)	239 (100.00)
	b) MDM	36 (60.00)	28 (46.66)	34 (56.66)	31 (52.54)	129 (53.97)
	c) ICDS(SNP)	17 (28.33)	14 (23.33)	22 (36.66)	19 (32.20)	72 (30.12)
	d) MGNREGS	42 (70.00)	25 (41.66)	39 (65.00)	15 (25.42)	121 (50.63)
	e) SGSY	26 (44.07)	31 (51.66)	29 (48.33)	36 (60.02)	122 (51.05)
	f) SGRY	-	-	-	-	-
	g) MBPY	12 (20.00)	23 (38.33)	19 (31.66)	26 (44.07)	80 (33.47)
	h) NOAP	-	8 (13.33)	-	13 (22.03)	21 (8.78)
	i) EFP	9 (15..)	13 (21.66)	7 (11.66)	11 (18.64)	46 (19.24)
	j) OTELP	-	-	-	-	-
2	Families aware about their entitlement of the commodities under the scheme					
	a) Rs. 2/- per kg. of rice under PDS yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	No	-	-	-	-	-
	b) MDM yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	No	-	-	-	-	-
	c) ICDS (SNP) Yes	34 (56.66)	28 (46.66)	32 (53.33)	38 (64.40)	132 (55.23)
	No	26 (43.33)	32 (53.33)	28 (46.66)	21 (35.59)	107 (44.76)
	d) MGNREGS Yes	-	-	-	-	-
	No	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)

3	Family condition before availing the benefits of the scheme whether in scarcity of food (Scheme-wise)					
	a) PDS (Rs. 2/- per kg. rice)					
	Yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	No	-	-	-	-	-
	No response	-	-	-	-	-
	b) MDM					
	Yes	36 (60.00)	28 (46.66)	34 (56.66)	31 (52.54)	129 (53.97)
	No	-	-	-	-	-
	No response	24 (40.00)	32 (53.33)	26 (43.33)	28 (47.46)	110 (46.03)
	c) ICDS (SNP)					
	Yes	34 (56.66)	28 (46.66)	32 (53.33)	38 (64.40)	132 (55.23)
	No	-	-	-	-	-
	No response	26 (43.33)	32 (53.33)	28 (46.66)	21 (35.59)	107 (44.76)
	d) NREGS					
	Yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	No	-	-	-	-	-
	No response	-	-	-	-	-
4	Family condition after availing the benefits of the scheme whether improved to achieve food security					
	a) PDS (Rs.2/-per kg. rice)					239
	▪ Improved to achieve food security					
	Yes	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	(100.00)
	▪ No response	-	-	-	-	-
	b) MDM					
	▪ Improved to achieve food security					
	Yes	36 (60.00)	28 (46.66)	34 (56.66)	31 (52.54)	129 (53.97)
	▪ No response	24 (40.00)	32 (53.33)	26 (43.33)	28 (47.46)	110 (46.03)
	c) ICDS (SNP)					
	Yes	34 (56.66)	28 (46.66)	32 (53.33)	38 (64.40)	132 (55.23)
	No	-	-	-	-	-
	No response	26 (43.33)	32 (53.33)	28 (46.66)	21 (35.59)	107 (44.76)
	d) NREGS					
	Yes	-	-	-	-	-
	No	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	No response	-	-	-	-	-
5	Statement of problems in implementation of the scheme(scheme-wise)					
	a) PDS					
	▪ Ration shops are located in far aware	7 (11.66)	-	5 (8.33)	-	12 (5.02)

	▪ Unable to lift the commodities due to lack of fund	3 (5.00)	-	5 (8.00)	-	8 (3.35)
	▪ commodities are inadequate to family members	35 (58.33)	36 (60.00)	30 (50.00)	29 (49.15)	130 (54.39)
	b)MDM					
	▪ No problems					
	c) ICDS (SNP)					
	▪ AWC is located in far away	11 (18.33)	23 (38.33)	18 (30.00)	9 (15.25)	61 (25.52)
	▪ Cooked meals not provided	34 (56.60)	28 (47.46)	13 (21.66)	23 (38.33)	98 (41.00)
	d) MGNREGS					
	▪ Jobs are not provided to card holders as per their entitlement	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	▪ The scheme of payment of wage through pass book is faulty	60 (100.00)	42 (70.00)	60 (100.00)	51 (86.44)	213 (89.12)
6	Statement of suggestions for taking remedial measures to tackle the problems in implementation					
	a) PDS					
	▪ Entitlement of commodities be linked with the number of members of the family	35 (58.33)	36 (60.00)	30 (50.00)	29 (49.15)	130 (54.39)
	▪ Ration shops be located nearer to habitation	7 (11.66)	-	5 (8.33)	-	12 (5.02)
	▪ SHGs be involved in distribution of commodities in respect of their habitations	22 (36.66)	13 (21.66)	9 (15.00)	17 (28.33)	61 (25.52)
	b) MDM					
	▪ SHGs be involved in management of MDM	19 (31.66)	11 (18.33)	6 (10.00)	13 (22.03)	49 (20.50)
	c) ICDS (SNP)					
	▪ AWC be located in each habitation	17 (28.33)	9 (15.00)	12 (20.00)	6 (10.16)	44 (18.41)
	▪ Cooked meals be supplied	14 (23.33)	7 (11.66)	11 (18.33)	5 (8.33)	37 (15.63)
	d) MGNREGS					
	▪ Jobs be assigned as per entitlement	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	▪ In lean season jobs be assigned regularly	60 (100.00)	60 (100.00)	60 (100.00)	59 (100.00)	239 (100.00)
	▪ Payment be made by cash on the same day of labour	42 (70.00)	26 (43.33)	49 (81.66)	19 (32.20)	136 (56.90)

5.4.8(1) Households availing benefits out of various schemes

5.4.8(1)(a) Benefits under Public Distribution System

It is revealed from the data as presented in item 1(a) of table – 5.17 that 100 per cent of sample tribal households are availing the benefits as provided under PDS, such as Antodaya / Annapurna schemes.

5.4.8(1)(b) Mid-day-Meals Scheme

As per the data given in item 1(b) of table – 5.17 it is observed that out of total 239 respondent households from all the sample blocks 129(53.97%) are getting benefits out of the scheme. On block-wise analysis it is revealed that maximum of 36(60%) respondent households from Kashipur block, followed by 34(56.66%) from Lanjigarh block, 31(52.54%) from Khariar block and minimum of 28(46.66%) from Udala block are availing the benefits.



Providing Mid-day meals to School children

5.4.8(1)(a) Integrated Child Development Scheme (Supplementary Nutrition)

From the data as shown in item 1© of table – 5.17 it is found that out of total 239 sample tribal households in four sample block 72(30.12%) are availing benefits of supplementary nutrition under ICDS. On block-wise analysis it is also revealed that more or less about 30 per cent of sample tribal households are benefitted through this scheme.



Supplementary Nutrition to mother & children

5.4.8(1)(d) Mahatma Gandhi National Rural Employment Guarantee Scheme

From the data as presented in item 1(d) of table – 5.17 it is found that, out of total 239 respondent households from all sample blocks 121(50.63%) are availing the benefits under the scheme. On block-wise analysis it is revealed that maximum households 42(70.00%) from Kashipur block followed by 39(65.00%) from Lanjigarh block, 25(41.66%) from Udala block and minimum of 15(25.42%) from Khariar block are availing the benefits under the scheme.



Jobs assigned under MGNREGS

5.4.8(1)(e) Swarnajayanti Gram Swarozgar Yojana (SGSY)

As per data given in item 1(e) of table – 5.17, under SGSY, out of total 239 respondent households from all the sample blocks under study 122(51.05%) are availing the benefits under the scheme. Considering block-wise it is found that minimum of about 44 per cent and maximum of about 60 per cent households are availing the benefits under the scheme.

5.4.8(1)(f) Sampoorna Gramin Rojgar Yojana (SGRY)

Under this scheme, as per the data given in item 1(f) of table – 5.17 it is revealed that no a single household from all the sample blocks has availed the benefit.

5.4.8(1)(g) Madhu Babu Pension Yojana(MBPY)

From the data as shown in item 1(g) of table – 5.17 it is revealed that total 80(33.47%) respondent households from all four sample blocks are availing the facilities under the scheme. On block-wise analysis maximum of 26(44.07%) respondent households from Khariar block followed by 23(38.33%) from Udala block, 19(31.66%) from Lanjigarh block and 12(20.00%) from Kashipur block are availing the benefits under the scheme.

5.4.8(1)(h) Indira Gandhi National Old Age Pension (IGNOAP)

Under the scheme total 21 respondent households - 13 from Khariar block and 8 from Udala block are availing the benefits under the scheme.

5.4.8(1)(i) Emergency Feeding Programme

As per data shown in item 1(i) of table – 5.17 it is found that total 46(19.24%) respondent households from all the sample blocks are getting benefits under this scheme. On block-wise analysis it is revealed that 9(15.00%) respondent households from Kashipur block, 13(21.66%) from Udala block, 7(11.66%) from Lanjigarh block and 11(18.64%) from Khariar block are availing the benefits under this scheme.

5.4.8(1)(j) Orissa Tribal Empowerment and Livelihood Programme (OTELP)

This programme is not operating in the sample blocks under study and therefore, the sample households are not getting benefits under this scheme.

5.4.8(2) Schemes more benefited to households towards bringing food security

5.4.8(2)(a) Rs. 2/- per kg. Rice under PDS

From the data as presented in item 2(a) of table – 5.17 it is revealed that 100 per cent of respondent households in all the blocks are in the opinion of supply of Rs. 2/- per kg. of rice under PDS is more beneficial towards bringing food security.

5.4.8(2)(b) Mid-day-Meals Scheme

As per data shown in item 2(b) of table – 5.17 it is also revealed that 100 per cent of respondent households are in the opinion of providing mid-day-meals to their school going children is giving more benefits towards food security. Because, under this scheme their school going children (from Class – I to Class – V) are able to mitigate their class room hunger as well they are getting at least one meal a day for about 210(7 months) in a year; and this partially bringing household food security.

5.4.8(2)(c) Integrated Child Development Scheme (Supplementary Nutrition)

From item 2(c) of table – 5.17 it is revealed that about 55 per cent out of total respondent households from all the sample blocks viewed about the scheme is benefited towards bringing household food security because out of this scheme children in the age group of 3 – 6 years, pregnant women, lactating mothers, adolescent girls are being provided nutritional food. On block-wise analysis also more or less about 50 per cent of respondent households viewed in favour

5.4.8(2)(d) Mahatma Gandhi National Rural Employment Guarantee Scheme

From the data as given item 2(d) of table - 5.17 it is revealed that 100 per cent of respondent households from all the sample blocks have viewed about the scheme of MGNREGS is more beneficial towards bringing the household food security.

5.4.8(3) Family condition before availing the benefits under different Food Security Schemes

5.4.8(3)(a) Public Distribution System – Rs. 2/- per kg. of rice

As per the data given in item 3(a) of table – 5.17 it is observed that 100 per cent of respondent households expressed their views about remaining in food scarcity prior to availing the benefits of Rs. 2/- per Kg. rice under PDS.

5.4.8(3)(b) Mid-day-meals Scheme

From the data as presented in item 3(b) of table – 5.17 it is revealed that out of total 239 respondent households 129(53.97%) have expressed their views in favour of scarcity of food prior to availing the benefits of MDM. While analyzing block-wise response of the respondent households more or less about 50 per cent have expressed the similar views. On this issue it is also revealed that out of total respondent households, about 46% respondent households from all blocks have not responded and on block-wise analysis similar response obtained.

5.4.8(3)(c) Integrated Child Development Scheme (Supplementary Nutrition)

As per the data shown in item 3(c) of table – 5.17 it is found that about 55 per cent of respondent households from total of all blocks have viewed on family condition was in scarcity of food prior to availing the benefits under the scheme and balance about 45 per cent respondent households did not responded. Also similar responses were found while analyzing the views of the respondent households block-wise.

5.4.8(3)(d) Mahatma Gandhi National Rural Employment Guarantee Scheme

On the issue of family condition prior to availing the benefits under MGNREGS was in scarcity of food, it is revealed from the data as presented in item 3(d) of table – 5.17 that cent per cent of respondent households are viewed in favour.

5.4.8(4) Family condition after availing the benefits under the Food Security Schemes

5.4.8(4)(a) Public Distribution System – Rs. 2/- per kg. of rice

On the question of family condition after availing the benefits under PDS, more particularly Rs./- 2/- per kg. of rice whether improved to achieve food security, it is found that cent per cent of respondent households viewed favouring improvement.

