

**Evaluation Study of Utilization of State
TSP & SCA to TSP funds in Sample ITDAs
and its Impact on Tribal Beneficiaries**

2019

**Scheduled Castes and Scheduled Tribes
Research & Training Institute (SCSTRTI)**

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Abbreviations:

ABAP	Annual Budgeted Action Plan
ANM	Auxiliary Nurse Midwifery
APSSDC	Andhra Pradesh State Skill Development Corporation
ATDC	Academy of Tribal Dialect and Culture
BKVY	Biju Krushak Vikash Yojana
CIPET	Central Institute of Plastics Engineering and Technology
DCA	Diploma in Computer Application
DIC	District Industrial Centre
DMLT	Diploma in Medical Laboratory Technology
DPMC	District Planning and Monitoring Committee
DRDA	District Rural Development Agency
DTDP	Dispersed Tribal Development Plan
EAP	Externally Aided Projects
EGMM	Employment Generation and Marketing Mission
FADP	Focus Area Development Programme
FNGO	Facilitating Non-Government Organisation
FRA	Forest Rights Act
GNM	General Nursing and Midwifery (Diploma Course)
GOI	Government of India
HKMDA	Hill Kharia and Mankirdia Development Agency
IGA	Income Generating Activity
IGS	Income Generation Scheme
ILRI	Indian Lac Research Institute
ITDA	Integrated Tribal Development Agency
KVIC	Khadi and Village Industries Commission
MADA	Modified Area Development Agency
MCU	Mother Chick Units
MGNREGA/S	Mahatma Gandhi National Rural Employment Guarantee Act / Scheme
MIP	Minor Irrigation Project
MIS	Management Information System
MOU	Memorandum of Understanding
MP	Micro Project
MPCE	Monthly Per Capita Consumption Expenditure
NHM	National Horticulture Mission
NRHM / NHM	National Rural Health Mission / National Health Mission
NSS	National Sample Survey
NSTFDC	National Scheduled Tribes Finance and Development Corporation
NTFP	Non-Timber Forest Products
OLM	Odisha Livelihood Mission
ORMAS	Odisha Rural Development and Marketing Society
OSFDC	Orissa SC & ST Development Finance Co-operative Corporation Ltd.
OTDS	Odisha Tribal Development Society
PAC	Project Appraisal Committee

PESA	Panchayat Extension to Scheduled Area
PLET	Placement Linked Employability Training
PPO	Plastic Processing Operator
PRT	Pre-Recruitment Training
PVTGs	Particularly Vulnerable Tribal Groups
RKVY	Rastriya Krishi Vikas Yojana
RSP	Rubber Producing Societies
RTE	Right to Education
SCA	Special Central Assistance
SCSTRTI	Scheduled Caste and Scheduled Tribe Research and Training Institute
SDCE	Skill Development Centers of Excellence
SDT	Skill Development Training
SECC	Socio-Economic and Caste Census
SHG	Self-Help Group
SMS	Subject Matter Specialist
ST	Scheduled Tribe
STFDC	State Scheduled Tribes Finance and Development Corporation
TRIFED	Tribal Cooperative Marketing Development Federation of India
TSP	Tribal Sub-Plan
TSS	Tribal Sub-Scheme
UT	Union Territories
WPR	Work Participation Rate
W-SHG	Women Self-Help Group
YTC	Youth Training Centers

Chapter One: Introduction and Background

1.0 Introduction:

The Special Central Assistance (SCA) was conceptualized to provide an added thrust to the Tribal Sub-Plan (TSP) in order to accelerate socio-economic development of the Scheduled Tribes. Special Central Assistance is provided to State Governments/UT Administrations as an additive to their Tribal Sub-Plan (TSP). The main objective of SCA to TSP is to give a thrust to the development programmes for Scheduled Tribes with reference to their occupational pattern and the need for increasing the productivity of and income from their limited resources. Similarly, resource inadequacy affecting the effective implementation of various programmes undertaken under Tribal Sub Plan (TSP) had prompted the Government of India to supplement the efforts of the State Governments by extending Special Central Assistance (SCA) as an additive to the State TSP. Accordingly, a scheme called SCA to TSP was launched in 1977-78 to bridge the resource gap for the implementation of TSP. The ultimate objective of extending SCA to TSP is to boost the demand-based income-generation programmes and thus raise the economic and social status of tribals.

1.1 Development of Scheduled Tribes; Approach and Strategies:

India, as a welfare State is committed to the welfare and development of its people in general and of vulnerable sections in particular. Preamble, Directive Principles of State Policy, fundamental Rights and specific sections, namely article 38, 39 and 46 in the Constitution of India stand testimony to its people. As a matter of strategy, the Government of India has resorted to planned development for minimising inequality in income, status and opportunities for its people.

Development is essentially a process of change initiated with an objective of improving the quality of life. For certain sections of society, who are considered as weaker sections, the process of change would aim at bringing them into the mainstream of socio-economic system. Left to itself the process of change even if initiated by an external stimulus, would not be sustainable for these sections. Inclusive growth demands that all social groups have equal access to the services provided by the State and equal opportunity for upward economic and social mobility. It is also necessary to ensure that there is no discrimination against any section of our society. In India, Scheduled Tribes (STs) have historically been disadvantaged and vulnerable.

Scheduled tribes have historically been physically or geographically excluded, but did not face any social stigma (like that of SCs) and are not socially excluded. So, unlike scheduled cases, scheduled tribes are generally concentrated in a few geographical regions, which are relatively physically inaccessible, such as hilly regions and forests. These historically rooted different forms of exclusion have very important implications for the present-day nature and causes of poverty among these groups.

Scheduled Tribes are referred to in Article 366(25) of the Constitution of India as those tribal communities, parts of, or groups within such tribes or tribal communities, who are scheduled in accordance with Article 342 of the Constitution. The essential characteristics, first laid down by the Lokur Committee, for a community to be identified as Scheduled Tribes are (a) indications of primitive traits, (b) distinctive culture, (c) shyness of contact with the community at large, (d) geographical isolation; and (e) backwardness. There are over 700 Scheduled Tribes notified under Article 342 of the Constitution of India, spread over different states and Union Territories of the Country.

Scheduled Area: The specification of Scheduled Areas in relation to the State of Odisha is by a notified order of the President vide "The Scheduled Areas (State of Bihar, Gujrat, Madhya Pradesh and Orissa) order, 1977 dated 31.12.1977 (C.O. 109). About 44.70% of the area of the state has been

notified as the Scheduled Area in accordance with the orders of the President of India, issued under the Fifth Schedule to the Constitution. The Scheduled Area in Odisha comprises the entire districts of Mayurbhanj, Koraput, Malkangiri, Rayagada, Nawarangapur, Sundargarh, and Kandhamals district, R.Udayagiri Tahasil, Gumma & Rayagada Blocks of Gajapati, Soroda Tahasil, excluding Gazalbadi and Gochha Panchayats of Ganjam district, Kuchinda Tahasil of Sambalpur district, Telkoi, Keonjhar, Champua and Barbil Tahasils of Keonjhar district, Th. Rampur and Lanjigarh blocks of Kalahandi district and Nilagiri block of Balasore district.

1.2 Tribal Profile of Odisha:

Odisha is the home of 62 tribes and comprise 22.8 percent of the total population of the State. The state is having 13 Particularly Vulnerable Tribal Groups (PVTGs). The tribes are mostly inhabited in the hilly regions of the state. Eight districts of the state are having more than 50.0 percent tribal population and six districts are having tribal population within 25.0 percent to 50.0 percent. Odisha is having more than 44.0 percent of the area as scheduled area and it covers about 67.0 percent of the tribal population (118 Blocks in 12 Districts). All the scheduled blocks come under Tribal Sub-Plan (TSP) area. Apart from TSP area, the state is having 47 blocks under MADA and 12 blocks identified as clusters, and 17 Micro Projects which are mostly looking for the development of PVTGs.

Table 1: Spread of Scheduled Tribes in the State of Odisha

Sl. No.	Particulars	Details
1	Districts	13
2	Block	119
3	Villages with 100 % tribal	3839
4	ITDA	22
5	MADA Blocks	47
6	Cluster Blocks	12
7	Micro Projects (for PVTG Development)	17

Source: Tribal Development Department

Table 2: Distribution of Tribal Villages by different Concentration of Groups - 2001 & 2011

State	100% Tribal		>90% Tribal		>75% Tribal		>50% Tribal		>25% Tribal	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Odisha	5085	3839	8688	8684	12249	12396	17531	17798	23000	23208
India	31742	21508	59549	63056	78508	82501	105296	110118	139302	145622

Source: Statistical Profile of STs, MOTA, Govt. of India

Odisha has the third largest concentration of tribal population in the country. The state comprises 9.66% of the total tribal population of the country. The ST population of Odisha increased from 42.24 lakh in 2001 census to 95.91 lakh in 2011. However, their proportion in the total population decreased from 24.07 percent in 1961 to 22.85 percent in 2011. Mayurbhanj district has maximum ST population (14.80 lakh) as the highest proportion (58.7 %) in the state. The sex ratio of ST stood at 1029 which is higher not only than the total sex ratio of the state (979) but also over the national average. The literacy rate of Scheduled Tribes has been increasing since 1961. As per census 2011, the literacy rate of STs are 52.24 percent where the male and female literacy rate is 63.70 percent and 41.20 percent respectively.

1.2.1 Demography:

India has a tribal population of 104.28 million and Odisha has the third largest concentration of tribal population in the country. The state comprises 9.66% of the total tribal population of the country. The ST population of Odisha increased from 42.24 lakh in 2001 census to 95.91 lakh in 2011. However, their proportion in the total population decreased from 24.07 percent in 1961 to 22.85 percent in 2011. Mayurbhanj district has maximum ST population (14.80 lakh) as the highest proportion (58.7 %) in

the state. The sex ratio of ST stood at 1029 which is higher not only in comparison to the total sex ratio of the state (979) but also over the national average. The literacy rate of Scheduled Tribes has been increasing since 1961. As per census 2011, the literacy rate of STs are 52.24 percent where the male and female literacy rate is 63.70 percent and 41.20 percent respectively.

Table 3: ST Population in Odisha

District	Area (in Sq. Km)	Total Population (including ST, SC & Others)			ST Population			Percentage of ST Population to Total Population			No. of Blocks
		Total	Male	Female	Total	Male	Female	Total	Male	Female	
1	2	3	4	5	6	7	8	9	10	11	12
Angul	6375	1273821	655718	618103	179603	89980	89623	14.10	13.72	14.50	8
Balasore	3806	2320529	1185787	1134742	275678	137748	137930	11.88	11.62	12.16	12
Bargarh	5837	1481255	749161	732094	281135	140542	140593	18.98	18.76	19.20	12
Bhadrak	2505	1506337	760260	746077	30428	15361	15067	2.02	2.02	2.02	7
Bolangir	6575	1648997	830097	818900	347164	172489	174675	21.05	20.78	21.33	14
Boudh	3098	441162	221625	219537	55364	27362	28002	12.55	12.35	12.76	3
Cuttack	3932	2624470	1352760	1271710	93745	47437	46308	3.57	3.51	3.64	14
Deogarh	2940	312520	158230	154290	110400	55126	55274	35.33	34.84	35.82	3
Dhenkanal	4452	1192811	612593	580218	162056	80878	81178	13.59	13.20	13.99	8
Gajapati	4325	577817	282882	294935	313714	151902	161812	54.29	53.70	54.86	7
Ganjam	8206	3529031	1779218	1749813	118928	59172	59756	3.37	3.33	3.41	22
Jagatsinghpur	1668	1136971	577865	559106	7862	4226	3636	0.69	0.73	0.65	8
Jajpur	2899	1827192	926034	901158	151432	76048	75384	8.29	8.21	8.37	10
Jharsuguda	2114	579505	296690	282815	176758	88273	88485	30.50	29.75	31.29	5
Kalahandi	7920	1576869	787101	789768	449456	221171	228285	28.50	28.10	28.91	13
Kandhamal	8021	733110	359945	373165	392820	190506	202314	53.58	52.93	54.22	12
Kendrapara	2644	1440361	717814	722547	9484	4748	4736	0.66	0.66	0.66	9
Keonjhar	8303	1801733	906487	895246	818878	405927	412951	45.45	44.78	46.13	13
Khurda	2813	2251673	1167137	1084536	115051	59094	55957	5.11	5.06	5.16	10
Koraput	8807	1379647	678809	700838	697583	337373	360210	50.56	49.70	51.40	14
Malkangiri	5791	613192	303624	309568	354614	171717	182897	57.83	56.56	59.08	7
Mayurbhanja	10418	2519738	1256213	1263525	1479576	730487	749089	58.72	58.15	59.29	26
Nawapara	3852	610382	301962	308420	206327	100469	105858	33.80	33.27	34.32	5
Nawarangpur	5291	1220946	604812	616134	681173	335028	346145	55.79	55.39	56.18	10
Nayagarh	3890	962789	502636	460153	58691	29173	29518	6.10	5.80	6.41	8
Puri	3479	1698730	865380	833350	6129	3240	2889	0.36	0.37	0.35	11
Rayagada	7073	967911	471960	495951	541905	259040	282865	55.99	54.89	57.03	11
Sambalpur	6624	1041099	526877	514222	355261	177565	177696	34.12	33.70	34.56	9
Sonepur	2337	610183	311312	298871	57192	28794	28398	9.37	9.25	9.50	6
Sundargarh	9712	2093437	1061147	1032290	1062349	526856	535493	50.75	49.65	51.87	17
Total State	155707	41974218	21212136	20762082	9590756	4727732	4863024	22.85	22.29	23.42	314

Source: Census, 2011

Odisha is having sizeable number of tribal populations, which comprises 22.8 percent (census, 2011) of the total population of the state (22.1 percent during 2001 census). Of the total population of the state (41.974 million), 9.59 million reported as Scheduled Tribe, of which 4.73 million are males (49.29 percent) and 4.86 million (50.71 percent) are females. The decadal change in tribal population in the State between two census periods, i.e., 2001 and 2011, remain to be 17.7 percent (India, 23.7 percent). The decadal change in tribal population in rural is less (16.8 percent) than that of urban (33.4 percent).

Tribal population in the State is mostly rural though there is an increasing trend of tribal population proportion in urban in comparison to total population. In the State of Odisha, the tribal population in rural was 24.6 percent and 8.1 percent in urban during 2001 of the total rural and urban population. The tribal population is rural increased to 25.7 percent and urban tribal population increased to 8.5 percent during 2011.

Table 4: Tribal Population Proportion in Odisha, 2001 and 2011

India/State/Union Territory	Percentage of Scheduled Tribes 2001			Percentage of Scheduled Tribes 2011		
	Total	Rural	Urban	Total	Rural	Urban
1	2	3	4	5	6	7

Odisha	22.1	24.6	8.1	22.8	25.7	8.5
India	8.2	10.4	2.4	8.6	11.3	2.8

1.2.2 Tribal Population in Study Districts:

Among the study districts, Mayurbhanj has the highest proportion of tribal population (58.72 percent), followed by Nawarangpur (55.79 percent), and Sundargarh(50.75 percent). Proportion of tribal population to total population of the project districts is presented in the Table.

Table 5: Tribal Population in Study Districts

Sl.	District	Total Population			Scheduled Tribe Population			ST Population Percentage to Total		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1	Mayurbhanja	25,19,738	12,56,213	12,63,525	14,79,576	7,30,487	7,49,089	58.72	58.15	59.29
2	Nawarangpur	12,20,946	6,04,812	6,16,134	6,81,173	3,35,028	3,46,145	55.79	55.39	56.18
3	Sundargarh	20,93,437	10,61,147	10,32,290	10,62,349	5,26,856	5,35,493	50.75	49.65	51.87
	Total State	4,19,74,218	2,12,12,136	2,07,62,082	95,90,756	47,27,732	48,63,024	22.85	22.29	23.42

Source: Census of India, 2011;

Table 6: ST Households and Population by Rural & Urban in Study Districts

SN	District	Total ST HH	% of State Total	Scheduled Tribe Population					
				Rural		Urban		Total	
1	2	3	4	5	6	7	8	9	10
				No.	%	No.	%	No.	%
1	Mayurbhanja	3,26,463	15.09	14,39,002	97.26	40,574	2.74	14,79,576	100.00
2	Nawarangpur	1,46,661	6.78	6,68,056	98.07	13,117	1.93	6,81,173	100.00
3	Sundargarh								
	State Total	21,63,110	100.00	89,94,967	93.79	5,95,789	6.21	95,90,756	100.00

Source: Census of India, 2011;

In exercise of powers conferred by sub-paragraph 6 of the Fifth Schedule to the Constitution of India, the revised Presidential Order titled "The Scheduled Areas (states of Bihar, Gujarat, Madhya Pradesh & Odisha) Order 1977" has declared the full districts viz. Mayurbhanj, Sundargarh, Koraput (which now includes the districts of Koraput, Malkangiri, Nabarangapur and Rayagada) as Scheduled Areas of the state along with other areas, i.e., Kuchinda tahasil of Sambalpur district, Keonjhar, Telkoi, Champua, Barbil tahasils of Keonjhar district, Khondamal, Balliguda and G.Udayagiri tahasil of Khondamal district, R.Udaygiri tahasil, Gumma and Rayagada block of Parlekhemundi tahasil in Parlakhemundi Sub-division and Suruda tahasil (excluding Gazalbadi and Gochha Gram Panchayats), of Ghumsur sub-division in Ganjam district, Thuamul Rampur and Lanjigarh blocks of Kalahandi district and Nilagiri block of Balasore district. After reorganisation of districts in the state, 7 districts fully and 6 districts partly are covered under the Scheduled Areas of the state.

1.3 PVTG and Its Population in Odisha

The State is having thirteen Particularly Vulnerable Tribal Groups (PVTGs). All the PVTGs record growth in their population as per census 2011 (comparing with the census of 1971). In comparison to 2001, there is reduction in the population of Birhor by 15.10 percent whereas highest percentage of growth in decadal population is observed among Mankirdia (111.62 percent). Comparing the population of 1971 and 2011 of different PVTGs, it is evident that there is comparatively less percentage of growth among Paudi Bhuyan (30.83 percent) and Lanjia Saura (40.80 percent).



Figure 1: PVTGs in Odisha

Table 7: PVTG and Its Population in Odisha

PVTGs	Population in Different Census Periods									
	1971		1981		1991		2001		2011	
	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11
Chuktia Bhunjia	-		-		-		-		2378	0.27
Birhor	248	0.81	142	0.18	825	1.42	702	1.02	596	0.07
Bondo	3870	12.67	5895	7.63	7315	12.56	9378	13.64	12231	1.41
Didayi	3055	10.00	1978	2.56	5471	9.40	7371	10.72	8890	1.03
Dongria Khond	2676	8.76	6067	7.85	-		-		6306	0.73
Juang	3181	10.42	30876	39.96	35665	61.25	41339	60.13	47095	5.44
Kharia	1259	4.12	1259	1.63	-		-		222844	25.73
Kutia Khond	3016	9.88	4735	6.13	-		-		7232	0.84
Lanjia Saura	4233	13.86	8421	10.90	-		-		5960	0.69
Lodha	1598	5.23	5100	6.60	7458	12.81	8905	12.95	9785	1.13
Mankirdia	133	0.44	1005	1.30	1491	2.56	1050	1.53	2222	0.26
Paudi Bhuyan	4424	14.49	8872	11.48	-		-		5788	0.67
Saura	2845	9.32	2917	3.78	-		-		534751	61.74
Total	30538	100.0	77267	100.0	58225	100.0	68745	100.0	866078	100.0

Source: Statistical Profile of STs, MOTA, Govt. of India.

1.4 Literacy Rate among STs:

Among the study districts, highest literacy rate among STs observed in Sundargarh (65.08 percent) followed by Mayurbhanj (53.11 percent) and Nawarangpur (38.54 percent). Literacy rate of STs by study district is presented in the Table. Odisha is having a literacy rate of 72.87 percent with male literacy of 81.59 percent and female literacy of 64.01 percent. The male literacy rate is 8.72 percentage point higher than the total literacy rate of the State whereas, female literacy rate is 8.86 percentage point lower than the average literacy rate of the State. The literacy rate of scheduled tribes in the State is 52.24 percent with male literacy rate of 63.7 percent and female literacy rate of 41.2 percent. The male literacy rate among the tribals is 11.46 percentage point higher than the average literacy rate among the tribals whereas the female literacy rate is 11.04 percentage point less than average literacy rate of tribals in the State. Comparing with literacy rate of the tribals with State literacy rate, it is evident that the literacy rate of tribals in the State is 20.63 percentage point lower than the total literacy rate of the State. The tribal male literacy rate is 17.89 percentage point less than the male literacy rate of the State and female literacy rate of tribals is 22.81 percentage point less than the female literacy rate of the State.

Table 8: Literacy Rate among Scheduled Tribes

SN	District	Total (All Communities)			Scheduled Tribes		
		Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7	8
1	Mayurbhanja	63.17	73.76	52.71	53.11	65.28	41.36
2	Nawarangpur	46.43	57.31	35.80	38.54	49.46	28.02
3	Sundargarh	73.34	81.01	65.48	65.08	73.98	56.39
	Odisha	72.87	81.59	64.01	52.24	63.70	41.20

Source: Census of India, 2011.

In Mayurbhanj, literacy rate among the tribals is 10.06 percentage point less than the average literacy rate of the district. The tribal male literacy rate is 8.48 percentage point less than the male literacy rate of the district and tribal female literacy rate is 11.35 percentage point less than the female literacy rate of the district. In Nawarangpur, the tribal literacy rate is 7.89 percentage point less than the literacy rate of the district with tribal male literacy rate is less by 7.85 percentage points from male literacy rate and tribal female literacy rate is 7.78 percentage point less than the female literacy rate of the district. More or less, similar trend is observed in Sundargarh where tribal literacy rate is 8.26 percentage point less than the district literacy rate with tribal male literacy rate is 7.03 percentage point less than male literacy rate of the district and tribal female literacy rate is 9.09 percentage point less than female literacy rate of the district.

1.4.1 Promotion of Tribal Education

The ST & SC Development Department has been taking different initiatives for the education of tribals like scholarship for both pre-matric and post-matric students; creating hostel facilities for ST students, Supply of books / reading materials, uniforms and conducting special pre-examination and pre-recruitment coaching facilities to ST students.

1.5 Housing:

Majority of the tribal household in the State have their own house (97.44 percent) and very few live-in rented house (0.93 percent) or in house of other categories (1.55 percent). Similar trend prevails in study districts where significant percentage of tribal households have their own land. House ownership status of tribal by study district is presented in the table.

Table 9: House Ownership Status of STs

Project District	Total ST Households	% of ST HH to Total ST HH with house ownership status as Owned	% of ST HH to Total ST HH with house ownership status as Rented	% of ST HH to Total ST HH with house ownership status as Other
1	2	3	4	5
All India	1,97,37,399	95.65	2.34	1.84
State Total	20,73,079	97.44	0.93	1.55
Mayurbhanj	3,36,028	98.12	0.46	1.35
Nabarangapur	1,51,212	99.04	0.31	0.63
Sundargarh	2,23,944	96.38	2.38	1.19

Source: SECC, 2011

Of the total tribal households of the State, about 71.33 percent live in *kuccha* houses. The tribal households living in *pucca* houses is 10.21 percent of the total ST households. The tribal households having semi-kuccha houses¹ observed in 11.07 percent cases and about 7.02 percent ST households live in semi-pucca² houses.

¹ Semi-kuccha house refers to *kuccha* wall with *pucca* roof top

² Semi-pucca house refers to *kuccha* roof top with *pucca* wall

Table 10: House Types of STs

District	Kuccha House Total	Kuccha House %	Pucca House Total	Pucca House %	Semi-Kuccha House Total	Semi-Kuccha House %	Semi-Pucca House Total	Semi-Pucca House %
1	2	3	4	5	6	7	8	9
All India	10596049	53.69	3967411	20.10	3933818	19.93	1026620	5.20
State Total	1478720	71.33	211677	10.21	229493	11.07	145604	7.02
Mayurbhanj	269453	80.19	21049	6.26	39297	11.69	5048	1.50
Nawarangapur	121838	80.57	14244	9.42	10256	6.78	4641	3.07
Sundargarh	170540	76.15	17713	7.91	4295	1.92	30423	13.59

Source: SECC, 2011;

Note: Semi Kuccha refers to Kuccha wall and Pucca Roof; Semi Pucca refers to Pucca Wall and Kuccha Roof

Percentage of tribal households living in kuccha houses is less in Sundargarh in comparison to other two districts, whereas highest percentage of tribal households living in pucca houses is in Nawarangpur. About 11.69 percent tribal households in Mayurbhanj live in semi-kuccha house which is highest among all the study districts. Among the study districts, highest percentage of tribal households living in semi-pucca houses (13.59 percent) is in Sundargarh district followed by Nawarangpur (3.07 percent). In all the three study districts, percentage of tribal households living in kuccha houses is more than the state average (71.33 percent) and less than state average (10.21 percent) in percentage of tribal households living in pucca houses.

1.6 Land Holding Pattern:

Of the total 9.59 million tribal households in the State, 1,426 thousand ST households possess land³ which is 1.29 percent more than that of total ST households possessing land in 2005-06. However, the area of holding has decreased by 7.64 percent during the agriculture census 2010-11 in comparison to agriculture census period 2005-06. So, while average land holding per ST household has decreased, number of ST households holding land has increased. Among the total land holding of ST families, 66.61 percent are marginal farmers, 23.55 percent are small, 8.3 percent are semi-medium, 1.46 percent are medium and 0.08 percent are large farmers. So, marginal and small farmers constitute a total of 90.16 percent of the total land holding.

In comparison to previous agriculture census (2005-06), there is a growth in number of marginal farmers⁴ by 21.57 percentage point (India; 8.93 percentage point) but number of small farmers⁵ has reduced by 20.44 percentage point in the State (India: -6.36 percentage point). Semi-medium⁶ and medium⁷ farmer percentage has also reduced in the state by 33.39 percentage point (India: -9.85 percentage point) and 50.34 percentage point (India: -14.36 percentage point) respectively. The large⁸ farmer percentage has also decreased by 61.90 percentage point (India: -11.11 percentage point). So, while there is a growth in marginal farmers among the STs, in remaining land holding categories, there is reduction in number of land holders.

Table 11: Operational Holdings of Scheduled Tribes

State	Agriculture Census 2005-06					Agriculture Census 2010-11				
	Marginal	Small	Semi-Medium	Medium	Large	Marginal	Small	Semi-Medium	Medium	Large
1	2	3	4	5	6	7	8	9	10	11
Odisha	54.79	29.6	12.46	2.94	0.21	66.61	23.55	8.3	1.46	0.08
India	49.48	25.62	16.44	7.38	1.08	53.9	23.99	14.82	6.32	0.96
Difference										
Odisha						21.57	-20.44	-33.39	-50.34	-61.90

³ Agriculture Census 2010-11

⁴ Marginal farmer refers to land holding size of < 1 ha.

⁵ Small farmer refers to land holding size of 1 ha. to 2 ha.

⁶ Semi-Medium farmer refers to land holding size of 2 ha. to 4 ha.

⁷ Medium farmer refers to land holding size of 4 ha. to 10 ha.

⁸ Large farmer refers to land holding size of > 10 ha.

India						8.93	-6.36	-9.85	-14.36	-11.11
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With regard to area operated by different holding categories among the tribal, 66.61 percent marginal farmers operate 36.21 percent land. The total operated land by the marginal farmers has increased by 46.18 percentage point in comparison to 2005-06. The small farmers (23.55 percent) operate 33.68 percent of the total land and area operated by the small farmers has increased by 1.42 percentage point in comparison to 2005-06. Similarly, semi-medium (8.3 percent) and medium farmers (1.46 percent) operate 21.36 percent and 7.57 percent land in the State and in both the categories area operated has reduced by 20.36 percentage point and 41.72 percentage point respectively. Amount of land operated by the large ST farmers (0.08 percent) has also decreased by 46.40 percentage point in comparison to the previous census period (2005-06). Overall, while there is growth in percentage of marginal ST farmers (21.57 percentage point), there is also increased in area of operation. On the other hand, while there is reduction in small farmer percentage (reduction by 20.44 percentage point), area operated by them has increased by 1.42 percentage point. With reduced number of semi-medium and medium ST farmers, area operated by farmers of these categories has also reduced. In case of large farmers, average area operated has also reduced with decreased percentage (61.90 percentage point) of ST farmers in this category.

Table 12: Area Operated by Operational Holdings of Scheduled Tribes

State	Agriculture Census 2005-06					Agriculture Census 2010-11				
	Marginal	Small	Semi-Medium	Medium	Large	Marginal	Small	Semi-Medium	Medium	Large
1	2	3	4	5	6	7	8	9	10	11
Odisha	24.77	33.21	26.82	12.99	2.22	36.21	33.68	21.36	7.57	1.19
India	14.58	21.81	26.83	25.97	10.81	17.26	22.6	26.27	23.76	10.11
Difference										
Odisha						46.18	1.42	-20.36	-41.72	-46.40
India						18.38	3.62	-2.09	-8.51	-6.48

The average size of operational holding of ST marginal farmers remains to be 0.62 ha. which has increased from 2005-06 when average holding size was 0.56 ha. Average holding size also found increase in all other holding categories. In case of small and semi-medium farmers, it has increased from 1.39 to 1.62 ha. and 2.67 ha. to 2.91 ha. In case of medium and large farmers, it has increased from 5.49 ha. to 5.87 ha. and 13.13 ha. to 16.85 ha.

Table 13: Average Land Holding among STs in Different Holding Categories

Holdings (ST)	2005-06			2010-11		
	Number	Area	Average Holding	Number	Area	Average Holding
1	2	3	4	5	6	7
Marginal	771	433	0.56	950	585	0.62
Small	416	581	1.39	336	544	1.62
Semi-Medium	175	469	2.67	118	345	2.91
Medium	41	227	5.49	21	122	5.87
Larger	3	39	13.13	1	19	16.85
Total (Odisha)	1407	1748	1.24	1426	1615	1.13

1.7 Economic Status

Odisha with one of the highest tribal population at the national level, comprise 23.91 percent of the total households. About 39.14 percent families derive major part of their income from manual casual labour due to landlessness. Only 0.87 percent tribal households are having non-agricultural enterprises and registered with Government. Members of 2.01 percent tribal families are in salaried job with Government and 0.71 percent having salaried job either in public sector or in private sector. Monthly income of highest earning household member is less than Rs.5,000/- in 95.69 percent cases. Only 0.82 percent tribal families in Odisha are having KCC (Kissan Credit Card) with a credit limit of Rs.50,

000 and above. In terms of holding unirrigated land, it is observed that 45.25 percent tribal families have unirrigated land and only 5.94 percent holds irrigated land⁹.

Under Socio-Economic and Caste Census (SECC), about 88.58 percent tribal households are considered under deprivation category due to poor asset base and other deprivations. In the income categories, about 6.94 percent families have agriculture as their source of income whereas 15.12 percent derive their income from wage employment, 0.37 percent from domestic services, 0.04 percent from rag picking, 0.11 percent from own non-agricultural enterprises, 0.07 percent from begging/charity and 1.26 percent from other engagement sources.

As per Tendulkar methodology (2009-10 estimation), 66.0 percent tribal population in rural (State total in Rural: 39.2 percent) and 34.1 percent in urban (State Total in Urban: 25.9 percent) are below the poverty line. With regard to incidence of poverty among the tribes, the state occupies “Extremely High Incidence of Poverty” status with more than 50.0 percent poverty. As per 1993-94 estimation, percentage of STs below the poverty line was 71.26 percent in rural and 64.85 percent in Urban. As per 1999-2000 estimation, percentage of STs below the poverty line increased to 73.93 percentage in rural and reduced to 59.59 percent in urban areas of the State. Further, poverty estimation of 2004-05 reveals that about 75.6 percent ST households are below the poverty line in rural and 61.8 percent in urban areas of the State.

As per the Socio-Economic and Caste Census (SECC), of the total tribal households, 29.21 percent are engaged in cultivation and derive their income from farming. Majority of 63.03 percent tribal households are engaged in manual casual labour. Other sectors / sub-sectors of engagement of tribal households are in part / full time domestic services (1.57 percent), foraging / rag picking (0.17 percent), non-agricultural enterprises (0.47 percent) and engagement in other economic activities (5.25 percent).

Table 14: Engagement of ST Households

Project District	Total HH	Total ST HH	% of HH in Cultivation	% of HH in Manual Labour	% of HH in Part / Full-Time Domestic Service	% of HH in Foraging Rag Picking	% of HH in Non-agricultural Enterprise	% of HH in Begging / Charity/ Alms collection	% of HH in Other Works
1	2	3	4	5	6	7	8	9	10
India	179787454	19737399	37.96	51.32	1.99	0.22	0.63	0.23	7.60
State	8677615	2073079	29.21	63.03	1.57	0.17	0.47	0.27	5.25
Mayurbhanj	571185	336028	30.34	62.68	1.44	0.19	0.35	0.17	4.83
Nabarangapur	262396	151212	34.19	60.14	1.14	0.08	0.34	0.11	4.00
Sundargarh	348141	223944	33.49	56.60	1.57	0.19	0.31	0.20	7.57

Source: Socio-Economic and Caste Census; 2011

Note: HH: Household

Highest monthly income by any member of tribal households observed to be less than Rs.5000/- (US \$ 80.65 at Rs.62/- per US \$) in 95.68 percent families. Monthly income level of Rs.5000/- to Rs.10,000/- (US \$ 80.65 to US \$ 161.29 at Rs.62/- per US \$) is in 2.67 percent ST households and in the remaining 1.63 percent ST households, highest monthly income of any of the member is more than Rs.10,000/- (US \$ 161.29 at Rs.62/- per US \$). Study district wise monthly highest income of ST households is presented in the Table.

⁹Socio-Economic and Caste Census of Tribals, Ministry of Tribal Affairs, Govt. of India

Table 15: Highest Income of Tribal Household Members

Project District	Total HH	Total ST HH	% of ST HH	% of HH with monthly Income of highest earning member < 5000	% of HH with monthly Income of highest earning member 5000 - 10000	% of HH with monthly Income of highest earning member > 10000
1	2	3	4	5	6	7
India	179787454	19737399	10.98	86.53	8.95	4.48
State (Odisha)	8677615	2073079	23.89	95.68	2.67	1.63
Mayurbhanj	571185	336028	58.83	96.17	2.43	1.40
Nabarangapur	262396	151212	57.63	96.65	2.51	0.84
Sundargarh	348141	223944	64.33%	93.89	3.36	2.68

Source: Socio-Economic and Caste Census

Note: HH: Household

1. About 66.0 percent tribal population in rural and 34.1 percent in urban are below the poverty line (Tendulkar methodology, 2009-10 estimation);
2. The state has “extremely high poverty ratio” status with more than 50.0 percent poverty among tribal;
3. Around 29.21 percent tribal households are engaged in cultivation and majority of 63.03 percent are engaged in manual casual labour;
4. Highest monthly income by any member of tribal households observed to be less than Rs.5000/- in 95.68 percent families;

1.8 Work Participation Rate (WPR)

The Work Participation Rate (WPR)¹⁰ of tribal in Odisha is 55.21 percent in case of male and 44.79 percent in case of female in comparison to tribal Work Participation Rate of 55.59 for male and 44.41 percent in case of female at the National level (census 2011).

Table 16: Work Participation Rate (Total Worker)

SN	Total Worker	Odisha (%)	India (%)	Difference (Percentage Point)
1	2	3	4	5 (4-3)
A	All Population			
A.1	Male	67.85	68.89	1.04
A.2	Female	32.15	31.11	(-) 1.04
	Difference (M-F)	35.7		
B	Tribal			
B.1	Male	55.21	55.59	0.38
B.2	Female	44.79	44.41	(-) 0.38
	Difference (M-F)	10.42		

Source: Census 2011 and Statistical Profile of Scheduled Tribes in India, 2013

In Main Workers segment, the State is having high percentage of male main workers (72.83 percent) among the tribal in comparison to the male main worker percentage of STs at the National level (63.94 percent), i.e., higher by 8.89 percentage point. The State is having a total of 2717 percentage female main workers among the STs which is lower than the female main workers (STs) of the country (36.06 percent) by 8.89 percentage point.

¹⁰ As per Census of India definition, the Work Participation Rate (WPR), as the percentage of total workers (main and marginal) to the total population.

In case of Marginal Workers, percentage of ST male marginal workers in the State (38.36 percent) is lower than the ST male marginal workers at the National level (40.23 percent) by 1.87 percentage point. But, in case of females, the State is having more ST female marginal workers (61.64 percent) than that of the country (59.77 percent) by 1.87 percentage point. So, in case of tribal, male main worker percentage in the State is higher than that of female by 45.66 percentage point whereas it is less by 23.28 percentage point from females in marginal worker segment. Work Participation of both tribal and all category population in main and marginal worker segment is presented in the Table.

Table 17: Main and Marginal Worker among STs

SN	Main Worker	Odisha (%)	India (%)	Difference (Percentage Point)
1	2	3	4	5 (4-3)
A	Main Worker			
A.1	All Population			
A.1.1	Male (M)	82.13	75.36	(-) 6.77
A.1.2	Female (F)	17.87	24.64	6.77
A.1.3	Difference (M-F)	64.26	50.72	
A.2	Tribal			
A.2.1	Male (M)	72.83	63.94	(-) 8.89
A.2.2	Female (F)	27.17	36.06	8.89
A.2.3	Difference (M-F)	45.66	27.88	
B	Marginal Worker			
B.1	All Population			
B.1.1	Male (M)	45.48	49.22	3.74
B.1.2	Female (F)	54.52	50.78	(-) 3.74
B.1.3	Difference (M-F)	(-) 9.04	(-) 1.56	
B.2	Tribal			
B.2.1	Male (M)	38.36	40.23	1.87
B.2.2	Female (F)	61.64	59.77	(-) 1.87
B.2.3	Difference (M-F)	(-) 23.28	(-) 19.54	

Source: Statistical Profile of Scheduled Tribes in India, 2013

1. Work Participation Rate of male is higher than female (10.42 percentage points);
2. The female WPR of tribal is higher than the national average by 1.87 percentage point;
3. WPR of tribal male is less than that of male in all population category by 12.64 percentage point, whereas WPR of tribal female is more than all population of female.
4. High percentage of male main workers among the tribal of the State in comparison to the male main worker percentage of tribal at the National level by 8.89 percentage point.
5. The female main workers among the STs is lower than the female main workers (STs) of the country;
6. In marginal worker segment, percentage of tribal male marginal workers in the State is lower than the ST marginal workers at the National level by 1.87 percentage point. In case of females, it is higher than the national average.

Table 18: Work Participation of Tribals (Main Workers)

Name	Male Worker to Total Worker	Female Worker to Total Worker	Main Worker to Total Worker	Male Worker to Total Male Worker	Female Main Worker to Total Female Worker	Main Casual Labour to Total Main Worker	Main Casual Labour to Total Male	Main Casual Labour to Total Female	Main Agricultural Labour to Total Main Worker	Main Agricultural Labour to Total Male	Main Agricultural Labour to Total Female

								Main Worker	Female Main Worker		Worker	Male Main Worker
1	2	3	4	5	6	7	8	9	10	11	12	13
India	T	55.58	44.42	64.81	74.52	52.67	40.87	43.28	36.62	36.18	31.26	44.88
	R	54.57	45.43	63.39	73.33	51.44	44.66	47.85	39.20	38.90	33.96	47.37
	U	67.70	32.30	82.06	86.13	73.53	5.48	5.29	5.94	10.73	8.90	15.20
Odisha	T	55.21	44.79	48.87	64.47	29.64	40.45	46.15	25.17	32.55	27.49	46.09
	R	54.54	45.46	47.50	63.35	28.48	43.22	49.39	26.77	34.50	29.16	48.74
	U	69.03	30.97	77.18	82.76	64.77	5.13	5.62	3.71	7.66	6.62	10.63
Sundargarh	T	60.87	39.13	51.47	64.69	30.92	38.10	41.98	25.48	16.29	13.49	25.43
	R	59.36	40.64	47.67	61.59	27.34	45.55	50.04	30.76	19.42	16.01	30.64
	U	72.64	27.36	81.28	84.58	72.54	3.86	4.35	2.32	1.91	1.70	2.56
Mayurbhanj	T	52.95	47.05	40.05	53.46	24.95	37.31	45.05	18.66	33.87	28.30	47.30
	R	52.67	47.33	39.42	52.83	24.50	38.38	46.44	19.03	34.72	29.05	48.31
	U	67.11	32.89	70.86	77.72	56.86	8.22	8.54	7.32	10.66	8.56	16.49
Nabarangapur	T	53.91	46.09	43.01	64.92	17.39	57.62	64.06	29.51	28.94	23.66	52.01
	R	53.80	46.20	42.81	64.87	17.12	58.60	65.01	30.33	29.26	23.86	53.04
	U	60.87	39.13	55.64	68.04	36.36	11.44	14.90	1.37	14.12	13.15	16.96

Source: Census, 2011; Note: T: Total; R: Rural; U: Urban

In worker category, percentage of male worker to total worker is highest in Sundargarh (60.87 percent) and lowest in Mayurbhanj (52.95 percent). On the other hand, female worker percentage to total worker is highest in Mayurbhanj (47.05 percent) and lowest in Sundargarh (39.13 percent). Main worker to total worker population is 51.47 percent in Sundargarh, followed by 43.01 percent in Nawarangpur and 40.05 percent in Mayurbhanj. Male main worker to total male worker is highest in Nawarangpur (64.92 percent) followed by Sundargarh (64.69 percent). Whereas, total female main worker to total female worker is highest in Sundargarh (30.92 percent) and lowest in Nawarangpur (17.39 percent).

Distribution of tribal main worker population reveals that casual main worker to total male worker is 57.62 percent in Nawarangpur (highest) and 37.31 percent in Mayurbhanj (lowest). Male casual labour to total male main worker is 64.06 percent in Nawarangpur (highest) and 41.98 percent in Sundargarh (lowest). Similarly, female casual labour to total female main worker is highest in Nawarangpur (29.51 percent) and lowest in Mayurbhanj (18.66 percent). Distribution of main worker population by sex is presented in the table.

Table 19: Work Participation Rate of Tribals (Marginal Worker)

Particular		Margin al Worker to Total Worker	Male Margin al Worker to Total Male Worker	Female Margin al Worker to Total Female Worker	Margin al Casual Labour to Total Marginal Worker	Male Margin al Casual Labour to Total Male Marginal Worker	Female Margin al Casual Labour to Total Female Marginal Worker	Margin al Ag. Labour to Total Marginal Worker	Male Margin al Ag. Labour to Total Male Marginal Worker	Female Margin al Ag. Labour to Total Female Marginal Worker
1	2	3	4	5	6	7	8	9	10	11
India	T	35.19	25.48	47.33	23.12	23.70	22.73	59.54	55.43	62.31
	R	36.61	26.67	48.56	23.76	24.64	23.18	60.94	57.28	63.36
	U	17.94	13.87	26.47	7.36	6.01	8.84	25.08	20.91	29.65
Odisha	T	51.13	35.53	70.36	11.70	16.05	8.99	70.48	62.97	75.15

	R	52.50	36.65	71.52	11.87	16.39	9.09	71.43	64.24	75.85
	U	22.82	17.24	35.23	3.47	4.06	2.83	25.12	19.01	31.78
Sundargarh	T	48.53	35.31	69.08	16.05	21.48	11.73	60.80	47.48	71.40
	R	52.33	38.41	72.66	16.53	22.45	11.96	63.23	50.12	73.35
	U	18.72	15.42	27.46	5.41	5.97	4.57	7.74	5.37	11.27
Mayurbhanj	T	59.95	46.54	75.05	9.51	14.95	5.71	66.28	62.11	69.19
	R	60.58	47.17	75.50	9.55	15.06	5.72	66.63	62.62	69.42
	U	29.14	22.28	43.14	5.61	6.18	5.01	30.09	20.85	39.81
N.Pur	T	56.99	35.08	82.61	11.89	19.44	8.14	80.01	69.30	85.33
	R	57.19	35.13	82.88	12.01	19.68	8.22	80.41	69.83	85.63
	U	44.36	31.96	63.64	2.52	5.20	0.43	48.38	37.92	56.55

Source: Census, 2011; Note: T: Total; R: Rural; U: Urban

Marginal worker to total worker population is 59.95 percent in Mayurbhanj, 56.99 percent in Nawarangpur and 48.53 percent in Sundargarh. So, marginal worker percentage is higher in Mayurbhanj and Nawarangpur whereas main worker percentage is higher in Sundargarh among the study districts. Male marginal worker to total male worker is highest in Mayurbhanj (46.54 percent) whereas female marginal worker to total female worker is highest in Nawarangpur (82.61 percent) and lowest in Sundargarh (69.08 percent). The figures reveal that overall, female marginal worker is higher than female main worker in the total female workforce, whereas male marginal worker percentage is proportionately less than male main worker in the total male work force. Distribution of marginal worker engagement (casual labour and agricultural labour) by sex is presented in the table.

1.9 Banking Services

Of the total ST households in the State, 35.0 percent households are availing banking services. The reasons of non-accessing banking services can be attributed to poor awareness, practice of keeping cash in hand, non-availability of banking services in the locality and poor accessibility to banking services etc.

1.10 Asset Holding

Asset holding of a household normally reflects the economic condition of the family. The ST households in the State shows a poor asset holding status with regard to assets that are considered essential in the present day of living. About 30.20 percent ST households own a television and 22.70 percent have a bicycle. Mobile phone for communication and two-wheeler for mobility is available with 32.80 percent and 10.50 percent ST families. Only 2.10 percent ST households have these modern assets (TV, computer, mobile phone and two / four-wheeler). About 43.0 percent ST families does not possess any of these assets (refer Table).

Table 20: Asset Holding and Facilities / Services of STs

Household Characteristics (Total and STs)	Odisha		India	
	2011		2011	
	Total	ST	Total	ST
1	2	3	4	5
Living in 'Good' Houses	64.1	48	53.2	40.6
Having a House with Concrete Roof	30.2	12.2	29	10.1
Having only one Dwelling Room	46.3	60	41	48.7
Using Tap Water	67.9	48.4	43.5	24.4
Access to Improved sources of Drinking Water (Tap, hand pump and closed well)	85.6	75.1	87.1	73.4
Having Toilet facility within premises	53.1	30.1	46.9	22.6
Using Electricity as Main Source of Lighting	83.9	59.8	67.2	51.7
Using LPG for Cooking	43.4	18.9	28.5	9.3
Availing Banking Services	68.9	47.9	58.7	45
Having Television	56.8	30.2	47.2	21.9

Household Characteristics (Total and STs)	Odisha		India	
	2011		2011	
	Total	ST	Total	ST
1	2	3	4	5
Having Telephone/Mobile Phone	69.1	39.7	63.2	34.8
Having 2/4-wheeler	30.8	12.1	25.7	10.6
With "No" Assets	19	43	17.8	37.3

Source: Tribal Sub-Plan in Odisha, with reference to Census 2011

Table 21: Asset Holding, Facilities and Services

Household Characteristics (Total and STs)	2011		2001		Difference	
	Total	ST	Total	ST	Total	ST
	2	3	4	5	6	7
1						
Living in 'Good' Houses	64.1	48.0	52.6	36.7	11.5	11.3
Having a house with Concrete Roof	30.2	12.2	21.1	8.5	9.1	3.7
Having only one Dwelling Room	46.3	60.0	52.3	64.9	-6.0	-4.9
Using Tap Water	67.9	48.4	64.0	45.2	3.9	3.2
Access to Improved sources of Drinking Water (Tap, hand pump and closed well)	85.6	75.1	79.8	69.4	5.8	5.7
Having toilet facility within premises	53.1	30.1	35.1	20.2	18.0	9.9
Using electricity as Main Source of Lighting	83.9	59.8	77.5	52.2	6.4	7.6
Using LPG for Cooking	43.4	18.9	29.7	12.1	13.7	6.8
Availing Banking Services	68.9	47.9	48.1	26.2	20.8	21.7
Having Television	56.8	30.2	44.1	22.6	12.7	7.6
Having Telephone/Mobile Phone	69.1	39.7	14.1	4.5	55.0	35.2
Having 2/4-wheeler	30.8	12.1	16.6	6.3	14.2	5.8
With no Assets	19.0	43.0	36.8	56.6	-17.8	-13.6

Source: Tribal Sub-Plan in Odisha, with reference to Census 2011

1.11 Consumption Expenditure

The NSS estimation of MPCE (Monthly Per Capita Consumption Expenditure) by 'All' and ST households (66th round, 2009-10) for rural and urban areas of Odisha reflects that in the rural areas of Odisha, 70.5 percent of tribal households spend up to Rs.1000/- whereas all household spending is 58.6 percent. The gap between ST and all households remain to be 11.9 percentage point. In the above Rs.3000/- spending category, percentage of all households spending is more than the ST households and the gap (ST – all categories) is (-) 1.2 in favour of all households. The mean per capita expenditure of ST and all categories remain to be Rs.930/- and Rs.1062/- in rural. In Urban areas, spending up to Rs.1000/- is about 30.0 percent in case of STs and 17.8 percent in case of all categories and difference remains to be 12.2. Monthly per capita consumption expenditure above Rs.3000/- is higher in case of all households (22.8 percent) in comparison to STs (18.3 percent) with a gap of (-) 4.5 percentage point (Table 22).

Table 22: Monthly Per Capita Consumption Expenditure: Rural and Urban

All / ST	Rural				Urban			
	Up to Rs.1000/-	Above Rs.3000/-	Mean (Rs.)	Median (Rs.)	Up to Rs.1000/-	Above Rs.3000/-	Mean (Rs.)	Median (Rs.)
1	2	3	4	5	6	7	8	9
All Households	58.6	1.5	1062	919	17.8	22.8	2556	1847
Scheduled Tribes	70.5	0.2	930	783	30.0	18.3	3561	1480
Difference (ST-All)	11.9	-1.2	-132	-136	12.2	-4.5	1005	-367

Source: NSS Round 66 (July 2009 to June 2010)

1.12 Administrative Mechanism

At the state level, tribal development is administered by The ST & SC Development, Minorities and Backward Class Welfare Department of Government, supported by different other state level institutions / organizations. The Tribes Advisory Council has been constituted which advises Government in matters related to tribal development and welfare. The tribal families living outside the geographical area of ITDA, Micro Project, MADA and Cluster are covered under the Dispersed

Tribal Development Program (DTDP). The Academy of Tribal Dialect and Culture (ATDC) looks after preserving and promoting tribal dialect, art and culture. The SCSTRTI conducts research activities for diagnostic and monographic studies of the scheduled tribes.

1.13 Central Government Assistance for Tribal Development

The Central Government has been supporting through various initiatives for the tribal development like, Special Central Assistance to Tribal Sub-Plan for employment-cum-income generation activities, Grant under Article 275 (1) of the Constitution of India, Scheme of Strengthening Education among Schedules Tribe (ST) Girls in Low Literacy Districts, Scheme of construction of hostels for ST Girls and Boy, Establishment of Ashram Schools in Tribal Sub-Plan Areas, Vocational Training, Pre and Post-Matric Scholarship, Upgradation of Merit of ST students, Rajiv Gandhi National Fellowship for STs, National Overseas Scholarship for STs, Grants-in aid to Voluntary Organization for implementing tribal welfare activities, Market Development for Tribal Products/Produce etc.

Study Approach and Methodology:

Study Objective:

To understand the execution of the planned activities under SCA to TSP and to examine and assess to what extent the activities have benefitted the tribal for whom the project/s has been designed. Specific objectives of the study are to assess / evaluate;

1. Types of activities planned under SCA to TSP for tribal development;
2. Implementation of framed sector specific plans under SCA in TSP areas;
3. Assessing the benefit (outcome) of the schemes to the tribal families and their Groups.

Study Design:

The study has adopted observational study design to capture relevant data from tribal households and other stakeholders to understand the tribal development status in TSP areas, more specifically under SCA to TSP. The study has been exploratory and empirical in nature with a mixed method approach. Both qualitative and quantitative techniques have been used with regard to data collection and analysis. The participatory approach is being adopted during the course of the study to understand the impact of SCA to TSP TSP at the household and community level. Apart from tribal households, different other stakeholders are also consulted at the village, GP, block and district level like district administration, PRI members and line departments.

Study Universe and Sampling:

The universe of the study is limited to selected three scheduled districts where tribal concentration is more than 50.0 percent (as per census 2011). The rationale of selection of the project districts and blocks is based on specific parameters, such as (1) tribal concentration, (2) institutional mechanism for tribal development and governance (ITDA), (3) distribution of districts in different State Revenue Divisions (RDC Divisions), (4) forest (relatively high forest density) and industrial districts (prominent mining and industrial activities), (5) existence of different tribal groups, including PVTGs and (6) remoteness of the area (from state / district headquarters).

The study has been covering selected GPs and revenue villages of the ITDA block, which are selected based on certain parameters, such as (1) concentration of different tribal development schemes / programs; (2) overall expenditure incurred under different schemes in those area (based on availability of such information); (3) socio-economic status of the block in comparison to other blocks in the area; (4) remoteness and distance from the district / block headquarters; and (5) areas that have demonstrated different learning lessons on tribal development. As the focus of the study is to evaluate the impact of the TSP at sub-plan areas, the study has been focusing on both household and community level, including their institutions / organisations and facilities / services.

As per the approved plan, the study will cover three districts, one each from each revenue divisions. The districts selected for the study area (1) Mayurbhanj, (2) Sundargarh and (3) Nabarangpur. From each study district, two blocks will be selected based on tribal development and administration mechanism and the prevalence of tribal concentration (TSP Blocks Only). From each block, two GPs will be selected, following aforementioned parameters. So, the sample will cover a total of around 300 tribal households from 3 districts, 3 ITDAs, 6 blocks and 12 GPs.

Table 23: Overall Sample Frame of the Study

SN	Revenue Division (RD)	Name of the District	Name of the Block	ITDA	No. of GP	No. of Village	No. of HH	No. of FGD
1	Central RD	Mayurbhanj	Khunta	Kaptipada	02	04	35	04
			Bijatola	Rairangpur	02	04	35	04
			Thakurmunda	Karanjia	02	04	30	04
			Sub-Total	03	06	12	100	12
2	South RD	Nabarangpur	Raighar	Nabarangpur	02	04	35	04
			Umarkote	Nabarangpur	02	04	35	04
			Jharigaon	Nabarangpur	02	04	30	04
			Sub-Total	01	06	12	100	12
3	North RD	Sundargarh	Rajgangapur	Sundargarh	02	04	35	04
			Gurundia	Bonai	02	04	35	04
			Kutra	Sundargarh	02	04	30	04
			Sub-Total	02	06	12	100	12
	Total			06	18	36	300	36

Note: Out of 6 ITDAs, the study will cover 3 ITDAs, one from each study district, keeping the number of household sample constant.

Key Study Aspects:

Table 24: Key Study Aspects

Schemes Planned by Sectors (Education, Health, Livelihood) and Planning Process
Schemes Implemented by Sector / Sub-Sector
Individual Vs Group Approach of Implementation
Activities / Projects Planned Vs Activities / Projects Executed
Coverage of Target Groups
Benefits Harvested by Tribal / Tribal Households
Improvement in Income / expenditure and overall quality of life of Tribal

Sector Coverage under the Evaluation:

Table 25: Sectors Covered under the Study

SN	Sectors	Department covered
1	Assistance to SHG for Livelihood Enhancement & Micro Enterprise Promotion	OLM
2	Horticulture Plantation & maintenance	Horticulture
3	Vegetable cultivation	Horticulture
4	Agriculture activities	Agriculture
5	Sericulture	Sericulture
6	Poultry	Animal Husbandry
7	Wadi Plantation & maintenance	Horticulture
8	Rubber Plantation & Maintenance	Rubber board
9	NTFP Cluster Promotion	Forest
10	Lac Cultivation & Processing	Forest
11	Skill Development Training	OLM
12	Pre-Recruitment Training	OLM
13	Placement Linked Employability Training	OLM
14	Construction of Rural Haat/ Market Complex/ Godown/ Agro Mart	ITDA
15	Communication including small link roads, small bridges for access to	Road and Bridges/DRDA

	Livelihood Development Services & market linkages	
16	Establishment of Market yard for Tribal products	
17	Production Centre/ Processing Units	
18	Farm Mechanization	Agriculture/Horticulture
19	Irrigation facilities	Irrigation

Indicators of Assessment:

1. Institutional Mechanism for District. & Sub-District Level Planning [SCA to TSP Planning Process (Top-Down / Bottom-Up)];
2. Role of Gram Sabha / GP / Line Depts. / DPMC in Planning Process;
3. Critical Needs Identified and Process Adopted for need Identification;
4. Identified Critical Livelihood and Infrastructural Gap and Gap Bridging;
5. Process of Prioritisation and Selection / Finalisation of Interventions;
6. Allocation of Funds by Identified Areas of Interventions by Different Dept. (Key Dept. Only)
7. No. of Beneficiaries Covered and Beneficiary Selection Criteria;
8. Activities Implemented to Bridge the Development Gap (Socio-economic / Infrastructural);
9. Convergence Approach and its Benefits;
10. Improvement in Household Expenditure
11. Change in Community Development Landscape;
12. No. & Type of Infrastructure Created and its Utilisation.

Study Tools / Instruments:

As the study is based on both primarily and secondary sources of data, a detail data collection framework / checklist has been developed to capture required data / information from different sources. Structured schedules are designed to collect information from different sources / stakeholders. The study instruments that are designed and being administered are as follows.

1. Structured Schedule for Household Interview;
2. Structured Format for GP and Village Planning;
3. Structured Checklist for Secondary Information;

Table 26: Study Tools and Data Sources

Study Respondents & Tools	Respondent Category	Study Instruments / Tools
	ITDA	Secondary Data / Interview Checklist
	District Social Welfare Officer	Secondary Data / Checklist
	Tribal Households / Beneficiaries	Structured Schedule / Case Study Checklist
	Other Stakeholders	Semi-Structured Schedule / FGD / Checklist
	PRI Member	Secondary Data / Checklist
	Local Service Providers	Secondary Data / Checklist
Data Sources	Source Type	Data Type
	ITDA	Secondary Data
	District Social Welfare Officer	Secondary Data
	Tribal Households / Beneficiaries	Primary Data
	Other Stakeholders	Primary Data
	Local PRI	Secondary Data
	Local Service Providers (Education / Health etc.)	Secondary Data

Desk Review:

Before the inception of the field study, available secondary literature has been reviewed to understand the district, its demographic composition, socio-economic condition of people and related aspects. The budget allocation under different schemes / programs and TSP allocation is also reviewed as per the available information. It is planned to collect relevant secondary information from the Department in due course of the study for analysis, apart from collection of such data from the field.

Design the Study:

The overall concept of the study and its relevance in the state context was prepared and submitted to SCSTRTI for review and finalization. The concept covers the draft framework of the study, approach and methodology to be adopted, sample coverage and other details related to the study.

Study Design Presentation / Discussion with SCSTRTI:

Based on the objective of the study and taking note from reviewed literature, a draft study framework has been designed for discussion. The study framework was presented to the officials of SCSTRTI for feedback. A detail presentation was made before the key officials of SCSTRTI on approach and methodology. Suggestions of officials of SCSTRTI was noted down and incorporated in the framework.

Designing the Study Instruments:

For the collection of primary and secondary data, three different tools were designed for the collection of required data from household and village level. The designed draft tools are already submitted to SCSTRTI after due review and incorporation of their feedbacks.

Piloting of Tools:

All the designed tools have been piloted in one of the tribal dominated non-project district (Keonjhar) to understand the effectiveness and applicability of the mentioned aspects in the tool for collective information / data. During piloting of tools, it is observed that (1) some of the aspects mentioned in the tools were remained unanswered or collection of such data at the household level seems less feasible, (2) some questions which were kept intentionally at different places to cross check the responses may create problem for the researchers, (3) financial information related to the scheme benefit is less in the memory of the respondent, (4) problem of recalling the past inputs received and its direct / indirect benefits at the household level (higher degree of probing by giving sufficient time is essential). Secondly, coverage of a range of Departments in a study district will consume a major part of the scheduled time of the study. Based on the pilot field findings, it is decided to reduce the number and volume of the tools, making it more responsive and precise and also focus on a maximum of 2-3 districts and selected villages and households. Further, it has been decided to focus more on selected aspects in-depth rather than covering more geographical area and collecting less information.

Human Resource Planning and Recruitment:

For the recruitment of required human resource, detail human resource planning was done and SCSTRTI was requested to support in getting these resources. It is planned that the identified resources will be put to the study based on the requirement in different phases of the study. Accordingly, Research Associate and Research Assistant was recruited to monitor and conduct the study.

Orientation of the Study Team:

The recruited Research Associate and Assistant were oriented on the study aspects. The study objective, research design and tools were discussed with them in detail. Their suggestions were also incorporated in the overall study framework.

Consultation with ITDA / Line Dept.:

Consultation meetings are organized in Sundargarh and Nabarangpur district with the ITDA and some of the line departments, such as Department of Agriculture and Farmer Empowerment, Department of Water Resources, Social Welfare Dept. etc. to understand SCA to TSP allocation and availability of any funds to them under SCA to TSP. A format was distributed to the selected line departments to understand their physical and financial progress in last 3 years.

Field Assessment:

Field assessment conducted in Nabarangpur district to assess the impact of activities taken up under SCA to TSP by the ITDA. The study covered 9 sectors of investment, including sericulture, agriculture / horticulture, fishery, goat rearing etc. A total of 130 household samples covered under the study in the district from 6 blocks and about 13 GPs. For qualitative information collection, the study team conducted 7 number of FGDs in sample villages. Details of Coverage is presented in the table.

Secondary Data Collection:

During field assessment (primary data collection), emphasis was also given for the collection of secondary data from different sources. Apart from ITDA, secondary information was also collected from other line departments at the district level.

Progress Review:

Assessment of study progress was assessed in an internal staff review and team members were provided with required inputs to expedite the study maintaining the quality. It was planned to complete the field study of all project districts by the end of February 2019. The data quality was reviewed and observed gaps were suggested for bridging in other study districts will follow-up of completed district.

Completion of Field Assessment:

After the completion of field study in Nabarangpur and Sundargarh, field study was initiated in Mayurbhanj and by the time of reporting field study is completed with collection of required primary data. The ITDAs in the district were consulted in the process to understand the areas of interventions and financial progress under SCA to TSP. In total, the field study covered 8 ITDAs and 3 micro projects to assess the impact of the activities in Nabarangpur, Sundargarh and Mayurbhanj district.

Data Compilation and Data Entry:

After the completion of the field study, now the team is entering the collected primary data in the pre-designed data entry template for analysis. While entry of primary household level data will be completed in a weeks' time, case study and secondary data is under compilation and will be completed by 10th of March 2019.

Sample Coverage:

Table 27: Sample Coverage by Income Generating Activities

SN	Activity	Mayurbhanj	Nawarangpur	Sundargarh	Total
1	Backyard Poultry	15	15	15	45
2	Farm Mechanisation	20	-	15	35
3	Fishery	15	15	20	50
4	Goat Rearing	15	15	-	30
5	Lac Cultivation	20	20	-	40
6	Lemon Grass	15	-	-	15
7	Mushroom	-	15	-	15
8	Pump set / Irrigation	15	15	25	55
9	Rubber Plantation	50	-	-	50
10	Sericulture	20	-	30	50
11	Vegetable Cultivation	15	15	20	50
12	Wadi	15	15	15	45
	Total	215	125	140	480
	SHG	10	5	6	21
	Infrastructure Development	10	15	14	39
	Placement Linked Training	15	20	10	45
	Training Institutions	7	8	5	20
	ITDA	2	1	3	6
	Micro Projects	2		1	3
	Blocks	5	5	11	21

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Tribes Covered under the Study:

The study covered 12 tribes out of the total 62 tribes of the State in three study districts, seven ITDAs and in three micro projects. The tribal categories covered under the study are Kandha (27.5 percent), Santal (24.0 percent), Kissan (11.9 percent), Bhumij (8.8 percent), Paudi Bhuyan (5.4 percent), Munda (4.8 percent), Kolha (4.8 percent), Bathudi (4.6 percent), Lodha (3.1 percent), Mankirdia (3.1 percent), Oram (1.9 percent) and Ganda (0.2 percent). Distribution of households by tribes is presented in the diagram.

Chapter Two: Tribal Sub-Plan Approach and SCA to TSP

2.1 Tribal Sub-Plan Approach:

Component Plans have been designed for Scheduled Tribes in the 5th Five Year Plan. The Sub-Plan Approach mandated allocation of proportionate funds from the total plan ceiling pertaining to the Scheduled Tribes population of the country as a whole and state in specific. This plan also ensures non-divertibility and non-lapsability of the funds fixed for the development of STs and SCs. The Tribal Sub-Plan (TSP) approach envisages integrated development of the tribal areas, wherein all programmes, irrespective of their sources of funding operate in unison to achieve the common goal of bringing the area at par with the rest of the state and to improve the quality of life of the scheduled tribes. The original strategy was oriented towards taking-up family-oriented income generating schemes in the sphere of agriculture, horticulture, animal husbandry, elimination of exploitation and human resources development.

2.2 TSP Strategy and Objectives:

The Tribal Sub Plan strategy was developed by an Expert Committee set up by the Ministry of Education and Social Welfare in 1972 under the Chairmanship of Prof. S.C. Dube for the rapid socio-economic development of tribal people and was adopted for the first time in the Fifth Five Year Plan. The salient features are given Below.

1. Preparation of plan meant for the welfare and development of tribals within the ambit of a State or a UT plan is a part of the overall plan of a State or UT, and is therefore called a Sub-Plan;
2. The funds provided under the Tribal Sub-Plan have to be at least equal in proportion to the ST population of each State or UT;
3. Tribals and tribal areas of a State or a UT are given benefits under the TSP, in addition to what percolates from the overall Plan of a State/ UT;
4. The Sub-Plan should:
 - a. Identify the resources for TSP areas;
 - b. Prepare a broad policy framework for development; and,
 - c. Define a suitable administrative strategy for its implementation.

TSP concept is not applicable to the tribal majority States of Arunachal Pradesh, Meghalaya, Mizoram and Nagaland and in the UTs of Lakshadweep and Dadra & Nagar Haveli where tribals represent more than 60% of the population, since the Annual Plan in these States/ UTs is itself a Tribal Plan. The States are expected to provide under the TSP funds which are at least equal to the percentage of the tribal population to the total population in the State.

The objectives of adoption of TSP strategy can be categorised into two, i.e. (i) Socio- economic development of the Scheduled Tribes and their habitats, and (ii) Protection of tribals from exploitation. It is envisaged to enhance the level of development of the Scheduled Tribes by adopting a multi-pronged strategy so as to minimize the gap that exists between and Scheduled Tribes the rest of the society. Some of the broad objectives of the TSP approach, those have been adopted in Odisha during the 11th Plan period are as follows.

1. To provide access to resource, to enhance employment opportunities and bring the income level of the impoverished and asset less tribal people in the TSP area at par with the general population.

2. To ensure survival, protection and development of the Particularly Vulnerable Tribal Groups (PVTGs) and bring them at par with the rest of the ST population.
3. To strive and to secure for the tribal people their forest rights and for the development of forest dwellers and shifting cultivators.
4. To bridge the critical gaps in communication and such other economic infrastructure as well as the social infrastructure in the tribal areas to support the developmental activities of the tribals.
5. To provide the basic health services for improvement in health and nutritional standards of the Scheduled Tribes leading to enhancement of status of the health indicators of these sections, particularly reduction of IMR/MMR and control of malaria.
6. To bridge the literacy hiatus between the Scheduled Tribes and the general population with thrust on literacy and more specifically on primary education of the Scheduled Tribes. Low literacy and lack of primary education have resulted in inducing vulnerability among the tribal population.

2.2.1 Objective:

The objective of the Tribal Sub-Plan (TSP) is to bridge the gap between Scheduled Tribe (ST) population and others by accelerating the development of STs by securing to them:

1. Human resource development by enhancing their access to education and health services,
2. Enhanced quality of life by providing basic amenities in tribal areas/localities including housing;
3. Substantial reduction in poverty and unemployment, creation of productive assets and income generating opportunities
4. Enhanced capacity to avail opportunities, gain rights and entitlements and improved facilities at par with other areas, and
5. Protection against exploitation and oppression.

2.2.2 Formulation of TSP

The sub-plan / sub-scheme proposed to be formulated by the State, after estimating the gaps in the development of Scheduled Tribes, will prioritize their development needs through a consultative process, and shall formulate the TSP schemes and prepare the TSP within the State Annual Plan and Five-Year Plan.

In the formulation of TSP, the States/UTs shall proceed as follows:

1. TSP should be formulated at the District level by the District Planning and Monitoring Committee (DPMC).
2. The DPMC must reflect on the actual demand for the schemes/programmes that are to benefit STs, giving priority to equity aspect of their local aspirations and socio-economic backwardness.
3. The annual plan must be approved by the District Planning Committee so that it has the approval of the highest PRI.
4. In case of area-oriented schemes, a Block level approach should be adopted so as to facilitate the inclusion of ST habitations which remain uncovered under District level approach.
5. The TSP at ITDP/ ITDA/ District level should form the basis for the State TSP formulation and implementation. The requirement of funds across DPMC proposals put together would generate demand for TSP requirement at the State level.
6. In the States having Scheduled Areas, the Gram Sabhas should undertake an exercise to identify the areas needing priority attention in villages. These priority activities may form TSP at cluster/MADA/ ITDP/ITDA level.

7. To prepare a realistic budget, matching sectoral priorities and actual budgetary flow, the Nodal department should consult all related Departments to :
 - a. Identify priority-areas under TSP
 - b. Examine various on-going schemes and their budgetary allocations and
 - c. Suggest new schemes.
8. The approval of the Nodal Department is mandatory for introduction of new schemes.
9. Service delivery should be standardized and adhered to in time-bound manner.
10. To facilitate the synchronization of the gap filling role of SCA to TSP, gaps still remaining under the TSP financing pattern must be highlighted for each ITDPs / ITDAs / MADA/Cluster/State level at the time of TSP financial allocations.