5.4.8(4)(b) *Mid-day-meals Scheme*

On the issue of family condition after availing the benefits under MDM to the school children, it is revealed from the data presented in table 4(b) of table – 5.17 that about more or less 55 per cent of respondent households expressed favouring improvement while more or less about 45 per cent area found not responded.

5.4.8(4)(c) *Integrated Child Development Scheme (Supplementary Nutrition)*

As per the data presented in item 4© of table – 5.17 it is observed that on the issue of family condition after availing the benefits under ICDS such as nutritional support to pregnant women, lactating mothers, children aged 3 – 6 years of age, adolescent girls, more or less about 55 per cent of respondent households expressed favouring improvement; whereas about 45 per cent households did not responded to it.

5.4.8(4)(d) *Mahatma Gandhi National Rural Employment Guarantee Scheme*

From the data as given in item 4(d) of table – 5.17 it is found that, on the question of after availing the benefits under MGNREGS whether family conditions of the beneficiaries have improved, cent per cent of respondent households have not responded. This shows that the family condition have not improved as they have not assigned adequate number of jobs under the scheme.

5.4.8(5) *Statement of views on the problems of implementation of Food Security Schemes*

Views of the sample tribal households relating to the problems on implementation of various food security schemes as were collected during the course of the fields visits are depicted in the following paragraphs.

5.4.8(5)(a) *Public Distribution System – Rs. 2/- per kg. of rice*

As per the statement of views of respondent households it is found from the table that three types of problems encountered by them such as – ration shop is located in far away, unable to lift the commodities due to lack of fund and the commodities available area inadequate to family members.

On the issue of ration shop is located in far away places, only 12 households – 7 from Kashipur block and 5 from Lanjigarh block have expressed their views. As the shops are located in far away places they are unable to lift the commodities under the scheme.

About the problem on unable to lift the commodities due to lack of fund, it is revealed from the data that only 8 respondent households - 3 from Kashipur block and 5 from Lanjigarh block have expressed their views on it.

Relating to the problem on the commodities available under PDS are inadequate to the family members, it is revealed from the data that total of 130(54.39%) respondent households from all the sample blocks and on block-wise 35(58.33%) from Kashipur

block, 36(60.00%) from Udala block, 30(50.00%) from Lanjigarh block and 29(49.15%) from Khariar block have given their views on this issue.

5.4.8(5)(b) *Mid-day-Meals Scheme*

It can be seen from the data as presented in item 5(b) of table – 5.17 that no respondent household from all the sample blocks has stated any problem relating to functioning of Mid-day-Meals Scheme.

5.4.8(5)(c) *Integrated Child Development Services (Supplementary Nutrition)*

As per the statement of views of respondent households, two types of problems are observed, like AWCs are located in far away places and cooked meals not provided.

On the point of AWCs are located in far away places, it is revealed from the data as shown in item 5(a) that total of 61(25.52%) respondent households from all sample blocks and on block-wise 11(18.33%) from Kashipur block, 23(38.33%) from Udala block, 18(30.00%) from Lanjigarh block and 9(15.35%) from Khariar block have expressed their views on it.

Regarding the problem on cooked meals not provided, it is found that total of 98(41.00%) respondent households from all the sample blocks and on block-wise 34(56.60%) from Kashipur block, 28(47.46%) from Udala block, 13(21.66%) from Lanjigarh block and 23(38.33%) from Khariar block have stated their views on it.

5.4.8(5)(d) *Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)*

Problems on implementation of MGNREGS, two types of problems have been stated by the respondent households like jobs are not provided to job card holders as per their entitlement and the system of payment of wage through pass book is faulty.

On the problem of jobs are not provided to job card holders as per entitlement, it may be observed from the data as presented in item 5(d) that cent per cent respondent households from all the sample blocks have stated the same.

Relating to the problem on the system of payment of wage through pass book it is revealed from the data that majority of households, i.e. 213(89.12%) out of 239 from total of all the sample blocks, and on; block-wise 60(100.00%) from Kashipur block, 42(70.00%) from Udala block, 60(100.00%) from Lanjigarh block and 51(86.44%) from Khariar block have expressed their views on this.

5.4.8(6) *Statement of views on suggestions on implementation of food Security schemes*

Suggestions from the sample tribal households towards overcoming the problems of functioning of different food security schemes as were collected during the course of field visits are shown in item 6 of table 5-17 and described in the following paragraphs.

5.4.8(6)(a) Public Distribution System(PDS)

The suggestions received from the respondent households on functioning of PDS are (i) entitlement of commodities be linked with the number of members in the family, (ii) ration shops be located nearer to habitation and (iii) SHGs be involved in distribution of commodities.

On the suggestion of entitlement of commodities be linked with number of members in the family, it is observed from the data that 130(54.39%) respondent households out of 239 from all the sample blocks and on block-wise 35(58.33%) from Kashipur block, 36(60.00%) from Udala block, 30(50.00%) from Lanjigarh block and 29(49.15%) from Khariar block have given their views on the above.

Regarding the suggestion on the ration shops be located nearer to habitation, only 12 respondent households, i.e. 7 from Kashipur block and 5 from Lanjigarh block have responded to it.

On the point of SHGs be involved in distribution of commodities in respect of their habitations, total 61(25.52%) respondent households from all the sample blocks and on block-wise 22(36.66%) from Kashipur block, 13(21.66%) from Udala block, 9(15.00%) from Lanjigarh block and 17(28.37%) from Khariar block have suggested.

5.4.8(6)(b) Mid-day-Meals Scheme

About functioning of MDM scheme only one suggestion has been received, i.e. SHGs be involved in management of MDM. On this suggestion total 49(20.50%) respondent households from all the sample blocks, and on block-wise 19(31.66%) from Kashipur block, 11(18.33%) from Udala block, 6(10.00%) from Lanjigarh block and 13(22.03%) from Khariar block have given their views.

5.4.8(6)(c) Integrated Child Development Services (Supplementary Nutrition)

On functioning of supplementary nutrition scheme under ICDS two suggestions were received, such as (i) AWCs be located in each habitation and (ii) cooked meals be supplied.

On the point of AWCs be located in each habitation, total 44(18.41%) respondent households from all the sample blocks and on block-wise 17(28.33%) from Kashipur block, 9(15.00%) from Udala block, 12(20.00%) from Lanjigarh block and 6(10.16%) from Khariar block have responded to it in favour.

On the suggestion of cooked meals be supplied, total of 37(15.63%) respondent households from all the sample blocks and on block-wise 14(23.33%) from Kashipur block, 7(11.66%) from Udala block, 11(18.33%) from Lanjigarh block and 5(8.33%) from Khariar block have viewed on it.

5.4.8(6)(d) Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

About functioning of MGNREGS three suggestions were received from the sample tribal households. These suggestions are (i) jobs be assigned as per entitlement, (ii) in lean season jobs be assigned at least 15 days in a month and (iii) payment be made by cash on the same day of labour.

On the points as stated in items (i) and (ii) above, 100 per cent of respondent households have given their views; whereas on the third point, i.e. payment be made on the same day of labour total of 136(56.90%) respondent households from all sample block and on block-wise 42((70.00%) from Kashipur block, 26(43.33%) from Udala block, 49(81.66%) from Lanjigarh block and 19(32.20%) from Khariar block have given their views in favour.

5.5 VIEWS OF OPINION MAKERS

Towards obtaining views from the opinion makers, such as local PRI members, village traditional heads, representatives of SHGs, representatives of local NGOs, members of grain bank, school teachers, AWWs, officials of DRDA, ITDA, Block office, Civil supply office, ICDS, etc. as per the methodology adopted, total 40 opinion makers consisting of 10 from each block were approached through a set of questionnaire during the course of the field study. The views as obtained relating to various aspects of food insecurity among tribals and about functioning of different food security schemes are presented in table – 5.18 and analysis thereon are made in the following paragraphs.

Table - 5.18 : Statement of views of opinion-makers in respect of food insecurity among tribals and food security measures taken by Government

Sl. No.	Description	Name of the block				Total of all blocks (in no./%) (N = 40)
		Kashipur	Udala	Langigarh	Khariar	
		(in no./%) (N = 10)	(in no./%) (N = 10)	(in no./%) (N = 10)	(in no./%) (N = 10)	
1	<u>Public Distribution System</u>					
	a) Awareness about various schemes					
	-Aware	9 (90.00)	10 (100.00)	10 (100.00)	10 (100.00)	39 (97.50)
	-Not aware	1 (10.00)	-	-	-	1 (2.50)
	b) Awareness about commodities, entitlement and prices					
	-Aware	9 (90.00)	10 (100.00)	10 (100.00)	10 (100.00)	39 (97.50)
	-Not aware	1 (10.00)	-	-	-	1 (2.50)
	c) Regular availability of commodities to tribal families					
	- Yes	9 (90.00)	10 (100.00)	10 (100.00)	10 (100.00)	39 (97.50)
	- No	-	-	-	-	-
	- Not responded	1 (10.00)	-	-	-	1 (2.50)

3	<u>ICDS (Supplementary Nutrition)</u>					
	a) Whether Supplementary nutrition programme under ICDS is helping to improve the situation of addressing food insecurity					
	Yes	8 (80.00)	10 (100.00)	7 (70.00)	10 (100.00)	35 (87.50)
	No	2 (20.00)	-	3 (30.00)	-	5 (12.50)
4	<u>Livelihood Support</u>					
	a) Awareness about various schemes providing livelihood support to tribals					
	- Aware	6 (60.00)	8 (80.00)	7 (70.00)	10 (100.00)	31 (77.50)
	- Not aware	4 (*40.00)	2 (20.00)	3 (30.00)	-	9 (22.50)
	b) Whether tribals are availing the benefits out of the schemes					
	Yes	6 (60.00)	4 (40.00)	7 (70.00)	3 (30.00)	20 (50.00)
	No	4 (40.00)	3 (30.00)	1 (10.00)	3 (30.00)	11 (27.50)
	No response	-	3 (30.00)	2 (20.00)	4 (40.00)	9 (22.50)
	c) Whether the benefits provided through livelihood support schemes to tribals have improved the situation of addressing food insecurity among them					
	- Yes to some extent	9 (90.00)	7 (70.00)	8 (80.00)	6 (60.00)	30 (75.00)
	- Did not comment	1 (10.00)	3 (30.00)	2 (20.00)	4 (40.00)	10 (25.00)
5	<u>Views on causes of the food insecurity among tribals</u>					
	a) Lack of awareness on various schemes	3 (30.00)	1 (10.00)	5 (50.00)	2 (20.00)	11 (27.50)
	b) Illiteracy and ignorance	7 (70.00)	8 (80.00)	4 (40.00)	9 (90.00)	28 (70.00)
	c) Landless	4 (40.00)	3 (30.00)	5 (50.00)	2 (20.00)	14 (35.00)
	d) Non availability of work	10 (100.00)	8 (80.00)	10 (100.00)	6 (60.00)	34 (85.00)
	e) Indulgence/consumption of liquor	5 (50.00)	3 (30.00)	7 (70.00)	4 (40.00)	19 (47.50)
	f) Abject poverty among tribals	3 (30.00)	-	2 (20.00)	4 (40.00)	9 (22.50)
	g) Lack of irrigation facilities	6 (60.00)	4 (40.00)	5 (50.00)	3 (30.00)	18 (45.00)
	h) Less production due to traditional methods of cultivation	4 (40.00)	3 (30.00)	1 (10.00)	3 (30.00)	11 (27.50)