2.3 Special Central Assistance (SCA) to Tribal Sub-Plan:

The Ministry of Tribal Affairs extends special central assistance to the TSP States and Union Territories and also to North Eastern States of Assam, Manipur and Tripura as an additional grant to these states/UTs. These grants are basically meant for family-oriented income generating scheme in various TSP areas to meet the gaps, which have not otherwise been taken care of by the State Plan. The GOI guidelines broadly lay down the following norms.

1. SCA is primarily meant for income generating family-oriented schemes and infrastructure incidental thereto (not more than 30% of the total outlay);
2. Wherever a scheme is provided for any Central Sector/Centrally Sponsored Schemes (CSS), SCA should not be utilised for the same. Rather, the allocations available under specific schemes can be availed of;
3. Major infrastructure development should be supplemented from the TSP flow, rather than being catered out SCA like roads, electrification etc.;
4. Schemes for funding demonstration units should not be financed out of SCA. Rather, the follow-up of demonstrations should be catered to looking to the Special disadvantages that the tribal funds himself or herself with;
5. Tribal populace below poverty line should alone be supported with SCA financed activities;
6. In any specific schematic projects financed by outside agencies, both national and international, normally a part of the outlay is proposed as State Government contribution. Such contribution should flow from normally State Plan and not out of SCA;
7. Wherever State Government Organizations like Tribal Development Cooperative Corporations (TDCCs) or Forest Development Corporations (FDCs) are dealing with schemes related to tribal welfare and development, the equity based should not be financed out of SCA, without prior approval of the GOI. This will lead to better monitoring of the concerned activities;
8. Specific sectors related to the Tribal need to be given a fillip by special schemes in the areas like sericulture, horticulture, etc out of SCA;
9. Wherever conjunctive flow of funds can be ensured from other ongoing development programmes, this must be dovetailed so as to have a better spatial and demographic coverage;

SCA is released for the economic development of the following

1. Integrated Tribal Development Agency / Project (IRDA / ITDP) area contiguous large area in which ST population is 50% or more out of a total population;
2. Modified Area Development Approach (MADA) pockets identification of pockets containing 50% or more of ST population out of a total population of 10000 and above;
3. Clusters-identified pockets containing 50% or more ST Population out of a total population of 5000;

4. Primitive Tribes-identified isolated communities among the STs characterised by the low rate of population, pre-agricultural level of technology and extremely low levels of literacy (so far 75 Primitive Tribal Groups (PTGs) have been identified;
5. Displaced tribal population outside (a), (b), (c) and (d) above;
6. Assistance for Margin Money Loan Programme (MMLP) for Tribal Finance and Development Corporations in the States to implement MMLP;
7. Special Projects-Specific Project proposals are also received and sanctioned.

So far as the procedural aspect is concerned, the guidelines are as follows:

1. SCA should be allocated by the State Governments/UT Administrations to the ITDPs and no part of SCA should be released to any department at the State level, Transfer of funds to implementing departments/agencies if required should be done by the ITDP to the corresponding officer of the implementing agency / line;
2. ITDP should prepare 5 year/Annual Plans depending upon the local parameters. Activities of, non-plan nature should not be catered to from SCA;
3. To fulfill the constitutional provisions, the schemes on which SCA is proposed to be utilized, should be specified in the annual TSPs of the States/UTs and administrative approval of the Government of India be obtained financial sanctions however need not be obtained on a case-by-case basis;
4. SCA is released to the States normally in three instalments and the entire amounts expected to be made available by the end of third quarter. The releases would be subject to the performance by the State Governments and the utilization of previously released funds.

Revised Guidelines for Implementation of Tribal Sub-Plan (TSP) by the States/UTs:

Objective:

SCA to TSP is 100.0 percent grant from Government of India (from 1977-78) to the States. It is charged to Consolidated Fund of India (except grants for NE States) and is an additive to State Plan funds and efforts for Tribal Development. TSP has following objectives to bridge the gap between Scheduled Tribe (ST) population and others by accelerating development of STs by ensuring:

1. Human resource development by enhancing their access to education and health services;
2. Enhanced quality of life by providing basic amenities in tribal areas/localities including housing;
3. Substantial reduction in poverty and unemployment, creation of productive assets and income generating opportunities;
4. Enhanced capacity to avail opportunities, gain rights and entitlements and improved facilities at par with other areas; and
5. Protection against exploitation and oppression.

SCA aims to address need of critical gaps, only as an additive to main vehicle, i.e., fund flow under TSP for tribal development. Fund flow under TSP consists of (a) State Plan Funds, and (b) Funds under Central Sector / Centrally Sponsored Schemes.

Role of Nodal Department:

At the State level the Tribal Welfare Department designated to be the nodal department authorized to lead the process of TSP development. The nodal department will work in close coordination with all relevant line departments. Directions of the Tribal Welfare Department must be made binding on the line departments. Secretary of the Nodal department will be Member-Secretary of the Executive Committee (EC), chaired by the Chief Secretary, which will be responsible for appraisal, of the perspective document as well as of the TSP schemes of different departments for inclusion in Annual TSP. The EC shall also be responsible for the monitoring and evaluation of the TSP Plans Minister of

the Nodal Department will be Vice-chairman of the Apex Level Committee/Tribal Advisory Council, chaired by Chief Minister that will approve the Annual Tribal Sub-Plan. The Nodal Department shall:

1. Identify socio-economic indicators to highlight development deficits of ST population;
2. Conduct a critical gap analysis to assess the deprivation of STs on identified socioeconomic parameters;
3. Identify priority-areas under TSP in consultation with line departments;
4. Prepare a comprehensive perspective TSP and Prepare Annual TSP documents taking into account various sources of funding;
5. Examine various on-going schemes and their budgetary allocations and suggest new schemes on the basis of assessment and discussions with the concerned line departments;
6. Suggest strategic measures, set target-oriented specific socio-economic indicators for various programmes/schemes in consultation with the line departments;
7. Grant approval for introduction of new schemes. viii. Grant approval for re-appropriation of TSP funds from one department to another after mid-year review;
8. Undertake scrutiny of the schemes/programmes submitted by the line departments to ensure that (a) concerned departments are providing for STs in their budget and plans funds and guidelines to the same extent as is available to other populations, in proportion to their requirement, (b) that only those schemes/programmes, that full-fill the criteria of securing direct benefits to ST individuals, households and localities and are aligned to the strategic objectives of TSP are included in the TSP. (c) Service delivery standards under various departmental schemes are established and adhered to;
9. Submit such proposals, with their evaluation, to the Executive Committee for appraisal;
10. Design a comprehensive monitoring framework with well-defined indicators;
11. Co-ordinate progress of various schemes/ programmes. xiii. Device a mechanism for speedy transfer of funds directly to field formations under intimation to District Headquarters, instead of being routed through District Headquarters, by enforcing on them a system of accountability for effective utilization of the funds;
12. Conduct evaluation to assess the impact of schemes implemented under TSP, on the socioeconomic conditions of STs on regular basis;
13. Ensure the follow up of the schemes implemented and maintenance of proper records on assets created under TSP in District/Block etc.;
14. Ensure that service delivery is standardized and adhered to in time-bound manner;
15. Ensure transparency and accountability at all levels in the implementation of TSP schemes and dissemination of information electronically relating to schemes/programmes, allocation and expenditure along with physical targets and achievements in respect of each department and placing this information in public domain;
16. Ensure that all the institutional mechanisms are established at various levels, i.e State, District, Block, Gram Sabha etc., as laid down in the guidelines;
17. Ensure that the gaps still remaining under the TSP financing pattern are highlighted for each ITDPs/ITDAs/MADA/Cluster/State level at the time of TSP financial allocations so as to facilitate the synchronization of the gap filling role of the Ministry's scheme SCA to TSP with the gaps identified in TSP;
18. Ensure that time bound action is initiated by various departments to meet the requirements of these guidelines.

Coverage of SCA to TSP:

SCA to TSP is provided to 23 States that are eligible to receive grants under this programme who have notified STs (excluding tribal majority States). These States are (1) Andhra Pradesh, (2) Assam, (3) Bihar, (4) Chhattisgarh, (5) Goa, (6) Gujarat, (7) Himachal Pradesh, (8) Jammu & Kashmir, (9) Jharkhand, (10) Karnataka, (11) Kerala, (12) Madhya Pradesh, (13) Maharashtra, (14) Manipur, (15) Odisha, (16) Rajasthan, (17) Sikkim, (18) Tamil Nadu, (19) Telangana, (20) Tripura, (21) Uttar Pradesh, (22) Uttarakhand and (23) West Bengal. Tribal majority States of Arunachal Pradesh,

Meghalaya, Mizoram, Nagaland and Union Territories are not covered under SCA to TSP. As it is stipulated, SCA is to be utilized for economic development of following:

Integrated Tribal Development Agency / Project (ITDA / ITDP): It is an area of size of one or more development blocks in which ST population is 50% or more of total population of such blocks. Complete development block / panchayat samiti is the minimum constituent unit of an ITDP / ITDA.

Modified Area Development Approach (MADA): These are identified pockets (consisting of one or more revenue villages) in contiguous areas with a concentration of tribals 50% or more within total population of 10, 000 or more in such area.

Clusters: These are identified pockets (with one or more revenue village(s) being constituent units) with a concentration of tribals 50% or more within total population of 5,000 or more in such area. In case of both MADA and Cluster pockets, complete revenue village(s) is constituent unit.

Particularly Vulnerable Tribal Groups (PVTGs): Identified isolated communities among tribals characterized by a stagnant or declining rate of population growth, pre-agricultural level of technology and extremely low levels of literacy.

Dispersed Tribal: Dispersed tribal population living outside ITDA, MADA, Clusters and micro projects (PVTGs).

Perspective Document and Annual Plans:

The States/UTs shall prepare a comprehensive perspective TSP document, taking into account all available sources of funding, to serve as a road map for implementation. Funds available for TSP under Central Sector and Centrally Sponsored Schemes as well as State Plans and Central Plans shall be pooled for the purposes of planning for TSP. This perspective document shall, inter-alia, reflect on:

1. Strategy to address the gaps and deficits in terms of relevant schemes taking into consideration the strengths of the tribal community, allocation of funds, fixing physical targets to address inter-tribal and inter-habitation variance /inequalities in their socioeconomic status and equity-based approach. The needs of the Particularly Vulnerable Tribal Groups (PVTGs) will be accorded priority with focused approach and special attention to improve their conditions of food security, health and education for mainstreaming these sections.
2. The strategy should define priorities for the TSP with a focus on long-term sustained gains in relation to area development.
3. Likely flow of benefits, in financial as well as physical terms, and specific steps required for accessing benefits by the tribals from each of the national (and State) level Flagship Schemes.
4. Role and contribution of NSTFDC and State level STFDC and TRIFED etc.
5. Critical evaluation to assess whether the ongoing schemes/ programmes have the potential to accelerate the pace of development of STs and result in bridging the gap in development in a time-bound manner.
6. Mechanisms/surveillance system to ensure utilization of funds meant for the intended purpose.
7. Evaluation as to how TSP has and is likely to help the STs in respect of the following key areas concerning STs: a) Prevention of land alienation and indebtedness b) Access and control over forest and effective implementation of FRA and PESA, wherever applicable c) Involuntary displacement due to development projects, proper rehabilitation
8. Outcome Analysis with critical evaluation of implementation strategies in terms of effectiveness of schemes/programmes.

The States/UTs shall break up the Perspective Plan into doable annual plans and accordingly prepare annual plan documents taking into account all available funds during the year, including Centrally Sponsored Schemes.

Selection of schemes/programmes:

The TSP should include only such existing schemes (including additional components to existing schemes) or new proposed schemes, which full-fill following criterion:

1. Provide clearly defined direct and quantifiable benefits to ST individuals or Scheduled Tribe households or Tribal areas the benefit provided to the STs along-with other people at a particular time may not be treated as direct benefit under TSP.
2. Create the potential to accelerate the pace of the development of STs and to bridge the gaps in socio-economic development indicators between STs and other sections of the society
3. The focus of such schemes should be on education, income generation, improving access to irrigated land, entrepreneurship, employment and skill development projects and access to basic amenities.
4. Have in-built mechanisms/surveillance system to ensure utilization of funds meant for the intended purpose.

Earmarking/ Allocation of funds:

Nodal Departments shall ensure that concerned departments are providing for STs in their budget and plans funds and guidelines to the same extent as is available to other populations, in proportion to their requirement. Approval of Planning Commission may not be accorded to State Plans if funds are not earmarked under TSP, in proportion to the population of STs in State. State governments should ensure that TSP funds are placed under the control of the Nodal Department. Funds shall be earmarked/ allocated to the TSP subject to the following conditions:

1. The expenditure under TSP is meant only for filling the development deficit, as an additional financial support, over and above the normal provisions which should be available to STs, like others, in various schemes, including in flagship programmes.
2. The funds under TSP are earmarked from the total plan outlays (not excluding the investments under Externally Aided Projects (EAPs) and any other scheme), not less than the population proportion of STs in State as per 2011 Census and in tune with problem share of the ST population.
3. The funds should be earmarked well in advance, at least six months, prior to commencement of the financial year. The size of the TSP fund thus earmarked shall be communicated to all departments for commencing process of preparation of TSP of each department.
4. There shall not be any notional allocations, that don't have flows/schemes directly benefiting STs.
5. Special attention shall be paid to allocate more funds to STs residing in the Scheduled Areas.
6. Due to physical remoteness and difficult terrain of tribal habitations, financial norms may need to be higher in tribal areas as compared to general areas. This should be ensured so that service standards in ST areas are not compromised.
7. Every State/UT shall undertake skill mapping and allocate funds under TSP for skill development of tribal youth and set targets in the light of the monitorable targets under poverty and employment in the 12th Five Year Plan. The target under 12th Five Year Plan is to generate 50 million new work opportunities through skill development.
8. The synergy of inter-sectoral programmes and an integrated approach/convergence with other schemes/programmes are ensured for efficient utilization of resources.
9. The departments, in consultation with Nodal Department, shall prepare the TSP to promote equity in development among various social groups within STs.
10. To ensure non-divertibility, funds under TSP shall be earmarked under a separate Minor Head below the functional major Head/Sub-Major Heads
11. The TSP funds, under Minor Head shall comprise sector-wise and scheme-wise allocations and actual expenditures incurred

12. To ensure effective and optimum use of resources, the re –appropriation of TSP funds from one Department to another Department should be facilitated after mid-year review. Appropriation of TSP funds from one Department to another Department shall be with the approval of the Nodal Department.
13. The State government may device a mechanism for speedy transfer of funds directly to field formations under intimation to District Headquarters, instead of being routed through District Headquarters, by enforcing on them a system of accountability for effective utilization of the funds.

Norms for allocation

There should be no division of the total plan outlay into so-called divisible and non-divisible components, with the TSP being confined to the divisible outlays alone. Norms to be followed for allocation of the cost of a scheme to the Tribal Sub-Plan are given in table below.

Table 28: Norms for Allocation of Cost of a Scheme to TSP

SN	Type of Scheme	Cost to be allocated and accounted for under TSP
1	Exclusively for ST individuals or ST households,	100%
2	For Scheduled Tribes habitations	100%
3	Benefiting mixed habitations	In proportion of the population of the STs in the habitation.
4	General schemes benefiting ST individuals or ST households, along with others	In proportion to the Scheduled Tribe beneficiaries actually covered.
5	Non-divisible infrastructure works	Estimates of likely benefits that may flow to STs may be shown as likely flow to TSP.
6	For area-based development projects / activities	25% in respect of the States/UTs having up to 10% ST population.
7	Reimbursement of fee for higher education in self-financed private institution	To be fully met from TSP fund

The schemes that follow other norms shall be recommended by concerned agency in the departments and aggregated for placing before the Minister, Tribal Welfare Department of State for consideration and approval as a pre-budget process.

Establishing Standards for Service Delivery

For the TSP to succeed in its avowed objective of filling critical gaps in the development of STs within a defined time frame, it is necessary that minimum acceptable standards of service delivery in each are established and enforced across sectors, across geographies. At present the rigor and quality of existing service delivery varies greatly from State to State and also within States, between districts/ ITDPs etc. The Nodal department must ensure that all line departments establish these standards of service delivery and strictly monitor their enforcement. The Nodal Department, in concert with the concerned line department, must ensure that the minimum standard of service delivery is maintained at all levels for activities undertaken through TSP. For example, in case of education at elementary level the minimum standards as stipulated under the RTE Act should be the benchmark. For Secondary level and above, the State specific norms are to be followed. The efforts should be made to improve upon the existing standards through innovative exemplar practices. The standards are to be maintained in infrastructure development, teacher training, Meals, support to students and support to teachers.

Similarly, for health sector, it must be ensured that the services being delivered through the TSP are meeting standard requirement and not inferior to similar services being provided to other categories. It is also emphasised that the children in Ashram Schools and Hostels are provided with adequately

diverse diet rich in essential nutrients with the appropriate frequency to ensure their optimal physical growth and cognitive development. A periodic health check-up of these children is conducted as per the guidelines of NRHM.

A robust monitoring system to monitor the standards of service delivery is therefore, a non-negotiable requirement. States/UTs must put in place a system for regular monitoring of standards of service delivery.

Formulation of TSP

The State, after estimating the gaps in the development of Scheduled Tribes, will prioritize their development needs through a consultative process, and shall formulate the TSP schemes and prepare the TSP within the State Annual Plan and Five-Year Plan. In the formulation of TSP, the States/UTs shall proceed as follows:

1. TSP should be formulated at the District level by the District Planning and Monitoring Committee (DPMC);
2. The DPMC must reflect on the actual demand for the schemes/programmes that are to benefit STs, giving priority to equity aspect of their local aspirations and socio-economic backwardness;
3. The annual plan must be approved by the District Planning Committee so that it has the approval of the highest PRI;
4. In case of area-oriented schemes, a Block level approach should be adopted so as to facilitate the inclusion of ST habitations which remain uncovered under District level approach;
5. The TSP at ITDP/ ITDA/ District level should form the basis for the State TSP formulation and implementation. The requirement of funds across DPMC proposals put together would generate demand for TSP requirement at the State level;
6. In the States having Scheduled Areas, the Gram Sabhas should undertake an exercise to identify the areas needing priority attention in villages. These priority activities may form TSP at cluster/MADA/ ITDP/ITDA level;
7. To prepare a realistic budget, matching sectoral priorities and actual;
8. budgetary flow, the Nodal department should consult all related Departments to:
 - a. identify priority-areas under TSP;
 - b. examine various on-going schemes and their budgetary allocations; and
 - c. suggest new schemes.
9. The approval of the Nodal Department is mandatory for introduction of new schemes;
10. Service delivery should be standardized and adhered to in time-bound manner;
11. To facilitate the synchronization of the gap filling role of SCA to TSP, gaps still remaining under the TSP financing pattern must be highlighted for each ITDPs/ITDAs/MADA/Cluster/State level at the time of TSP financial allocations;

Special Central Assistance (SCA) to Tribal Sub-Plan (TSP):

The Special Central Assistance (SCA) is being provided by the Ministry of Tribal Affairs (MoTA) to the State Government as an additive to the state Tribal Sub-Plan (TSP) for all round socio-economic development of tribal people. About 44.70 percent area of Odisha has been notified as scheduled area. It extends over 119 blocks in thirteen districts which covers ST population (about 68 percent) of the total tribal population of the State. The SCA Funds are provided to the ITDA, Micro projects and MADA/ Cluster Blocks for implementation of Income Generation Scheme (IGS) and Infrastructure Development Scheme (IDS) in the ratio of 70:30. A portion of SCA is allocated to OSFDC for implementation of Dispersal Tribal Development Programme (DTDP). During 2016-17, 118.06 crore was received and spent as against the budget provision of 126.95 crore under SCA to TSP.

Table 29: Funds Released & Utilised under SCA to TSS and Article 275 (1)

Year	SCA to TSP	Article 275 (1)
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	Fund Released	Expenditure	Beneficiary	Works completed	Infrastructure	EMRS	Total Fund Released	Total Exp	No of Works Completed
2010-11	123.93	123.93	82775	1205	64.66	31.78	96.44	96.44	955
2011-12	144.49	144.49	101038	1038	78.34	35.13	113.47	113.47	1625
2012-13	133.21	133.21	78212	1768	-	-	112.84	112.84	1131
2013-14	133.21	133.21	94374	1599	119.99	35.01	155.00	114.63	1437
2014-15	128.66	64.70	31753	625	68.18	10.39	79.57	70.30	858
2015-16	147.29	133.52	84274	1002	72.21	79.79	152.00	137.61	1376
2016-17	118.06	34.76	18664	211	52.05	67.49	119.54	20.78	1.79

Source: Odisha Economic Survey 2017-18; Govt. of Odisha Annual Activity Report, 2016-17

Criteria- Inter-State Allocation

From the year 2016-17 onwards, allocation of funds among 23 states under SCA to TSP has been made in following manner:

1. 50% based on State ST population,
2. 25% based on tribal areas covered under ITDPs / ITDAs. A few States where no ITDP / ITDA has been constituted, area of concerned Block / Panchayat Samiti (Middle level PRI), where ST population is 50% or more have been taken into account. From 2017-18 and onwards, above tribal area would include geographical area of (1) ITDPs / ITDAs, (2) MADA Pockets, and (3) Cluster Pockets (As per 2011 Census).
3. Remaining 25% of allocation would be as per an analysis of outcome-based performance of concerned States.

Inter-District Allocation Criteria

1. Inter-District allocation of SCA funds shall be (i) $66^{2/3}$ % on population and (ii) $33^{1/3}$ % on Area. (i.e., on 2:1 proportion based on population: area). Only such areas are taken into account where ST population is more than 50% of total population of such District / Sub-Division / Block / revenue village.
2. As per the norm, districts having 25% or more STs (of district population) shall be focussed, for implementation of tribal development programmes. This also includes districts, affected by Left Wing Extremism (LWE) activities (where ST population is even less than 25%). In case of such LWE affected areas, tribal inhabited areas are normally localized in a particular part of district. Area of such Sub-Division / Block / Village can be taken into account for area calculation.
3. All MADA pockets / clusters are also to be covered under some or other development programmes within every cycle of three years. (Starting from 2016-17)
4. Fund allocation should be $\pm 10.0\%$ of corresponding ST population share. That is, if a community counts for 20% of State ST population, then programmes should be for 18 % - 22 % band of total fund allocation for such a community. If this community is more backward, then an increased allocation may be justified based on human development index parameters. In any case, if the allocation works out to lower than 18%, then total State allocation would be reduced accordingly.

Intra-State Prioritization and Allocation:

Table 30: Activity Prioritization under TSP

SN	Activity	Fund Allocation (%)
1	Education	40-50%
2	Health	10- 15%
3	Agriculture, Horticulture, Animal Husbandry (AH), Fisheries, Dairy & others in Primary Sector	20-30%

4	Other income generating schemes to augment Tribal household economy	10- 15%
5	Administrative structure (incl. manpower) / Institutional framework & Research studies	< 5- 10%
	Total	100.0 %

1. Conjunctural use with dovetailing of financial resources from ongoing activities of line departments must be resorted, to ensure larger spatial and higher demographic coverage (under TSP flow concept or funds especially available under Central Sector / Centrally Sponsored Schemes.)
2. Cluster (multiple beneficiaries in one location) approach on saturation (all beneficiaries of an identified area are covered / benefitted by Government activity / programmes) basis can be an excellent modus operandi, especially for districts with $\geq 50\%$ and even for $\geq 25\%$ ST population.
3. Use of institutional finance should also be optimized. Projects modelled on Public- Private (Sector) Participation (PPP mode) can go a long way especially for Education and Health sectors and other human resource development programmes.
4. Primarily, activities of non-recurring nature (including infrastructure and equipment with at least three years life time) shall be supported under SCA to TSP. Fund for recurring component of such programmes / schemes shall be borne by State funds / TSP allocation. An illustrative list of activities for SCA funding is presented in the table below.
5. Communities with similar livelihood pattern / traditional occupation (i.e., income source same for tribal household economy) should be clubbed together for planning under SCA to TSP.
6. ST household, especially with entitled land right under FRA Act, 2006 should be covered by programmes, activities; especially designed for them. So also, should be coverage of women Self Help Groups (SHGs) beneficiaries.
7. Major infrastructure sector, like road connectivity, electricity, drinking water, major irrigation projects, housing would not be funded under SCA as substantive part of State Plan funds go into these programmes.

Table 31: List of Activities for SCA Funding (Illustrative)

SN	Category	Issues/Activities
1	Education (Inconjunction with SSA / RMSA funds)	<ol style="list-style-type: none"> 1. Addition to existing building infrastructure of Secondary I Sr Secondary School (Even with upgradation of Primary / Upper Primary School) (Repair and Maintenance of existing buildings not covered) 2. Construction of co-ed residential schools. 3. Construction of Girls and Boys Hostels. 4. Use of solar energy in residential schools and Hostels. 5. Vocational training centers (including for modern sector of economy like IT, green energy etc.) in residential school (Preferably at Sr Secondary level) 6. IT based education facilities I equipment (For Sr Secondary level) 7. Special measures for identification and nurturing I promotion of talented tribal students. 8. Recurring cost for 3 to 5 years for special efforts/innovative measures like: (a) Introduction of English as school teaching medium, (b) Special scholarships for admission in best public schools in States for nurturing of tribal talents, (c) Soft skill improvement measures in schools (after normal academic teaching hours) and (d) Super 30 type of specialized training / coaching facilities.
2.	Health	<ol style="list-style-type: none"> 1. Addition to I Strengthening of building infrastructure of CHC I PHC 2. Equipment with minimum three years life period.

		<ol style="list-style-type: none"> 3. Mobile Dispensary in remote locations. 4. Conduct of screening for acute health problems like Sickle Cell Anemia among Tribal Students and provision of health cards. 5. Focus on eradication of prevalent endemic health problems like Malaria, Leprosy, TB etc. 6. Training of tribal students in paramedical courses.
3	Data Support for Strengthening Entitlement and Land Rights	<ol style="list-style-type: none"> 1. FRA entitlements 2. Data compilation 3. MFP Plantation and other measures for Income-support 4. Land alienation - Data Base 5. Assistance to STs for land development and increasing productivity 6. Efforts for Resettlement and Rehabilitation of Project Displaced ST households
4	Agriculture, Horticulture, Animal Husbandry (AH), Fisheries, Dairy & others in Primary Sector	<p>Agriculture:</p> <ol style="list-style-type: none"> 1. Adoption and extension of commercial and traditional crops to augment tribal household income; 2. Soil health management and moisture / water conservation measures (including dug-well, tube well, pump-set etc.); 3. Promotion of organic farming; 4. Tribal area specific technical support through KVKs, and other Agricultural Research Organizations (including strengthening of Extension mechanism); <p>Horticulture:</p> <ol style="list-style-type: none"> 1. Setting up nurseries of fruits, flowers, vegetables including poly house, greenhouse farming. 2. Practice and promotion of growing horticultural products with forward linkages like warehousing, processing etc. 3. Commercial apiculture through tribal beneficiaries. 4. Promotion of aromatic and medicinal plants. 5. Use of Drip irrigation and other modern techniques. <p>Dairy Development:</p> <ol style="list-style-type: none"> 1. Cooperative based (or other) dairy development including processing and chilling infrastructure to ensure better and reasonable price to tribal households. 2. Veterinary services including building infrastructure and equipment. 3. Improvement of local breed for high yield output through AI. (artificial insemination) 4. Providing training and assistance with backward and forward linkages for self-employment. <p>Poulties & Fisheries:</p> <ol style="list-style-type: none"> 1. Commercial fisheries through tribal beneficiaries including production of fries and fingerlings with proper linkages to market value chain. (Including training facilities) 2. Promotion of backyard fisheries. 3. Promotion of poultry as income generating activity with backward and forward linkages.
5	Other income generating schemes to augment Tribal household economy.	<ol style="list-style-type: none"> 1. Establishment of Agro I forest I natural resource-based micro I village industries through training of Tribal Cooperatives I SHGs I individual entrepreneurs. 2. Augmentation of existing infrastructure (including design development etc.) for tribal products like textiles, handicrafts, sericulture products for better income to tribal artisans. 3. Warehousing and food processing facilities for ensuring increased life to tribal products. 4. Village tourism, Eco-tourism, Adventure tourism 5. Promotion and skill development in traditional tribal cultural attributes like tribal jewellery, painting, dance forms, music and culinary art etc.

		6. Any other activity with assured self-employment I placement linkages.
6	Administrative I institutional framework and Research Studies	<ol style="list-style-type: none"> 1. Strengthening of TRI (with building infrastructure I equipment and IT support) 2. Preparation of field manual in regional languages for effective implementation. 3. Conducting research on specific tribal issues. 4. IT equipment support for TSP monitoring.
7	Skill Development (in conjunction with TSP flow under ongoing schemes of Gol I State Govt. Departments I PSEs I Authorities established by Govt.)	<ol style="list-style-type: none"> 1. To focus on women centric activities / projects with major sanctioned amount for female beneficiaries 2. Provision for additional units I classes in special vocational training courses in govt. institutions especially MSME tool rooms (Also for school dropouts) 3. Provision for additional seats to ST candidates in regular skill development courses with assured employment I self-employment.
8	Promotion of sports & games (in conjunction with TSP flow of different Gol I State Govt. Programmes)	<ol style="list-style-type: none"> 1. Provision of sports facilities in tribal schools. 2. Construction of Sports Complex, Mini Stadium etc. 3. Organizing sports events with due participation of tribal youth

Chapter Three: Focused Area Development Programme (FADP):

The livelihood of the Scheduled Tribe (ST) community mostly depends on forest, agriculture and animal husbandry. Tradition approach and practices, poor management, less effective local institutions in strengthening tribal livelihoods, lack of required forward and backward linkages in livelihood area and persisting gap in establishing an end-to-end solution in the value chain make livelihood of tribes more vulnerable to various shocks and risks. Livelihood developmental interventions in Tribal Sub-Plan area under SCA are primarily being taken-up by Integrated Tribal Development Agencies (ITDAs) and related institutions of the Nodal Department (ST & SC Development Dept.). The ITDAs have identified locally suitable interventions, broadly termed as “Focus Area Development Programmes” (FADP) that make use of available resources and capacities of local tribal communities. The FADPs are expected to promote usage of alternative technologies and have the potential to make sustainable socio-economic impact in the lives of tribal population.

The Focus Area Development Programme has been implemented by 13 ITDAs of the state with funds being dovetailed from various sources like SCA to TSP & Article 275(1) (of ST & SC Development Dept., Govt. of Odisha), MGNREGS (of Panchayati Raj Dept., Govt. of Odisha), National Horticulture Mission (NHM) and other Depts./ Donors. It is a convergence mode of operation where all concerned departments join their effort to ensure improvement of livelihood of Scheduled Tribes. The “Odisha Tribal Development Society” (OTDS) under the administrative control of ST & SC Dev. Dept., Govt. of Odisha is implementing “Focus Area Development Programme” (FADP) for livelihood enhancement of Scheduled Tribe families in the Tribal Sub-Plan blocks of the State.

3.1 Objectives of FADP:

Development of a decadal perspective plan for each ITDA for supporting ST families with viable alternative livelihoods has been the base for the implementation of FADP. The plan covers, Identification of specific Livelihood Focus Areas including land and non-land-based options suitable to local conditions, available resources and capacities of the tribal communities. Specific objectives of FADP are;

1. Ensure sustainable livelihoods of ST families through land and non-land-based livelihood activities;
2. Develop suitable infrastructure so as to improve the standard of living and facilitate incremental results in their livelihoods;

3. Develop backward & forward linkages and strengthen the local institutions; and
4. Improve the governance system in the tribal villages by strengthening the Community Institutions.

3.2 Process Approach:

Under FADP, a decadal growth plan is proposed to be prepared at each ITDA level in a participatory manner, after detail analysis of the sector / sub-sector potential. Currently prepared decadal Perspective Plan for FADP aims to cover about 5.12 lakh tribal families with tentative budget of Rs.1569.70 crores. Convergence of Special Central Assistance to Tribal Sub-Plan (SCA to TSP) and Article-275(1) funds with national/state flagship schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), National Horticulture Mission (NHM), Rastriya Krishi Vikas Yojana (RKVY), Biju Krushak Vikas Yojana (BKVY) etc. has been proposed in this Plan. Overall, it is convergence mode of strengthening the livelihood of the tribals.

In each ITDA, one Facilitating NGO (FNGO) has been selected to provide handholding support for community mobilisation, participatory planning, project formulation & implementation of projects under FADP. The FNGOs, who have been engaged in ITDAs, are preparing Annual Budgeted Action Plan (ABAP), Detailed Project Report (DPR), and perspective plan on livelihood interventions for the ITDA. The sectors / sub-sectors that have been identified for intervention under FADP are as below.

3.3 Key Interventions:

Each ITDA has identified one or two focus areas that are scalable in nature, likely to create significant socio-economic impact and promote economies of scale for product aggregation, value addition and marketing. A total of 17 sectoral / sub-sectoral interventions, taken up under FADP, are discussed below.

Table 32: FADP Intervention Areas

Sl. No.	Interventions	Sl. No.	Interventions
1	WADI/Horticulture Plantation	10	NTFP Collection & Marketing
2	Improved Agriculture	11	Production/Processing Centres
3	Vegetable Cultivation	12	Poultry Rearing
4	Lac Cultivation & Processing	13	Dairy
5	Rubber Plantation	14	Fishery
6	Sericulture	15	Apiculture
7	Farm Mechanisation	16	Micro Enterprise Development
8	Coffee Plantation	17	Goat Rearing
9	Skill Training Programme for Tribal Youth		

Table 33: List of Focused Area Development Programme by ITDA, Odisha

SN	Name of FADP	No. of ITDAs	Name of ITDA
1	Wadi/ Horticulture	16	Baripada, Kaptipada, Karanjia, Rairangpur, Keonjhar, Champua, Paralakhemundi, Th. Rampur, Phulbani, Baliguda, Rayagada, Gunupur, Koraput, Jeypore, Nawarangpur & Malkangiri
2	Poultry	12	Nilagiri, Sundergarh, Bonai, Kuchinda, Paralakhemundi, Phulbani, Baliguda, Rayagada, Gunupur, Koraput, Jeypore & Nawarangpur
3	Goat rearing	8	Kuchinda, Keonjhar, Champua, Baliguda, Gunupur, Koraput, Nawarangpur & Malkangiri
4	Rubber Cultivation	5	Baripada, Kaptipada, Karanjia, Rairangpur & Paralakhemundi

5	Coffee Cultivation	2	Rayagada & Koraput
6	Lac Cultivation & Processing	3	Nilagiri, Bonai & Nawarangpur
7	Improved Vegetable Cultivation	9	Panposh, Kuchinda, Paralakhemundi, Baliguda, Gunupur, Koraput, Nawarangpur, Th. Rampur & Keonjhar
8	Farm Mechanisation	7	Paralakhemundi, Th. Rampur, Baliguda, Gunupur, Koraput, Nawarangpur & Malkangiri
9	NTFP Collection & Mktg.	9	Kaptipada, Sundergarh, Panposh, Bonai, Keonjhar, Champua, Paralakhemundi, Baliguda & Rayagada
10	Improved Agriculture	6	Nilagiri, Panposh, Keonjhar, Phulbani, Baliguda & Gunupur
11	Fishery	11	Baripada, Kaptipada, Sundergarh, Panposh, Keonjhar, Th. Rampur, Phulbani, Koraput, Jeypore, Nawarangpur & Malkangiri
12	Micro Enterprises (Non-farm; SAP Processing, Fruit & Vegetable Aggregation / Processing, NTFP Value Addition)		Selected Clusters of 22 ITDAs
13	Handloom & Handicrafts		Selected Clusters of 22 ITDAs

3.4 Institutional Structure:

The Odisha Tribal Development Society (OTDS), a society promoted by SC & ST Development Department of Government of Odisha has been facilitating implementation of FADP in tribal development and administration areas. OTDS is a registered body under societies registration act, 1860. The society is having technical experts who facilitate in annual plan preparation and its consolidation, provide support in implementation and monitoring of the FADPs in ITDAs and facilitate convergence initiatives.