6	<u>Views on consequences / results of food insecurity</u>					
	a) Taking inadequate and alternate food	9 (90.00)	3 (30.00)	7 (70.00)	2 (20.00)	21 (52.50)
	b) Migration for labour due to acute food scarcity	3 (30.00)	1 (10.00)	4 (40.00)	-	8 (20.00)
	c) Distress sale of land/assets/mortgage of land (mortgage of land)	1 (10.00)	-	1 (10.00)	-	2 (5.00)
	d) Starvation deaths	-	-	-	-	-
	e) Suicidal cases due to acute food scarcity	-	-	-	-	-
	f) Selling of infants	-	-	-	-	-
	g) Child labour	-	-	-	-	-
	h) Malnutrition	-	-	-	-	-
	i) Immoral trafficking	-	-	-	-	-
7	<u>Views on community coping mechanism/ assistance through NGO to address food in security</u>					
	a) No grain bank is functioning	7 (70.00)	2 (20.00)	4 (40.00)	3 (30.00)	16 (40.00)
	b) No NGO/VO is providing assistance to address food insecurity	10 (100.00)	6 (60.00)	5 (50.00)	2 (20.00)	23 (57.50)
8	<u>Suggestions to overcome the problems of functioning of different schemes towards ensuring food security among tribals</u>					
	<u>a) Relating to PDS</u>					
	- SHGs be involved in distribution of commodities	2 (20.00)	1 (10.00)	3 (30.00)	-	6 (15.00)
	-PDS centres be located Nearby habitations	3 (30.00)	2 (20.00)	4 (40.00)	2 (20.00)	11 (27.50)
	-Proper identification of Beneficiaries / new beneficiaries be included in the BPL list	4 (40.00)	2 (20.00)	5 (50.00)	3 (30.00)	14 (35.00)
	-Quantum of food stock be based on number of members in the family	6 (60.00)	3 (30.00)	7 (70.00)	4 (40.00)	20 (50.00)
	- Quantity of BPL rice R.2/- per kg. be supplied 35 kg.per month	6 (60.00)	4 (40.00)	5 (50.00)	7 (70.00)	22 (55.00)
	<u>b) Relating to MDM</u>					
	- SHGs be involved in management of of MDM	2 (20.00)	-	3 (30.00)	-	5 (12.50)
	<u>c) Relating to ICDS(SNP)</u>					
	-AWWs be engaged locally					

preferably from the same village/habitation	3 (30.00)	2 (20.00)	1 (10.00)	-	6 (15.00)
- Cooked food be supplied					
- AWCs be located in each habitation	2 (20.00)	-	3 (30.00)	-	5 (12.50)
d) <u>Relating to MGNREGS</u>	4 (40.00)	1 (10.00)	2 (20.00)	-	7 (17.50)
- Jobs be assigned to cardholders as per entitlement of the scheme like MGNREGS or other employment generation schemes regularly	10 (100.00)	10 (100.00)	10 (100.00)	10 (100.00)	40 (100.00)
- In lean season jobs be assigned to the card holders at least 15 days in a month	10 (100.00)	7 (70.00)	8 (80.00)	6 (60.00)	31 (77.50)
<u>e) Other suggestions</u>					
i) SHGs be provided with loan facilities and subsidies to set up their own ventures	6 (60.00)	4 (40.00)	7 (70.00)	5 (50.00)	22 (55.00)
ii) Vocational trainings be provided unemployed youths and SHG members to create self employment opportunities	4 (40.00)	2 (20.00)	3 (30.00)	6 (60.00)	15 (37.50)
iii) Irrigation facilities be improved in the areas	10 (10.00)	10 (100.00)	10 (100.00)	10 (100.00)	40 (100.00)
iv) Marketing of MFP be ensured	9 (90.00)	3 (30.00)	7 (70.00)	4 (40.00)	23 (57.50)

5.5.1 Views on Public Distribution System

Views of opinion makers relating to different aspects of function of public distribution system in tribal areas as were collected are shown in item 1 of table – 5.18.

Regarding awareness on various schemes like Antodaya, Annapurna, etc. and awareness about entitlement of commodities under different schemes, it may be revealed from the data as presented in item 1(a) and 1(b) of table – 5.18 that except one opinion maker from Kashipur block all are aware about various schemes as well as entitlement of commodities thereon.

About regular availability and supply of commodities under different schemes it is gathered that except one respondent all others have given their views that commodities under different schemes are available and supplied to the beneficiaries regularly.

Views of opinion makers were collected in respect of problems on implementation of PDS and given in item 1(d) of table – 5.18. Regarding problem on commodities particularly rice available under the scheme are inadequate to family members, about more or less 30 per cent of opinion makers have given their views on it. On the point of the households do not have purchasing powers in lean season, only 8(20.00%) of opinion makers from all the blocks and on block-wise 3(30.00%) from Kashipur block, 4(40.00%) from Lanjigarh block and 1(10.00%) from Khariar block have given their views on it. On the point of ration shops are located in far away places 4(10.00%) opinion makers from all

the sample blocks and on block-wise 1(10.00%) from each of Kashipur and Lanjigarh blocks and 2(20.00%) from Udala block have given their views. On the problem of lack of preservation or storage facilities on 3 respondent opinion makers, i.e. 2 from Udala block and 1 from Lanjigarh block have stated their views. It is also observed that some time parboiled rice supplied to the cardholders in stead of boiled rice. As tribals do not prefer to consume parboiled rice on this problem only one respondent opinion maker from Kashipur block has given his view. On the point of some genuine households do not have cards, only 5 respondent opinion makers - 3 from Udala block and 2 from 2 from Lanjigarh block given their views. Total of 6 respondent opinion makers from all the blocks and on block-wise one each from Kashipur and Khariar blocks and two each from Udala and Lanjigarh blocks have stated that transportation cost in hilly and remote areas is higher. Seven respondent opinion makers from all the sample blocks and on block-wise 5 from Kashipur block and one each from Udala and Lanjigarh blocks have stated their views as no problem encountered in implementation of PDS in the areas.

Views of the opinion makers were collected on the point the commodities supplied through PDS to the tribals whether improved the situation of addressing food insecurity among them, two types of answers were received. Firstly, cent per cent of opinion makers viewed that Rs. 2/- per kg. of rice is giving benefits. Secondly, 7 respondent opinion makers from total of all sample blocks and on block-wise 4 from Udala block and 3 from Lanjigarh block have viewed that supply of rice through PDS mitigating the food insecurity of 3 months on an average in a year.

Views about mortgaging of BPL cards by the tribals and money received out of this spent on consumption of alcohol, it is revealed from the response that no such case is found.

5.5.2 Views on Mid day meals Scheme

In respect of MDM scheme views of the opinion makers were gathered in two aspects. On the aspect of whether tribal school going children are availing the benefits under MDM, it is revealed that cent per cent of opinion makers were agreed to it. On the second aspect whether MDM is helping to improve the situation of addressing food insecurity problems also similar responses were received.

5.5.3 Integrated Child Development Services (Supplementary Nutrition)

Views on whether supplementary nutrition programme under ICDS is helping to improve the situation of addressing food insecurity problems, it is observed from the data as presented in item 3(a) of table – 5.18 that 35(87.50%) respondent opinion makers from total of all sample blocks and on block-wise 8(80.00%) from Kashipur block, 7(70.00%) from Lanjigarh block and 100 per cent each from Udala and Khariar blocks have responded in favour, whereas 2 respondent opinion makers from Kashipur block and 3 from Lanjigarh block have not responded to it.

5.5.4 Livelihood Support Programmes

Views of the opinion makers regarding awareness about various schemes providing livelihood support to tribals, it is revealed from the data as given in item 4(a) of table – 5.18 that 31(77.50%) opinion makers out of total of all sample blocks and on block-wise 6(60.00%) from Kashipur block, 8(80.00%) from Udala block, 7(70.00%) from Lanjigarh block and 10(100.00%) from Khariar block are aware about the schemes, whereas 9(22.50%) respondent opinion makers from all blocks and on block-wise 4(40.00%) from Kashipur block, 2(20.00%) from Udala block and 3(30.00%) from Lanjigarh block are found not aware.

On the question of whether tribals are availing the benefits out of the schemes, it is observed from the data as given in item 4(b) of table – 5.18 that 50 per cent of respondent opinion makers have agreed to it, whereas 11(27.50%) have not agreed and balance 9(22.50%) did not responded.

Regarding views of opinion makers on the point of whether the benefits provided through livelihood support schemes to tribals have improved the situation of addressing food insecurity among them, it is observed from the data as given in; item 4(c) of table – 5.18 that, 30(75.00%) of respondent opinion makers out of total of all sample blocks and on block-wise 9 (90.00%) from Kashipur block, 7(70.00%) from Udala block, 8(80.00%) from Lanjigarh block and 6(60.00%) from Khariar block have expressed their views to some extent, whereas balance respondents not commented on it. From the above views it may be assumed that the benefits under livelihood support schemes have not reached to the tribals in these areas.

5.5.5 Views on Causes of Food Insecurity

Views from the opinion makers relating to the causes of food insecurity among tribals as were collected area shown in item 5 of table – 5.18. From the data as presented above it is observed that there are nine causes responsible for food insecurity in tribal areas as stated by the opinion makers. Out of these causes, non-availability of works scored highest, i.e. 34(85.00%) respondent opinion makers from total of all the sample blocks and on block-wise 10(100.00%) from Kashipur block, 8(80.00%) from Udala block, 10(100.00%) Lanjigarh block and 6(60.00%) Khariar block have stated their views in favour. Out of other causes, lack of awareness about various schemes and illiteracy and ignorance of tribals are two similar and related causes as stated by; the opinion makers. On the point of lack of awareness about various schemes total 11(27.50%) of respondent opinion makers from all sample blocks and on block-wise 3(30.0%) from Kashipur block, 1(10.00%) from Udala block, 5(50.00%) from Lanjigarh block and 2(20.00%) from Khariar block have stated their views. On the point of illiteracy and ignorance total 28(70.00%) of respondent opinion makers from all the sample blocks and on block-wise 7(70.00%) from Kashipur block, 8(80.00%) from Udala block, 4(40.00%) from Lanjigarh block and 9(90.00%) from Khariar block have given their views. Landless is another important cause responsible for food insecurity among tribals. On this point total 14(35.00%) of respondent opinion makers from total of all blocks and on block-wise 4(40.00%) from Kashipur block, 3(30.00%) from Udala block, 5(50.00%) from Lanjigarh block and 2(20.00%) from Khariar block have stated their views. On the point of

indulgence/consumption of liquor by tribals, total of 19(47.50%) of opinion makers from all the sample blocks and on block-wise 5(50.00%) from Kashipur block, 3(30.00%) from Udala block, 7(70.00%) from Lanjigarh block and 4(40.00%) from Khariar block have given their views. On the point of abject poverty among tribals total 9(22.50%) opinion makers from total of all sample blocks and on block-wise 3(30.00%) from Kashipur block, 2(20.00%) from Lanjigarh block and 4(40.00%) from Khariar block have stated their views. Lack of irrigation facilities in tribal areas is another important cause. On this point 18(45.00%) opinion makers from all the sample blocks and on block-wise 6(60.00%) from Kashipur block, 4(40.00%) from Udala block, 5(50.00%) from Lanjigarh block and 3(30.00%) from Khariar block have stated their views. Less production due to traditional methods of cultivation is one of the important causes as opined by the opinion makers. On this point total 11(27.50%) respondent opinion makers from all the sample blocks and on block-wise 4(40.00%) from Kashipur block, 3(30.00%) from Udala block, 1(10.00%) Lanjigarh block and 3(30.00%) from Khariar block have stated it. On the point of loss of production due to irregular monsoon /frequent occurrence of drought in the areas total 8(20.00%) of opinion makers from all the sample blocks and on block-wise 2(20.00%) from Kashipur block, 1(10.00%) from Udala block, 3(30.00%) from Lanjigarh block and 2(20.00%) from Khariar block have stated their views.

5.5.6 Views on consequences / results of food insecurity

Views from the opinion makers relating to consequences / results of food insecurity as were gathered are presented in item 6 of table – 5.18. From the data it is observed that the opinion makers have given their views in favour on the first three aspects, i.e. (a) taking inadequate and alternate food, (b) migration for labour due to acute food scarcity and (c) mortgaging of land, and given their views not in favour of other points like, (d) starvation deaths, (e) suicidal cases, (f) selling of infants, (g) child labour, (h) malnutrition and (i) immoral trafficking. On the aspect of taking inadequate and alternate food during acute food scarcity total 21(52.50%) respondent opinion makers from all the sample blocks and on block-wise 9(90.00%) from Kashipur block, 3(30.00%) from Udala block, 7(70.00%) from Lanjigarh block and 2(20.00%) from Khariar block have responded on it. On the aspect of migration for labour due to acute food scarcity total 8(20.00%) respondent opinion makers from all the sample blocks and on block-wise 3(30.00%) from Kashipur block, 1(10.00%) from Udala block and 4(40.00%) from Lanjigarh block have viewed to it. On the aspect of distress sale of land / assets / mortgage of land, only two opinion makers, i.e. one from Kashipur block and another from Lanjigarh block have stated their views favouring mortgaging land during acute food scarcity period.

5.6.7 Views on community coping mechanism /assistance through NGO

Views of the opinion makers relating to assistance through community mechanism like grain bank and assistance through NGOs during acute food scarcity period were collected and given in item 7 of table – 18. From the knowledge of the respondent opinion makers it is found that 16(40.0%) respondent opinion makers from total of all blocks and on block-wise 7(70.00%) from Kashipur block, 2(20.00%) from Udala block, 4(40.00%) from Lanjigarh block and 3(30.00%) from Khariar block have viewed in favour of no grain bank is functioning in their areas. On the point of no NGO is providing assistance to address food insecurity it is revealed from the responses that total of 23(57.50%)

respondent opinion makers from all the sample blocks and on block-wise 10(100.00%) from Kashipur block, 6(60.00%) from Udala block, 5(50.00%) from Lanjigarh block and 2(20.00%) from Khariar block have agreed to it.

5.6.8 Suggestions to overcome the problems on implementation of implementation of different schemes towards ensuring food security

Suggestions from the opinion makers were collected in respect of the problems in implementation of different food security schemes / programmes so as to ensure food security among tribals and given in item 8 of table – 5.18.

5.6.8(a) Relating to Public Distribution System

Five suggestions were gathered in respect of PDS. Out of five suggestions, maximum of respondent opinion makers, i.e. 22(55.00%) from total of all sample blocks and on block-wise 6(60.00%) from Kashipur block, 4(40.00%) from Udala block, 5(50.00%) from Lanjigarh block and 7(70.00%) from Khariar block have suggested that the quantity of Rs. 2/- per kg. of BPL rice under Antodaya scheme be supplied @ 35 kg. per month in stead of 25 kg. per month. Also similar views were received from 20(50.00%) respondent opinion makers from total of all blocks and on block-wise 6(60.00%) from Kashipur block, 3(30.00%) from Udala block, 7(70.00%) from Lanjigarh block and 4(40.00%) from Khariar block regarding quantity of food supplied through PDS should be based on number of members in the family. Next to higher response also received about proper identification of beneficiaries / new beneficiaries be included in the BPL list as this has prepared about more than 12 years back. On this suggestion 14(35.00%) respondent opinion makers from total of all sample blocks and on block-wise 4(40.00%) from Kashipur block, 2(20.00%) from Udala block, 5(50.00%) from Lanjigarh block and 3(30.00%) from Khariar block have responded. On the point of PDS centres be located nearby habitations, total of 11(27.50%) respondent opinion makers from all the sample blocks and on block-wise 3(30.00%) from Kashipur block, 2(20.00%) from Udala block, 4(40.00%) from Lanjigarh block and 2(20.00%) from Khariar block have given their suggestions. Only 6(15.00%) respondent opinion makers from total of all the sample blocks and on block-wise 2(20.00%) from Kashipur block, 1(10.00%) from Udala block and 3(30.00%) from Lanjigarh block have suggested that the SHGs be involved in distribution of commodities under PDS.

5.6.8(b) Relating to Mid-day-Meals Scheme

Relataing to MDM scheme only one suggestion, i.e. SHGs be involved in mananging of MDM has been obtained. On this point only 5(12.50%) respondent opinion makers from total of all blocks and on block-wise 2(20.00%) from Kashipur block and 3(30.00%) from Lanjigarh block have given their suggestions.

5.6.8(c) Relating to ICDS (Supplementary Nutrition Programme)

Relating to supplementary nutrition programmes under ICDS, three suggestions were gathered. On the point of AWWs be engaged locally preferably from the same village / habitation total of 6(15.00%) respondent opinion makers from all the sample blocks and

on block-wise 3(30.00%) from Kashipur block, 2(20.00%) from Udala block and 1(10.00%) from Lanjigarh block have suggested. On the point of cooked food be supplied, total of 5(12.50%) respondent opinion makers from all the sample blocks and on block-wise 2(20.00%) from Kashipur block and 3(30.00%) from Lanjigarh block have suggested. On the point of AWCs be located in each habitation 7(17.50%) respondent opinion makers from total of all sample blocks and on block-wise 4(40.00%) from Kashipur block, 1(10.00%) from Udala block and 2(20.00%) from LOanjigarh block have suggested.

5.6.8(d) Related to Livelihood support programmes

Relating to livelihood support programmes, as per data presented in item 8(d) of table – 5.18 two suggestions were obtained from the opinion makers. In the first suggestion cent per cent of opinion makers from all the sample blocks have stated that jobs be assigned to card holders as per entitlement of the schemes like MGNREGS or other employment guarantee schemes regularly. Secondly, 31(77.50%) respondent opinion makers from total of all blocks and on block-wise 10(100.00%) from Kashipur block, 7(70.00%) from Udala block, 8(80.00%) from Lanjigarh block and 6(60.00%) from Raigarh block have suggested that in lean season jobs be assigned to the card holders at least 15 days in a month.

5.6.8(e) Other suggestions

Towards eliminating household food insecurity in tribal areas, besides the above scheme-wise suggestions the opinion makers have made some additional suggestions like (i) SHGs be provided with loan facilities and subsidies to set up their ventures, (ii) vocational trainings be provided to unemployed youths, SHG members to create self employment opportunities, (iii) irrigation facilities be improved in the areas and (iv) marketing of MFP be ensured. On the first suggestion like SHGs be provided with loan facilities and subsidies to set up their own ventures, as per the data given in item 8(e)(i) of table – 5.18 that total of 22(55.00%) opinion makers from all the sample blocks and on block-wise 6(60.00%) from Kashipur block, 4(40.00%) from Udala block, 6(60.00%) from Lanjigarh block and 5(50.00%) from Khariar block have given their suggestions. On the second aspect like vocational trainings be provided to unemployed youths, SHG members to create self employment opportunities, total of 15(37.50%) respondent opinion makers from all the sample blocks and on block-wise 4(40.00%) from Kashipur block, 2(20.00%) from Udala block, 3(30.00%) from Lanjigarh block and 6(60.00%) from Khariar block have suggested. On the third aspect like irrigation facilities be improved in the areas cent per cent of opinion makers from all the sample blocks have suggested to it. On the fourth point like marketing of MFP be ensured it is revealed from the data that total of 23(57.50%) of opinion makers from all the sample blocks and on block-wise 9(90.00%) from Kashipur block, 3(30.00%) from Udala block, 7(70.00%) from Lanjigarh block and 4(40.00%) from Khariar block have suggested on it.

5.7 Focus Group Discussions

As per the design of the study and methodology adopted, during the course of field visits for primary data collection a few Focus Group Discussions (FGDs) were organized in the sample villages under study. The focus group discussions held with the members of

tribal household heads, traditional village heads, women leaders in the respective villages / areas, WSHG members, AWWs, local PRI representatives, school teachers, representatives of local NGOs / VOs, etc. During organizing FGDs proceedings were drawn and some of which are given below.



Focus Group Discussion with men and women groups

**5.7.(1) Proceedings of the Focus Group Discussion at Village
Panbandh, G.P. Tikri under Kashipur of Rayagada District**

The purpose and objectives of the group discussion were explained in details to the assembled persons numbering about nineteen in the Primary school verandah and the outcomes of such discussions are indicated below.

There has been no instance of natural calamities such as drought, flood, cyclone etc. during the last five years but three years back, Cholera (Diarrhea and Dysentery) had spread out in the village and about thirteen persons had died due to it. As per the disclosures made by the assembled people, it transpired that those people had succumbed to malnutrition and diseases induced by sustained hunger. The intensity of this fatal occurrence was so severe that the staff of Health department had to make camp arrangement within the settlement to tackle the same and it took about a week's time for them to bring normalcy in the village. Acute food insecurity occurred during that period and the local administration distributed food items in shape of Gratuitous Relief for about a fortnight and to some families for a month.

The tribal inhabitants of this village are mostly agricultural labourers and marginal farmers and they render labour in and around their neighboring area which is rapidly emerging / developing into a semi-urban centre due to the establishment of offices of various companies associated with Bauxite mining related works. In and around Tikri, the G.P. Hqr., job for menial and construction works, is generally available through out the year. Some of the inhabitants of this settlement has even gone outside the state to Andhra Pradesh, Tamil Nadu and other States of the country in search of better livelihood and wages

About eighty-one job cards have been distributed to the tribal inhabitants of this village but they seldom get work under NREGS and other employment guarantee schemes of the Government. Since the year 2006, when the NREGS scheme was introduced, only nine to eleven days of work have been provided to some of the job-card holders. Those workers are being paid in shape of cash only. Thus the tribal of this particular village are not getting any benefit out of this benevolent scheme devised to provide employment for about one hundred days in a year.

About forty-one students have been enrolled in the Primary School located in the village which has five classes but two teachers only. One is a lady teacher who often remains ill and another is a youth of about thirty five years of age. The students are being provided with MDM in the school but it is managed by the teachers themselves. Besides, the SNP and EFP being implemented through Anganwadi centre helps about 106 children within the age group of 0-6 years along with 14 pregnant and lactating mothers and also 15 old and infirm persons to get some amount of nutritious food admissible under the scheme. In this village ten tribal have been covered under NOAP, seven under MBPY out of which, three are disabled persons and one is assisted under Annapurna scheme. The Annapurna beneficiary is entitled for 10 k.g of rice per month free of cost. There are sixty nine BPL card holders and sixteen Antodaya Annapurma beneficiaries in this village. Many deserving cases are yet to be covered under MBPY/ NOAP etc. and their cases needs attention on priority to overcome their food insecurity status or situations.

The entitlements under BPL cards are mainly Rice and K.Oil .However during September and October they were even provided with two K.G. Sugar in subsidised rate. Twenty five k.g.s of rice are being availed by most of the beneficiaries at the rate of Rs. 2/- per K.Gs. on the fixed days of distribution. Though Rice is being supplied through the Panchayat office located at Tikri, which is situated at a distance of about four K.M.s from the village but it poises lots of problems for the old and aged people to carry their entitlements to their homes. No such instances of mortgaging BPL cards have yet come to the light nor do those people sell their entitlements in the market in lieu of cash or other incentives. The scheme of PDS Rice @ Rs.2/- being provided through TPDS, is universal in this region, as it is supplied to all those who possess ration cards, be it APL or BPL . It serves as lifeline for these tribal people. It has become very popular among the tribal of this area as it helps them to have some quantity of their main staple food at the cheapest rate. This particular scheme has undoubtedly improved the food insecurity situation of the inhabitants of this village, where the instances of starvation / malnutrition was a routine affair earlier. But it is ironic to note that the BPL /APL list has not been updated since 1997 thus putting many deserving families out of the loop, as so many families that have formed during the last twelve years have not been able to get a card.

As ascertained from the assembled people, the rainy season and the period thereafter till harvesting, is the most insecure period for them. To maintain their livelihood, people prefer to go to Tikri and other nearby places in search of work and with the earnings, they arrange food for themselves as well as for their other family members. There is no community arrangement to tackle the food insecurity problem in this village nor any instance of intervention of any NGO/VO in this concern has yet been noticed. The only help for them comes from various schemes of the Govt. and those are TPDS, MDM, and ICDS etc. Since the people do not possess enough land holdings to raise, reap / harvest

sufficient food items, and the absence of proper irrigation and water facilities nearby those land holdings and due to non-adoption of modern agricultural practices, the output has been too meager to manage for the entire year. Moreover, the targeted system of PDS with its shortcomings of biased selection of beneficiaries resulting in exclusions of few needy families, improper management of MDM, non-implementation of NREGS in letter and spirit as per the provision of the Act and other related schemes are some of the reasons which do make the tribal food insecure. At the time of acute insecurity of food items people generally borrow from their relatives, who are some how better-off and some even mortgage their belongings and even land also in case of dire necessity. The TPDS is somehow beneficial to the tribal who possess cards but the implementation of NREGS is not at all satisfactory. People are even not aware of their basic rights and entitlements under the scheme and whom to approach and how to approach for the redressal of their grievances.

The major food items of the villagers are Rice, Mandia, Maize, tamarind and to some extent mango-kernel in processed form. They mostly consume those items in porridge or liquid form using a pinch of salt with tamarind or tomatoes in crushed shapes. Potatoes, Brinjal or other common vegetables are rarely used or consumed by them. Many people were found to be rearing chicks of poultry but those are generally consumed whenever a guest or relatives arrives or during the time of festivities or ceremonies.

As per the views of the assembled people, the problem of food scarcity among them could be averted to some extent, if suitable irrigation facilities are developed by checking the flow of water in the stream passing through their land holdings and utilizing it on productive purposes. The MDM in the village school needs to be managed by the local WSHG or by the Mothers committee of the school concerned for better functioning of this scheme. Engagement of a lady from the same village and from their own community as Anganwadi worker would also help in better implementation of special nutrition programmes of the government meant for small children, women folk and old and infirm persons.

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**5.7.(2) Proceedings of the FGD meeting held at village: Talapadikhal,
G.P. Talajhari in Kashipur Block of Rayagada district**

The focus group discussion at village: Talapadikhal of Talajhari G.P. of Kashipur Block was initiated by the Research Assistant in presence of Anganwadi worker and ST women of the village at about 11 A.M. on dated 05.11.22009. The R.A. explained the assembled women about the purpose in detail and hinted about various schemes and programmes of the Government devised to combat food insecurity among the tribal. Discussions were made as per the points noted in the guidelines of the project and the gist of such discussions is noted below point wise.