At the ITDA level, there has been project manager and subject matter specialists (21 project managers and 9 subject matter specialists were there by 2017-18) who provide techno managerial support in project formulation, implementation, convergence, monitoring and documentation. In each ITDA, one FNGO has been selected to provide hand holding support for community mobilization, participatory formulation and implementation of projects under FADP.

Interventions:

Each ITDA has identified one or two focused areas that are scalable in nature, likely to create significant socio-economic impact and promote economies of scale for product aggregation, value addition and marketing.

WADI: The project is being implemented in ITDAs, namely Champua, Koraput, Jeypore, Gunupur, Th. Rampur, Baliguda, Nawarangpur, Sundargarh and paralakhemundi. Irrigation sources, such as dug well, shallow tube well, bore well, lift irrigation, drip irrigation have been created in convergence with Jalanidhi, Biju Krushak Vikas Yojana-Deep Bore Well Scheme, NHM etc.

Lac Cultivation and Processing: This project is being implemented in Nilgiri, Nawarangpur, Bonai and Bapipada ITDAs. Lac cultivation is being done on Kusum trees as well as by starting Semialata plantation by tribal farmers under SCA to TSS.

Rubber Plantation: This activity is taken up in Baripada, Kaptipada, Karanjia, Rairangpur and Paralakhemundi ITDAs, benefitting tribal farmers. Inter-cropping of pulses, besides cereals has been taken up and irrigation potentials has also been created under SCA to TSP and MGNREGS respectively.

Poultry Rearing: Poultry rearing has been taken up in ITDAs, namely Nilgiri, Baripada, Kaptipada, Karanjia, Rairangpur, Keonjhar, Kuchinda, Bonai, Panposh, SUNDargarh, Koraput, Jeypore, Paralakhemundi, Raygada, Gunpur, Nawarangpur, Malkangiri, Baliguda and Phulbani. Two models of poultry under this intervention are taken up, i.e., (1) in the first model, mother chick units (MCUs) are linked with backyard units. Birds of Banaraj and Kuroiler bred are mostly reared in this model. In the MCUs, 600-1000 nos. of one-day old chicks are reared for 4 weeks by individual tribal families / tribal women SHGs. Then, 30 nos. of such 4 weeks old chicks are reared in night shelters in the backyards by tribal families; (2) In Broiler / Layer units, 400-600 birds area reared by individual tribal families.

Backward linkages in this intervention includes vaccination of birds, timely availability of chicks, feed supplements etc. Linkage with veterinary dept. is being done to ensure vaccination. Besides, a poultry pellet feed mill is being established in Jeypore with technical support from Animal Resource Development Dept. The tribal families engaged in poultry rearing are tagged with local poultry cooperatives for marketing under SCA to TSS.

Farm Mechanization: Farm mechanization has been promoted under SCA to TSS to support tribal farmers. Farm machineries such as pump sets, power tillers, levelers, paddy threshers etc. has been provided where subsidy has been leveraged under “State Agriculture Policy” scheme. Members of these SHGS are being trained by Odisha Farm machinery Research and Development Centre to utilize these farm machineries for their agricultural works. These SHGs have developed “user mechanisms / rules” and collect user fee for rental uses of these machineries by members / other tribal farmers. These fees are meant to ensure maintenance of the machineries and increase members earning.

Vegetable Cultivation: Commercial vegetable cultivation is being taken in Phulbani, Baliguda, Malkangiri, Nawarangpur, Gunpur, Rayagada, Koraput, Panposh, Keonjhar, Th. Rampur and Nilgiri ITDAs by the tribal farmers. Two models have been adopted in this intervention, i.e., (1) vegetable nursery in poly house by SHGs run by women members and making available vegetable seedlings to individual farmers undertaking vegetable cultivation on raised bed with drip irrigation, and (2) supply of inputs, viz, seed, fertilizer etc. to poor tribal farmers.

The farmers have been provided with critical inputs, irrigation and drip irrigation system have been created. Besides, functional infrastructure for collection, sorting, grading with pack units as well as cool chamber and refrigerated van for marketing support has been supplemented in ITDAs under SCA to TSS.

Sericulture: Sericulture has been promoted in 4 ITDAs, i.e., Baripada, Keonjhar, Bonei and Paralakhemundi to facilitate rearing of silk worms and preservation of cocoons by supporting tribal farmers engaged in sericulture activities with seed subsidy, training on tasar reeling and spinning and purchase of twin reeling Charkha. Coordination with the dept. of handlooms and textiles is being done for establishment of processing units and marketing of silk.

Fishery: Promotion of inland fishery is being done in association with Primary Fishermen Cooperative Societies (PFCS) and Fish Farmers Development Agency (FFDA) by raising of fingerling stocking , provision of fish fingerlings in village ponds, small and medium reservoirs and supply of equipment (fishing net) for fishermen in 8 ITDAs, i.e., Baripada, Rairangpur, Keonjhar, Panposh, SUNDargarh, Nawarangpur, Malkangiri and Paralakhemundig under SCA to TSS.

Micro Enterprise Development through SHGs: Thrust is being put on building capacity of the local institutions and strengthening their capacity to manage each aspects of the projects. In this context, region specific potential product clusters have been identified. For promotion of such product clusters, potential SHGs have been provided with capital support in 21 ITDAs to start micro enterprise under SCA to TSS. To manage the micro enterprise units successfully, SHG members were provided skill / capacity building and hand holding support.

Goat Rearing: Goat rearing has been taken up in 4 ITDAs, i.e., Th. Rampur, Kuchinda, Keonjhar and Karanjia. The intervention aims at breed improvement, comprehensive vaccination and insurance of animals.

Skill Training Program for Tribal Youths: Under skill training program, three different sets of activities area promoted, namely, Skill Development Training (SDT), Placement Linked Employability Training (PLET) and Pre-Recruitment Training (PRT) to tribal youths. Under PRT, unemployed tribal youths, interested to join armed forces are being given training support. Camps / meals were conducted by the ITDAs in blocks under their jurisdiction to generate awareness among the unemployed tribal youths and provide them required counselling to enable them take up suitable courses / trades and join designated / empaneled training centres. Major trades opted by tribal youths under SDT include emerging domains, such as Computer Networking & Hardware, Tally Computer Accounting, Mobile Repairing etc. as well as core traditional domains, such as Heavy / light motor vehicle Driving Training, Electrician / House wiring, welding and fabrication, Civil work supervisor etc.

The major trades opted by tribal youths under PLET included, emerging domains, such as hotel / hospitality management, Plastic processing operator, Diploma/ batchers degree in pharmacy, diploma in food management, office automation and graphic design, multimedia, retail sale, DLMT, Health care and multipurpose worker, beside patient assistance/ attendant etc. as well as core traditional domains such as data entry operator, Auxillary Nursing and Midwifery (ANM), General nursing and Midwifery, tailoring / sewing, fitter, Mason etc.

Chapter Four: Implementation of SCA to TSS

The Special Central Assistance (SCA) is being provided by the Ministry of Tribal Affairs to the state govt. as an additive to the state tribal sub-scheme (TSS) where state plan provisions are not normally forthcoming to bring about a more rapid economic development of tribals. From the 10th five year plan period, the objective and scope of SCA to TSS which was originally meant for filling up of the critical gaps in the family based income generation activities of the TSS, has been expanded to cover the employment cum income generation activities and the infrastructure incidental there to not only family based but also run by the SHGs. Thus, SCA is primarily meant for family oriented income generating schemes in the sectors of agriculture, horticulture, irrigation, sericulture, animal husbandry, village small scale cottage industries, skill dev. Training etc., and a part of SCA (not more than 30.0 percent) is permitted to be utilized for the development of infrastructure incidental to such income generating schemes. Ministry of tribal affairs, govt. of India releases SCA in the shape of grant in aid to the state Govt. keeping in view th tribal population percentage of the state. Further, information education and communication related programs in the tribal areas have been implemented under the funding of the SCA to TSS.

The Ministry of tribal affairs have been providing SCA as an additionality to the TSS for carrying out programs to assist tribal HHs with income generation schemes and for creation of infrastructure in TSP areas to support economic activities. A portion of SCA is allocated to OSFDC for implementation of dispersed tribal development plan (DTDP). Leaving this aside, the SCA funds are passed on to the ITDAs, micro projects and MADA cluster blocks for implementation of income generation schemes (IGS) and infrastructure development schemes (IDS).

ST families below the poverty line have been assisted under various income generating schemes through 22 ITDAs, 17 micro projects, 45 MADA, 13 cluster pockets and OSFDC under SCA to TSS. Besides, need based infrastructure projects have been created out of the funds flow under SCA to TSS.

Physical and Financial Achievement:

While SCA to TSS has been allocated based on tribal population, allocation of funds under SCA to TSS shows a fluctuating trend when there has been growth in tribal population in the State (census 2011 and census 2001). In 2013-14, SCA to TSS allocation was Rs.13,321.00 lakh which was same to the allocation of 2012-13. In 2014-15, allocation under SCA to TSS increased by 12.04 percent. From the year 2015-16 there has been reduction in allocation of funds, i.e., 1.32 percent during 2015-16 from 2014-15, 19.84 percent during 2016-17 from 2015-16 and 28.98 percent in 2017-18 (till December 2017) from 2016-17.

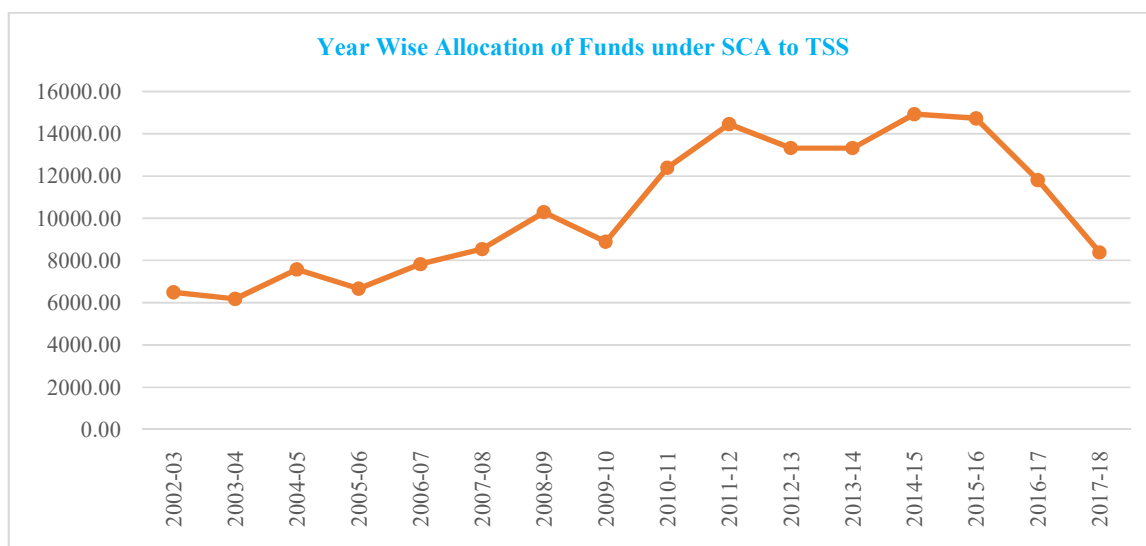


Figure 2: Year wise Allocation of Funds under SCA to TSS

Table 34: Year wise Allocation of Funds under SCA to TSS

Year	Allocation (Rs. in Lakh)	Annual Growth in Allocation	Year	Allocation (Rs. in Lakh)	Annual Growth in Allocation
2002-03	6495.30		2010-11	12393.00	39.47
2003-04	6184.94	-4.78	2011-12	14449.15	16.59
2004-05	7578.63	22.53	2012-13	13321.00	-7.81
2005-06	6673.96	-11.94	2013-14	13321.00	0.00
2006-07	7829.33	17.31	2014-15	14925.04	12.04
2007-08	8543.41	9.12	2015-16	14728.52	-1.32
2008-09	10290.50	20.45	2016-17	11806.20	-19.84
2009-10	8885.55	-13.65	2017-18	8385.00	-28.98

Source: Annual Activity Report, 2017-18, ST & SC Development, Minorities & Backward Classes Welfare Department, Govt. of Odisha.

Activity wise allocation of funds under SCA to TSS reveals that some activities for which funds provision was made in the year 2015-16, was excluded in 2016-17 and new activities were taken up in 2016-17 based on the demand / requirement. For example, horticulture plantation, pre-recruitment training, placement linked employability training, construction of rural hats etc. were taken up during 2016-17 which was not there in 2015-16. Some activities of 2015-16 also excluded from the allocation during 2016-17 such as goat rearing, dairy development, fishery and coffee plantation (refer Table 35).

Table 35: Activity wise Allocation of Funds under SCA to TSS

Activities	Allocation of Funds (in Lakh)	
	2016-17	2015-16
Assistance to SHG for Livelihood Enhancement & Micro Enterprise Promotion	1000.00	133.44
Horticulture Plantation & maintenance	300.00	
Wadi Plantation & maintenance	500.00	622.3
Rubber Plantation & Maintenance	400.00	668
Agriculture activities	400.00	106.49
Vegetable cultivation	334.00	90.3
NTPF Cluster Promotion	74.00	2.5
Lac Cultivation & Processing	75.00	15.17
Sericulture	75.00	43.42
Poultry	200.00	126.42
Skill Development Training	3720.20	656.37

Pre-Recruitment Training	200.00	
Placement Linked Employability Training	3000.00	
Construction of Rural Haat/ Market Complex/ Godown/ Agro Mart	100.00	
Production Centre/ Processing Units	100.00	
Communication including small link roads, small bridges for access to Livelihood Development Services & market linkages	400.00	
Farm Mechanization	228.00	39.86
Irrigation facilities	300.00	
Establishment of Market yard for Tribal products	400.00	
Goat Rearing		12.4
Fishery		21.31
Dairy Development		20.46
Coffee Plantation		26.2
Total	11806.20	2584.64

Source: Annual Activity Report, 2017-18 and 2014-15, ST & SC Development, Minorities & Backward Classes Welfare Department, Govt. of Odisha.

Note: Information has been taken for the Year 2015-16 from annual Report 2015-16 of SSD for FADP only, whereas total fund received under SCA to TSP is Rs.14925.04 (Rs.636.16 and Rs.510.28 has been provided in convergence from MGNREGA respectively for Wadi and Rubber plantation).

Fund allocation to different tribal development and administration agencies reveals that there has been substantial reduction in allocation of funds to different agencies such as ITDAs and MADA pockets. In comparison to 2013-14, there is reduction of 33.93 percent in allocation of funds to ITDAs under SCA to TSS. Similarly, there has been 61.68 percent reduction in allocation of funds in 2016-17 in comparison to 2013-14 to MADA pockets. Allocation of funds to DTDP has also reduced by 88.13 percent during 2017-18 (till December 2017) in comparison to 2013-14. Overall, there is reduction of 34.79 percent in allocation of funds to different agencies during 2016-17 in comparison to 2013-14. However, in 2016-17, micro projects, cluster pockets and TDCC were provided funds under SCA to TSS.

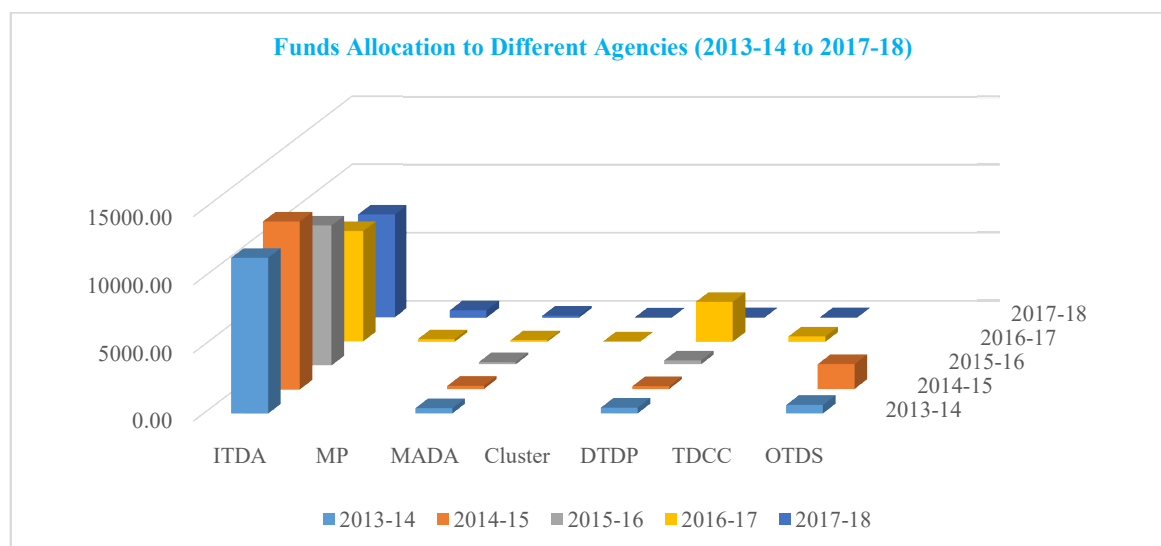


Figure 3: Funds Allocation under SCA to TSS

Table 36: SCA to TSS by Agencies (Rs. in Lakh)

Name of the Agency	Funds Received and Released				
	2017-18	2016-17	2015-16	2014-15	2013-14

	Fund Received (Up to Dec' 2017)	Fund Received	Fund Received (Up to Dec' 2015)	Fund Received	Fund Received
ITDAs	7555.00	8105.35	10277.33	12332.97	11435.23
Micro Projects	540.00	210.00			
MADA Pockets	150.00	120.00	170	220	391.4164
Cluster Pockets	40.00	40.00			
DTDP	50.00	2930.85	290	203.96	421.392
TDCC	50.00	400.00			
OTDS, Fishery and OTELP				1786.88	611.2806
Total	8385.00	11806.20	13485.02	14543.81	12859.319

Source: Annual Activity Report, (2017-18, 2015-16, 2014-15) ST & SC Development, Minorities & Backward Classes Welfare Department, Govt. of Odisha.

Note: Total fund received and released as mentioned in the Annual Report of SSD 2015-16 and 2014-15, Govt. of Odisha is Rs.14925.04 for 2014-15 and Rs.12859.32 for 2013-14

Physical & Financial Progress Under SCA to TSP in Studied Districts:

Physicals Progress:

Different activities are implemented by the ITDAs under SCA to TSS, such as skill development, rubber plantation, fishery promotion, farm mechanization, backyard poultry promotion, development of different infrastructures that are incidental to IGA etc. Some activities are taken up in specific years like handloom promotion, vocational education in schools etc. Interventions are more aligned towards income generation, skill development and infrastructure development.

Table 37: Physical Progress Under SCA to TSS in Mayurbhanj

Activities Under SCA to TSS	2013-14		2014-15		2015-16		2016-17		2017-18		Grand Total
	No.	No.	G %	No.	G %	No.	G %	No.	G %		
Mayurbhanj											
Agriculture Activities	75	118	57.33	160	35.59	426	166.25	472	10.80	1251	
Assistance to SHG for livelihood enhancement (Members)	712	1347	89.19	1008	-25.17	683	-32.24	739	8.20	4489	
Backyard Poultry (Household)	1010	810	-19.80	50	-93.83	112	124.00	90	-19.64	2072	
Diary Development Programme	69	629	811.59	485	-22.89	279	-42.47			1462	
Farm Mechanisation				12		140	1066.67	10	-92.86	162	
Fishery	75	316	321.33	15	-95.25	400	2566.67	71	-82.25	877	
Handloom				57						57	
Horticulture Plantation & Maintenance	65	30	-53.85	200	566.67			146		441	
Infrastructure Development Scheme	76	119	56.58	92	-22.69	67	-27.17	80	19.40	434	
Irrigation	161	1787	1009.94	3	-99.83	84	2700.00	76	-9.52	2111	
Lac Cultivation & processing	100	160	60.00			162				422	
Livelihood Training for tribal youth	402									402	
Monitoring & Evaluation				1						1	
PGT		2								2	
Production Centre /Processing Units								50		50	
Provision for PVTG other than micro project area				300		400	33.33			700	
Provision of Filling gap of Ashram School		36								36	
Renovation of Bulk Cooler at KM Kota, Bangriposi	25									25	
Rubber Plantation & Maintenance	1002	2103	109.88	1632	-22.40	471	-71.14	612	29.94	5820	
Sericulture	100	70	-30.00	405	478.57	10	-97.53	50	400.00	635	
Sewing Machine supply to Adolescent Girls under SABALA						46				46	
Training		356		374	5.06			81		811	
Training (PLET)	288	392	36.11	346	-11.73	518	49.71	378	-27.03	1922	
Training (PRT)	1062	1059	-0.28	1045	-1.32	1207	15.50	170	-85.92	4543	
Training (SDT)	273	720	163.74	868	20.56	1132	30.41	716	-36.75	3709	
Vegetable Cultivation						50		197	294.00	247	
Vocational education in SSD schools						2				2	
Wadi Plantation	110	850	672.73	230	-72.94			177		1367	

Note: No. refers to no. of units and G% refers to annual growth in framed activities

Looking at the number of activities implemented over a period of five years, i.e., between 2013-14 and 2017-18, it is evident that focus on different activities differs by district. In Mayurbhanj, focus has been more on skill development trainings (PLET, PRT and SDT), promotion of rubber cultivation, support to SHGs, backyard poultry promotion, irrigation promotion and support for agricultural activities.

Table 38: Physical Progress Under SCA to TSS in Nabarangpur

Activities Under SCA to TSS	2013-14		2014-15		2015-16		2016-17		2017-18		Grand Total
	No.	G%	No.	G%	No.	G%	No.	G%	No.	G%	
Nabarangpur											
Aggregation Centre & Cool Chamber					1						1
Agriculture Activities			100				250				350
Assistance to SHG for livelihood enhancement	1021		1045	2.35	901	-13.78	366	-59.38	346	-5.46	3679
Backyard Poultry	831								80		911
Crates Support					1						1
Farm Mechanisation			100						160		260
Fishery	70				360						430
Goat Rearing	220				300		84	-72.00			604
Handloom							13				13
Horticulture Plantation & Maintenance					55		1000	1718.18	168	-83.20	1223
Infrastructure Development Scheme	78	96	23.08	72	-25.00	43	-40.28	80	86.05		369
Irrigation	260	70	-73.08	223	218.57						553
Lac Cultivation & processing	152	229	50.66						400		781
Piped Drinking Water	7										7
Production Centre /Processing Units							1		40		41
Refrigerated Van					1						1
Training (PLET)			470		328	-30.21	351	7.01	180	-48.72	1329
Training (PRT)							35		260	642.86	295
Training (SDT)	616	206	-66.56	370	79.61	180	-51.35	277	53.89		1649
Vegetable Cultivation			50		480	860.00	1000	108.33	100	-90.00	1630
Wadi Plantation	60	392	553.33	404	3.06	151	-62.62	158	4.64		1165

Note: No. refers to no. of units and G% refers to annual growth in framed activities

In Nabarangpur, more or less similar trend is observed where focus has been more on skill development trainings (PLET, PRT, SDT), assistance to SHGs for IGA activities, vegetable cultivation and Wadi plantation. Under SCA to TSS, less focus has been on backyard poultry, farm mechanization, fishery promotion, support for handloom promotion etc. However, coverage of units in different years do not reflect a graduation trend rather it differs year wise having both positive and negative growth trend like that of Mayurbhanj.

Table 39: Physical Progress under SCA to TSS in Sundargarh

Activities Under SCA to TSS	2013-14		2014-15		2015-16		2016-17		2017-18		Grand Total
	No.	G%	No.	G%	No.	G%	No.	G%	No.	G%	
Sundargarh											
Agriculture Activities	1142				928		40		10	-75.00	2120
Assistance to SHG for livelihood enhancement	230	419	82.17	1971	370.41	735	-62.71	524	-28.71		3879
Backyard Poultry	300	56	-81.33				145		165	13.79	666
Cool Chamber			1								1
Diary Development Programme					300						300
Farm Mechanisation							1000		503	-49.70	1503
Fishery		107		265	147.66	287	8.30	287	0.00		946
Horticulture Plantation & Maintenance	1140	365	-67.98	733	100.82	28	-96.18	10	-64.29		2276
Infrastructure Development Scheme	164	81	-50.61	92	13.58	68	-26.09	57	-16.18		462
Irrigation	20	70	250.0	243	247.14	377	55.14	57	-84.88		767
Lac Cultivation & processing	207								100		307
NTFP Cluster Promotion			87				30		30		147
Production Centre /Processing Units							1		1		2
Refrigerated Van			1								1
Sericulture			170		370	117.65	1000	170.27			1540
Training	300			430		90	-79.07				820
Training (PLET) (Placement Linked Employability Training)	128	939	633.59	614	-34.61	1401	128.18	1330	-5.07		4412
Training (PRT)				118							118

Training (SDT)	1720	351	-79.59	1118	218.52	421	-62.34	120	-71.5	3730
Vegetable Cultivation						40		10	-75.0	50
Wadi Plantation		843		290	-65.60	409	41.03	613	49.88	2155

Note: No. refers to no. of units and G% refers to annual growth in framed activities

Like other districts, in Sundargarh, focus is more on skill development training (PLET and SDT), wadi plantation, horticulture plantation, assistance to SHGs, promotion of agricultural activities etc. Importance has also been given to sericulture and wadi plantation. Like Mayurbhanj and Nabarangpur, growth in coverage is not uniform and some years there is negative growth in some of the executed activities in terms of coverage.

So, overall, there is higher focus in skill development training under SCA to TSS in all the districts for employment of educated youths. Wadi is also given significant importance in Nabarangpur and Sundargarh in comparison to Mayurbhanj. Similarly, backyard poultry is given more importance in Mayurbhanj in comparison to other two districts. However, IGA through SHG has been given importance in all the districts.

Financial Progress:

Between 2013-14 to 2017-18 (five years aggregate), highest amount of funds is allocated to Mayurbhanj, followed by Sundargarh and Nabarangpur. Utilisation of funds allocated under SCA remains to be more than 90.0 percent in all the districts in different years. In comparison to 2013-14, there is a positive growth in funds allocation during 2014-15 in Mayurbhanj (23.47 percent) whereas receipt of funds remains less in Nabarangpur (- 31.95 percent) and Sundargarh (- 47.42 percent). In comparison to 2014-15, there is negative growth in Mayurbhanj (- 18.52 percent) whereas receipt of funds by ITDA in Nabarangpur and Sundargarh increased by 2.25 percent and 4.46 percent respectively.

Table 40: Financial Progress under SCA to TSS (1)

District	2013-14			2014-15				2015-16			
	Fund received	Fund Utilised	% Utilised	Fund received	Fund Utilised	% Utilised	Growth in Allocation	Fund received	Fund Utilised	% Utilised	Growth in Allocation
Mayurbhanj	2009.76	1990.78	99.06	2481.40	3056.55	123.18	23.47	2021.81	2123.18	105.01	-18.52
Nabarangpur	1520.82	1384.22	91.02	1034.98	1033.52	99.86	-31.95	1058.24	886.97	83.82	2.25
Sundargarh	2789.20	2036.67	73.02	1466.62	1016.52	69.31	-47.42	1531.96	1317.79	86.02	4.46
Total	6319.78	5411.67	85.63	4983.00	5106.60	102.48	-21.15	4612.01	4327.95	93.84	-7.45

Source: ITDAs; Note: Financials in lakh

Similar trend is observed in 2016-17 where annual fund received by ITDA in Mayurbhanj is less by 21.63 percent in comparison to 2015-16. In 2017-18, all the districts have received less funds than 2016-17. Overall, in last five years, percentage of fund utilization of the total receipt remains to be more than 100.0 percent in Mayurbhanj, followed by Nabarangpur. Among the three studied districts, lowest utilization rate is observed in Sundargarh.

Table 41: Financial Progress under SCA to TSS (2)

	2016-17				2017-18				Five Year		
	Fund received	Fund Utilised	% Utilised	Growth in Allocation	Fund received	Fund Utilised	% Utilised	Growth in Allocation	Total Fund received	Total Fund Utilised	% Utilised
Mayurbhanj	1584.47	1546.71	97.62	-21.63	1556.99	1285.49	82.56	-1.73	9654.43	10002.71	103.61
Nabarangpur	1137.59	794.44	69.84	7.50	799.50	634.55	79.37	-29.72	5551.13	4733.70	85.27
Sundargarh	2364.32	2166.70	91.64	54.33	1200.44	869.53	72.43	-49.23	9352.54	7407.22	79.20
Total	5086.38	4507.85	88.63	10.29	3556.93	2789.57	78.43	-30.07	24558.10	22143.63	90.17

Source: ITDAs; Note: Financials in lakh

Chapter Five: Outcome and Impact of SCA

5.1 Socio-Economic Profile of STs:

Distribution of Household Members:

The study covered a total 480 sample households having a total of 2049 members of different age groups with an average of 4 members (4.27 members) per household. Majority of the household members are in the working age group of 18 to 60 years (69.1 percent) followed by children in the age group of 6 to 14 years (11.7 percent). About 6.9 percent of the total members are in the 0-6 years age group, 7.8 percent are in the 14 to 18 years age group and 4.5 percent members are in the 60+ age group. Of the total household members, male members comprise 54.1 percent and 45.9 percent are female members. Distribution of members by age group in sample households are presented in the diagram.

Educational Status:

Among the total members, highest of 19.3 percent are having primary education followed by 19.0 percent who have education up to high school and 12.8 percent are having college education. Only 0.8 percent members are having technical education and 9.4 percent members are illiterate. Literate and barely literate comprise 19.4 percent members.

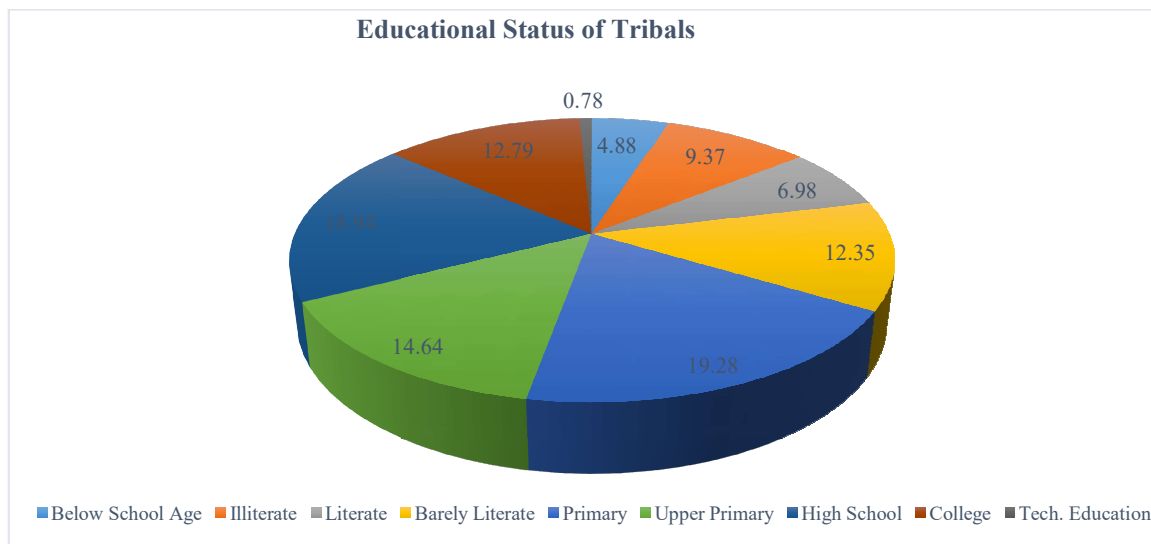


Figure 4: Educational Status of Tribals

Sex wise distribution of members by educational status reveals that 20.22 percent male and 18.17 percent female are having primary education whereas, 13.63 percent male and 15.83 percent female are having upper primary education. High school education is availed by 20.40 percent male and 17.22 percent female. More number of females are having college education than male, i.e., 13.39 percent female in comparison to 12.27 percent male. Sex wise distribution by educational status of tribal household members are presented in the table.

Table 42: Educational Status of Tribal Household Members by Sex

SN	Educational Status	Male		Female		Total	
		No.	%	No.	%	No.	%
1	Below School Age	60	5.42	40	4.25	100	4.88

2	Illiterate	77	6.95	115	12.22	192	9.37
3	Literate	81	7.31	62	6.59	143	6.98
4	Barely Literate	148	13.36	105	11.16	253	12.35
5	Primary	224	20.22	171	18.17	395	19.28
6	Upper Primary	151	13.63	149	15.83	300	14.64
7	High School	226	20.40	162	17.22	388	18.94
8	College	136	12.27	126	13.39	262	12.79
9	Tech. Education	5	0.45	11	1.17	16	0.78
	Total	1108	100.00	941	100.00	2044	100.00

Occupational Engagement:

Agriculture has been the primary source of income for the majority of the tribal households (44.8 percent) followed by collection of non-timber forest produces (3.5 percent). For majority of the households, NTFP collection and selling has been the prime secondary source of income (83.80 percent) followed by engagement in agriculture (11.07 percent). Engagement pattern of the households is presented in the table.

Table 43: Occupational Engagement of Tribal Household Members

SN	Educational Status	Primary Occupation		Secondary Occupation	
		No.	%	No.	%
1	Agriculture	918	44.8	110	11.07
2	Animal Husbandry	181	8.8	28	2.82
3	Wage	29	1.4	20	2.01
4	Forest Produce / NTFP	72	3.5	833	83.80
5	Petty Business	1	0.0	2	0.20
6	Permanent/Temporary Job	2	0.1		
7	Pension	1	0.0	1	0.10
8	Other	845	41.2		
	Total	2049	100.0	994	100.0

Housing:

All the tribal families, irrespective of their category, are having their own house. Percentage of tribal families having mixed type¹¹ of household is highest (58.54 percent) followed by kutchha (36.04 percent) houses. Percentage of families having pucca house is less (5.42 percent) among all the house categories.