The incident which had occurred in this particular village was an incident of Dysentery and Diarrhea, which had occurred three years back and four adults and one child had expired due to it. Officials of Health department and Panchayat Samiti visited the village during that particular period and administered medicines to check the menace and within a span of a week the situation was brought under control and their daily life-cycle normalized.

The villagers are mostly marginal farmers but have to depend upon wages by rendering labour because of lack of proper irrigation and other facilities in the neighborhood. Majority of the tribal have been provided with land under IFFAD scheme which was in vogue earlier in this particular Block due to acute poverty and consequential starvation death instances, but those land are all located in hilly tracts and the yield of Mandia, Kosala, Alasi etc, cultivated on those patches is very low. As a result, the youths (Male only) prefer to move to Rayagada town, Gunupur area, Andhra, Kerala, Tamilnadu to earn their livelihood. The women folk collect firewood and sell it at Kashipur at the time of scarcity, which is located at a distance of about six K.M.s from the village.

Almost all the household have been provided with job-cards under NREGS since the year 2007 but have not been provided with works as per their entitlements. As per the estimation done with the assembled people, about twelve tribal have been provided with work for ten to fifteen days and the wages works out to Rs.25/- per beneficiaries per day as the work was of excavating semi-hard soil to facilitate construction of canal nearby their village. Thus the scheme has not been able to fulfill or mitigate their food insecurity, which still persists in several households.

The MDM programme covers about fifty five students at present, out of which thirty seven are of ST category. This programme is still being managed by the two teachers of the school resulting in irregularities, as revealed by the local villagers. Mother committee or the SHGs of women have not been entrusted with its management yet. However the MDM programme mitigates the food insecurity among the tribal school going children to some extent in the working days.

The SNP and EFP are being implemented through the Anganwadi centre of the village but on majority of days, food is not cooked or distributed among the beneficiaries. The Anganwadi worker resides at Kashipur along with her family and remains absent on majority of days. On verification of the records and registers of the Anganwadi centre it transpired that there was no food stock for the last three months and though some stock appeared to have been received by the worker just the day before yesterday, it was yet to be cooked and distributed. On our persuasion, the helper was summoned and food items were cooked and distributed only to the children assembled there. The worker submitted that from tomorrow onwards EFP beneficiaries of the village would be provided cooked meals. The anganwadi centre of this village has been constructed out of WFP fund as it revealed from the writings engraved in the wall of the building. But food stock is being kept in the house of the helper, who happens to be a local tribal lady. We saw several bags of cements being stored in this building, which transpired to be that of a contractor, who has been assigned the repair and construction of new school building under SSA. The introduction of providing Rasi ladu to the infants and children upto 6 years as well as pregnant and lactating mothers on fortnightly basis just makes them aware about the efforts of the Govt. to tackle malnutrition and food insecurity among those deprived and unfortunate lot.

Rice to BPL and APL card holders is being provided to the beneficiaries @ Rs. 2 /- per Kg. as per their entitlements. But no k.oil is being provided though their cards reveals about its supply to them. Since the GP Hqr. is located at a distance of about three K.Ms

and one river and a perennial stream, besides the hills are to be crossed to reach the G.P. office, so they face problems and hardships in collecting their entitlements. Instance of mortgaging their BPL cards is not prevalent in this village. Supply of rice @ Rs. 2/- per Kg. does help them a lot to mitigate their food insecurity status but in their opinion it ought to be based on number of family members per household and not as per the present practice of 25 Kg. or 35 Kg. per household, as being supplied to them. Food insecurity generally prevails during rainy season as no work is available nearby nor they could collect fire-woods and other forest products to help sustain their families. To tackle the situation, the tribal either borrow from well to do persons on high interest by mortgaging their land / utensils or other belongings. The main reason for such food insecurity in tribal families is non-availability of work or food products. Lack of sincerity among the public officials for proper implementation of food security programmes and schemes such as NREGS / MDM / ICDS/ EFP is the main obstacle and hindrance which deprives the tribal of their entitlements. Those could be overcome if proper supervision is made at the supervisory level i.e., Block /Sub-Division/District level and awareness campaign is made intensively in those areas. Further, involvement of the community in the administration of those schemes is to be made compulsory and person/ officials responsible for slackness are to be made accountable.

Major food items for the villagers is Rice, Mandia, Kosala, Maize, Alasi, Mustard and vegetables such as tomato, Radish, Cabbage, green leaves etc. Though the cereals and pulses are mainly consumed by them but the vegetables are sold in the local Hat at Kashipur.

5.7.(3) Proceedings of the Focus Group Discussions held among villagers of Mahespeta under Bandhpari G.P. of Lanjigarh Block of Kalahandi district

The focus group discussion was organized amidst the picturesque settings nearby the village well situated at the eastern corner of village: Mahespeta coming under Bandhpari G.P. of Lanjigarh Block. This tribal settlement is inaccessible and is located at a distance of about 22 K.Ms from the Block Headquarter and about 6 K.M.s from the black-topped road connecting Biswanathpur, the Block Hqr. with Bhawanipatna, the district Hqr., through the Terenammghati, where a PMGSY road is being laid and under progress. To reach the settlement, we had to tread a narrow pathway leading through the ghats on the hired vehicle but have to walk about a K.M. from the point, where we parked the vehicle due to non-existence of any proper road or pathway ahead. Since it was noon time and the day of distribution of BPL rice at the G.P. Hqr., so only few villagers were present. The discussions on the subject were made with a conglomeration of men and women folk numbering about eight only. A staff of the KKDA and other members of the Research team were present in course of the discussion

The village: Mahespeta has not been affected by any kind of calamities since the last five or more years but the tribal inhabitants belonging to Kutia kandha sub-caste are leading their lives miserably due to their poverty, illiteracy and lack of awareness about the schemes and programmes devised by the government for their welfare and development. Agriculture is the major source of livelihood for people of this village but due to factors such as inconsistent and irregular monsoon, climate change, forest depletion, rainfall has become erratic over the years leading to drought like situation for these people. Majority of

the inhabitants are marginal farmers and cultivate “Dongar” land for their sustenance. In the backyards, patches of mustard field interspersed with vegetables such as Pumpkin, Green leaves (Spinach), Tomatoes were observed. People of this village earn their livelihood by cultivating their meager lands and by collecting fire woods, minor forest produce from the forests and hills surrounded through out their village. Though about fourteen job-cards under NREGS have been provided but they seldom get work. The laying of road at Bedagoan, the nearest major settlement, where a primary school exists, had offered some of the tribal menial work but, they had to face a lot of problems in getting their wages and dues under the scheme. It was further ascertained that none, except only one boy aged about twelve years, of the village has ever visited the school for acquiring knowledge and skills and thus all the inhabitants are illiterate. Even the Anganwadi centre do not exist in this village and a mini anganwadi centre at Kumkhal located at a distance of about three to four K.M. caters to this settlement with the supply of dry ration for the children between the age group of 6 months to 6 years as well as pregnant and lactating mothers. People are not even aware about their entitlements under the SNP and EFP schemes and are left at the mercy of the anganwadi worker, who provides them the dry ration on monthly basis. The ASHA karmee stays at Kum khal and visits the settlement in routine manner just to oversee the health related programmes of the government .It was also learnt that barring the PDS programme and to some extent the ICDS, other schemes of the government such as MDM for school children, NREGS for providing employment, BSY for the adolescent girls do have any positive impact on the lives of these tribal people nor have helped them to overcome the food insecurity, which they do face during rainy season and at the time of dire necessity. The women prefer to deliver their off-springs within the cosy and dingy atmosphere of their thatched huts and settlements. It was learnt that not a single case of institutional delivery has yet taken place in respect of inhabitants of this village inspite of the monetary incentives being offered by the govt. to bring down the instances of IMR and MMR in the State. Due to non-existence of anganwadi centre or any school nearby, the small tribal children prefer to spend their time by looking after their goats and cattle grazing in the nearby hills and forests and also in the collection of fire wood, leaves etc. The village well is in a dilapidated condition and the people consume water from the only tube well located in their village. Whenever it becomes defunct or do not function they have to depend upon the nallaha situated nearby their habitation. The village is yet to be provided with electricity, though boards indicating incorporation of it under “Rajiv Gandhi Gramya Bidyut Yojana” was noticed on the pathway leading to this settlement. The G.P. Hqr. is located at Bandhpari, at a distance of about 14-15 K.Ms and thus, the tribal have to face much inconveniences and problems in lifting their quotas of 25 / 35 K.G rice from the GP office, which is being distributed on fixed days only. The quantum of rice being provided under TPDS do help them to mitigate their hunger for quite a number of days but the nutritional aspect is lacking, as it reveals from the decimated appearances of the women folk, children and the aged persons.

Instances of mortgaging their BPL cards for petty amount of cash or kind are not prevalent in this village It transpired that the rainy season is the most acute period for them as regards food security and during this period some of the families face scarcity of food grains and during this period they consume mostly the porridges made out of cereals / pulses such as Suan (Kosala), mango kernel (dried and powdered), wild roots (Kanda) etc. Abject poverty, non-availability of job/ work in the vicinity as and when required, poor infrastructural facilities such as road, electricity etc. and lack of cultivable lands are the

major causes for their food insecurities. Illiteracy and non-existence of IEC factor on various programmes of the govt. adds up to their woes. Members present while discussion disclosed that to improve the wretched condition in which they are living at present, an anganwadi or pre school centre with provision of nutritional diet needs to be opened, work for the job-card holders needs to be provided as and when sought for. It was also observed that those people needs to be made aware about their entitlements under various schemes of the government and particularly about the Forest Rights Act and its benefit implicit in the said Act. It would help in making them self reliant upon the vast forest, from which they have been getting many of their needs concerning food and consumption, since time immemorial. Though the KKDA, the micro project set up for the PTGs is functioning in the area but this village has not yet been incorporated in their list of adopted villages. As a result, benefit being chanelised through the agency is not reaching them. Vedanta, the corporate house, which has set up its plants and offices at Lanjigarh is also assisting the district administration and particularly the poor inhabitants of Lanjigarh Block through child care programmes by providing supplementary nutritious food items to the needy children. But those benevolent programmes have not reached those scattered tribal settlements. Endeavors ought to be made to incorporate those tribal villages into the fold of corporate sectors peripheral development schemes and programmes. The people of this area needs to be made aware about the benefits enshrined under different programmes and schemes of the government devised to tackle food insecurity through interventions of IEC. What to speak about the poor illiterate tribal - even the local authorities dealing with those programmes and schemes are not aware of the fact that as per the interim orders of the Hon'ble Supreme Court of India passed on various occasions in the famous "Right to Food" case bearing Writ Petition no.196 / 2001 , the P.T.G.s (classified as priority group) are entitled for certain types of public support as a matter of right. The SHG, which is in a moribund state due to absence of institutional support, may be revived with the assistance for some gainful employment opportunities either by the ITDA or the G.P./ P.S and this would help them to lead their lives decently and without the scourge of hunger.

5.7(4) Proceedings of the Focus Group Discussions held among villagers of Ladang under Troilochanpur G.P. of Lanjigarh Block, Kalahandi district

The focus group discussion was held amidst the two rows of thatched houses which comprise the revenue village named Ladang. It is located nearby the Niamgiri hills at a higher altitude and is not accessible by vehicle as a stream flows on the so called path leading to this tribal settlement. The primary school is located at Gouda -Thuaguda at a distance of about 1.5 K.M, and the Anganwadi centre is also located there. There are about twenty seven households and all the inhabitants are tribal belonging to Kutia-Kandha sub-caste. This village has not yet been enlisted under the programmes of Kutia Kandha Development Agency and the proposal to incorporate it is pending with the government, as ascertained from the field man of KKDA, who was also present during the discussion. The tribal were apprised about the motto of our visit and their views and opinions on various aspects of the subject, as per the point wise questionnaire discussed, are as such.

No occurrence of drought, flood or cyclone has been experienced by the villagers during the last five years. The inhabitants of this settlement depend upon cultivation of Mandia, kosala, Paddy and vegetables such as Pumpkin, Brinjal etc. in their meager holdings. Most of them are marginal farmers and only two, the village Headman and

another, the Pujari do possess about six to eight acres of land. The women folk and children collect minor forest products and fire wood from the forest for their use and consumption. Though about twenty two families possess job-cards under NREGS but they do not get work at the time of their need, which is mostly rainy season and periods thereafter till early October. Since the inception of NREGS, only one work has been executed through the Panchayat Samiti, but the payments have not been as per their output and expectations. On casual glance over the job-cards and reading out the entries made therein, some (Three women) declined to have rendered work. The wages paid to those villagers were of miniscule quantity and were not in accordance with the minimum wages prescribed by the government. The villagers opined against the NREGS scheme since it has not helped them in any way and the contractor engaged for the smooth execution of the work has exploited them by not making proper payments to them. Out of the school going children in the village, only one has been enrolled in the Primary school situated at Goudathuaguda, which is at a distance of about 1.5 K.M from the village and a perennial stream flows in between. Thus the MDM scheme has not benefited the inhabitant of Ladang. The Anganwadi centre is also located at Gouda-Thuaguda but the worker seldom comes to the centre. The villagers disclosed that the Anganwadi worker visits their village once in two to three months and distributes dry food items such as Rice & Dal measuring roughly about one K.G and 250 grams respectively. The Emergency feeding programme is also managed likewise through distribution of dry food items (i.e., Rice) once in 2 to 3 months duration. As about pension scheme to needy beneficiaries, it revealed that only 4 are being benefited through NOAP and also under MBPY. Still few genuine old and infirm persons and widows are yet to be covered under this social security scheme of the government, The BPL card holders are getting 25 K.G of rice at the rate of Rs.2/per K.G. But the verification process of PDS cards initiated during the month of November has debarred many of the villagers to receive their entitlements as their EPICs are not with them nor has been provided to them. Those possessing BPL cards but no EPIC have to visit GP office located at Trilochanpur several times and it causes problems for them.

The rice which they receive is used by the tribal villagers and none do sell it or mortgage their BPL cards in lieu of cash or other benefits. The PDS and the supply of 25 / 35 Kg. rice has undoubtedly benefited them and it even helps in mitigating their food insecurity to some extent at the time of scarcity. The villagers mostly face insecurity and scarcity of food items during rainy season and during this period they consume wild roots (Kanda) collected from the forest and also from the inner fleshy parts of Salap tree which is dried, stored and eaten in porridge forms. Such collection from forest is mainly done by the women folk, who also preserve it for their use at the time of need. The main food of the people of this village is generally Mandia, kosala and other cereals and pulses consumed in gravy liquid forms. The main reason for such food insecurity is actually their economic condition which is extremely miserable. The tribal people of the village live in abject poverty and it is also the cause and effect of their undernourishment. The malnutrition that besieges the majority of the children and the women folk coupled with the lack of basic medical care for them as well as old and infirm persons are two urgent issues that deserves attention of the local administration. Crop management has remained a basic problem for the tribal who usually use a traditional variety of seeds. Different advanced technology is hardly used, leading to reduction of production year after year. As for livestock, people rear goats, pigs, hen etc. The local breed of such animal is good for upkeep, but their productive capacity is very low compared to other breeds and thus the tribal people do not

get the financial benefit. Those are solely utilized for self-consumption with little ability to sell them during emergencies.

To these inhabitants, forest plays a major role in the life and livelihood of the people. These indigenous people collect different forest products like Mahua flowers & seeds, Sal leaves, Tendu leaves, fire woods, different kinds of roots (kanda), tamarind, berries etc. form the forest for their consumption as well for sale. But their saga of exploitation by the traders and middlemen seem to be disheartening. These people do not have any idea about the market system and market rate fixed by the government for forest products and they sell their collection for a paltry amount.

As no work is available to these people when they need it, nor do they owe sufficient land to grow food items, so the scarcity of proper food items forces them to depend upon such items such as Kanda, Salap etc. which do not provide ample nutrition to lead a normal healthy life and this renders them prone to several diseases such as Malaria, diarrhea etc. At the time of acute scarcity they prefer to grind and consume whatever they do lay their hands upon and these are mostly wild roots, tender parts of bamboo shoots etc. Barring the BPL rice scheme other programmes such as SNP or EFP through ICDS centers, NREGS, MDM have not been able to address their food insecurity problems due to its maladministration and lack of supervision among the local authorities. It was suggested by the assembled people that if the women SHGs are entrusted with the responsibilities to manage the anganwadi sub-centers in their respective villages and if the job-card holders are provided work, then only the food insecurity phases prevailing among the inhabitants could be tackled. Thus there is the need for strengthening nutritional interventions, empowering local community to manage risks and uncertainties of food access through grain-bank to be run by the villagers and the development of the productive resources like land, water and forests.

The NREGS has failed to reach the people of this area and provide them work during lean periods. Schemes devised to challenge poverty and maintain food security such as SGRY, PMGSY etc, is lagging far behind. The major player in this situation is the lack of awareness or understanding and illiteracy of the people. Callousness of local self governing mechanism and government officials adds fuel to the problem, making people more vulnerable to poverty and food insecurity. Because of number of problems ranging from livelihood crisis & indebtedness to distress migration, prolonged malnutrition and non implementation of government schemes, starvation among the tribal is not at all uncommon. Even the consumption of inedible items such as mango-kernels, poisonous roots and tubers and similar so called distress food items often passed off as traditional tribal food indicate the existence of high level of hunger and starvation in this area.

5.8 DISCUSSIONS ON FINDINGS

Views / opinions relating to various aspects of the study as were collected during the course of field work in respect of different target groups of respondents, such as tribal households, opinion makers, etc. have been duly presented in tabular forms and analysed thereon. In the following paragraphs attempts have been to discuss and compile the views / opinions / suggestions of different target groups of respondents as well as views as

gathered during organizing focus group discussions so as to derive suitable findings and suggestions and bring the conclusion.

5.8.1 Extent of Food Insecurity

From analysis of data, views gathered from the respondent tribal households, opinion makers as well as from the focus group discussions it is revealed that there exists food insecurity in almost all the areas under study. So far as the extent of food insecurity it is observed from the data as presented in items (1) and (2) of table – 5.10 that only 33.89 per cent of households are able to arrange two squares of meals a day throughout the year. Balance 66.11 per cent of households do not able to arrange even two squares of meals a day throughout the year, and out of which 48.12 per cent households are able to arrange for about 6 – 9 months, 9.62 per cent are able to arrange for about 6 months and 8.37 per cent are able to arrange for less than 6 months.

Regarding acute food scarcity period as observed from analysis of data and views obtained from different target groups of respondents it is revealed that the rainy season and the period thereafter till harvesting, i.e. from June to October in the year, is the most insecurity period for the tribal households under study.

5.8.2 Causative Factors for Household Food Insecurity

There are several factors responsible for household food scarcity in the tribal areas. In the present study total 9 villages from 4 blocks covering one block each from 4 districts were covered. From the data relating to socio-economic conditions of the sample tribal households under study, it was revealed that 63.39 per cent family members above 6 years of age are illiterates, about 58 per cent households' primary occupation as wage labourers, 25.52 per cent households, only about 10 per cent households have irrigated cultivable land, about 58 per cent households are marginal farmers have less than 2 acres of land, about 55 per cent households have more than 5 members, about 75 per cent households have annual income less than Rs. 15,000/- per month, etc. From the above findings it can be stated here that high illiteracy rate, landlessness, low income, low category of primary occupation, big family size, lack of irrigation, etc. are the major factors responsible for household food insecurity in tribal areas.

Other factors responsible for household food insecurity among tribal people, as revealed from the views of the tribal households, opinion makers as well as from focus group discussions are – non-availability of work, lack of awareness about various schemes, abject poverty, not get the proper prices for MFP, less production due to traditional methods of cultivation, loss of production due to irregular monsoon/ frequent occurrence of natural calamities like drought, indulgence / consumption of liquor, due to high price rise of commodities, etc.

Relating to non-availability of work, from the views of the respondent households it was observed that about 50 per cent of households are not getting works half of the year, about 38 per cent of households are not getting works for even three months in the year and also about 71 per cent households area not getting works during the lean season from August to October. From the focus group discussions it was also observed that as locally

works area not available, the labour force are seasonally migrating in search of work to nearest urban areas, mining areas, even to other districts in the state or out side the states.

Lack of awareness about different schemes / programmes among tribals also viewed by different stakeholders as one of the factors responsible for food insecurity. Due to unawareness they are deprived of availing the benefits meant for them out of different schemes.

Poverty is inter-related with food insecurity and the extent of food insecurity is associated with the problems of poverty and low income. In the present study, on analysis of data as well as views gathered from different stakeholders it can be concluded that the extent of food security among respondent tribal households is associated with the problems of poverty and low income.

Marketing problems for minor forest produces (MFP) or not getting proper prices for MFP is another factor. Here it can be mentioned that the members of tribal households are some how or other remain engaged in collection of MFP to meet their family needs as well as to supplement their income. Due to marketing problems and / or not getting proper price for sale of MFP they are loosing their income leading to food insecurity.

Less production due to traditional methods of cultivation is another factor responsible for food insecurity in tribal areas. Generally tribals used traditional methods of cultivation. Use of improved varieties of seeds and fertilizers and other improved techniques of cultivation are found lacking resulting reduction of production.

Loss of production due to irregular monsoon / frequent occurrence of natural calamities like drought is also the cause of food scarcity in the areas. From the data available irrigation facilities in the study areas are very less, i.e. only about 10 per cent irrigated cultivable land is available only at Udala block and other areas are rain-fed. Due to irregular monsoon in last few years agricultural production is severely hampered resulting loss of production. Besides, occurrence of drought is also found in these areas mainly due to irregular monsoon.

Indulgence / consumption of liquor is a regular phenomenon of the tribal people. Consumption of liquor with very limited and low income among tribal people adversely affects consumption behaviour in respect of other food items resulting food insecurity. From the data sheets and the views as collected are found in favour of the above finding and consumption of liquor is one of the causes of family food insecurity.

High price rice of commodities including food items is also one of the important causes of food insecurity. Tribals, the low income group of people are unable to cope up with the high price rise of different commodities including food items. With very low and limited income they do not have access to many food items including vegetables for their household needs.

5.8.3 *Consequences of food insecurity*

The poor and hungry are in general hurt the most by the food and financial crises, the exact impact at the household level differ widely. The nature and the size of effects depend on household characteristics. In the present study views from different stakeholders were gathered relating to consequences of food insecurity among tribal households. Out of the anticipated cases like suicidal cases, starvation death cases, cases of selling babies, distress sale of land / assets, causes of malnutrition / under nourishment in the families, no such cases are found from the study area. However, remaining hunger or manage with inadequate or alternate food, migration for labour, mortgaging land during acute food scarcity period are observed in few cases. From the response of tribal households, opinion makers and members of focus group discussions it was revealed that during acute food scarcity the household members are remaining hunger and manage with very little or inadequate food. In many occasions they take boiled rice water (torani) with little amount of rice. Also they used alternate foods like different kinds of wild roots (Kanda), tender parts of bamboo shoots, slaps, etc. Also they consume mango kernel (dried and powdered) tamarind seeds (in powder forms), mandia, kosala Suan) in gravy liquid forms. Migration for labour is regular phenomenon among the wage labourers. During lean season or in acute scarcity period they are migrating to nearest urban centres, other districts as well as other nearby states for labour work. Also during acute food scarcity mortgaging of land are found in some cases as reported by the respondents of different groups. Besides, during acute food scarcity all the members in the family are suffering and specially women and girl children are more suffering, as reported by different groups of respondents.

5.8.4 *Coping mechanism adopted by the tribals during food scarcity*

Besides government assistance during acute food scarcity through different schemes, there are other coping mechanisms such as village grain bank, traditional village Kothaghar and individual household coping mechanism would be adopted. From analysis of data as well as views collected from different stakeholders it is revealed that except individual household coping mechanism not community coping mechanism or assistance from NGOs or VOs are found in these areas.

To ensure food security of the households on a sustainable basis community managed grain banks have been established. This guarantees adequate food security during the lean season to the poor tribal households. But in all the villages under study no grain bank is functioning. Also, no traditional community arrangement (Kothaghar) is made towards guaranting food security during lean season to poor tribal households. Besides, no non-government organization / voluntary organization is providing any assistance to the poor tribal households during food scarcity period as observed in the study areas.

From the study it is gathered that the poor and suffering tribal households are adopting their own coping mechanism during acute food scarcity, such as adjust with inadequate food / taking alternate food, seek help from friends and relatives, gift and exchange.

5.8.5 *Women's role in household food security*

From the study it is revealed that tribal women are responsible for every phase of the food cycle – production, post harvest, meal planning and preparation. They are also mobilizing resources for food through labour work, part time economic activity, barter system, selling of farm products and bi-products, collection of minor forest produces, collection of mushroom in rainy season, etc. Besides above, they are also helping in their family food security by preservation of food items, extension of shelf life of fruits and vegetables, preparation and value added of puffed / flattened rice etc.