Table 44: House Types by Tribes

SN	Tribes	Kutchha		Mixed		Pucca		Total	
		No.	%	No.	%	No.	%	No.	%
1	Bathudi	2	9.09	18	81.8	2	9.09	22	4.58
2	Bhumij	3	7.14	36	85.7	3	7.14	42	8.75
3	Ganda	0	0.00	0	0.0	1	100.00	1	0.21
4	Kandha	55	41.67	70	53.0	7	5.30	132	27.50
5	Kisan	25	43.86	28	49.1	4	7.02	57	11.88
6	Kolha	11	47.83	12	52.2	0	0.00	23	4.79
7	Lodha	9	60.00	5	33.3	1	6.67	15	3.13
8	Mankirdia	6	40.00	8	53.3	1	6.67	15	3.13
9	Munda	12	52.17	11	47.8	0	0.00	23	4.79
10	Oram	5	55.56	4	44.4	0	0.00	9	1.88
11	Paudi Bhuyan	10	38.46	16	61.5	0	0.00	26	5.42
12	Santal	35	30.43	73	63.5	7	6.09	115	23.96
	Total	173	36.04	281	58.5	26	5.42	480	100.00

¹¹Mixed type house refers to kuccha wall with concrete roof or concrete wall with kuccha roof.

Among the tribes, majority of Kandhas area having kuccha houses (31.79 percent) followed by Santals (20.23 percent) and Kissan (14.45 percent). Majority of Santal households are having mixed house type (25.98 percent) followed by Kandha (24.91 percent) families and Bhumij (12.81 percent). Pucca houses are highest among Kandha and Santals (26.92 percent) followed by Kissan (15.38 percent) and Bhumij (11.54 percent). Looking by each tribe, it is evident that majority of the families across tribes are having mixed type of houses followed by kuccha and pucca houses. House types by tribe is presented in the table.

About 75.6 percent houses are two rooms houses, whereas 22.1 percent houses are having three rooms and only 2.3 percent houses area having more than 3 rooms. Among the house types, 35.81 percent kuccha houses, 58.95 percent mixed houses and 5.23 percent pucca houses are having two rooms. Houses with three rooms observed in 37.74 percent kuccha houses, 59.43 percent mixed houses and 2.83 percent pucca houses. More than three rooms observed in majority of mixed and pucca houses (36.36 percent) than kuccha houses (27.27 percent).

Table 45: No. of Rooms by House Type

SN	No. of Rooms	Kutchha		Mixed		Pucca		Total	
		No.	%	No.	%	No.	%	No.	%
1	2 Rooms	130	35.81	214	58.95	19	5.23	363	75.63
2	3 Rooms	40	37.74	63	59.43	3	2.83	106	22.08
3	> 3 Rooms	3	27.27	4	36.36	4	36.36	11	2.29
	Total	173	36.04	281	58.54	26	5.42	480	100.00

Sanitary Facility:

Of the total households, 51.04 percent households are having toilet facility. By house type, household level toilet facility is available with 54.34 percent kuccha houses, 48.04 percent mixed houses and 61.54 percent pucca houses. Further, of the total toilets, 38.37 percent are in kuccha houses, 55.10 percent are in mixed houses and 6.53 percent are in pucca houses. As reported, all family members use toilet, as a result, open defecation has reduced in the locality.

Table 46: Toilet Facility

SN	House Type	HH with Toilet		HH Without Toilet		Total	
		No.	%	No.	%	No.	%
1	Kuccha	94	54.34	79	45.66	173	36.04
2	Mixed	135	48.04	146	51.96	281	58.54
3	Pucca	16	61.54	10	38.46	26	5.42
	Total	245	51.04	235	48.96	480	100.00

Electrification:

Irrespective of household categories, 74.6 percent houses area having electricity and of the total houses that are electrified, 35.20 percent are kuccha houses, 57.54 percent are mixed and 7.26 percent area pucca houses. So, in comparison to mix houses, electrification of kuccha houses and pucca houses are relatively less. Average hours of power supply in normal conditions has been around 16 hours a day and quality of power supply remains normal in most cases (74.2 percent).

Table 47: Household Electrification

SN	House Type	HH Electrified		HH Not Electrified		Total	
		No.	%	No.	%	No.	%
1	Kuccha	126	35.20	47	38.52	173	36.04
2	Mixed	206	57.54	75	61.48	281	58.54
3	Pucca	26	7.26	0	0.00	26	5.42
	Total	358	100.00	122	100.00	480	100.00

Drinking Water:

Community tube wells have been the major source of drinking water (94.0 percent) for the tribal families in the study locations. However, some families (2.9 percent) depend upon river / stream to fetch drinking water while 3.1 percent families having pipe water supply for drinking purpose.

Fuel Used for Cooking:

Use of woods with cow dung is the common fuel used by majority of the tribal families (98.3 percent). Use of electricity for cooking purpose is very minimal (0.2 percent). Only 1.5 percent families are having LPG for cooking.

Land Holding Pattern:

Based on the land holding (agricultural and other land), households are categorized in to different groups. Of the total households, about 46.7 percent families are marginal farmers with average holding size is less than 1 Ha, Households with holding size of 1 to 2 Ha. (small farmers) comprise of 47.7 percent, 5.2 percent are semi-medium farmers with holding size of 2 to 4 Ha. and 0.4 percent are medium farmers with average holding size of 4 to 10 Ha. Marginal and small farmers together comprise 94.4 percent of the total households. Taking only the agricultural land in to account (excluding homestead and other land), it is observed that 47.7 percent families are marginal farmers, 46.9 percent are small farmers, 5.0 percent are semi-medium farmers and remaining 0.4 percent are medium farmers.

Table 48: Farmer Category by Land Holding

Particulars	Farmer Category (Total Land)		Ag. Land Holding Category	
	No. of Household	Percent of HH	No. of Household	Percent of HH
Marginal Farmer	224	46.7	229	47.7
Small Farmer	229	47.7	225	46.9
Semi-Medium	25	5.2	24	5.0
Medium	2	0.4	2	0.4
Total	480	100.0	480	100.0

Land holding pattern by tribes reveals that highest percentage of marginal farmers are in Mankirdia tribe (86.67 percent) followed by Oram (77.78 percent) and Munda (56.52 percent) among the 12 studied tribes. Small farmer percentage is highest in case of Paudi Bhuyan (65.38 percent) followed by Bathudi (63.64 percent) and Bhumij (59.52 percent). Land holding pattern in terms of cultivable land (agricultural land) reflects more or less similar trend. Distribution of households by land holding across the tribes is presented in the following tables.

Table 49: Farmers by Holding Categories among Tribes (Total Land)

SN	Tribes	Marginal Farmer		Small Farmer		Semi-Medium Farmer		Medium Farmer		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Bathudi	4	18.18	14	63.64	3	13.64	1	4.55	22	100.0
2	Bhumij	11	26.19	25	59.52	5	11.90	1	2.38	42	100.0
3	Ganda	0	0.00	0	0.00	1	100.00	0	0.00	1	100.0
4	Kandha	67	50.76	57	43.18	8	6.06	0	0.00	132	100.0
5	Kisan	26	45.61	28	49.12	3	5.26	0	0.00	57	100.0
6	Kolha	12	52.17	11	47.83	0	0.00	0	0.00	23	100.0
7	Lodha	7	46.67	8	53.33	0	0.00	0	0.00	15	100.0
8	Mankirdia	13	86.67	2	13.33	0	0.00	0	0.00	15	100.0
9	Munda	13	56.52	10	43.48	0	0.00	0	0.00	23	100.0
10	Oram	7	77.78	2	22.22	0	0.00	0	0.00	9	100.0
11	Paudi Bhuyan	8	30.77	17	65.38	1	3.85	0	0.00	26	100.0
12	Santal	56	48.70	55	47.83	4	3.48	0	0.00	115	100.0
	Total	224	46.67	229	47.71	25	5.21	2	0.42	480	100.0

Table 50: Farmers by Holding Categories among Tribes (Ag. Land)

SN	Tribes	Marginal Farmer		Small Farmer		Semi-Medium Farmer		Medium Farmer		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Bathudi	4	18.18	14	63.64	3	13.64	1	4.55	22	100.0
2	Bhumij	12	28.57	25	59.52	4	9.52	1	2.38	42	100.0
3	Ganda	0	0.00	0	0.00	1	100.00	0	0.00	1	100.0
4	Kandha	67	50.76	57	43.18	8	6.06	0	0.00	132	100.0
5	Kisan	26	45.61	28	49.12	3	5.26	0	0.00	57	100.0
6	Kolha	13	56.52	10	43.48	0	0.00	0	0.00	23	100.0
7	Lodha	7	46.67	8	53.33	0	0.00	0	0.00	15	100.0
8	Mankirdia	13	86.67	2	13.33	0	0.00	0	0.00	15	100.0
9	Munda	14	60.87	9	39.13	0	0.00	0	0.00	23	100.0
10	Oram	7	77.78	2	22.22	0	0.00	0	0.00	9	100.0
11	Paudi Bhuyan	9	34.62	16	61.54	1	3.85	0	0.00	26	100.0
12	Santal	57	49.57	54	46.96	4	3.48	0	0.00	115	100.0
	Total	229	47.71	225	46.88	24	5.00	2	0.42	480	100.0

The average land holding of tribal families found to be 1.10 Ha. (2.74 acres), irrespective of tribal groups. The average agricultural land (cultivable land) holding found to be 1.06 Ha. (2.65 acres) and homestead land holding is 0.09 acres.

Table 51: Average Land Holding

Particulars	Ag. Land Holding (Ac.)	Homestead Land (Ac.)	Total Land (Ac.)	Irrigated Ag. Land (Ac.)	Unirrigated Ag. Land (Ac.)
Average	2.65	0.09	2.74	0.70	2.43
No. of HH	480	480	480	148	480
Median Value	2.50	0.06	2.55	0.58	2.20
Minimum	1.00	.01	1.05	0.00	.40
Maximum	10.50	.66	10.56	3.00	10.50

Average cultivable land (agricultural land) holding found to be highest (excluding Ganda) in case of Bathudi (3.69 acres) followed by Bhumij (3.37 acres). The average total land holding also found to be highest (excluding Ganda) among the Bhatudis (3.75 acres) followed by Bhumij (3.46 acres). However, average irrigated land found to be highest (excluding Ganda) among Bhumij (1.73 acres) followed by Kolha (0.90 acres) and Munda (0.90 acres). Average holding of land by different tribes, including irrigated and unirrigated land of the total holdings is presented in the table.

Table 52: Average land Holding by Tribes

SN	Tribes	Av. Ag. Land (Ac.)	Av. Homestead Land (Ac.)	Av. Total Land (Ac.)	Av. Irrigated Land (Ac.)	Av. Unirrigated Land (Ac.)
1	Bathudi	3.69	0.06	3.75	0.46	3.29
2	Bhumij	3.37	0.09	3.46	1.73	3.13
3	Ganda	6.00	0.15	6.15	1.00	5.00
4	Kandha	2.54	0.10	2.65	0.57	2.36
5	Kisan	2.77	0.09	2.85	0.89	2.61
6	Kolha	2.50	0.08	2.57	0.90	2.34
7	Lodha	2.37	0.12	2.48	0.00	2.37
8	Mankirdia	1.74	0.11	1.85	0.00	1.74
9	Munda	2.05	0.06	2.11	0.90	1.89
10	Oram	1.99	0.06	2.05	0.60	1.86
11	Paudi Bhuyan	2.89	0.09	2.98	0.62	2.27
12	Santal	2.53	0.10	2.63	0.76	2.30

Household Assets:

To understand the economic condition of the tribal families, different basic asset base of households was mapped. It is evident from the mapping that most of the tribal families have cycle for transportation (97.92 percent), followed by mobile phone (68.13 percent), excluding Lodha tribe. Among relatively costlier assets, four-wheeler is only with a few families of Kisan and three-wheeler with some families of Bathudi tribe. Similarly, TV, bike and freeze is available with only 24.58 percent, 18.75 percent and 5.0 percent of tribal families. Due to rural electrification, now 49.58 percent families are now having fan. Possession of different assets by different category of tribals is presented in the table.

Table 53: Tribal Households Having Different Assets

SN	Tribes	Total HH	Percentage of HHs Having Different Assets							
			Mobile	TV	Freeze	Bike	Four-Wheeler	Three-Wheeler	Cycle	Fan
1	Bathudi	22	72.73	18.18	4.55	18.18	0.0	4.55	100.0	54.55
2	Bhumij	42	88.10	30.95	4.76	26.19	0.0	0.0	100.0	50.00
3	Ganda	1	100.0	100.0	100.0	100.0	0.0	0.0	100.0	100.0
4	Kandha	132	73.48	23.48	3.03	21.21	0.0	0.0	95.45	55.30
5	Kisan	57	75.44	33.33	7.02	17.54	1.75	0.0	100.0	61.40
6	Kolha	23	60.87	17.39	8.70	21.74	0.0	0.0	91.30	43.48
7	Lodha	15	0.00	0.00	0.0	6.67	0.0	0.0	100.0	46.67
8	Mankirdia	15	60.00	20.00	0.0	6.67	0.0	0.0	100.0	40.00
9	Munda	23	82.61	47.83	8.70	8.70	0.0	0.0	95.65	52.17
10	Oram	9	44.44	33.33	11.11	22.22	0.0	0.0	100.0	44.44
11	Paudi Bhuyan	26	42.31	7.69	3.85	7.69	0.0	0.0	100.0	15.38
12	Santal	115	66.09	23.48	5.22	20.00	0.0	0.0	99.13	46.09
	Total	480	68.13	24.58	5.00	18.75	0.21	0.21	97.92	49.58

Livestock has been an asset for the rural families which is also a part of their livelihood and coping mechanism during distress conditions. In comparison to large ruminants, such as cow / buffalo (44.38 percent tribal families having cow / buffalo) and bullock (5.36 percent tribal families having bullock), more number of families are having small ruminants (75.21 percent families having goat / sheep). All the tribal families found to have poultry / birds. Small ruminants and birds have been one of the sources of income of these tribal families and also a part of their domestic consumption.

Table 54: Tribal Households Having Livestock

SN	Tribes	Total HH	Percentage of HHs Having Livestock			
			Cow / Buffalo	Bullock	Goat/Sheep	Poultry/Chicken
1	Bathudi	22	86.36	4.55	95.45	4.87
2	Bhumij	42	76.19	4.76	59.52	8.85
3	Ganda	1	100.0	100.0	100.0	0.22
4	Kandha	132	47.73	4.55	70.45	26.33
5	Kisan	57	28.07	12.28	75.44	12.17
6	Kolha	23	65.22	8.70	82.61	4.65
7	Lodha	15	20.00	6.67	86.67	3.32
8	Mankirdia	15	46.67	6.67	93.33	3.32
9	Munda	23	52.17	0.00	78.26	4.42
10	Oram	9	33.33	11.11	66.67	1.55
11	Paudi Bhuyan	26	38.46	3.85	76.92	5.75
12	Santal	115	27.83	3.48	76.52	24.56
	Total	480	44.38	5.63	75.21	100.0

Individual ownership of farm implements by the tribal households have been poor. Prevalence of relatively high cost farm machineries like power tiller, tractor and thrasher is observed with very few families in comparison to small implement like sprayer (29.17 percent families having sprayer). It indicates that farm activities are mostly performed manually with the use of own as well as external labour force. Under SCA to TSS, attempt has been made to improve the farm mechanization rate with

the support of different farm machineries to farmers group so that dependency on labour force can be reduced, drudgery can be minimized and farm activities can be performed on time and with less cost.

Table 55: Tribal Households Having Farm Implements

SN	Tribes	No. of HH	Percentage of Tribal HH Having Farm Implements				
			Power Tiller	Tractor	Pump Set	Thrasher	Sprayer
1	Bathudi	22			9.09		22.73
2	Bhumij	42					11.90
3	Ganda	1					100.00
4	Kandha	132			18.94		28.03
5	Kisan	57		1.75	14.04	7.02	36.84
6	Kolha	23			17.39		17.39
7	Lodha	15					53.33
8	Mankirdia	15					26.67
9	Munda	23			21.74	8.70	43.48
10	Oram	9			11.11		66.67
11	Paudi Bhuyan	26			65.38		42.31
12	Santal	115	0.87		21.74		24.35
	Total	480	0.21	0.21	18.13	1.25	29.17

Schematic Benefits:

The tribal households found enrolled in different schemes / programs of the government but the degree of accessibility to different schemes differs by tribal groups and also by district. Most of the tribal families enrolled in different schemes are like availing input subsidy in agriculture / horticulture, ration card, job card under MGNREGA, supplementary nutrition under supplementary nutrition program, pre-school education, immunization etc. Least coverage is in widowhood pension, irrigation support, free cooking gas connection etc. Low enrolment in certain schemes / program is also driven by entitlement aspects and eligibility of the tribal family to access the benefits. Accessibility to different schematic benefits by tribal groups are presented in the table.

Table 56: Schematic Benefits Received

Govt. Schemes / Programmes	Bathudi % of HH	Bhumij % of HH	Ganda % of HH	Kandha % of HH	Kissan % of HH	Kolha % of HH	Lodha % of HH
PAY / Mo Kudia/ Biju Pucca Ghar	22.7	9.5	0.0	10.6	12.3	8.7	46.7
Widowhood Pension	0.0	0.0	0.0	1.5	0.0	0.0	0.0
NOAP / SOAP (Old Age Pension)	9.1	14.3	0.0	18.9	12.3	4.3	33.3
BPL / APL Card / Ration Card	95.5	95.2	100.0	95.5	96.5	100.0	100.0
Job Card (MGNREGA)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electrification (RGVY/BGJY)	9.1	9.5	100.0	12.1	10.5	8.7	20.0
Nutrition (SNP): Child	100.0	100.0	100.0	99.2	100.0	100.0	86.7
Nutrition (SNP): Pg. Women	100.0	100.0	100.0	99.2	100.0	100.0	86.7
Nutrition (SNP): Nursing Mother	100.0	100.0	100.0	99.2	100.0	100.0	86.7
Financial Incentive Under MAMATA	18.2	4.8	0.0	15.9	7.0	17.4	13.3
Immunisation to Children	100.0	100.0	100.0	99.2	100.0	100.0	86.7
Pre-School Education (ICDS)	100.0	100.0	100.0	99.2	100.0	100.0	86.7
Free Cooking Gas Connection	9.1	19.0	0.0	9.8	12.3	4.3	6.7
Books/Reading Materials (Primary Edu.)	0.0	2.4	0.0	1.5	0.0	0.0	0.0
Input Subsidy (Agri. / Horticulture)	0.0	9.5	0.0	12.1	33.3	34.8	0.0
Biju Krushka Kalyana Yojana	4.5	4.8	100.0	4.5	14.0	4.3	6.7
BSBY (Biju Swastya Bima Yojana)	18.2	11.9	0.0	13.6	14.0	17.4	13.3
Individual Land Rights (FRA) in Ac.	9.1	14.3	0.0	15.9	15.8	17.4	13.3
Title of FRA land	13.6	14.3	0.0	14.4	15.8	13.0	13.3
Benefit from ITDA	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Irrigation		4.8					

Table 57: Schematic Benefits Received

Govt. Schemes / Programmes	Mankirdi	Munda	Oram	Paudi	Santal	Total	
	a			Bhuyan		No. of	% of Total
	% of HH	% of HH	% of HH	% of HH	% of HH	HH	HH
PAY / Mo Kudia/ Biju Pucca Ghar	53.3	4.3	0.0	23.1	10.4	66	13.8
Widowhood Pension	0.0	0.0	0.0	0.0	0.0	2	0.4
NOAP / SOAP (Old Age Pension)	6.7	4.3	11.1	11.5	19.1	74	15.4
BPL / APL Card / Ration Card	100.0	100.0	100.0	100.0	99.1	468	97.5
Job Card (MGNREGA)	100.0	100.0	100.0	100.0	100.0	480	100.0
Electrification (RGGVY/BGJY)	33.3	4.3	11.1	3.8	10.4	54	11.3
Nutrition (SNP): Child	100.0	100.0	100.0	100.0	100.0	477	99.4
Nutrition (SNP): Pg. Women	100.0	100.0	100.0	100.0	100.0	477	99.4
Nutrition (SNP): Nursing Mother	100.0	100.0	100.0	100.0	100.0	477	99.4
Financial Incentive Under MAMATA	13.3	21.7	11.1	11.5	12.2	62	12.9
Immunisation to Children	100.0	100.0	100.0	100.0	100.0	477	99.4
Pre-School Education (ICDS)	100.0	100.0	100.0	100.0	100.0	477	99.4
Free Cooking Gas Connection?	6.7	8.7	0.0	7.7	7.0	45	9.4
Input Subsidy (Agri. / Horticulture)		26.1	11.1	57.7	33.0	107	22.3
Biju Krushka Kalyana Yojana	6.7	13.0	0.0	15.4	8.7	38	7.9
BSBY (Biju Swastya Bima Yojana)	13.3	21.7	11.1	11.5	15.7	70	14.6
Individual Land Rights (FRA) in Ac.	6.7	17.4	11.1	23.1	13.9	72	15.0
Title of FRA land received	40.0	13.0	11.1	19.2	15.7	75	15.6
Benefit from ITDA	100.0	100.0	100.0	100.0	100.0	480	100.0
Irrigation						2	0.4

Skill Based Training on IGA:

Only members of 11.46 percent tribal families have received skill-based training on different income generating activities like grafting / plantation (10.91 percent), mushroom cultivation (27.27 percent), spinning (36.36 percent) and tapping (25.45 percent). While all the trained persons are of the opinion that the training is beneficial, 63.64 percent trained members are using the training inputs. Of the total trained persons, 25.45 percent are currently working with rubber society and getting an average monthly income of Rs.5,000/- to Rs.6,000/-.

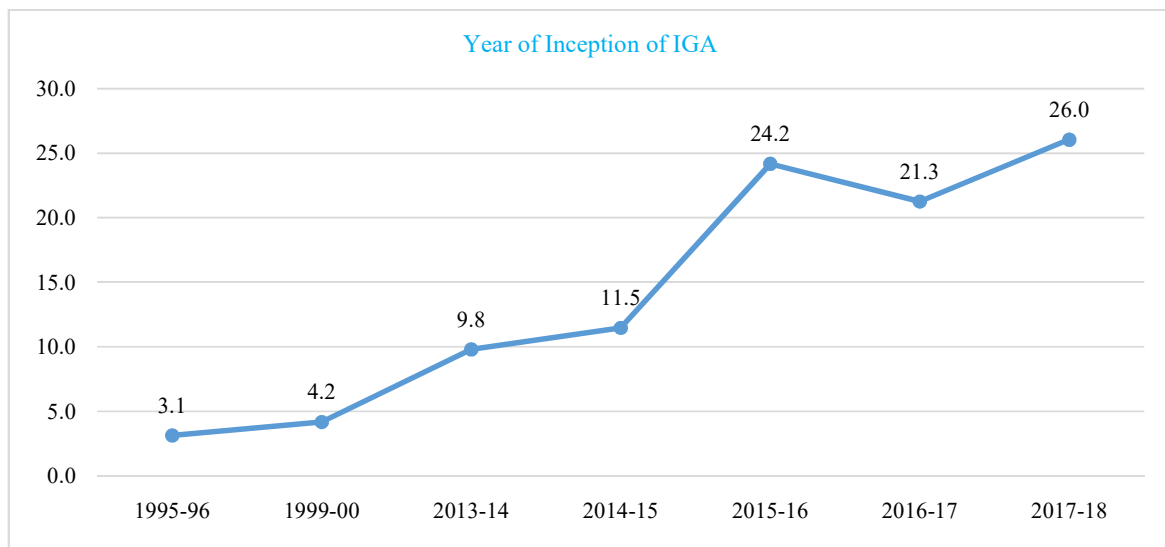
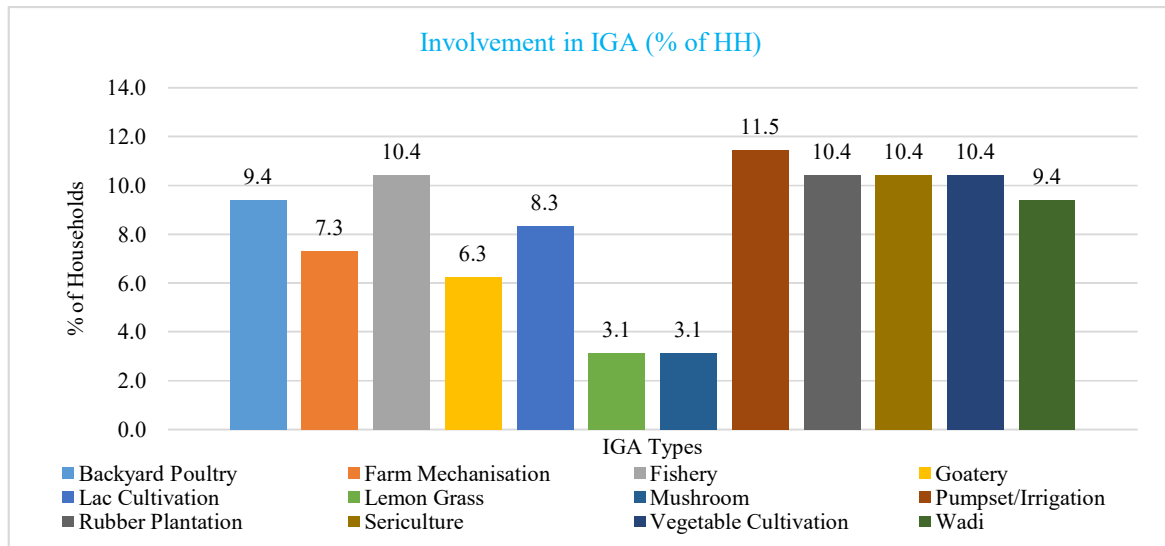
Table 58: Skill Based Training and Engagement

SN	Particulars	Figures
1	Households having Trained Persons	11.46 Percent
1.1	Training on Grafting / Plantation	10.91 Percent
1.2	Mushroom Cultivation	27.27 Percent
1.3	Spinning	36.36 Percent
1.4	Tapping	25.45 Percent
2	Training has been Beneficial	11.46 Percent
3	Trained Person Employment in Rubber Society	25.45 Percent
4	Average Monthly Income	Rs. 5000-Rs. 6,000

IGA Business Economics:

The households are engaged in different Income Generating Activities (IGAs) to supplement their household income and for economic development. The IGAs have been supported by the tribal development and administration units directly and/or through financial institutions. In the IGA activities, number of persons supported for agricultural activities is highest (pump set support-11.5 percent and horticulture by 10.4 percent), followed by fishery, (10.4 percent), rubber plantation (10.4

percent) and sericulture (10.4 percent). Lowest percentage of households are engaged in lemon grass cultivation (3.1 percent) and mushroom cultivation (3.1 percent).



Under SCA to TSS, the families were supported who were associated in similar nature of IGAs prior to the support to strengthen their activities further. About 28.5 percent households are involved in different IGA by 2014-15 who were supported under SCA to strengthen their activities. Some IGAs were taken up newly by the families, in collaboration with others in a group approach or independently in view of the involvement of others in similar activities. Different households were supported under current IGA in different years as discussed earlier. About 28.5 percent tribal families were supported for IGA in the year 2015-16, 24.2 percent in 2015-16, 21.3 percent in 2016-17 and 26.0 percent in 2017-18. Distribution of households supported in different years for different IGA under SCA is presented in the table.

Table 59: Year of Involvement / Inception of IGA

IGA Types	Pre 2015-16		2015-16		2016-17		2017-18		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Backyard Poultry	10	22.2	5	11.1	15	33.3	15	33.3	45	9.4
Farm Machineries	0	0.0	0	0.0	15	42.9	20	57.1	35	7.3

Fishery	12	24.0	23	46.0	15	30.0	0	0.0	50	10.4
Goatery	15	50.0	0	0.0	15	50.0	0	0.0	30	6.3
Lac Cultivation	20	50.0	0	0.0	0	0.0	20	50.0	40	8.3
Lemon Grass	0	0.0	0	0.0	15	100.0	0	0.0	15	3.1
Mushroom	0	0.0	15	100.0	0	0.0	0	0.0	15	3.1
Pump set	15	27.3	15	27.3	25	45.5	0	0.0	55	11.5
Rubber Plantation	35	70.0	15	30.0	0	0.0	0	0.0	50	10.4
Sericulture	0	0.0	20	40.0	0	0.0	30	60.0	50	10.4
Veg. Cultivation	0	0.0	15	30.0	0	0.0	35	70.0	50	10.4
Wadi	30	66.7	8	17.8	2	4.4	5	11.1	45	9.4
Total	137	28.5	116	24.2	102	21.3	125	26.0	480	100.0

Distribution of IGAs, based on the involvement of the tribal families and its economic support reveals that 46.9 percent families having IGAs that are multi seasonal and continue throughout the year (46.9 percent) whereas 53.1 percent families do the IGAs on seasonal basis. Backyard poultry, fisher related activities, goat raring, mushroom cultivation and Wadi has been annual source of engagement for the families. Similarly; lac, lemon grass cultivation, rubber plantation, sericulture and vegetable cultivation is more seasonal. Rubber farming is season as most of the plantations are new and yet to yield rubber.

Table 60: Seasonality of IGA by its Category

IGA Types	Annual		Seasonal		Total	
	No.	%	No.	%	No.	%
Backyard Poultry	45	100.0	0	0.0	45	100.0
Farm Machineries	0	0.0	35	100.0	35	100.0
Fishery	50	100.0	0	0.0	50	100.0
Goatery	30	100.0	0	0.0	30	100.0
Lac Cultivation	0	0.0	40	100.0	40	100.0
Lemon Grass	0	0.0	15	100.0	15	100.0
Mushroom	15	100.0	0	0.0	15	100.0
Pump set	40	72.7	15	27.3	55	100.0
Rubber Plantation	0	0.0	50	100.0	50	100.0
Sericulture	0	0.0	50	100.0	50	100.0
Veg. Cultivation	0	0.0	50	100.0	50	100.0
Wadi	45	100.0	0	0.0	45	100.0
Total	225	46.9	255	53.1	480	100.0

Table 61: IGA by Group / Individual

IGA Types	Group		Individual		Total	
	No.	%	No.	%	No.	%
Backyard Poultry	15	33.3	30	66.7	45	100.0
Farm Machineries	20	57.1	15	42.9	35	100.0
Fishery			50	100.0	50	100.0
Goatery			30	100.0	30	100.0
Lac Cultivation			40	100.0	40	100.0
Lemon Grass			15	100.0	15	100.0
Mushroom			15	100.0	15	100.0
Pump set			55	100.0	55	100.0
Rubber Plantation	50	100.0			50	100.0
Sericulture			50	100.0	50	100.0
Veg. Cultivation			50	100.0	50	100.0
Wadi			45	100.0	45	100.0
Total	85	17.7	395	82.3	480	100.0

Group approach to IGA is less prominent (17.7 percent) than individual based IGA (82.3 percent). Here group approach to IGA refers to all the members of the groups doing or managing similar type of IGA and account is kept at the group level. Some of the IGAs are taken up by tribal families both in group and individual approach, like 33.3 percent families are doing backyard poultry in a group approach whereas 66.7 percent doing it individually. Similarly, farm machineries are managed in a group approach (57.1 percent) and also supported to individual farmers (42.9 percent)

Table 62: Different IGAs Taken up by Different Tribes (1)

SN	Tribes	Backyard Poultry		Farm Mechanisation		Fishery		Goatery		Lac Cultivation		Lemon Grass	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	Bathudi												
2	Bhumij												
3	Ganda												
4	Kandha	18	13.6			15	11.4	8	6.1	16	12.1		
5	Kisan			12	21.1	17	29.8						
6	Kolha							15	65.2				
7	Lodha											15	100.0
8	Mankirdia	15	100.0										
9	Munda	5	21.7	3	13.0	3	13.0						
10	Oram	7	77.8										
11	Paudi Bhuyan												
12	Santal			20	17.4	15	13.0	7	6.1	24	20.9		
	Total	45	9.4	35	7.3	50	10.4	30	6.3	40	8.3	15	3.1

Of the total tribal households, 9.4 percent are involved in backyard poultry which is highest in Mankirdia, 7.3 percent supported for farm mechanization (highest of 21.1 percent among Kissan), 10.4 percent in fishery (highest of 29.8 percent among Kissan), 6.3 percent in goat rearing (highest of 65.2 percent in Kolha), 8.3 percent in lac cultivation (highest of 20.9 percent Santal), 3.1 percent mushroom cultivation, 10.4 percent in rubber cultivation (Highest of 83.3 percent among Bhumij), 10.4 percent in sericulture (highest of 39.1 percent in Munda), 10.4 percent in vegetable cultivation (highest of 42.3 percent in Bhuyan) and 9.4 percent in wadi (highest of 17.4 percent in Kolha).

Table 63: Different IGAs Taken up by Different Tribes (2)

SN	Tribes	Mushroom		Pump set/Irrigation		Rubber Plantation		Sericulture		Vegetable Cultivation		Wadi	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	Bathudi					15	68.2			7	31.8		
2	Bhumij					35	83.3					7	16.7
3	Ganda											1	100.0
4	Kandha	15	11.4	16	12.1					24	18.2	20	15.2
5	Kisan			6	10.5			21	36.8			1	1.8
6	Kolha			4	17.4							4	17.4
7	Lodha												
8	Mankirdia												
9	Munda			2	8.7			9	39.1			1	4.3
10	Oram			1	11.1					1	11.1		
11	Paudi Bhuyan			15	57.7					11	42.3		
12	Santal			11	9.6			20	17.4	7	6.1	11	9.6
	Total	15	3.1	55	11.5	50	10.4	50	10.4	50	10.4	45	9.4

Days of Engagement:

Annual days of engagement in different IGA varies and majority of the families remain engaged for 30 to 60 days (37.1 percent) followed by more than 182 days (21.7 percent). Based on IGA type, 14.6 percent families remain engage for about 30 days in the IGA and 14.0 percent for 60 to 91 days. So, looking at days of engagement, irrespective of number of workers, it can be said with regard to IGA that engagement are marginal in nature and does not provide full engagement round the year. Hence, families are engaged primarily in other activities and IGAs are supplementing household livelihood.