5.8.6 *Problems on implementation of food security schemes and suggestions*

Out of several schemes / programmes, Antodaya and Anna schemes under PDS, school lunch programme MDM, supplementary nutrition under ICDS and NREGS are major schemes providing safety nets towards household food security. However, there are many problems in implementing the above schemes / programmes are found from the analysis of data and views obtained from different stakeholders, are discussed in the following manner. Also suggestions thereon as made by different stakeholders are given accordingly.

Relating to supply of commodities under public distribution system the problems as observed are - commodities available particularly rice are inadequate for family members, households do not have purchasing powers in lean season / unable to lift the commodities due to lack of fund, unable to lift the commodities as the ration shops are located in far away places, some genuine households do not have PBL cards, lack of preservation or storage facilities, transportation cost in hilly and remote areas is high, etc.

On the aspect of the commodities distributed through PDS, particularly rice, are found inadequate for family members in case of most of the tribal households. Here it can be mentioned that, tribals generally opt to use pokhal (boiled rice with water) daily in their diet from breakfast to dinner. Almost all the families used pokhal 2 – 3 times daily because of the belief that it was easily digestible and helped in cooling stomach. From the household data (as given in table – 5.6) relating to family size of the respondents it was observed that about 55 per cent of sample tribal households having 5 – 7 members and above 7 members. By consuming 2 – 3 times of rice daily by the above group of households they need at least 2 kg. of rice per day, and the quantity of rice available through PDS is found quite inadequate for them. On this issue suggestions as made by different respondent stakeholders are – quantity of food should be based on number of members in the family and the quantity of Rs. 2 /- per kg. of rice be given 35 kg. per month per card in stead of 25 kg.

On the problem of the households do not have purchasing power in lean season and / or unable to lift the commodities due to lack of fund, it can be discussed here that during the lean season most of the tribals do not get sufficient works for their livelihood. Also some of the households are not getting sufficient works throughout the year and living in extreme hardship. These types of households do not have economic access to lift the commodities distributed under PDS regularly. From the income range of households (as given in table – 5.7) it was observed that about 75 per cent of sample tribal households

having annual income of less than Rs. 15,000/- and the income per member per day comes up to Rs. 41.66 only. With this little income it can be assumed that these poor households do not have economic access in all times to procure the items under PDS.

The problem of some genuine households do not have BPL cards has been raised by the opinion makers and members of focus group discussions. As stated by them the BPL list has been prepared in the year 1977. Generally tribals opted nuclear families. When the son got married he lived separately. During this gap of 12 /13 years of preparation of BPL list there are some genuine households who are below poverty line have been earmarked but they have neither included in the BPL list nor have been provided with BPL cards, and thereby these households deprived of the benefits under different schemes. On this issue suggestions made by different stakeholders that proper identification of beneficiaries be made and new beneficiaries be included in the BPL list.

Out of the problems in implementing PDS few opinion makers among officials have identified two problems such as lack of preservation or storage facilities for PDS items and transportation cost in hilly and remote areas is higher. The respondent stakeholders have suggested for godown facilities in G.P. level for smooth functioning of PDS.

Relating to implementation of MDM two such problems have been identified by the members attended focus group discussion, such as in some schools, teachers are still entrusted with preparation and distribution of mid day meals and as per the norms of MDM, members of women SHG or members of Mothers' Committee would be entrusted with the job. The intention of engaging women SHG or Mothers' Committee that they get some economic benefit out of these engagement and teachers will remain engaged in teaching.

Relating to implementation of supplementary nutrition programme under ICDS, the problems as suggested by different respondent stakeholders area - in some areas AWCs are located in far away places, the few areas cooked meals are not provided, in some villages AWWs are appointed from distance locality and are not coming to the centres regularly and the rations are not supplied to few centres regularly. As per the norms under the scheme, supplementary nutrition has to be provided to needy children and to expectant / nursing mothers from low income families for a period of 300 days in a year. Besides, severely malnourished children in grade III and IV as per ICDS classification are to be provided with additional dose of SNP. From differential views of the responded target groups it may be concluded that SNP is being provided to the targeted beneficiaries as per the norms. However, in few centres implementation problems as stated above are observed for which the beneficiaries of those areas are deprived of the benefits out of the scheme. To overcome the problems of implementation few suggestions have been made by different respondent groups such as – cooked food be supplied regularly to the targeted beneficiaries, AWCs be located in each habitation, AWWs be engaged locally preferably from the same village / habitation and rations be supplied to the centres regularly.

In implementation of livelihood support schemes like MGNREGS there are lot of problems suggested by different target groups of respondents and as per them the beneficiaries are not getting the benefits out of this scheme. The main problems area - lack of awareness about the scheme by the tribals and jobs are not assigned to the card

holders as per entitlement. From analysis of data and views gathered from the respondent stakeholders it is also revealed that the tribals are not aware fully about the benefits under the scheme, their entitlement, obtaining job card, applying for jobs, etc. Besides, from analysis of data as presented in table – 5.15 it is revealed that cent per cent of sample tribal households have given their views about non-assignment of jobs to them as per their entitlement under the scheme. Even, since operation of the scheme in 2006 / 2007 total of 10 – 15 days of works have not been assigned to them. Therefore it can be concluded that the MGNREGS is not implemented properly in these areas. It is to be mentioned here that, this scheme is entitling the rural poor guaranteed employment as a means of sustenance averting hunger and distress, ultimately lifting them from the trap of poverty. As per the scheme 100 days unskilled wage employment will be provided to a rural family in a financial year and unemployment allowances to job seekers if works not provided within 15 days of application. If MGNREGS will be implemented properly, this will bring visible change in the lives of the poor people and help to improve food security. In order to overcome the problems in implementation so as to reach the benefits out of the scheme to the beneficiaries the opinion makers have suggested that jobs be assigned to the card holders as per their entitlement on regular basis, in lean season jobs be assigned to the card holders at least 15 days in a month and necessary steps be taken to make aware of the schemes to the tribal peoples.

CHAPTER – VI

MAJOR FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 MAJOR FINDINGS

6.1(1) Socio-Economic Conditions of Tribal Households under Study

- ♦ As per the design of the study and methodology adopted, all the tribal households taken for the study are in the category of below poverty line (BPL).
- ♦ The selected tribal households are from different communities, like Santal, Kolha, Kol-Lohara, Sabar, Kandha, Gond, Kondh and Kutia-Kondh.
- ♦ Out of selected households, 237(99.16%) households are nuclear and only 2(0.84%) are joint type of families.
- ♦ In respect of family size of the respondent households, out of total of 239 households ,maximum of 118(49.37%) households have 5 – 7 members followed by 73(30.54%) having 3 – 4 members, 36(15.06%) have up to 2 members and 12(5.02%) have more than 7 members.
- ♦ 63.39 per cent of members of household (above 6 years of age) are illiterates, 18.69 per cent have educational standard up to Class – III, 9.62 pr cent are between Class – IV and M.E., 6.88 per cent are between above M.E. and H.S.C level and only 1.42 per cent are matriculate and above.
- ♦ Out of total 239 respondent households, 61(25.52%) are landless (other than house).
- ♦ 87.45 per cent of households have own house on their own land and 10.68 per cent households have own house on Government land.
- ♦ 86.61 per cent of households have Kuchha houses, 11.29 per cent have partly Pucca and partly Kuchha houses and only 2.09 per cent have Pucca houses under IAY.
- ♦ No households under study have electricity connections to their houses.
- ♦ Cent per cent households do not have toilet facilities, neither at / near their homes nor community toilet facilities.
- ♦ 81.59 per cent households collect drinking water from tube-wells, 18.82 per cent from well and 17.99 per cent from streams.

- ♦ 58 per cent of households having land up to 2 acres and 17.16 per cent have more than 2 acres of land.
- ♦ Only 9.62 per cent households have cultivable irrigated land.
- ♦ So far as primary occupation is concerned, maximum of 57.74% households are engaged as wage labourers followed by 38.49 per cent cultivators and only 0.42 per cent service-holders.
- ♦ Regarding annual income of households, maximum of 41.84 per cent have annual income within the range of Rs. 6001 to Rs. 11000 followed by 24.69 per cent within the range of Rs. 11001 to Rs. 15000, 17.99 per cent within the range of Rs. 15001 to Rs. 20000, 8.79 per cent up to Rs. 3000 and 6.69 per cent above Rs. 20000.
- ♦ About annual expenditure on food items, maximum of 51.88 per cent households incurred up to Rs. 6000 followed by 28.03 per cent within the range of Rs. 6001 to Rs. 10000, 15.90 per cent within the range of Rs. 10001 to Rs. 15000, 3.25 per cent within the range of Rs. 15001 to Rs. 20000 and 0.84 per cent above Rs. 20000.
- ♦ About indebtedness / loan for food items, 81.37 per cent households made loans from friends and relatives and 7.95 per cent from private money lenders.

6.1(2) *Extent of Food Insecurity Among Sample Tribal Households*

- ♦ 66.11 per cent households do not able to arrange two square of meals a day throughout the year.
- ♦ 33.89 per cent households able to arrange two squares of meals a day throughout the year.
- ♦ 48.12 per cent of households able to arrange two square of meals for about 6 – 9 months in the year.
- ♦ 9.62 per cent of households able to arrange two square of meals for about 6 months in the year.
- ♦ 8.37 per cent of households able to arrange two square of meals for about 3 months in the year.
- ♦ Acute food security period during the year comes from June to October or till harvesting period.

6.1(3) Factors Responsible for Food Insecurity

- ♦ Less production due to lack of irrigation facilities in tribal areas and adopting traditional methods of cultivation by the tribal people.
- ♦ Loss of crops due to irregular monsoon and frequent occurrence of drought.
- ♦ Landlessness, abject poverty associated with high illiteracy, ignorance, lack of awareness schemes, etc. are major factors responsible for food insecurity among tribal people.
- ♦ Due to high price rise of different commodities / services including food items, poor tribal people are unable to afford.
- ♦ Marketing problems for selling of MFP and not getting proper price out sale of MFP.
- ♦ Non availability of work is the most and important factor, among other factors, responsible for poverty and food insecurity. As per the data collected from the sample tribal households :-
 - 70.71 per cent are not getting works during the period from August to October.
 - 50.29 per cent not getting sufficient works throughout the year.
 - 38.07 per cent not getting works even half of the year.
 - 13.81 per cent not getting works even for three months in a year.

6.1(4) Consequences of Food Insecurity among Tribal People

- ♦ Manage with little amount of food or one meal a day or even remain hunger when food is not available.
- ♦ During acute scarcity adopt taking alternate foods like mandia and kosala (suan) in gravity and liquid forms, mango kernel (dried and powdered), tamarind seeds (in powder form). Also they consume different wild roots (Kanda), tender parts of bamboo shoots, slaps, etc.
- ♦ Migration for labour is a regular phenomenon. They are migrating to nearest urban centres, mining areas, to other districts and even to other states for labour work.
- ♦ Mortgaging land during acute food scarcity are found in very few cases.
- ♦ Distress sale of land or assets area not found from the present study.

- ♦ No such instances like, suicidal cases, starvation death cases, cases of selling babies and immoral trafficking are found from study areas.
- ♦ During scarcity of food all the members of the family are suffering, but women and girl children are more suffering.

6.1(5) *Coping Mechanism*

- ♦ There is no community mechanism like grain bank, traditional Kothaghar / Kothajami are operating for benefits of the poor tribal people during food scarcity period in the study areas.
- ♦ No non-government or voluntary organizations are providing assistance to the tribal people during food scarcity period. Only some non-government organizations are engaged in organizing awareness campaigns in respect of some developmental schemes like health, sanitation, etc.
- ♦ During food scarcity, the households are adopting their individual coping mechanism like manage with little amount of food / not even a full meal a day, remain hunger in many occasions, taking alternate foods (as stated in item 6.1.4 above), mortgaging land, migrating for labour work, etc. Besides, they are making loans from friends / relatives or from local money lenders, gift and exchange, etc.

6.1(6) *Women's Role in Family Food Security*

- Mobilising resources for food through labour work, part time economic activity.
- Seasonally migrated for labour work,
- Collection of MFP, selling of farm products and bi-products, collection of mushrooms and wild roots in rainy season, etc.
- Preservation of food items, extension of shelf life of fruits and vegetables, etc.

6.2 IMPACT OF IMPLEMENTATION OF DIFFERENT FOOD SECURITY SCHEMES IN THE STUDY AREA

6.2(1) *Public Distribution System*

- Almost all the respondent tribal households are well aware about the scheme and their entitlement of different commodities.
- Regarding physical and economic access for the commodities, it is observed that majority of the beneficiaries availing the benefits out of the scheme regularly and as per their entitlement. In few cases the beneficiaries unable

to lift the commodities as the ration shops are located in far away places and also in some cases the beneficiaries are unable to lift the commodities due to lack of fund and more particularly in lean season.

- On the aspect of the benefits availing by the beneficiaries out of the scheme, as observed from the study, Rs. 2/- per kg. rice giving more benefits and improving the situation of addressing food insecurity. This also mitigates the food insecurity of about 3 months on an average in a year. Also some members during FGD have viewed as supply of Rs. 2/- per kg. rice serves as life line for the poor tribal households.
- From the above, the overall impact of implementation of PDS is found satisfactory.

6.2(2) *Mid Day Meals Scheme*

- All the sample tribal households under study are well aware about mid day meals scheme.
- MDM has benefited children whose parents work as casual wage labourers. These children are generally hungry during the day because their parents work as wage labourers either far away or go to work early.
- MDM is a protection against hunger in general and facilitate the abolition of class room hunger.
- At least one member of the households having school going children benefiting from MDM secured one meal a day.
- MDM also gives employment to tribal women as cooks and helpers from the locality.
- Poor tribal households such as landless labourers value the assurance of a free lunch for their children. The contribution of MDM scheme to food security seems to be particularly crucial in tribal areas.

6.2(3) *Supplementary Nutrition under ICDS*

- All the tribal households under study are aware about supplementary nutrition programme under Integrated Child Development Scheme and their entitlement thereon.
- The targeted beneficiaries such as children in; the age group 6 months to 6 years, pregnant and lactating mothers are availing the benefits under the scheme except few problems in implementation like, in few centres cooked food are not provided, few AWCs are located far away places and the beneficiaries are not getting benefits out of the scheme, in some places AWWs are appointed from different localities and from far away places and

are not coming to AWCs regularly, in some AWCs rations are not getting regularly, etc.

- The beneficiaries availing the benefits out of the scheme helping them towards addressing food insecurity.
- Except few problems in implementation, overall the programme is conducted in systematic manner.

6.2(4) Mahatma Gandhi National Rural Employment Guarantee Scheme

- The MGNREGS is operating since April 2008 in the study areas. Most of the tribal people in these areas are not aware fully about the scheme, particularly methods of applying for jobs, their entitlement for jobs, types of jobs, etc.
- Most of the beneficiaries, who are job card holders under this scheme, have reported that they have not been assigned jobs even 10 – 15 days since operation of the scheme. They are deprived of the benefits under the scheme.
- As per the scheme 100 days unskilled wage employment to a rural family in a financial year. Also unemployment allowance to job seekers if work not provided to job seekers with 15 days of application. The Act also guarantees one of the crucial right, Right to work. In the present study out of 239 tribal households about 25 per cent are landless. Also about 58 per cent of households are wage labourers. Poor tribal households such as landless / wage labourers are the most vulnerable groups in the society. As per the scheme they should be treated on priority basis towards fulfilling the main objective of the scheme by providing them livelihood security so as to abolish food insecurity and curb migration from rural to urban.
- From the sample household data in respect of income and expenditure pattern on food, it was observed that their living conditions are very poor; and if the MGNREGS will be implemented properly these poor tribal landless / wage labourers will get livelihood security as well as income in two fold which will help to improve both food security and improve human development index.
- From the data as presented in respect of implementation of MGNREGS and the views obtained from different respondent stakeholders it may be concluded that the scheme is not been properly implemented in those areas.

6.2(5) Swarnjayanti Gram Swarozgar Yojana (SGSY)

- Regarding awareness about the scheme majority of the tribal households under study are aware of it.

- The scheme focuses social mobilization of rural poor into Self Help Groups (SHGs), their capacity building, skill upgradation and training assistance for taking different activities towards increasing income level of families.
- In 9 villages under study 22 SHGs were formed consisting total members of 236. As observed from the study most of the members were imparted skill up-gradation trainings. But for taking up different activities credit linkages like loans from banks and government subsidies with marketing assurance are yet to be done.
- Considering the above, it may be assumed that so far the targeted beneficiaries (swarozgaries) under the scheme which is yet to yield results.

6.2(6) *Sampoorna Gramin Rojgar Yojana (SGRY)*

- Majority of the sample households are not aware fully about the scheme.
- The scheme is to provide additional and supplementary wage employment through creation of durable community, social and economic assets and essential infrastructure in rural areas.
- From the views of the respondent tribal households they have not got the benefits out of the scheme.

6.2(7) *Madhu Babu Pension Yojana (MBPY)*

- State Old Age Pension (SOAP) and Orissa Disability Pension (ODP) Scheme are now being treated as MBPY since January 2008.
- The respondent households are well aware about the scheme.
- The beneficiaries covered under the scheme are availing the benefits regularly. The benefits accrued by the members of tribal households helped in addressing food insecurity to some extent. However, as observed from the study some deserving persons have to be included in the list.
- The scheme is operating in these areas in normal ways.

6.2(8) *National Old Age Pension (NOAP)*

- National Old Age Pension Scheme is operating in these areas since 1995 and the households under study are well aware about the scheme and its benefits.
- The beneficiaries under the scheme are getting regularly monthly pension @ Rs. 200 p.m. which helps the poor tribal households in mitigating food insecurity in some extent. However, new members under the scheme have to be included when the BPL list will be finalized.

- The scheme is operating in these areas in normal ways.

6.2(9) *Emergency Feeding Programme (EPF)*

- Except Udala block, EFP being implemented in other areas under study and the people of the area are aware about the scheme and the benefits under the scheme.
- Old, infirm and indigent people from the study area are availing the benefits like cooked food through AWCs. It was found that in few occasions the beneficiaries are getting food grains in stead of cooked food.
- The scheme is operating in the areas as stated above in normal ways.

6.2(10) *Orissa Tribal Empowerment and Livelihood Programme (OTELP)*

As reported by the different respondent stakeholders this programme is not implemented in the study areas.

6.3 SUGGESTIONS

- ♦ Policy interventions needed as a result of the study include giving land to landless labourers, improvement of rural connectivity, improving literacy particularly women's literacy, implementation of forest rights for tribals, improving irrigation facilities and agricultural production.
- ♦ Agriculture is the main subsistence of the tribals. Most of the tribal people engaged in agriculture do not possess land and this is one of the prime reasons for acute food scarcity. Therefore, land to landless has been suggested. The uncultivable lands owned by the tribals needs development for use of cultivation.
- ♦ Irrigation has been the major contributory factor in increasing food productivity. The lack of irrigation facilities for cultivation had been a bottleneck for the poor tribals in these areas. Through the food for work activities creation of dug wells, community ponds and other water bodies can be taken up. These will improve immediate food security through creation of assets, which will increase agriculture productivity and water supply in the areas. Such works are being taken in MGNREGS and the pace of work can be accelerated.
- ♦ Tribal communities share a symbiotic relationship with forests that are a major source of food, nutrition and livelihoods. Depleting forest based livelihoods has over the years resulted in a poor status of the population in the areas. The community forest management groups should be assisted to take up plantation, rehabilitation of degraded forests, plant nurseries, harvesting NTFT, forest road construction and repair, etc under income

generation programmes, besides providing marketing assistance and giving proper prices for MFP.

♦ Public Distribution System :-

- Quantity of food (rice) be linked with number of members in the family.
- Quantity of Rs. 2-a-kg. rice be given @ 35 kg. per month per family under PBL in stead of 25 kg.
- Ration shops be located nearby habitation.
- SHGs be involved in distribution of commodities in respect of their habitation.
- Iodised salt should be included as part of the ration commodities of PDS. All families entitled to concessional food grains should be provided iodised salt at concessional rate.

♦ Mid-day-Meal Scheme:-

- SHGs be involved in management of MDMS.

♦ Integrated Child Development Services (Supplementary Nutrition):-

- Cooked food be supplied regularly in stead of supply of food grains in some centres.
- AWCs be located in each habitation.
- AWWs be engaged locally preferably from the same village / habitataion.
- Regular rations be supplied to the AWCs.

♦ Mahatma Gandhi National Rural Employment Guarantee Scheme(mgnregs):-

- Jobs be assigned to job card holders or eligible beneficiaries as per their entitlement, i.e. jobs for 100 in a financial year or unemployment allowance to job seekers if work not provided as per scheme.
- In lean season jobs be assigned to job card holders or eligible beneficiaries particularly landless wage labourers at least 15 days in a month.

- For implementation of this scheme, the Panchayats play major role and the Gram Sabha (Village Meeting) is the foremost body for approval. Strict monitoring of the performance by PRIs against specific outcomes should be ensured. Greater convergence is also required across departments and programmes with MGNREGA so that sustainable livelihoods can be created.
- ♦ Orissa Tribal Empowerment and Livelihood Programme (OTELP):-
 - This programme is not implemented in the study areas and this should be extended to the blocks / areas where food insecurity observed.
- ♦ Madhu Babu Pension Yojana (MBPY):-
 - Some deserving persons be included in the list for availing the benefits under the scheme.
- ♦ Emergency Feeding Programme(EFP):-
 - All the beneficiaries under the scheme be given cooked food in stead of food grains (as supplied to some areas).
- ♦ National Old Age Pension(MBPY):-
 - Some deserving persons be included in the list for availing the benefits under the scheme.
- ♦ Establishment of Grain Bank - Grain banks should be established in as many as villages in tribal areas with active women's SHGs and Watershed committees. This will guarantee adequate food security during lean season.
- ♦ Monitoring - PRIs may be actively involved in the monitoring of PDS. These PRIs should be empowered, trained and facilitated in monitoring hunger as well as schemes implemented to reduce hunger / malnutrition such as PDS, MDMS, ICDS and FFW programmes. This will help strengthen the delivery mechanism and overcome operational inefficiencies and administrative impediments.
- ♦ SHGs should be strengthened by providing necessary finance and subsidies, technical and marketing supports, skill development so as to set up of their new ventures, because it will not only create work to the group but also increase the income level of the participants this increasing their purchasing power so as to address food insecurity.
- ♦ BPL Census - Since 1977 there has been lot of changes / creation of new families in tribal areas in below poverty line category. Some deserving

families have to be included in the list and the benefits under different schemes can reach to these families.

- ♦ Research / Evaluation studies may be taken up on implementation of various ongoing schemes related to food security like PDS, MDMS, ICDS, MGNREGS, FFW, EFP, OTELP, etc. Further, more research works needed on special focus areas for enhancing purchasing power of tribal population through sustainable livelihoods to achieve food security in tribal areas.

6.4 CONCLUSION

The problem of food insecurity prevails in tribal areas. We have examined numerous data sources as well as analytical view points and the literature and came to the conclusion that, the main cause of food insecurity is lowering of purchasing power among the poor and vulnerable population in tribal areas. In general, tribals have been socially and economically disadvantaged due to their isolation both geographically as well as culturally from mainstream population. Habitation in remote difficult terrains and the practice of primary subsistence from agriculture has led to significant economic backwardness of tribal communities. Moreover, illiteracy, ignorance or lack of knowledge regarding their life style and customs has also caused them to be regarded as backward. Despite over six decades of planning and special measures taken for tribals as well as implementation of several programmes / schemes in these areas like a number of tribal development programmes, rural development programmes, anti-poverty schemes, food security programmes, etc., as observed from the study, out of sample tribal households under study, 25.52 per cent do not possess any land other than houses, 86.61 per cent living in Kuchha houses, cent per cent have no access to piped water, electricity and toilet facilities at their houses, 63.39 per cent of household members above 6 years of age are illiterates, 66.11 per cent of households do not able to arrange two square meals a day, 50.63 per cent households annual income below Rs. 11000, 51.88 per cent households annual expenditure on food items below Rs. 6000, etc. Out of the government programmes on food security measures, PDS is playing an important role. Although both MDMS and ICDS have specific target groups of beneficiaries, these schemes are also fulfilling some extent of household food security. MGNRES and other food for work schemes can be chenalized to improve both the key areas of village connectivity and small scale irrigation. Village approach roads to main roads and small irrigation schemes can both increase economic opportunities and productivity. Also in this chapter major findings, impacts of different food security related schemes and few suggestions have been given based on analysis of data, views / opinions obtained from different stakeholders. However, the implementation of such programmes including issues of reaching those with severe malnutrition / hunger depends very much on the demand from the affected persons for the services / benefits. Securing right to food is very much a matter of mobilizing of the concerned persons to secure their rights. But, what is important is the mobilization and organization of the poor or food insure themselves. Their voice is necessary to make the ending of hunger a part of the political platform of various political parties and civil society organizations, NGOs and community based organizations, including traditional tribal organizations.



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