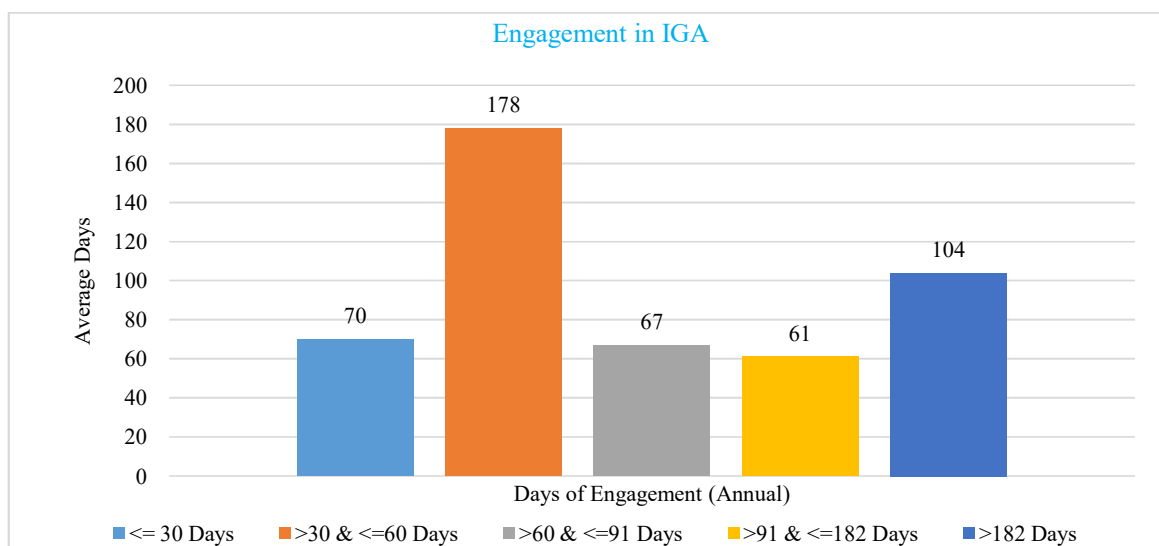


Table 64: Annual Days of Engagement by IGA

IGA Types	<= 30 Days		>30 & <=60 Days		>60 & <=91 Days		>91 & <=182 Days		>182 Days		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Backyard Poultry									45	100.0	45	9.4
Farm Machineries	15	42.9	10	28.6			10	28.6			35	7.3
Fishery			36	72.0	14	28.0					50	10.4
Goatery									30	100.0	30	6.3
Lac Cultivation			36	90.0	4	10.0					40	8.3
Lemon Grass	3	20.0	12	80.0							15	3.1
Mushroom									15	100.0	15	3.1
Pump set			15	27.3	20	36.4	20	36.4			55	11.5
Rubber Plantation	38	76.0	12	24.0							50	10.4
Sericulture					20	40.0	30	60.0			50	10.4
Veg. Cultivation			42	84.0	8	16.0					50	10.4
Wadi	14	31.1	15	33.3	1	2.2	1	2.2	14	31.1	45	9.4
Total	70	14.6	178	37.1	67	14.0	61	12.7	104	21.7	480	100.0

Days of engagement in IGA activities by tribes reveals that highest percentage of families belonging to Bathudi tribe are engaged for 30-60 days (81.8 percent), 90.5 percent Bhumij are involved for about 30 days, 47.0 percent Kandha remain engaged for 30-60 days, 80.0 percent Lodha families engage in IGA for 30-60 days and 76.9 percent Paudi Bhuyan remain engaged for 30-60 days in IGA activities. Days of engagement in IGA by different tribes are presented in the table.

Table 65: Days of Engagement in IGA by Tribes

IGA Types	<= 30 Days		>30 & <=60 Days		>60 & <=91 Days		>91 & <=182 Days		>182 Days	
	No.	%	No.	%	No.	%	No.	%	No.	%
Bathudi	3	13.6	18	81.8	1	4.5				
Bhumij	38	90.5	4	9.5						
Ganda	1	100.0								
Kandha	8	6.1	62	47.0	21	15.9			41	31.1
Kisan	13	22.8	11	19.3	12	21.1	21	36.8		
Kolha							5	21.7	18	78.3
Lodha	3	20.0	12	80.0						
Mankirdia									15	100.0
Munda	4	17.4	3	13.0	2	8.7	9	39.1	5	21.7
Oram			1	11.1	1	11.1			7	77.8
Paudi Bhuyan			20	76.9	1	3.8	5	19.2		
Santal			47	40.9	29	25.2	21	18.3	18	15.7

Total	70	14.6	178	37.1	67	14.0	61	12.7	104	21.7
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Income from IGA:

Average income from IGA, irrespective of the days of engagement remain to be Rs.12,301.92. Difference in income among different IGAs remains to be high. The families engaged for about 30 days in IGA are having average annual income of Rs.23,438.49 which is relatively higher than the average income of families engaged for more days in different IGAs. Families engaged for 30-60 days having average income of Rs.10,188.82, average annual income of Rs.14,356.27 by families engaged for 60-90 days, Rs.13,315.53 by families engaged for 91-182 days and average annual income of Rs.6,504.81 by families engaged for more than 182 days in different IGAs. Some activities that fetch more income to families in short duration are like poultry, goat rearing, vegetable cultivation etc.

Table 66: Days of Engagement & Income From IGA

Engagement Days		Gross Income	Engagement Days		Gross Income
<= 30 Days	No. of HH	70	>91 & <=182 Days	No. of HH	61
	Av. Income	23438.49		Av. Income	13315.53
	Median	10286.00		Median	10920.00
	Std. Deviation	28165.48		Std. Deviation	5532.18
	Maximum	96996.00		Maximum	29900.00
	% of Total HH	14.6		% of Total HH	12.7
>30 & <=60 Days	No. of HH	178	>182 Days	No. of HH	104
	Av. Income	10188.82		Av. Income	6504.81
	Median	6500.00		Median	840.00
	Std. Deviation	10664.11		Std. Deviation	10151.61
	Maximum	62500.00		Maximum	37400.00
	% of Total HH	37.1		% of Total HH	21.7
>60 & <=91 Days	No. of HH	67	Total	No. of HH	480
	Av. Income	14356.27		Av. Income	12301.92
	Median	11600.00		Median	8568.00
	Std. Deviation	7205.30		Std. Deviation	14739.26
	Maximum	42500.00		Maximum	96996.00
	% of Total HH	14.0		% of Total HH	100.0

Household Income and Expenditure:

The average annual household income of the tribal families (including IGA), irrespective of their categories, calculated to be Rs.44,877.87 which is 33.22 percent higher than the pre-SCA income. However, the growth in income cannot be treated exclusively as an impact of SCA rather contribution of SCA is one of the attributes in supporting the families to have additional income. Other attributes are like increased market price of different commodities which the tribal families deal with (NTFP, agricultural produces etc.), increment in per day cost of labour for wage earners, access to other financial benefits provided under different schemes, reduction is cost due to provision of subsidy under different schemes etc.

Table 67: Average Annual Income of Tribal Households

Tribes		Income Before SCA	Income Present	Mean Difference %	Tribes		Income Before SCA	Income Present	Mean Difference %
Bathudi	Mean	45645.45	69086.36	51.35	Mankirdia	Mean	21936.67	23068.00	5.16
	Median	44250.00	62250.00	40.68		Median	22200.00	23340.00	5.14
	SD	4262.542	18825.456			SD	2532.677	2551.233	
Bhumij	Mean	27878.57	86097.62	208.83	Munda	Mean	37300.00	42481.30	13.89
	Median	27750.00	71250.00	156.76		Median	38000.00	43000.00	13.16
	SD	3281.548	39689.94			SD	7581.437	5058.389	
Ganda	Mean	29000.00	41500.00	43.10	Oram	Mean	29088.89	36893.33	26.83
	Median	29000.00	41500.00	43.10		Median	27000.00	34850.00	29.07

	SD					SD	8525.468	6182.516	
Kandha	Mean	31715.53	39151.05	23.44	Paudi Bhuyan	Mean	25969.23	33634.62	29.52
	Median	31850.00	37150.00	16.64		Median	25000.00	30525.00	22.10
	SD	5702.494	9362.087			SD	5743.990	11267.71	
Kisan	Mean	34770.18	43884.39	26.21	Santal	Mean	39145.22	41790.87	6.76
	Median	34600.00	43700.00	26.30		Median	36500.00	41300.00	13.15
	SD	6661.214	6555.897			SD	11478.11	6845.698	
Kolha	Mean	33908.70	40277.83	18.78	Total	Mean	33661.46	44877.87	33.32
	Median	35000.00	38500.00	10.00		Median	32550.00	40550.00	24.58
	SD	3923.810	5733.753			SD	9091.285	20509.133	
Lodha	Mean	25300.00	28837.33	13.98					
	Median	25600.00	29160.00	13.91					
	SD	3234.855	3173.325						

Note: SD: Standard Deviation

Looking at average annual income by tribes in the present scenario, it is evident that some tribes have higher income than the total average income combining all the tribes, such as Bhatudi and Bhumij. Whereas, some tribes have average annual income is less than that of the combined average annual income (i.e., Rs.44,877.87) like Lodha, Mankirdia, Oram, Paudi Bhuyan etc. In comparison to pre-SCA, highest income growth (in terms of percentage of mean difference) observed among Bhumij (208.83 percent) followed by Bathudi and lowest growth observed in case of Mankirdia, Santal and Lodha.

Table 68: Household Expenditure

Heads of Expenditure	Pre-SCA	Present	Difference	% of Difference	Std. Deviation	
					Pre SCA	Present
Food	14742.92	17609.58	2866.67	19.44	3373.338	4034.480
Clothing	2571.13	3338.70	767.57	29.85	1572.391	1651.182
Health	2056.72	2735.74	679.03	33.02	902.148	1114.031
Education	2248.35	2198.37	-49.99	-2.22	1252.383	1753.871
Entertainment	1144.78	1713.53	568.74	49.68	601.055	1105.881
Housing	2617.82	3252.38	634.56	24.24	1581.132	1958.766
Agri / Business Investment	3560.43	4002.88	442.45	12.43	1143.177	1233.770
Credit Repayment	2076.92	2876.19	799.27	38.48	837.808	1269.608
Mobility	200.00	500.00	300.00	150.0	-	-
Social / Religious	2109.09	2197.66	88.57	4.2	858.052	643.008
Household Assets	1490.51	1671.09	180.58	12.12	917.628	1028.886
Utility Payment	1872.67	1982.7	110.03	5.88	744.906	797.776
Other Expenditure	1870.07	1243.72	-626.35	-33.49	575.102	774.954
Total Expenditure	27518.54	34750.04	7231.5	26.28	5720.880	7678.730

Note: Housing covers house construction, repair and maintenance

In terms of household expenditure, average annual household expenditure of a tribal family, irrespective of their category, remains to be Rs.34,750.04 in the present situation which is higher by about 26.28 percent from the pre-SCA situation. Highest percentage of difference in heads of expenditures at the household level (pre-SCA and present) is in entertainment (49.68 percent), followed by credit repayment (38.48 percent) and health care (33.02 percent). Though, average expenditure incurred towards food remains high, difference in expenditure is comparatively less than some of the other heads of expenditure.

In the overall annual average household expenditure, the food expenditure, which was 53.57 percent of the total household expenditure, reduced to 50.67 percent in the present situation and it may be attributed mostly to access to PDS. Expenditure in education has also reduced from 8.17 percent to 6.33 percent and expenditure in agricultural and other IGA activities have also reduced marginally from 12.94 percent to 11.52 percent. In remaining cases, expenditure percentage in different heads of expenditure in the pre-SCA and present situation is remaining more or less same, excluding expenditure in other heads. Looking at the overall income and expenditure, it is evident that some

asset accumulation process has just began when the families are in a position to have some balance funds for exigencies.

5.2 Income Generation Activities:

5.2.1 WADI:

Introduction: The wadi concept is a holistic development approach which covers the development of a designated area of land and its inhabitants in the form of a *wadi cluster*. It has dimensions of farm production, natural resource management, social mobilization and economic upliftment. From an individual farm perspective, it is a tree-based farming system, more specifically a *wadi system*, in which the agri-horti-forestry unit interacts with other production components of the farm such as annual crop fields and livestock. At the level of the physical land unit, the *wadi plot* is an agri-horti-forestry arrangement of beneficial plant species. This concept has turned out to be a practical strategy for the development of smallholders in dry areas who cannot take the risk of investing in high-input intensive agriculture because of poor land quality and limited water availability.

Activities in the broader framework of the wadi concept can be for natural resource management, adoption of sustainable farming practices and the overall socio-economic development of rural communities. Individually, farmers may construct water conservation structures within their farms, but the benefits can be manifold if this is taken up as a community initiative. Hence area-based treatment, as in watersheds or comparable large land areas, is advocated in wadi programs for soil and water conservation. Not only this ensures uniformity and contiguity in the measures implemented, but also makes sure that plots of common and community land in the locality are also treated. Expected other benefits due to community action are like development of water bodies to harness rain water, improvement in pests and diseases control effectively with the coordinated effort of neighbour farmers and realization of better prices for the produce.

Another feature of the wadi concept is the empowerment of people through social mobilisation and capacity building to address issues beyond farming and agroforestry. This can be seen in the formation of people's organisations that assume the responsibility of managing local issues. It creates opportunities for people, especially women, to work together as small groups and earn additional income. Other key components of the wadi programme are community health, drinking water and sanitation. Thus, at the individual farm level, wadi is an agri-horti-forestry intervention. The picture at the macro-level, however, is one where the wadi program is an approach to comprehensive rural development through a farming system approach.

5.2.1.1 Wadi System:

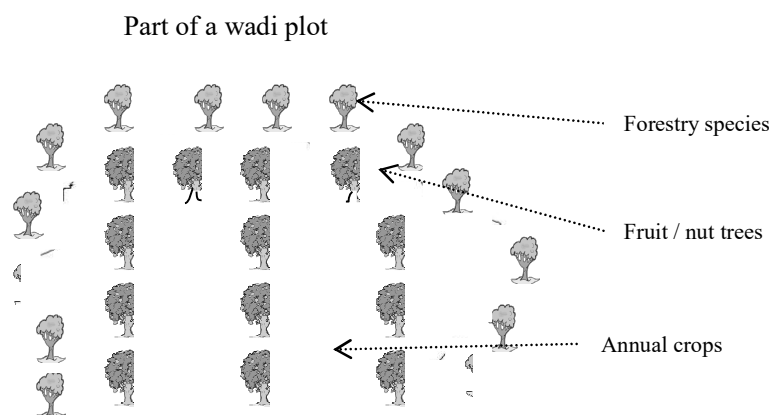
The influence of other enterprises of the farmer on the agroforestry unit is given due recognition in the wadi concept. Whereas the interaction among the components in most agroforestry systems is in the tree-crop interface, it is generally in the carry over form in wadi. For example, the fodder from the forestry species in the wadi is used as fodder for livestock and the dung or farmyard manure is returned to the interspaces where annual crops are grown. Similarly, there is interaction among the wadi and non-wadi land in sharing labour and inputs. Taking these factors into consideration in the design and execution contributes towards the success of wadi. The wadi system also includes activities such as production of seedlings or grafts in nurseries and post-harvest handling of processing and marketing of produce.

1. A Wadi plot is a piece of family-owned land that is developed for agri-horti-forestry with soil & water conservation;
2. It is a long term, multi component project with high degree of beneficiary participation;
3. Intercropping: off-season vegetables and pulses for assuring food security during the gestation period;

- This combination met the food, fodder, fuel, timber, green manure requirements of tribal households.

5.2.1.2 Wadi Plot:

The wadi plot is usually a piece of land measuring 0.4-1.0 ha. It has agricultural crops, horticultural trees and forestry species as constituents. The arrangement of these species generally centres around the horticultural component. Fruit and nut trees like mango and cashew are the common horticultural species in wadi and they are planted at the recommended spacing; for example, 10 x 10 m for mango and 7.0 x 7.0 for cashew. As intercrops are grown in the spaces between the trees, what they produce is an additional yield from the land and it does not come at the expense of fruit / nut yield. The third component of the wadi system is the forestry species. These multipurpose trees are planted at relatively close spacing along the border of the land designated for wadi. The shift from rainfall-dependent single crop to at least three species in the wadi enhances the ecological sustainability of the farm. At the same time, the product diversity in the form of food, fodder, fuelwood and small timber increases the economic sustainability of the farmer.



Introduction of tree-based system makes small holders realise that their land is a valuable resource. As a result, they build a permanent relationship with their land and devote more time and energy towards its development. Wadi may not be the best option for fertile lands with irrigation facility where 2-3 crops can be raised successfully in a year. Wadi has succeeded among people who do not own fertile land and water facility. A basic requirement in wadi program is the initial support for inputs as subsistence farmers do not have the reserves to invest. This support has to be further strengthened by providing technical information on improved farming practices. Eventually, however, wadi farmers create a productive resource where the major input is their own labour. The wadi system is suitable for tribal houses for the reasons, such as;

- The tribal HHs in general faces food and livelihood insecurity;
- They are not able to meet their food and fodder requirements from land-based activities;
- Most of the farmers practice rain fed agriculture, much of it on marginal and degraded land.
- During dry season, tribal farmers migrates under distress conditions;
- Food security provisions does not automatically ensure food security at the household level;
- Often the approaches taken are sectoral and fragmented leading to undesirable consequences for the poor farmers;
- Scope for taking up commercial crops, to improve the economic status of the tribal farmers.

Table 69: Model Principles

Particulars	Model Specifications
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Motivation behind the model	Income Generation Opportunities; Reduction in Migration; Natural Resource Management.
Process Adopted	Soil and Water Conservation, promoting WADI, Creation of CBOs.
Stakeholders Participated	Local Tribal Development and Administration Units; Directorate of Horticulture; Panchayati Raj and Drinking Water Dept. (MGNREGA).
Target Beneficiaries	Tribal Households
Benefits	Capacity building of people and institutions. Less external dependency. Asset building at household as well as village level.
Overall Outcome	Ecological Security Food Security Financial Security Social Security

5.2.1.3 Objectives:

Considering the need of a holistic approach to improve the livelihood of vulnerable rural tribal households, the ITDAs, have been promoting wadi for self-reliance of tribal households in farming. Plan for orchard development was initiated along with the revival of intercropping and crop diversification in several villages. Care has been taken for a long-term program which will be helpful for raising successful orchards in tribal farmer's field. The action plan has been drawn up keeping in view the provision made in National Horticulture Mission (NHM) by Horticulture Department and the MGNREGS by DRDA and a part of the expenditure borne by the participating farmers and rest funded under SCA to TSP. The ratio of the plan outlay has been kept as 51:49 in respect of Beneficiary + MGNREGS component and subsidy component under both NHM and SCA to TSP which is admissible under SCA. WADI project was started with the objective of;

- Remunerative self-employment and settlement in own environment;
- Improving efficient utilisation of land and water resources.
- Reducing seasonal migration and shifting cultivation.
- Promoting food-security, improve quality of life and a clean environment.
- Improvement in agricultural practices and technologies
- Reduced dependency on forest for fuel wood & fodder.

5.2.1.4 Convergence Plan:

WADI project has been implemented in a convergence manner with different schemes, such as schemes of Agriculture and Farmers' Empowerment Department, Forest and Environment Department, Panchayati Raj and Drinking Water Dept. etc. Under the project, different inputs were provided by the ITDA to the Wadi farmers so that their initial investment cost will be reduced and it will not be a burden on them in the way of achieving more sustainable livelihood. Farmers were provided with different inputs for wadi plantation and its management.

Tentative Estimate of WADI

SN	Components	Amount For 1 Ac.(in Rs.)	Convergence with
A	Labour Component:		
	Land Development	4920	MGNREGS
1	Lay out and demarcation	328	MGNREGS
2	Digging of pits (1mt x 1mt x 1mt)	4100	MGNREGS
3	Filling of pits	820	MGNREGS
4	Planting followed by watering	492	MGNREGS

5	Irrigation- Drip System	8200	MGNREGS
6	Intercultural operation	820	MGNREGS
7	Intercrop Vegetables Cultivation	6560	MGNREGS
8	Application of PP Chemical	328	MGNREGS
9	Gabion & Mulching (installation)	660	MGNREGS
10	Collection of fencing material and fixing.	4100	MGNREGS
11	Collection of staking materials and fixing	492	MGNREGS
12	Unforeseen labour works	656	MGNREGS
B	Materials Component:		
1	Cost of Planting material	1070	SCA-TSP
2	Cost of Organic manure / fertilizer & other Organic Products	3000	SCA-TSP
3	Cost of Organic PP Chemical	420	SCA-TSP
4	Cost of fencing materials including cost of forest species seedling	1950	SCA-TSP
5	Cost of Gabion & Mulching (100-micron Poly mulch)	7000	SCA-TSP
6	Cost of Intercropping Vegetable Cultivation	3500	SCA-TSP
7	Cost of Pitchers.	1000	SCA-TSP
8	Cost of Display Board	520	SCA-TSP
9	Transportation Charges- WADI inputs	2500	SCA-TSP
10	Miscellaneous expenditure	250	SCA-TSP
C	Capacity Building & Manpower Support Component:		
1	Cost of Training & Capacity Building	330	SSD
2	Cost of Exposure Visit (in or outside district)	330	SSD
3	Cost of Awareness Camp (i.e. Theatre / Puppet Show / Road Show etc.)	330	SSD
4	Semi-Skilled Person (i.e., Uddyan Sathi) for supervision of WADI	1100	MGNREGS
Sub-Total: MGNREGS Component		33576	
Sub-Total: SCA Component		21210	
Sub-Total: SSD Component		990	
Total:		55776	

5.2.1.5 Inter Cropping:

To make use of the available land optimally and to meet the short-term requirements, the project promoted intercropping and crop diversification within the Wadi plot. Farmers are oriented accordingly to take up a range of crops like grams, pulses and vegetables. For example, vegetables like tomato, brinjal, beans, chilly, pumpkin and various pulses such as cow pea, arhar, and black gram were promoted by the farmers under the project.

5.2.1.6 Study Observation:

The study covered 45 tribal farmers from different ITDAs who have been supported under WADI in different years. Of the total farmers, 33.3 percent were supported during 2013-14, 33.3 percent during 2014-15, 17.8 percent during 2015-16, 4.4 percent during 2016-17 and remaining 11.1 percent during 2017-18. In 2013-14 and 2014-15, farmers were supported for Mango plantation, in 2015-16 for Cashew, in 2016-17 for Litchi with mixed cropping and Mango and in 2017-18 for Litchi and mixed cropping. In ITDA, Nabarangpur, farmers were supported with Cashew plantation whereas, Litchi with mixed cropping were promoted by Bonai ITDA and Mango by all the ITDAs.

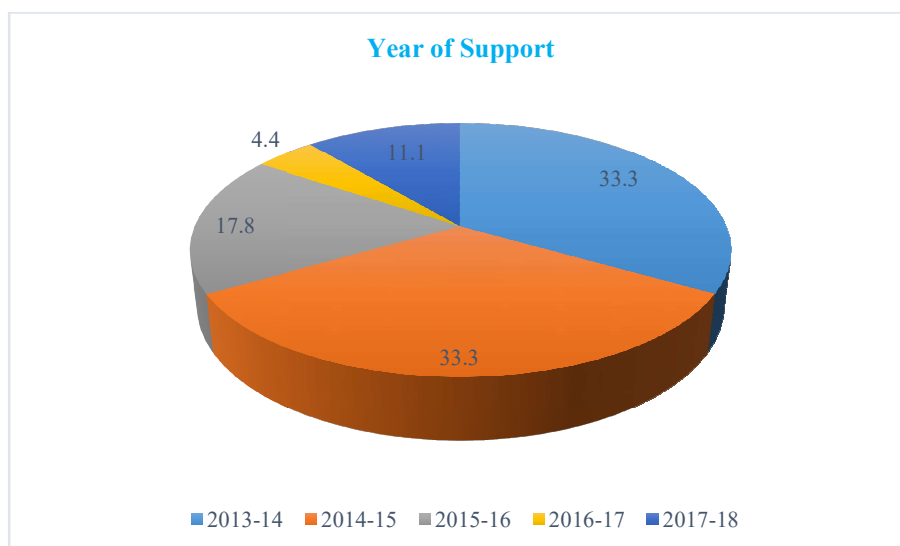


Figure 5: Distribution of Tribal Households by Year of Support

Table 70: Wadi Plantation by ITDAs

Name of the ITDA	Cashew Plantation		Litchi & Mixed Crop		Mango		Total	
	No.	%	No.	%	No.	%	No.	%
ITDA Baripada					15	100.0	15	33.3
ITDA Bonei			6	66.7	3	33.3	9	20.0
ITDA Nabarangpur	8	53.3			7	46.7	15	33.3
ITDA Sundargarh					6	100.0	6	13.3
Total	8	17.8	6	13.3	31	68.9	45	100.0

5.2.1.6.1 Involvement of Farmers by Holding Categories:

Generally, farmers of low holding categories are involved in wadi. Of the total farmers studied, 24.4 percent are marginal farmers, 60.0 percent are small farmers and 15.6 percent are semi-medium farmers. Marginal and small farmers together comprise 84.4 percent of the total farmers who have been covered under wadi. Land holding of farmers by plantation types is presented in the Table 71: Land Holding of Farmers Involved in WADI.

Table 71: Land Holding of Farmers Involved in WADI

Plantation Types	Agriculture Land Holding Categories							
	Marginal Farmer		Small Farmer		Semi-Medium Farmer		Total	
	No.	%	No.	%	No.	%	No.	%
Cashew Plantation	2	25.0	4	50.0	2	25.0	8	17.8
Lichi, Mixed Crop	1	16.7	4	66.7	1	16.7	6	13.3
Mango	8	25.8	19	61.3	4	12.9	31	68.9
Total	11	24.4	27	60.0	7	15.6	45	100.0

The marginal farmers area having about 0.80 acre under plantation crops of which 0.61 acre covered under wadi plantation. In case of small farmers, average of 1.10 acre is covered under wadi of the total 1.18 acre of plantation area. In case of semi-medium farmers all the area having plantation crops (1.61 acres) are under wadi plantation. Irrespective of the holding categories, average of 1.16 acres are under plantation crops of which 1.06 acres are covered under wadi plantation.

Table 72: Wadi Farmers of Different Holding Categories

Land Holding Categories		Total Area under Plantation (Ac.)	Area of Wadi Plantation (Ac.)
Marginal Farmer	No. of HH	11	11

	Average	0.80	0.61
	% of Total HH	24.4	24.4
Small Farmer	No. of HH	27	27
	Average	1.18	1.10
	% of Total HH	60.0	60.0
Semi-Medium Farmer	No. of HH	7	7
	Average	1.61	1.61
	% of Total HH	15.6	15.6
Total	No. of HH	45	45
	Average	1.16	1.06
	% of Total HH	100.0	100.0

Looking by area devoted under different fruit crops by ITDAs, it is evident that cashew plantation area under ITDA, Nabarangpur is about 1.26 acres of which 1.13 acres covered under wadi when average agricultural holding size of the farmers is about 2.0 acres. Similarly, in ITDA, Bonei, average of 1.33 acres put under Litchi and mixed crops by the farmers who have average agricultural land holding of about 2 acres. Mango plant is most promoted under wadi in all the four ITDAs and average of 0.99 acres supported under Wadi to the farmers. Of the average holding size of 1.87 acres, about 1.10 acres area under plantation. In all the cases, substantial part of the land is put to fruit plantation. As the scope of inter cropping and mixed cropping exists and fruit crops normally do not affect the yield of other crops, farmers are willing to take up plantation crops. The study finds that looking at the future benefits, some marginal and small farmers have put additional area under plantation crops (difference between total area under plantation and area under wadi). Crop wise coverage of households and area devoted by farmers in different ITDAs are presented in the Table 73.

Table 73: Average Land Holding and Plantation Area

Activity	ITDA		Ag. Land Holding (Ac.)	Total Area under Plantation (Ac.)	Area under Wadi Plantation (Ac.)	
Cashew Plantation	ITDA Nabarangpur	No. of HH	8	8	8	
		Average	2.00	1.26	1.13	
		% of Total HH	17.8	17.8	17.8	
Litchi with Mixed Crop	ITDA Bonei	No. of HH	6	6	6	
		Average	2.00	1.33	1.33	
		% of Total HH	13.3	13.3	13.3	
Mango	ITDA Baripada	No. of HH	15	15	15	
		Average	1.93	1.11	1.04	
		% of Total HH	33.3	33.3	33.3	
	ITDA Bonei	No. of HH	3	3	3	
		Average	2.00	1.00	1.00	
		% of Total HH	6.7	6.7	6.7	
	ITDA Nabarangpur	No. of HH	7	7	7	
		Average	1.57	1.00	0.77	
		% of Total HH	15.6	15.6	15.6	
	ITDA Sundargarh	No. of HH	6	6	6	
		Average	2.00	1.23	1.12	
		% of Total HH	13.3	13.3	13.3	
	Total	Total	No. of HH	31	31	31
			Average	1.87	1.10	0.99
			% of Total HH	68.9	68.9	68.9
Total	ITDA Baripada	No. of HH	15	15	15	
		Average	1.93	1.11	1.04	
		% of Total HH	33.3	33.3	33.3	
	ITDA Bonei	No. of HH	9	9	9	
		Average	2.00	1.22	1.22	
		% of Total HH	20.0	20.0	20.0	
	ITDA	No. of HH	15	15	15	

Nabarangpur	Average	1.80	1.14	0.96
	% of Total HH	33.3	33.3	33.3
ITDA Sundargarh	No. of HH	6	6	6
	Average	2.00	1.23	1.12
	% of Total HH	13.3	13.3	13.3
Total	No. of HH	45	45	45
	Average	1.91	1.16	1.06
	% of Total HH	100.0	100.0	100.0

On an average, 17.8 percent farmers have planted about 63 cashew plants, 13.3 percent farmers having litchi and mixed crop plantation of 67 numbers and majority of 68.9 percent farmers are having 55 mango plants in their fields.

Table 74: Average No. of Plants Planted by Farmers

Plant Name	No. of HH	Average No. of Plants	% of Total HH
Cashew Plantation	8	63	17.8
Litchi, Mixed Crop	6	67	13.3
Mango	31	55	68.9
Total	45	58	100.0

The average expenditure incurred in litchi and mixed crop plantation is highest among all other fruit crops (Rs.96,000/-) followed by cashew plantation (Rs.88,575/-) and mango plantation (Rs.77,371/-). Apart from saplings, ITDAs also supported with other inputs like fertilizer (average of 115.67 Kg.) and pesticides (5.31 lt.). The average cost incurred towards labour estimated to be Rs.81846.67, irrespective of the plantation categories, which is entirely managed from MGNREGS. The average maintenance cost incurred, irrespective of plant categories, is about Rs.7958.33 which is born by ITDAs. Details of inputs and expenditure incurred by plant types is presented in the Table 75.

Table 75: Inputs and Expenditure Incurred

Plant Name	Particulars	Fertilizer (Kg.)	Pesticides (Lt.)	Maintenance Cost (Rs.)	Labour Cost (Rs.)	ITDA Support (Rs.)	PR & DW Dept. (Rs.)	Total Expenditure Incurred
Cashew Plantation	No. of HH	8	8	8	8	8	8	8
	Average	125.6	5.7	8484.4	23868.8	32353.1	23868.8	88575.0
	% of Total HH	17.8	17.8	17.8	17.8	17.8	17.8	17.8
Litchi, Mixed Crop	No. of HH	6	6	6	6	6	6	6
	Average	133.3	6.7	10000.0	25333.3	35333.3	25333.3	96000.0
	% of Total HH	13.3	13.3	13.3	13.3	13.3	13.3	13.3
Mango	No. of HH	31	31	31	31	31	31	31
	Average	109.7	5.0	7427.4	20838.7	28266.1	20838.7	77371.0
	% of Total HH	68.9	68.9	68.9	68.9	68.9	68.9	68.9
Total	No. of HH	45	45	45	45	45	45	45
	Average	115.67	5.31	7958.33	21976.67	29935.00	21976.67	81846.67
	% of HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.2.1.6.2 Overall Outcome:

All the farmers covered under wadi are of the opinion that it was a requirement for them to improve their agricultural income in a sustained manner. Though, gestation period is about 4-5 years in general, the plantation area can be utilized for other crops through inter-cropping and mixed cropping. Once the plants start yielding fruits (in most cases, it is yet to yield), the income of the farmers is expected to increase. By the time of the study, about 68.9 percent farmers have started realizing the benefit of the plantation. On an average each farmer has sold 109 Kg of mango and having average earning of Rs.2,916.13 from selling of mango.

Table 76: Income from Wadi

Plantation		Total Annual Production from Plants (KG)		Total Annual Sell of Produces (in Quintal)		Annual Income from WADI Plants (from selling)	
		Pre-Wadi	Post-Wadi	Pre-Wadi	Post-Wadi	Pre-Wadi	Post-Wadi
Cashew Plantation	No. of HH	8	8	8	8	8	8
	Average	0.00	0.00	0.00	0.00	0.00	0.00
	% of Total HH	17.8	17.8	17.8	17.8	17.8	17.8
Lichi, Mixed Crop	No. of HH	6	6	6	6	6	6
	Average	0.00	0.00	0.00	0.00	0.00	0.00
	% of Total HH	13.3	13.3	13.3	13.3	13.3	13.3
Mango	No. of HH	31	31	31	31	31	31
	Average	0.00	109.03	0.00	109.03	0.00	2916.13
	% of Total HH	68.9	68.9	68.9	68.9	68.9	68.9
Total	No. of HH	45	45	45	45	45	45
	Average	0.00	75.11	0.00	75.11	0.00	2008.89
	% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0



Scenario 1: Greater Involvement of Beneficiary in Wadi, Inter Cropping is done and beneficiary is deriving additional income

Scenario 2: Occasional Involvement of beneficiary in Wadi, No Inter-Cropping by the beneficiary and hence no additional income

Scenario 3: No ownership and involvement of beneficiary in Wadi, No wadi plants on the field across different patches in spite of irrigation provision

Case: According to Sonali, to grow a sapling to a tree is same as to make a child young. Sonali Soren, 51 years is a women farmer residing in village Baddakoi of Betna GP of Baripada Sadar Block. She is a widow having only one son. In the year 2013-14, a wadi plantation patch was selected by ITDA for mango plantation, where she has 1.25 acres of land. The selected patch covers 18 acres of land which belongs to 7 farmers. Initially it was a group activity till completion of maintenance period. Although individual area was in separate patches, but all involved farmers, including Sonali were looking after the entire area. Individually, maintenance effort was given by the farmers in their respective areas.

The wadi plantation was implemented in a convergence mode. Irrigation was supported under Jananidhi Programme, labour component under MGNREGA and other inputs provided by ITDA. For providing irrigation in the wadi patch of 18 acres, agriculture department provided Rs.50,000.00 and ITDA supported with Rs.55,000.00. The support provided by ITDA was a part of the beneficiary share. Under Jananidhi scheme, the beneficiary is expected to pay a part of the total cost which is subsidized by the ITDA. Under the convergence

approach, three departments monitored the activities. The agriculture department (horticulture directorate) also supported the farmers having wadi patch with micro irrigation (drip irrigation) for improving irrigation efficiency. Under MGNREGA, farmers were supported to meet the labour component of all the works taken up for plantation.



Sonali Soren is at her wadi (mango plantation)



Drip Irrigation System

Sonali took the lead among all the wadi farmers and started inter cropping of vegetable from the second year of plantation in the wadi area. As irrigation facility was there, it was easy for her to produce vegetables for self-consumption and for selling in the local market. She has been producing different vegetables, like tomato, potato, brinjal, cabbage and pumpkin for last 5 years in the wadi patch. On an average, she earns about Rs. 20,000.00 from the vegetable cultivation every year. Now she has adequate production and does not purchase vegetable from the market in season. Other families in the village and nearby area also procure vegetable from her. From vegetable cultivation, Sonali has been maintaining her small family. On the other hand, last year was the second year of mango production. She earned about Rs.10,000.00 by selling mango, collected from her 100 mango plants.

Apart from receiving support, hard labour of the beneficiary and interest towards the activity is important. Mere support under any scheme does not yield any outcome if the beneficiary does not take it forward.

Because of the wadi intervention under SCA to TSS, now each farmer is having on an average 68 fruit bearing plants. The household consumption of fruits has also increased and now the tribal households are consuming on an average 4.6 Kg of fruits which gives them additional nutritional value. Wadi has also emerged as a source of engagement and days of employment in wadi has been about 98 days in a year. It is expected that once the fruit bearing plants starts yielding to its fullest capacity, a farmer can get on an average Rs.30,000/- to Rs.35,000/- additional income, apart from his regular farming activities.

5.2.2 Sericulture:

Sericulture is one such activity that can not only increase the income of the people, but can also generate employment opportunities, particularly for women. And it will go a long way in increasing the income of the beneficiaries and raising their standard of living. It is capable of creating employment as well as alleviating poverty for large sections of population in the countryside. Sericulture suits both marginal and small-scale landholders because of its low investment, high assured returns, short gestation period and rich opportunities for enhancement of income and creation of family employment round the year. The net returns in case of Mulberry sericulture (when a farmer has one acre of Mulberry planta on using family labor) is estimated at about Rs 98,000/- per annum, which is substantially high compared to that of other tropical crops. Also, it is an activity, which does not depend on season, but can be carried out throughout the year.

Sericulture is having a number of advantages which has been motivating tribal families to take it up as a livelihood like low and one-time input cost, less water requirement for mulberry garden and high

return and less risk. Discussion with beneficiaries reveals that for many families, it is not a new venture and they have been engaged in this activity even before receiving support from ITDA.

Promotion of sericulture-based livelihood is objectively designed to create employment and self-sustainable livelihood source for the interested tribal households. Key conditions require proper precautions and preventive measure to be taken up by the farmers during process work as occupational disorder is high in this sector Extreme temperature to be avoided (humid area with stream and semi cold region are suitable) are; Strengthening supply chain system with both forward and backward linkage, Support Service, Producer group formation to create awareness on precaution and preventive measures as well as have the peer group support, Provisioning and ensuring irrigation facility with sprinkling system, Supply of safety gears/ equipment, Ensure spurious products in the name of silk, Supply of disease free laying, kits of rearing and transfer of latest technology;

1. High employment potential:
2. Generate kind of employment especially in rural areas. Hence, sericulture is used as a tool for rural reconstruction. Provides vibrancy to village economics:
3. Gross value of silk fabrics flows back to the cocoon growers with share of income to different groups under cocoon grower, reeler, twister, weaver and trade. Low gestation, high returns:
4. Women friendly occupation:
5. Ideal program for weaker section of the society.
6. Eco-friendly activity
7. Address equity concerns.

The study covered 50 tribal families who were supported sericulture under SCA to TSS. The tribal farmers under ITDA, Baripada (40.0 percent households) were supported during 2015-16 and in ITDA, Bonei, tribal families (60.0 percent households) were supported in 2017-18. Apart from these families, the other farmers are also involved in sericulture in the studied villages and nearby localities. In studied villages of ITDA, Baripada, 40 tribal families are involved in sericulture and about 300 tribal farmers in the nearby villages. In ITDA, Bonei, more number of tribal households are involved in sericulture. In studied villages, about 3945 families and around 32000 families in the nearby villages are involved in sericulture. It seems, ITDAs have taken special measures to involve tribal families in sericulture and making it a sustained source of income for them. However, of the total studied families, about 32.0 percent families from Mayurbhanj under ITDA Baripada, have left sericulture due to discontinuity in yarn preparation, non-availability of required equipment and marketing issues.

It is observed that almost all the households who were supported by the ITDAs under SCA were involved in sericulture, prior to availing support. So, ITDAs carefully selected the beneficiaries who have prior experience of sericulture and under SCA, sub-sector strengthening measure was taken up to improve the livelihood condition of the tribal families. The families involved in sericulture were supported with silk worm of around 200 gm (in ITDA Bonei) to augment the production. Average expenditure incurred per beneficiary is about Rs.4,320.00.

5.2.2.1 Outcome and Impact:

The households who continued sericulture, recorded a growth of about 9.83 percent in average production of silk. The project support minimized the cost of production and growth in net profit from sericulture is recorded to be around 35.64 percent. However, there is no such significant change in days of engagement in sericulture and average days of engagement remained to be around 106 days in a year.

Table 77: Pre and Post-SCA Comparison of Indicators

Indicators	Pre-SCA Ranking					Post-SCA Ranking				
	1	2	3	4	5	1	2	3	4	5
Total Production of Silk (Kg.)	60.0						60.0			

Total Volume of Sell (Kg.)	60.0					60.0		
Gross Annual Income from Sericulture		100.0					60.0	
Net Annual Income from Sericulture		100.0					60.0	
Gross Annual Income from All Sources		100.0					60.0	
Net Annual Income from All Sources		100.0					60.0	
Annual HH Expenditure		100.0					60.0	
Av. Days of Employment in Sericulture		100.0				60.0		
Av. Days of Employment-Other Activities	38.0	62.0				62.0	38.0	

Note: Rank 1 for the lowest and Rank 5 for highest; Figures represent percentage of households in different ranking groups.

Ranking of different indicators, that reflects performance of sericulture and its contribution to the household income, is presented in the table. As the ranking reveals, there is marginal increment in total silk production and its marketing. Gross and net income from sericulture also has increased by one rank. However, average days of employment in sericulture remain static with reduction in percentage of households as farmers in Mayurbhanj has left sericulture as an avenue of livelihood.

5.2.3 Rubber Plantation:

The beginning of commercial cultivation of natural rubber (NR) in India started during early 20th century. When the Indian Rubber Board was established in 1947 to look after the rubber plantation industry in the country. Its functions, as defined under the Rubber Act, 1947, included the development of the NR industry by devising suitable promotional measures, undertaking scientific, technological and economic research etc. Rubber is one crop which could be gainfully cultivated in extensively in areas with good soil depth and light irrigation potential. Rubber is a long duration tree crop that stays on the ground for several years. The economic life of the rubber tree normally varies between 30 to 35 years.

Historically, while some states of India have been the conventional rubber producing states, Odisha can be considered as a new and unconventional place for the promotion of rubber. A small pilot project of the government and Rubber Board, which was undertaken in the year 1997, has moved a long way in combating the livelihood issues of people in project districts in general and the tribal families of small villages in particular. Two cases of rubber plantation initiative and its benefit to the livelihood of the tribal families are discussed here.

Climatic conditions for optimum growth of rubber tree

1. Rainfall of 2000 to 3000 mm evenly distributed without any marked dry season and with 125 to 150 rainy days per annum
2. Maximum temperature of about 29oC to 34oC and minimum of about 20oC or more with a monthly mean of 25 to 28^oC
3. High atmospheric humidity of the order of 80%
4. Bright sunshine amounting to about 2000 h per annum at the rate of 6 hours per day through all the months
5. Absence of strong wind Only a few regions in India meet all these requirements. Fortunately, rubber can be grown successfully under moderately deviating conditions too.

Cost and Benefit:

The cost of cultivation of rubber varies year wise. While the highest investment is incurred in the planting year, maintenance cost remains high in the second year and gradually it reduces and gets stabilized after 7th or 8th year of plantation when the plants start yielding. Operational expenses normally remain high while the input cost gets steadied after second year of plantation. The gestation period normally remains for 6 years from the planting year and from 7th year onwards, farmers start harvesting which gradually increases after 8th year of plantation. By 15th year of plantation, a farmer

gets a net profit of 1.12 lakh from one ha. of planned area. Cost and benefit details of rubber plantation in one ha. of area taken up by the tribal farmers in the district is presented in the table.

Table 78: Cost of Rubber Plantation

Detailed Project Cost of Rubber Plantation (in one Hectare) (Amount in Rs.)								
Sl. No.	Item of expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
I	Materials							
1	Planting Material	15000	750					15750
2	Farmyard Manure	6000	0	0	0	0	0	6000
3	Fertilizer	2000	2000	2000	2000	1750	1750	11500
4	Plant protection chemicals & others	1800	1000	1000	1250	1250	1250	7550
5	Cover crop seeds	450						450
6	Tools and implements	500	250	250	250	250	250	1750
7	Insurance	955						955
	Sub total	26705	4000	3250	3500	3250	3250	43955
II	Operation							
1	Land clearing	1500						1500
2	Terracing, lining, pitting	16500						16500
3	Filling and planting	11250	450					11700
4	Weeding and mulching	12000	15000	9000	9000	5400	4500	54900
5	Manuring	750	1500	1500	1500	1500	1500	8250
6	Plant protection	1500	1500	1800	300	300	300	5700
7	Establishment of cover crop	1950	450					2400
8	Drainage and miscellaneous work	1050	300	300	300	300	150	2400
9	Boundary protection and foot path	2550	1050	1050	750	750	750	6900
10	Watch & ward	450	450	450	450	450	450	2700
	Sub total	49500	20700	14100	12300	8700	7650	112950
	Total	76205	24700	17350	15800	11950	10900	156905
	Rounded off	76200	24700	17400	15800	12000	10900	157000

Table 79: Cost & Benefit of Rubber Plantation

Cost and Benefit Analysis of Rubber Plantation (in one Hectare)			
Year	Cost	Benefit	Net Benefit
1	76200	-	-76200
2	24700	-	-24700
3	17400	-	-17400
4	15800	-	-15800
5	12000	-	-12000
6	10900	-	-10900
7	56200	67500	11300
8	36300	97500	61200
9	36900	112500	75600
10	37500	135000	97500
11	37800	150000	112200
Year 12 to 15	37800	150000	112200
Total	399500	712500	313000

Marketing

Rubber is a non-perishable and long-term sustainable cultivation which is the key advantage for which farmers of these villages have started adopting it. Besides, for the marketing of the produce, forward linkage is established with different buyers, including Birla Tyres.

Rubber Cultivation in Mayurbhanj District:

The Rubber Board started its first innovative Rubber Block Plantation scheme at Jadunathpur tribal village of Mayurbhanj district in Odisha as a pilot project during 1995-96 with 55 farmers. It was launched in collaboration with ITDA & DRDA. This Block Plantation scheme envisages to pool the small patches of tribal land together making a block & planting rubber with the work force of the

beneficiaries involved. This scheme was meant for their economic rehabilitation & proper use of their unutilized waste land. Till 1998, it was the plantation period and at present there are 13,000 plants in 100 acres of land which have started producing. Apart from plantation, ITDA and Rubber Board facilitated to form a society of rubber cultivators which is now called **Jadunathpur Rubber Society**. Now 77 Farmers are members in this society. Apart from 100 acres, additional 400 acres are planted before 4 years in this village under MGNREGS. Farmers are getting around Rs.40, 000 to Rs.45, 000 per acre per year. Year wise production and person days generated and gross income (in Lakh) is presented in the table.

Year	Production (in Kg)	Person Days Generated	Gross Income (in Lakhs)
2005-2006	3880	3500	2.85
2006-2007	15729	4219	12.95
2006-2007	25938	7088	22.62
2007-2008	37981	5606	29.29
2008-2009	30443	7181	36.83
2009-2010	29647	6892	55.3
2010-2011	37376	9054	70.15
2011-2012	43416	9000	66.77
2012-2013	45860	9000	63.94
2014-2015	50962	9000	56.87
2015-2016 (till mid-year)	47000	9000	46.8
Total	368232	79540	464.37

Jadunathpur village has become an island of success and glory amidst an entire tribal population of the adjoining areas. This prompted to take up plantation in the adjoining sub-division of Kaptipada, almost a half kilometer away from Jadunathpur Plantation Site, i.e., at Kendugadi. A society of rubber producers also formed in the village, known as **Kendugadi Rubber Producer Society**. Plantation at the site was carried out in between 1999 -2001 covering 92 families. Presently there are 14,000 plants which are being tapped for latex.

Year	Production in Kg	Amount in Lakhs
2010-2011	11235	21.01
2011-2012	20250	36.6
2012-2013	28000	41.37
2013-2014	39482	54.43
2014-2015	48700	53
2015-2016 (till mid-year)	39000	37.2
Total	186667	243.61

The Sheets produced by both the societies are being marketed at the doorsteps of the society by Rubber Manufacturer and dealer from Odisha and other states as per the rate mutually agreed upon. Apart from this, these societies have also signed an MOU with ORMAS to market the Sheets to Birla Group from the financial year 2017-18.

Looking at the rate of success, rubber plantation was taken up in other areas of the district. Now four Rubber Producing Societies (RPS), registered under Rubber Board, are operating in the district, namely, Shamakhunta RPS under ITDA, Baripada; Bisoi RPS under ITDA, Rairangpur; Matiagarh RPS under ITDA, Karanjia ; and Bholagadia RPS under ITDA, Kaptipada are ready for production of sheets. Another two RPS are already formed and in the process of registration whereas another five societies are under formation.

Lateral Income Generation

Despite the prime objective of the block planting project, i.e., the production of quality rubber sheets, Rubber Board also initiated implementing some other innovative ideas to supplement the income of the tribal rubber farmers. Production & marketing of quality bud-grafted rubber stumps was taken up as a lateral source of income for the tribal farmers involved in rubber plantation. There are two ways of getting benefit by this, i.e., income generation out of the marketing of quality bud-grafted rubber

stump and secondly, generation of additional wage-days to carry out various nursery activities like, nursery raising, bud-grafting & other connected operational activities. The Jadunathpur Rubber Producers' Society started generating quality B.G. rubber stumps since 2010-11 as a pilot project. Production and price details of BG stumps are presented in the table.

Year	Production of B.G. Rubber Stumps	Selling Price per Stump (Rs.)	Price (in Rs.)	Generation of Person Days
2010-11	2,717	25	67,925	1,400
2011-12	12,227	20	2,44,540	2,800
2012-13	40,000	20	8,00,000	3,700
2015-16	27,000	20	5,40,000	4,000
Total	81,944		16,52,465	11,900

In-spite of its varied advantage, during last 20 years, only 1069 acres of block plantations have been taken up in Mayurbhanj district by Rubber Board. Although there are vast stretches of uplands i.e. about 40% of the entire land mass is available in Mayurbhanj district, only 1,069 acres of land involving 1,048 beneficiary families have been taken up by Rubber Board which is quite lower than expected. The reason for this is that Odisha is treated as a non-Traditional area by the Rubber Board and for non-traditional area, the role of the Rubber Board has been limited to acting as a facilitator and to provide some demonstrative models in the State. Further shortage of funds at the farmer level for investment has also been a limiting factor for Rubber Board for further expansion. In a non-traditional area, the gestation period, in terms of mobilizing farmers and involving them in the process takes more time than a conventional rubber grown area. Perhaps, this is the reason, the scale up of operation has been remaining slow in all the demonstrated districts of the State.

Expansion of Rubber in Mayurbhanj District

1. Rubber is a commercial species which if cultivated, can develop the economic condition of the tribal people of this district;
2. Rubber can generate income to the tune of Rs.72, 000 to Rs.90, 000 per acres per annum. Very few other plant species can generate such an income for the tribal people;
3. The agro-climatic condition of Mayurbhanj district is also moderately suitable for rubber cultivation;
4. About 40.0 percent of land in Mayurbhanj District is up lands and hence they are suitable for rubber cultivation.

Modus operandi of the Expansion of the Project

Considering these aspects, the District Administration, Mayurbhanj decided to take up large scale rubber plantation in Mayurbhanj district with the direct involvement of ITDAs for the economic development of the tribal people of Mayurbhanj. The year 2012 was watershed in terms of rubber plantations in Mayurbhanj district. During this year rubber plantation was taken up as a "Focused Intervention" for livelihood improvement of the tribal population of the district by the District Administration. The task of improving the livelihood of tribal families by means of rubber plantations was given to the Integrated Tribal Development Agencies functioning under the ST & SC Development Department of the Government of Odisha under **Focus Area Development Programme(F.A.D.P)**. In this context, a ten years perspective plan was formulated and decided to take up plantations in 40,000 acres in Mayurbhanj district directly by the ITDAs. A "Perspective Plan" was prepared by the ITDAs in convergence model, a unique of its kind where funds will be dovetailed from different state and national flagship schemes like (1) MGNREGS, (2) National Horticultural Mission, and (3) Jananidhi (Agriculture Department, Govt. of Odisha Scheme).

During the year 2012-13, funds available under MGNREGS was converged with SCA to TSP (Special Central Assistance to Tribal Sub-Plan) and Jananidhi to make this programme successful. Labour component which involves the various physical activities like land development, pitting, weeding etc. and materials component that involves the meeting of requirement of cost of fertilizers / manures, plant protection items, cost of mulching materials etc. are met out of MGNREGS in the ratio

of 60:40 (Labour component to material component ratio). Funds available under SCA to TSP was converged with State schemes like Jananidhi (Agriculture Department) & Biju Krushak Vikash Yojana (BKVY of Lift Irrigation Corporation) to install bore well facility in the plantation areas. For Jananidhi either 50% or Rs. 50,000/- (whichever is less) is given as subsidy to the beneficiary by Agriculture Department & the rest amount is met out of funds from SCA to TSP. In those places where Biju Krushak Vikash Yojana (BKVY of Lift Irrigation Corporation) has been taken up, 90% subsidy was availed by the beneficiary out of the funds of Biju Krushak Vikash Yojana (BKVY of Lift Irrigation Corporation) & the rest amount is met out of funds from SCA to TSP. Similarly, for mulching and drip irrigation support, 90% & 80% subsidy assistance is met out of funds from National Horticulture Mission & the rest from SCA to TSP on behalf of the beneficiary.

Sl. No.	Activity	Schemes Converged with
1	Nursery Preparation	Special Central Assistance to Tribal Sub-Plan (SCA to TSP) & Jananidhi
2	Plantation Activity	MGNREGS (for labour and material component); SCA to TSP & BKVY / Jananidhi (Irrigation), National Horticulture Mission (Drip and mulching)

Area Covered under Rubber Plantation and Beneficiary Coverage

Year	ITDA BARIPADA		ITDA KAPTIPADA		ITDA RAIRANGPUR		ITDA KARANJIA	
	Area in Acer	Beneficiary	Area in Acer	Beneficiary	Area in Acer	Beneficiary	Area in Acer	Beneficiary
2013-14	584	348	416.25	425	172.85	95	200	263
2014-15	915	780	560.03	874	324.83	102	356.3	254
2015-16	375.06	506	351	369	150	115	250	79
2016-17	345.08	150	106.38	158	107	44	70	27
Total	1874.06	1634	1327.28	1668	647.68	312	806.3	596

Name of the Other Agency implemented through ITDAs during- 2015-16	Area in acre	Beneficiary
DDH (Under ITDA Baripada, ITDA Kaptipada, ITDA Karanjia)	765	319
PD WATERSHED under ITDA, Baripada	368.56	311

Rubber plantation has been taken up in large scale by ITDAs in collaboration with the Rubber Board. The study covered 50 tribal farmers who have grown rubber in their fields with the support of ITDA and rubber board. The plantation is quite old in ITDA, Baripada (1995-96) and ITDA, Kaptipada whereas, tribal farmers in ITDA, Karanjia has taken up rubber plantation as viable alternative livelihood in the year 2015-16. About 30.0 percent of the studied rubber growers have received support in 1995-96 (ITDA, Baripada), 40.0 percent in the year 1999-2000 (ITDA, Kaptipada) and remaining 30.0 percent in the year 2015-16 (ITDA, Karanjia). All the farmers, who have been supported by ITDA and rubber board for rubber plantation are continuing due to assured future return on investment (30.0 percent) and currently having assured annual income (70.0 percent). All the farmers supported under SCA for rubber plantation were completely new to the venture. Motivational inputs along with financial support and future economic prospect encouraged the farmers to adopt rubber as a viable means for livelihood enhancement.

Looking at the future economic prospect of rubber plantation, many tribal farmers have adopted it in all the three ITDAs of Mayurbhanj. The average land holding of the rubber growers is about 3.40 acres, i.e., the farmers adopted rubber plantation are basically small farmers and area covered under rubber plantation is about 1.05 acres. Of the studied households, in ITDA, Baripada, about 26.37 percent of the total land available with the famers are put to rubber plantation. Similarly, 32.69 percent land put to rubber plantation by farmers in ITDA, Kaptipada and 33.95 percent area in ITDA, Karanjia. Overall, farmers have put about 30.98 percent of the total land available with them under

rubber plantation. ITDA wise number of farmers, their total land holding and average area put to rubber plantation is presented in the Table 80.

Table 80: Area Covered under Plantation

Name of the ITDA		Total Ag. Land of the HH	Area under Rubber Plants (Ac.)
ITDA, Baripada	No. of HH	15	15
	Average	3.78	1.0
	Total	56.65	14.94
	% of Total HH	30.0	30.0
ITDA, Kaptipada	No. of HH	20	20
	Average	2.97	0.97
	Total	59.41	19.42
	% of Total HH	40.0	40.0
ITDA, Karanjia	No. of HH	15	15
	Average	3.59	1.22
	Total	53.90	18.30
	% of Total HH	30.0	30.0
Total	No. of HH	50	50
	Average	3.40	1.05
	Total	169.96	52.66
	% of Total HH	100.0	100.0

ITDAs, in collaboration with rubber board has provided rubber plant saplings, fertilizer and pesticides. Labour cost is met from MGNREGS. Each rubber grower is provided with on an average 155 rubber saplings, 19 Kg of fertilizer and labour cost of around Rs.2,526.00. In ITDA, Karanjaia where plantation work has taken up in recent years, higher number of plant saplings are provided to the farmers (219 plants on an average) and cost incurred towards labour engagement is also highest among the ITDAs. Inputs provided to the farmers by the ITDAs / rubber board is presented in the Table 81.

Table 81: Inputs Provided to Rubber Growers

Name of the ITDA		Plant Sapling (No)	Fertilizer KG	Pesticides (Kg/Lt.)	Labour Cost
ITDA Baripada	No. of HH	15	15	15	15
	Average	113.47	17.93	4.98	1220.00
	Total	1702.0	268.92	74.70	18300
	% of Total HH	30.0	30.0	30.0	30.0
ITDA Kaptipada	No. of HH	20	20	20	20
	Average	136.95	17.48	4.86	1250.00
	Total	2739.0	349.56	97.10	25000
	% of Total HH	40.0	40.0	40.0	40.0
ITDA Karanjia	No. of HH	15	15	15	15
	Average	219.60	21.96	6.10	5533.33
	Total	3294.0	329.40	91.50	83000
	% of Total HH	30.0	30.0	30.0	30.0
Total	No. of HH	50	50	50	50
	Average	154.70	18.96	5.27	2526.00
	Total	7735.00	947.88	263.30	126300
	% of Total HH	100.0	100.0	100.0	100.0

Due to the provision of inputs, labour cost and care taken by the farmers, the morality rate of the plants seems low. Overall, plant survival rate remains to be 86.28 percent with higher survival rate in the intervention areas of ITDA, Baripada and ITDA, Kaptipada. Plant mortality rate found to be higher in recently planted rubber saplings in ITDA, Karanjia where plant survival rate is 68.91 percent. Total saplings provided and no. of plants survived is presented in Table 82.

Table 82: Survival of Rubber Plants

Name of the ITDA		Total Saplings Provided (No.)	Total Plants Survived (No.)
ITDA Baripada	No. of HH	15	15
	Average	159	154
	Total	2390	2315
	% of Total HH	30.0	30.0
ITDA Kaptipada	No. of HH	20	20
	Average	155	150
	Total	3107	3000
	% of Total HH	40.0	40.0
ITDA Karanjia	No. of HH	15	15
	Average	220	151
	Total	3294	2270
	% of Total HH	30.0	30.0
Total	No. of HH	50	50
	Average	176	152
	Total	8792	7586
	% of Total HH	100.0	100.0

While, all the farmers feel that rubber plantation is beneficial to them, 30.0 percent farmers who have not yet realized the return expect to get economic benefit after 7 years of gestation period. Whereas, remaining 70.0 percent farmers have started getting initial return which is expected to grow in coming years when plants will get maturity and start yielding more.

Outcome and Impact:

On an average, 396.09 Kg of rubber is produced by each farmer (70.0 percent farmers) annually which is sold through different channels after primary processing. According to the rubber growers, average unit cost of rubber per Kg is around Rs.118/- and average annual income of each grower from rubber is about Rs.46,738.11. Average annual income of the farmers from rubber is around Rs.47,506.80 in ITDA, Baripada with an average production of 402.60 Kg of rubber sheets, whereas average annual income of farmers from rubber in ITDA, Kaptipada is Rs.46161.60 with the average production of 391.20 Kg of rubber sheets. Production of rubber by the sample households and income is presented in the Table 83.

Table 83: Outcome / Impact of Rubber Plantation

Name of the ITDA		Total Production of Rubber (Kg.)	Total Volume of Sell of Rubber (Kg.)	Net Annual Income from Rubber (Rs.)	Average days of Employment in Rubber Fields (No. of Days)	Savings Amount (Rs.)
ITDA Baripada	No. of HH	15	15	15	15	15
	Average	402.6	402.6	47506.8	56.0	32000.0
	Total	6039	6039	712602	840	480000
	% of Total HH	42.9	42.9	42.9	30.0	42.9
ITDA Kaptipada	No. of HH	20	20	20	20	20
	Average	391.2	391.2	46161.6	54.75	31950.0
	Total	7824	7824	923232	1095	639000
	% of Total HH	57.1	57.1	57.1	40.0	57.1
ITDA Karanjia	No. of HH				15	
	Average				53.67	
	Total				805	
	% of Total HH				30.0	
Total	No. of HH	35	35	35	50	35
	Average	396.09	396.09	46738.11	54.80	31971.43
	Total	13863	13863	1635834	2740	1119000
	% of Total HH	100.0	100.0	100.0	100.0	100.0

Rubber plantation has also created opportunities of employment for the growers. Average days of employment in rubber cultivation is calculated to be 54.80 days per family. Looking at days of employment and average income from rubber, it can be concluded that each farmer now has substantial income from engagement in rubber cultivation (Income per day of engagement is around Rs.853/-). The farmers, who were not having any savings now having average savings of Rs.31,971.43 which can be utilized by the family to meet any exigencies, including improving the human capital and family household asset base.

Case: This is a case of Kendugadi village of Khunta block where rubber plantation was taken up by the farmers for a sustained income. Rubber plantation was carried out by the rubber board with the help of ITDA Kaptipada in the year 1999-2000 at different villages of Khunta block. Initially, the villagers were reluctant to take up rubber plantation in their land as they were cultivating food grains in those lands. Secondly, farmers were of the view that through rubber plantation, which is having high gestation period, government will take away their land and farmers will become landless. According to the rubber growers, the rubber plantation areas will be captured by Government. Only we the poor farmers will suffer. Some others farmers were of the view that if Government takes away our land; we shall take the help of court for getting justice. These types of thinking were in the mind of the farmers during the growth period of plants. However, after conducting several rounds of meeting with the villagers, gradually people got motivated and agreed to the proposal. The major motivational factor was the return from rubber plantation in the long run for a longer period which will resume in full force after 9 years. Accordingly, the plantation was taken up in the farmer's fields.

Participating Agency	ITDA, Kaptipada & Rubber Board (Govt. of India)
Total Project Cost and its sharing pattern	ITDA - Rs. 23.46 lakh (47.59%) Rubber Board - Rs.23.92 lakh (48.52%) Beneficiary - Rs.01.92 lakh (3.89%) – Labour component
	Total - Rs. 49.30 lakh
Location	Under Khunta Block
Year of starting	1999
Planting period	1999-2001
Area planted	39.97 hectare
No of beneficiary families benefited as on date	92 families with 507 members
Year of harvesting started	2010-11



Rubber plantation at Kendugadi village of Khunta block

About 11 years passed by this time since rubber plantation taken up in the area. To support value addition and primary processing, in the year 2010, a processing plant was established by the rubber board with the support of ITDA Kapripada. 2010-11 was the first year of production from Kendugadi area. Prior to the production, the farmers were organized to a cooperative society with the facilitation support from ITDA and rubber board. The produced were processed locally and most of the workers who are engaged at the production of rubber are from the farmer's family. They were provided training on rubber cultivation and its processing procedures. Workers and leading farmers were also provided exposure visit to Kerala for getting the idea about the process and the

production. After production of the finished rubber, it was sold to buyers. The business has been continuing for last 9 years. Whatever the profit is generated, it is distributed among the farmers based on the number of trees tapped.

Year wise Production & Income of Kendugadi Rubber Producers Society

Year of tapping	Nos. of tapping trees	Production Area (Ha)	Total Production (Kg)	Production per (Ha) in Kg	Total Income (Rs)	Income per Ha (Rs)	Production per Trees (Kg)	Income per Trees (Rs)
2010-11	7,000	17.5	11,235	642	21,01,325/-	1,20,075/-	1.605	300.18/-
2011-12	10,000	25	20,250	810	36,60,200/-	1,46,408/-	2.025	366.02/-
2012-13	11,111	27.7	28,000	1010.8	41,37,700/-	1,49,375/-	2.52	372.39/-
2013-14	12,700	31.8	39,482	1241.5	54,43,402/-	1,71,176/-	3.108	428.61/-
2014-15	13,800	34.5	48,700	1411.6	54,09,230/-	1,56,789/-	3.529	391.97/-
2015-16	14,281	35.7	44,125	1235.9	43,14,375/-	1,20,850/-	3.08	302.10/-
2016-17	14,848	37.12	59,200	1594.8	74,03,695/-	1,99,453/-	3.99	498.63/-
2017-18	14,633	38.5	68,300	1774	80,91,669/-	2,10,173/-	4.66	552.97/-

Source: ITDA Kaptipada, Mayurbhanj

Year wise income has been increasing because the growth of the trees and number of tapping of the trees. Again, at the initial stages, all the trees were not tapped, but gradually all the trees are in production stage. Now farmers are getting about Rs.350.00 to Rs.552.97 from a tree. The amount varies from time to time depending upon the rate per kg. in the market. After 12 years of plantation and second year of production some farmers started getting income. Gradually all the farmers started getting income from rubber plantation. IN the operation and maintenance, all the family members remain engaged for shorten period of time in a week. Some farmers were engaged in tapping the trees (raw rubber collection) after getting training. Income from the rubber has been increasing and will continue for 25 years from the date of plantation. Now all the farmers are happy. They realized that, whatever communicated to them by the ITDA and rubber board in the year 1999 was true.



Staff and workers of Kendugadi rubber plantation society along with the farmers of Kendugadi village.

In rubber production system, ITDAs and rubber board has taken care to provide primary processing facility and linkage of produce with the market. The processing and market linkage facility has created opportunities for the farmers to take up rubber in an incremental scale. There are two processing units operating in the district, i.e., one at Jadunathpur and other one at Kendugadi. Rubber growers of ITDA, Baripada are depends upon Jadunathpur processing facility whereas rubber growers of ITDA, Kaptipada are dependent upon processing facility available at Kendugadi. In the areas of ITDA, Karanjia, no such processing facility is identified at present. However, it is not a necessity now as production of rubber is yet to start in this region.

Rubber block plantation project is a boon to the tribal communities. It has been found impacting the tribal life and livelihood in many ways such as;

1. A new opportunity than has been found beneficial in terms of strengthening tribal economy and enhancement in per household income of rubber cultivators;

2. Creation of opportunity of employment for the rural youths and other employment seekers;
3. Protects environment and act as green shield for the locality;
4. Acceptance by tribal community because of environment friendly source of income generation that provide income to them in a sustainable manner;
5. Strengthening rural economy with the development of rubber clusters;
6. Expansion of rubber plantation has brought economic and social transformations to local populations, particularly tribal, who were having difficulty to meet their bare basic needs;
7. Economic use of degraded and fallow / barren land to generate income;
8. Improvement in quality of life of rubber cultivators and improved food security.

It's a new line of hope for many others social disadvantaged section of the rural areas of the districts. Therefore, scaling up of this venture may be thought of to infuse a paradigm shift in agriculture / horticulture and agrarian transition, creating sustainable livelihood and contributing in achieving overall development of all sections of the society.

5.2.4 Poultry:

Promotion of poultry has been a common income supportive approach, taken in studied areas with the involvement of tribal households. The assessment covered a total of 45 tribal families who have been supported for poultry promotion as a viable supplementary livelihood means. The sample is distributed across two ITDAs and one micro project, i.e., ITDA Bonei, ITDA, Nabarangpur and HKMDA, Jashipur. Of the total coverage, 33.3 percent sample were covered from each tribal development and administration units.

Year of receiving support varies across the beneficiaries, i.e., 22.2 percent families were supported during 2014-15, 11.1 percent during 2015-16, 33.3 percent during 2016-17 and remaining 33.3 percent during 2017-18. Each family was provided with 15-20 chicklings for rearing along with cage and feeding. The provided chicks were pre-vaccinated so that mortality rate can be reduced. However, in-spite of this preventive measure, mortality rate of chicklings remain to be around 51.76 percent on an average, i.e., about 61.33 percent in ITDA, Bonei, 50.22 percent in ITDA, Nabarangpur and 43.33 percent in HKMDA, Jashipur.

Table 84: Year of Support for Poultry Promotion

Year of Support	NO. of ST HH	Percent
2014-15	10	22.2
2015-16	5	11.1
2016-17	15	33.3
2017-18	15	33.3
Total	45	100.0

While requirement of the support is well established, as all the beneficiaries are of the opinion that it has been a supplementary source of income, still its benefits remain partial for them and below the desired level. The reasons are primarily attributed to the mortality rate of chicklings. Due to high mortality rate, the supported families could not be benefitted as they have expected.

Table 85: Chickling Survival Rate

Name of the ITDA / Micro Project		Total Chicklings Provided	Total Chicklings Survived
ITDA Bonei	No. of HH	15	15
	Average	20.00	7.73
	% of Total HH	33.3	33.3
ITDA Nabarangpur	No. of HH	15	15
	Average	15.00	7.47
	% of Total HH	33.3	33.3
HKMDA, Jashipur	No. of HH	15	15
	Average	20.00	11.33

	% of Total HH	33.3	33.3
Total	No. of HH	45	45
	Average	18.33	8.84
	% of Total HH	100.0	100.0

Outcome / Impact:

While average number of birds per household increased, the average annual sell of birds, after the project support, has also increased marginally at the household level from 1.73 to 3.21. However, number of birds consumed by the households more or less remains unchanged.

Table 86: Sell and Consumption of Birds

Name of the ITDA/Agency		Total Annual Sell of Birds (No.)		Annual Household Consumption of Birds (No.)	
		Pre	Post	Pre	Post
ITDA Bonei	No. of HH	4	9	15	15
	Average	1.75	3.22	5.00	5.00
	% of Total HH	26.7	32.1	33.3	33.3
ITDA Nabarangpur	No. of HH	7	9	15	15
	Average	2.00	3.56	5.60	5.60
	% of Total HH	46.7	32.1	33.3	33.3
HKMDA, Jashipur	No. of HH	4	10	15	15
	Average	1.25	2.90	5.13	5.13
	% of Total HH	26.7	35.7	33.3	33.3
Total	No. of HH	15	28	45	45
	Average	1.73	3.21	5.24	5.24
	% of Total HH	100.0	100.0	100.0	100.0

There is growth in average annual income of the households from poultry, i.e., from Rs.320/- to Rs.746.79. Though the growth is substantial, but amount realized from selling of birds is not that encouraging. Further, as the poultry is of micro scale and limited to backyard only with couple of birds, earning substantial income from poultry seems less feasible. Further, low scale of operation does not contribute in creating employment opportunities for the household members nor it generates substantial income which a family can save for other uses.

Table 87: Outcome / Impact of Poultry

ITDA/Agency		Annual Income from Poultry (Rs.)		Annual Household Consumption of Birds (Rs.)		Average days of Employment in Poultry		Savings Amount (Rs.)	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
ITDA Bonei	No. of HH	4	9	15	15	15	15	15	15
	Average	325.0	765.56	1000.0	1500.0	0.0	0.0	0.0	0.0
	% of Total HH	26.7	32.1	33.3	33.3	33.3	33.3	33.3	33.3
ITDA Nabarangpur	No. of HH	7	9	15	15	15	15	15	15
	Average	392.86	733.33	1120.0	1680.0	0.0	0.0	0.0	0.0
	% of Total HH	46.7	32.1	33.3	33.3	33.3	33.3	33.3	33.3
HKMDA, Jashipur	No. of HH	4	10	15	15	15	15	15	15
	Average	187.50	742.0	1026.67	1540.0	0.0	0.0	0.0	0.0
	% of Total HH	26.7	35.7	33.3	33.3	33.3	33.3	33.3	33.3
Total	No. of HH	15	28	45	45	45	45	45	45
	Average	320.0	746.79	1048.89	1573.33	0.0	0.0	0.0	0.0
	% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Case: Some aspiring female of a village came together, organized themselves to a group with the objective of taking up feasible income generating / supplementing activities with the support of the government. But their whole effort went in vein due to factors that are reasonably external to them and no support rendered to them at the time of need.

Maa Hingulani SHG was formed in the year 2013 with the association of 12 female members in the village Banuaguda of Sirisa GP under Papadahandi Block of Nabarangpur district. After the formation of SHG, they started their savings and credit activities. In the mean time they came to know that ITDA is providing assistance to SHGs for different income generation activities. They discussed with the officials of ITDA and finalized to take up poultry business. The proposal was placed to ITDA which was approved for support. Through OTELP, Rs.1,26,634/- was placed to group to construct a poultry farm. After the construction of the farm, Sworna Jyoti Co-operative Society was consulted to help the group in their business. The society provided all the inputs such as the chicks, feed and medicine to grow the chicks and the group members started taking care the chicks. The business plan was that the grown will be procured by the cooperative society and the group will be paid rearing expenses for each bird based on its weight. In return the group will get a lump sum amount by the society after sell of poultry by deducting the expenses made towards inputs. All the members took care of the chicks for three months on rotational basis. After three months the first batch poultry was sold to the society, but the group got only Rs.1200. In the same process the group got only Rs.600 in the next batch. As the return was below the expectations of the members, they discussed the matter with the members of the cooperative. When the members asked the society regarding the profit and their share, the society informed them that as demand in the market is low, the birds were sold in a very low price. The members refused to the society not to involve in the process further after the selling of second batch. Up to one year they continued their saving and in the month of January 2016 they distributed their saving amount among themselves and now the group is dormant. After distribution of their saving money, neither they have collected monthly savings nor updated documents. The infrastructure was formed for the purpose is being used by the members for storage of firewood and other purposes. According to the SHG members, there are many more cases in the village and nearby villages, which has affected to the SHGs and members in their pursuit for better income from IGAs. All most all the SHGs financed for poultry in this batch have become defunct after this incident.



Members of Maa Hingulani SHG during discussion on their poultry business



Present Condition of Poultry Farm

The project has supported “Bana raj” variety of chicks for better growth and with the expectation that it has got a market demand. But the beneficiaries are of the opinion that demand for Bana raj variety has decreased and people are now preferring indigenous (desi) varieties. Secondly, as scale of production is very minimal, it does not get a value that the families are expecting. Mostly it is sold in the village or near by local hats which does not give them a good return. Thirdly, there is no such provision under the support for health care management of birds. Veterinary services are generally not available to poultry growers for which it becomes difficult to contain the mortality rate. High mortality rate reduces their income and profitability of the initiative.

There is no such remarkable change in household economy of tribal households due to poultry support. The intervention is more sporadic and welfare driven. Looking at the performance, it seems the strategy of support has not taken in to account the management aspects, scale of operation, market requirement and overall making it a more sustainable livelihood venture. Nature of such support measures is highly unsustainable and may not yield the desired result in the long run. It demands a sector growth approach where production clusters can be developed in a PPP mode. Community organizations, more particularly the women SHGs / farmer groups can be mobilized to participate in the process in an enterprising mode and SCA funds can be utilized for promotion and strengthening of the venture. SCA fund can also be dovetailed with other available schemes for infrastructure

development and access to other markets. Such approach will be beneficial to both poultry farmers as well as the private body who will be associated as an investor and also as a marketing channel.

5.2.5 Goat Rearing:

The assessment covered a total of 30 tribal families who have been supported for goat rearing as a viable supplementary livelihood means. The sample is distributed across three ITDAs, i.e., ITDA Karanjia, ITDA, Nabarangpur and ITDA, Rairangpur. Of the total, 20.0 percent sample were covered from ITDA, Karanjia, 50.0 percent from ITDA, Nabarangpur and 30.0 percent from ITDA, Rairangpur.

Year of receiving support varies across the beneficiaries and ITDAs, i.e., 50.0 percent beneficiaries were supported during 2014-15 and remaining 50.0 percent during 2016-17. Each family was provided with 3-5 goats. The provided goats were pre-vaccinated so that mortality rate can be reduced. Perhaps, because of this preventive measure, mortality rate of goats remained low, unlike poultry.

Table 88: Goat Rearing Support to Tribal Households

ITDA	Total Goats Provided							
	3 Nos.		4 Nos.		5 Nos.		Total	
	No.	%	No.	%	No.	%	No.	%
ITDA Karanjia	0	0.0	0	0.0	6	100.0	6	20.0
ITDA Nabarangpur	3	20.0	12	80.0	0	0.0	15	50.0
ITDA Rairangpur	0	0.0	0	0.0	9	100.0	9	30.0
Total	3	10.0	12	40.0	15	50.0	30	100.0

All the beneficiaries are of the opinion that the project support has been helpful to them to supplement their present source of income. The rearing families expect a long-term return from the goats when their numbers will grow in future, provided there is no mortality.

Case: Goatery has become a supportive livelihood options for many SHGs and its members. Kulgirdihi village of NB Pokharia GP comes under Bisoi block. This is the case of Shiv Durga SHG of Bisoi block under ITDA Rairangpur of Mayurbhanj district. During the assessment, it was found that members are doing goat rearing individually but all the members are involved in the activity. After getting bank loan of Rs.2,00,000.00 in the year 2017-18, the amount was distributed equally among 10 members and each member got Rs. 20,000.00. Members individually purchased 3-4 goats from the market. At individual family level, they started taking care with good management practices. As goat rearing was their earlier practice, they adopted some of the good practices in rearing goat. Most of the members have more than 7 goats now. As the goats are free and eating natural leaves, there was natural growth in goats and members are expecting good market value in the coming days. However, it was found during discussion with members that no animal is insured and veterinary service is also not on requirement basis. The members are looking for good verity of breed in coming days for better production and better value. Although the SHG members have not got much profit from the goat rearing, but the livestock asset in terms of goat has increased. It has been considered to be a successful livelihood activity by the members.



5.2.5.1 Outcome / Impact:

Because of the project support, the average number of goats per household has increased. The average annual income from sell of goats has also increased from Rs.4928.57 to Rs.7162.67. However, additional income has not get translated in to savings, rather utilized for other purposes. The livestock value, as estimated roughly is about Rs.36,800/- which the beneficiary families now possess.

Table 89: Outcome / Impact of Goat Rearing

Name of the ITDA		Annual Income from Goats (Rs.)		Average days of Employment in Goatery		Savings Amount (Rs.)		Present livestock Value (Goat)
		Pre	Post	Pre	Post	Pre	Post	
ITDA Karanjia	No. of HH	2	2	6	6	6	6	6
	Average	4250.0	6665.0	0.0	0.0	0.0	0.0	31333.3
	% of Total HH	28.6	13.3	20.0	20.0	20.0	20.0	20.0
ITDA Nabarangpur	No. of HH	3	11	15	15	15	15	15
	Average	5333.3	7309.09	0.0	0.0	0.00	0.0	35733.3
	% of Total HH	42.9	73.3	50.0	50.0	50.0	50.0	50.0
ITDA Rairangpur	No. of HH	2	2	9	9	9	9	9
	Average	5000.0	6855.0	0.0	0.0	0.0	0.00	42222.2
	% of Total HH	28.6	13.3	30.0	30.0	30.0	30.0	30.0
Total	No. of HH	7	15	30	30	30	30	30
	Average	4928.57	7162.67	0.0	0.0	0.0	0.0	36800.0
	% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Case: Mr Madam Majhi is a beneficiary under goatery activities. Along with agriculture, the family members also collect MFP from the nearby forest areas. Forest has been a source of livelihood for most of the people in the village. Under SCA, Madan was supported for construction of a shed and 3 goats in the year 2014-15. Goats were provided after vaccination. Madam constructed the shed with the guidance of the officials with a total cost of Rs.10,000.00. Open grazing is the common practice in the locality as it is near to the forest area. Because of care, number of goats increased from 3 to 10 by the year 2019 (by the time of assessment. According to the beneficiary, the support has been of immense help to the family and now he is having livestock asset worth of Rs.40,000.00. He has benefited by selling 3 goats at the rate of Rs.4,000/- per goat and earned Rs12,000.00 in the year 2017-18. Looking at the success of Madan, other tribal families now seems interested to have such support so that they can have better earning from goat rearing.



Goats and Shed supported through the project



Mr Madam Majhi with his goat in the shed

In animal husbandry, insurance play a vital role to compensate the mortality, if any. But the beneficiaries are of the opinion that no such insurance coverage is made for the supported animals. Secondly, health care management is pivotal in animal husbandry but veterinary support provision has been remaining inadequate and not in time. Even, the rearing families were not oriented / trained on health care management of the goat. Looking at the support system, it is apparent that the approach for income enhancement of tribal farmers through goat rearing is more or less similar to that of promotion of backyard poultry, which in the long run will not be sustainable and may not yield desired outcome of improving economic condition of tribal families.

5.2.6 Individual Fishery Promotion:

The multiple functions of the natural resources in supporting various production systems and livelihoods are more pronounced in rain fed areas. The numerous water bodies that dart the rainfed areas are part of such a multi-functional natural resources infrastructure built over time. The traditional fish production systems in these water bodies of rainfed areas have evolved within this complexity; but are at a very low level of productivity. It is perhaps owing to this innate complexity of fish production and related value chain development that the small water bodies are largely neglected and the fish-potential remain underused, in-spite of their potential to contribute to overall production and livelihoods. Among the community, the programme aims to introduce simple technical and scientific know-how among the farmers, while keeping their traditional practices intact, in order to realise and harvesting the fishery potential.

Fishery is emerging as a supplementing source of livelihood for tribal families in the administrative areas of ITDA, Bonei; ITDA, Nabarangpur; ITDA, Sundargarh and ITDA, Baripada (studied areas). A total of 50 tribal fishers were interacted during the assessment process who have been supported by the ITDAs in different years. Of the total, 24.0 percent fishers were supported in the year 2013-14, 22.0 percent in 2015-16 and 54.0 percent in 2016-17. While ITDAs extended support under SCA to existing fishing families, some families who were having interest in fishing were also supported in the process.

Table 90: Year of Support to Fishers

Year of Support	Name of the ITDA									
	ITDA Bonei		ITDA Nabarangpur		ITDA Sundargarh		ITDA, Baripada		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
2013-14	8	66.7	4	33.3					12	24.0
2015-16			11	100.0					11	22.0
2016-17					12	44.4	15	55.6	27	54.0
Total	8	16.0	15	30.0	12	24.0	15	30.0	50	100.0

In majority cases (54.0 percent), male members are associated in fishing activities while in post-harvest functions, women members also remain engaged (46.0 percent). In order to promote fishery,

ITDAs have extended their support to the tribal fishers in terms of providing (1) farm pond, (2) supply of fingerlings, (3) supply of fish feed and (4) other accessories like fishing net, boat and life jacket. As all these supports has been helpful to the fishers, they view it as a need-based support of ITDAs to improve their engagement in fishery and related income.

5.2.6.1 Outcome / Impact:

All the tribal fishers, who have been supported under SCA, reports increase in catch / sell of fish from 108.84 Kg to 146.50 Kg per year. Annual household consumption of fish has also increased marginally from 40.26 Kg to 47.50 Kg (both catch and purchased consumption). While average annual expenditure incurred by the tribal fishers towards fishing remain more or less same, income from fishery has increased from Rs.12,315.79 to Rs.18,332.00. There is marginal shift in days of employment in fishing activity, i.e., from 53 days to 58 days. However, with increased income, average household savings has increased to Rs.2164.00 from the previous average household savings of Rs.1,000.00. So, it can be said that because of SCA support, with marginal increase in days of engagement, tribal fishers could able to have better catch and able to market it in the nearby places and getting higher return in comparison to previous situation (refer Table 91.).

Table 91: Outcome / Impact of Fishery Intervention

Indicators	Pre-SCA			Post-SCA		
	No. of HH	Average	% of Total HH	No. of HH	Average	% of Total HH
Total Annual Sell of fish (Kg)	37	108.84	100.0	50	146.50	100.0
Annual Income from fishery (Rs. from selling)	38	12315.79	100.0	50	18332.0	100.0
Annual Household Consumption of fish (KG.)	38	40.26	100.0	50	47.50	100.0
Annual Expenditure in Fishery (Rs.)	22	1595.45	100.0	20	1530.0	100.0
Net Annual Income from Fishery (Rs.)	50	9360.0	100.0	50	18332.0	100.0
Annual Household Consumption of Fishery (in Rs.)	50	4284.0	100.0	50	8550.0	100.0
Average days of Employment in Fishery	23	52.83	100.0	50	58.0	100.0
Savings Amount (Rs.)	38	1000.0	100.0	50	2164.0	100.0

Case: Life security and livelihood are both side of a same coin. Both the activities have been assured to fisherman by ITDA Nabarangpur. There are three reservoirs / dams, i.e., Kapoor, Podagarh and Indrabati which are adjoining the Tentulikhunti block of Nabarangpur district. The villagers, including tribal families, living adjacent to these dams depend upon the reservoir for fishing along with agriculture and forest produce collection. Kapoor dam has been utilized by the tribal fishermen of Machhagaon GP and also people of nearby GPs. For development of tribal fishermen's livelihood, funds under SCA to TSS was utilized by the ITDA Nabarangpur with the technical support of fishery and animal husbandry development dept.

Under fishery promotion scheme, the ST beneficiaries were provided required support. Fishery promotion supports were provided with the assistance of fishery department. Two beneficiaries combined in a group were provided benefit in a combined mode. One boat, 20 kg net and two life jackets were provided to each group with a cost of about Rs.30,000.00. Apart from these assets, fingerlings were released in the reservoir during monsoon in the year 2015-16 to improve fish density in the reservoir. According to fishers, after getting the support, income from the fishing activity of the beneficiaries have increased. Now the fishers are able to move to the deep water with the boat and life jacket support. Mr. Phatku Jani, 45 years belongs to Beheraguda village of Machhagaon GP of Tentulikhunti block. Mr. Phatku is engaged in fishing activity like other tribal fishers. Earlier he was earning about Rs.10,000.00 from fishery activity, but after getting support and due to deep water fishing, now he is earning up to Rs.17,000.00 per annum. Again, according to the beneficiary, life jacket has become the most protective measure for life by which now he ventures in to deep water.



Support to Fishers under SCA

However, discussion with the villagers reveals that the width of the supplied boat is less than the requirement. Further, additional 10 kg net is required to the beneficiaries to enhance their catch. As the scheme has benefitted only the tribal families, other caste fishermen of the village also demanding similar support. Most of the tribal beneficiaries confirm that the support to fishers have benefited them and their income has increased.

Perception ranking of fishery beneficiaries further reveals that there is a positive shift in different dimensions, i.e., from pre-SCA to Post-SCA (current) support situation. Now the tribal fishers have different fishing instruments as a result, fish catch has increased along with income from selling and household consumption. For some families (54.0 percent), days of engagement has also marginally increased. Details are presented in Table 92.

Table 92: Perception Ranking of Indicators

Ranking Indicators	Pre-SCA (% of HH)					Post-SCA (% of HH)				
	1	2	3	4	5	1	2	3	4	5
Fishing Instruments	76.0						24.0	76.0		
Annual fish catch (in Kg.)		76.0					24.0	76.0		
Annual Income from Fishery		76.0					24.0	76.0		
Annual HH Consumption of Fish		76.0					24.0	76.0		
Av. Days of Employment in Fishery		46.0					46.0	54.0		

Due to the sustained efforts, many of the tribals are now engaged in fishery related activity. The beginning of farmers' interest and their active participation in the process paved the way for the community's complete ownership of this programme.

5.2.7 Mushroom Cultivation:

Mushroom, an edible fungus, provides the human body with some of the most essential nutrients. Mushroom is rich in important vitamins, minerals, and carbohydrates that are important for the growth of the human body. It also forms an important ingredient in the preparation of some

Health Benefits

1. Mushrooms are chiefly known for their medicinal properties. The fungus and its extract have been used in medicines for ages, especially in the preparation of traditional Chinese medicines.
2. With zero cholesterol, fewer fats and very low carbohydrates, mushrooms provide magnificent amounts of lean proteins. The fibre and certain enzymes present in mushrooms burn the cholesterol upon digesting, thereby lowering bad cholesterol.
3. The presence of beta-glucans and conjugated linoleic acid, mushrooms possess anti-carcinogenic effects which help in reducing the estrogen and inhibiting the growth of cancerous cells, thereby lowering the risk of breast and prostate cancer.
4. With no fats, no cholesterol, very low carbohydrates, high proteins, vitamins and minerals, mushrooms help in breaking down the sugar or starch of the food due to the natural insulin and enzymes content. As such, they make a great food for diabetic people.
5. Mushrooms contain ergothioneine, a powerful and antioxidant which effectively protects against free radicals and boosts the immunity system. Besides, they help in healing ulcers and ulcerous wounds, thereby protecting them from infections.
6. A lean protein diet, containing mushrooms, is ideal for losing fat and building muscle mass. Since a lot of fats are required for digesting proteins, mushrooms help in getting rid of extra fat and cholesterol.
7. Regular consumption of mushrooms is known for lowering the risk of hypertension, heart attack, stroke and atherosclerosis.
8. Mushroom is widely known for its antiviral, antibacterial, anti-diabetic, anti-parasitic and anti-inflammatory properties.
9. Mushrooms are an effective antidote, the extracts of which are used for nullifying the toxic effects of poison.
10. Mushrooms have about 22 calories per 100 gm of weight.

medicines.

Mushroom has been a profitable venture for the associated tribal families in Nabarangpur, promoted and supported by ITDA, Nabarangpur. The assessment covered 15 mushroom growers who have been supported under SCA by ITDA, Nabarangpur. About 93.3 percent beneficiaries of mushroom farming were supported by the ITDA in the year 2015-16 and remaining 6.7 percent during 2017-18. Discussion with the members reveals that all the supported families are continuing mushroom cultivation due to instant income as it is having a greater demand in the market. The tribal families supported for mushroom cultivation were not new to the farming as more or less they have been doing it with a much lower scale. Before the project support, each beneficiary was having an average of 3 mushroom beds, ranging between 2-4 beds. After the project support, now each family is having 12 beds which give them higher production and income. Both male and female members of the family look after the beds. ITDA supported the families in developing their understanding on mushroom farming system by imparting them capacity building training. ITDA also extended financial assistance for shed preparation, bed preparation, purchasing pump set, polythene sheets and other essentials that are required for mushroom farming. With the support from ITDA, each beneficiary developed their shed and bed for mushroom with an average expenditure of about Rs.4,500/-, supported by ITDA.

Every beneficiary feels that the support was essential for them and it is a need-based support from ITDA for the enhancement of their income. Now with additional 12 beds, each family on an average is having 15 beds, ranging between 14 to 16 beds.

Case: Nari Chetana SHG was formed in the year 2001 and has been at the functional stage. The members have faced lots of problems since their organization was formed but they manage to solve all the problems collectively. All the members have become literates after joining the SHG. For improving the economic status of the members, the SHG thought of taking up mushroom cultivation. The members got exposure visit on mushroom cultivation with the support of ITDA and started mushroom farming. After getting the benefit from ITDA Nabarangpur in the year 2017-18, all the members are continuing mushroom cultivation individually and getting good amount of profit. As there is local demand for mushroom, members of the SHG are facing any marketing constraint.

Further, to enhance income, two members named Purba Bhatra and Ratni Bhatra are preparing mushroom pakoda using the raw mushroom. At the road side point of Nabarandpur (about 1 km away from the market), they constructed a temporary shed and prepare food in the evening. On an average they sell pakoda at the rate Rs. 20.00 per plate (about 100 gm.). As the temporary selling shed is not having electricity connection, they use charge light to run the business for two to three hours. These two members continue preparation of mushroom pakoda, even if when they don't have any production of their own. They purchase mushroom from other members at the time of scarcity and prepare pakoda. Due to the taste, pakoda has a high demand among the consumers. The customers also confirm about the quality and test of mushroom pakoda when discussed. On an average they sell about 3.5 kg of mushroom pakoda every day. The members are planning to repair the temporary shed and expand their business.

A small change in the business operation yield better result for the women entrepreneurs. Production of raw mushroom would not have help them to fetch a higher income what mushroom pakoda helped these two members to have higher income. After initial selling of mushroom pakoda, now it has a good demand in the roadside shop.



Raw Mushroom Production



Preparation of Mushroom Pakoda by SHG members

5.2.7.1 Outcome / Impact:

Because of the support of ITDA, there is enhancement in mushroom production. Earlier, the average production was about 52 Kg per year. But with increased number of beds, each family, on an average is selling about 173 Kg of mushroom apart from household consumption of about 60 Kg per year (earlier household consumption was about 30 Kg per year). With increased production and marketable surplus, average annual income (gross income) from mushroom increased from Rs.8333.33 to Rs.26076.67, i.e., a growth of about 212.92 percent. With the increased number of beds, the expenditure has also gone up in mushroom production. Earlier, each family was spending on an average Rs.1000/- for producing about 82 Kg of mushrooms (including domestic consumption) whereas, now they are spending on an average Rs.3333.33 to produce 233 Kg of mushroom.

Table 93: Ranking of Mushroom Cultivation Benefits

Ranking Parameters	Ranking									
	Pre-SCA (% of HH)					Post-SCA (% of HH)				
	1	2	3	4	5	1	2	3	4	5
Number of Mushroom beds	100.0							100.0		
Average Production of Mushroom	100.0								100.0	

Net Annual Income from Mushroom	100.0								100.0
Annual HH Consumption of Mushroom		100.0							100.0
Av. Days of Employment in Mushroom		100.0							100.0

Ranking of benefits of mushroom farming reveals that there is substantial benefit in terms of production of mushroom and related income from the selling. Local markets have been the major selling point for the producers as demand is relatively high. Ranking also reveals that annual household consumption of mushroom has also increased with higher production.

5.2.8 LAC Cultivation:

Lac, a natural polymer (resin) is produced by *Kerria lacca* (Kerr), which is purposely cultured on shoots of several species of trees, mainly palas, kusum and ber. Lac cultivation is a subsidiary source of income for a large number of farmers, mainly in Odisha, Jharkhand, Chhattisgarh, West Bengal, North-East states and other parts of the country. India, which is the highest producer of lac, contributes around 55% of the total world requirement. The country exports around 80-90% of its production. The state of Jharkhand is known as the ‘Lac State of India’ which alone contributes about 59% of the national production.

A study carried out by Indian Lac Research Institute (ILRI) in Ranchi district of Jharkhand and several lac growing villages of other regions have revealed that income generated from lac cultivation is next only to cultivation of paddy. The income from lac cultivation is about 8% of their total agricultural income. And most of the lac growing families are among the poorest of the poor in the state. The cultivation is done extensively in the remote interior pockets of the state. Further, it has also been found that about half of the total lac-host trees are still lying un-exploited for lac cultivation in lac growing areas and there are areas where in-spite of large number of host trees, lac cultivation is not carried out at all. If these lac hosts could be utilised for cultivation of lac, it would not only increase the national production of lac and add to the income of the farmers but also help prevent indiscriminate felling of trees for fuel and timber purposes.

One of the biggest concerns in lac cultivation is fluctuation in the production of lac. Despite good unrealized demand for lac (both domestic as well as overseas), the lac production growth had not been very healthy. This can be attributed to fluctuation in yield due to lack of penetration of scientific lac cultivation technologies and prevailing marketing practices. The seed (brood lac) for lac production cannot be stored and is very short lived. Therefore, whenever, there is a dip in lac production due to adverse climatic conditions in an area, resilience in production is constrained by brood lac supply. Thus, adopting advanced lac production technology and promotion of brood lac centers would help in enhanced/higher return to the lac grower and thereby reducing dependence on seasonal migration, stabilisation of lac production and creating favorable environment for growth in lac production.

Study Findings:

ITDA, Baripada and ITDA, Nabarangpur has been promoting and supporting lac cultivation by involving the tribal families. The assessment covered 40 such families who have been involved in lac cultivation and supported by ITDAs under SCA. In 2013-14, 50.0 percent sample farmers were supported by ITDA, Baripada and remaining 50.0 percent farmers were supported by ITDA, Nabarangpur in 2017-18. Apart from sample households, there are many tribal families, in the study village and nearby areas are involved in lac farming. However, many farmers have left lac cultivation due to problem in processing and marketing of lac. All the sample farmers received financial support from ITDAs for continuing lac production as a supplementing source of income. The tribal families are also of the opinion that the support was need based to continue lac cultivation. There is one lac processing unit in Nabarangpur which is around 95 Km away from the studied area and other one is at Balasore which is about 75 Km away from the studied villages in Baripada. The lac growers normally depend upon these privately managed units. The units procure lac and prepare finished / semi-process products for bangles and other jewelry.

Table 94: Outcome / Impact of Lac Farming

Name of the ITDA		Total Production of Lac (Kg.)		Total Annual Sell of Lac (Kg.)		Unit Cost of Lac per Kg.		Annual Income from Lac (Rs.)		Average days of Employment in Lac Cultivation	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
ITDA Baripada	No. of HH	20	20	20	20	20	20	20	20	20	20
	Average	13.61	64.75	13.61	64.75	90.0	100.0	1225.0	6475.0	24.40	55.25
	% of Total HH	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
ITDA Nabarangpur	No. of HH	20	20	20	20	20	20	20	20	20	20
	Average	14.0	54.75	14.0	54.75	100.0	110.0	1400.0	6022.50	25.20	55.0
	% of Total HH	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Total	No. of HH	40	40	40	40	40	40	40	40	40	40
	Average	13.81	59.75	13.81	59.75	95.0	105.0	1312.50	6248.75	24.80	55.13
	% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.2.8.1 Outcome / Impact:

With the support and encouragement of ITDAs, there has been increment in production and selling of lac. Production and selling of lac have increased on an average from 13.81 Kg to 59.75 Kg. Though, there is marginal increase in unit cost of lac, due to increased production, average income of the families has increased from Rs.1,312.50 to Rs.6,248.75 with increased number of engagement days. However, the lac farmers are of the opinion that there is a requirement for capacity building on preparation of different lac-based products and appropriate market linkage with external markets for remunerative return.

Table 95: Perception Ranking of Indicators

Ranking of Indicators	Pre-SCA (% of HH)					Post-SCA (% of HH)				
	1	2	3	4	5	1	2	3	4	5
Total Lac Production (in Kg.)	100.0						100.0			
Quantum of Lac sold (in Kg.)	100.0						100.0			
Annual Income from Lac (Rs.)	100.0						100.0			
Av. Days of Employment in Lac Cultivation	100.0						100.0			

Ranking of outcome / impact of lac by the growers reveals that there is a positive shift of different outcome indicators such as production, marketing and income. But the achievement is not substantial. Average days of employment in many cases, more or less remain same with income growth. But in financial term, average annual income of the families from lac is not highly encouraging as on an average each farmer earns about Rs.6,200/- in a year's time.

Though, many tribal families are engaged in lac production in specific areas, it appears that the intervention is more sporadic and scale of production is at a very minimal stage. Sustained growth of the sub-sector demands enhancement in production, engagement of substantial number of families in production system and provision of associated support system. If production has to be enhanced, improved production technology has to reach to the lac growers. Hence, the key focus should be on improvement of the skills and competencies of the poor tribal families growing lac, which are at a very primitive level at present. Over and above this development of sustainable forward and backward linkages for long term sustainability would be taken up. Providing quality brood Lac is not sufficient, but over a period of time, a mechanism has to be developed to strengthen local economy in the long that is based or significantly supported by lac sector and growers will be able to access to quality inputs. As for market for raw-lac, there is a substantial deficit in the availability of raw lac for the processing industry. ILRI estimates that the industry requires at least 20% more raw lac than the existing annual national production of 15,000 Tons.

However, small-scale processing units to convert "raw-lac" to "sced-lac" would be essential which is economically feasible only if the scale of production of raw lac is attended. This will increase the shelf life of the produce which can be used to give a better bargaining power to the growers and help

them to cope with the market fluctuations. Further, this will generate additional employment at the local level. A producer organisation approach would be further helpful for production promotion, value addition and market linkage. In the long run, success of these producer groups can fetch external investments from private entrepreneurs for production enhancement, value addition and marketing of the raw / semi-finished and finished products. Adoption of convergence approach would be helpful where government provides inputs, technology is provided by Resource institutions (ILRI), local NGOs associated in mobilization and promotion activities and private entrepreneurs are engaged in value addition and market linkage. Specific lac sub-sector development focus could be on (1) exploring use of alternate host plants for areas where traditional host plants are not available, (2) field trials for testing new breeds and other technology developed, (3) integrated lac based farming system, (4) nursery raising for availability of saplings of lac host plants, (5) technology and market information support system, (6) demonstration of models in line with farmer's field school, and (7) capacity building of lac growers through training, exposure and hand holding support.

5.2.9 Vegetable Cultivation:

Promotion of vegetable farming among the tribal families has been one of the key activities under livelihood promotion under SCA in the studied ITDAs. Of the total sample households (50 nos.) covered under the assessment, 30.0 percent farmers received support for vegetable cultivation in 2015-16 and remaining 70.0 percent in 2017-18. The support has been in the form of seeds / planting materials, provided to the selected beneficiaries for vegetable farming. Discussion with the beneficiary farmers reveals that the supported farmers are still continuing with the vegetable farming because it has been supplementing their annual income.

Table 96: Year of Receiving Project Support

ITDA / Micro Projects	Year of Receiving Support					
	2015-16		2017-18		Total	
	No. of HH	Percent	No. of HH	Percent	No. of HH	Percent
ITDA Bonei	0	0.0	9	100.0	9	18.0
ITDA Karanjia	15	100.0	0	0.0	15	30.0
ITDA Nabarangpur	0	0.0	15	100.0	15	30.0
ITDA Sundargarh	0	0.0	1	100.0	1	2.0
PBDA, Khuntagaon	0	0.0	10	100.0	10	20.0
Total	15	30.0	35	70.0	50	100.0

5.2.9.1 Area Coverage:

The beneficiary farmers, who were supported for vegetable cultivation, are having average of 2.76 acres of land (median value (2.5 acres), ranging between minimum of 1.0 acre to a maximum of 10.0 acres. Average land holding of farmers found to be of higher order in ITDA, Sundargarh (3.50 acres) and ITDA, Karanjia (3.30 acres) whereas lowest in ITDA, Nabrangpur (2.29 acres).

Table 97: Land Holding

Name of the ITDA/Agency	No. of HH	Average Ag. Land Holding	Median Value of Land Holding	Total Land of HHs	Minimum Land Holding	Maximum Land Holding	% of Total HH
ITDA Bonei	9	2.86	3.00	25.75	1.41	5.00	18.0
ITDA Karanjia	15	3.30	2.50	49.48	1.50	10.00	30.0
ITDA Nabarangpur	15	2.29	2.00	34.42	1.00	5.00	30.0
ITDA Sundargarh	1	3.50	3.50	3.50	3.50	3.50	2.0
SO PBDA, Khuntagaon	10	2.46	2.38	24.60	1.00	5.00	20.0
Total	50	2.76	2.50	137.75	1.00	10.00	100.0

Of the total tribal farmers, supports for vegetable farming, 44.0 percent are marginal farmers with land holding size of less than 2.5 acres. Small farmers comprise 46.0 percent, followed by 8.0 percent semi-medium and 2.0 percent medium farmers. Involvement of big farmer is not observed in vegetable promotion support. So, objectively promotion of vegetable cultivation has been focused more on marginal and small farmers (as together they comprise 90.0 percent of the total beneficiaries) so that they can have better earning to supplement their livelihood.

Table 98: Land Holding Categories among Beneficiaries

Land Holding Categories	No. of Households	Percent	Cumulative Percent
<2.5 Acres (Marginal Farmer)	22	44.0	44.0
>=2.5 &<5 Acres (Small Farmer)	23	46.0	90.0
>=5 Acres &<10 Acres (Semi-Medium Farmer)	4	8.0	98.0
>=10 Acres &<25 Acres (Medium Farmer)	1	2.0	100.0
Total	50	100.0	

The average area, of the total agricultural holding put to vegetable cultivation is about 0.37 acres (median value: 0.31 acres). While the marginal farmers have devoted 0.29 acres for vegetable cultivation, small farmers have been doing vegetable cultivation in an average area of 0.47 acres, semi-medium farmers in 0.23 acres and medium farmers in 0.40 acres. Minimum area devoted for vegetable cultivation is 0.05 acres and maximum of 1.44 acres.

Table 99: Area under Vegetable by Holding Categories

Land Holding Categories (in Acres)	No. of HH	Average Land under Vegetable Cultivation	Total Land Put to Vegetable Cultivation	Minimum Land Covered under Vegetable Cultivation	Maximum Land Covered under Vegetable Cultivation	% of Total HH
<2.5 (Marginal Farmer)	22	0.29	6.36	0.10	0.77	44.0
>=2.5 &<5 (Small Farmer)	23	0.47	10.82	0.10	1.44	46.0
>=5 &<10 (Semi-Medium)	4	0.23	0.90	0.05	0.35	8.0
>=10 &<25 (Medium)	1	0.40	0.40	0.40	0.40	2.0
Total	50	0.37	18.48	0.05	1.44	100.0

Vegetable cultivation is taken up by the tribal farmers primarily during Rabi season. Cultivation of vegetable in Kharif is marginal as cereal crops dominates during Kharif along with pulses. In summer, vegetable cultivation is not taken up due to scarcity of water. Different vegetables taken up by the tribal farmers are like brinjal, green pea, potato, okra, tomato, onion, chilly and bitter gourd. While tomato, onion and chilly is grown less, mostly for consumption purpose; brinjal, potato, okra and bitter gourd is sold in the market. Average area covered under different crops are as below.

Table 100: Area Covered under Cultivation of different Vegetables

Vegetables	No. of HH	Average Area Cultivated (in Ac.)	Total Area Cultivated	Maximum Area Cultivated	Minimum Area Cultivated	% of HH Cultivated
Brinjal	32	0.07	2.25	0.20	0.05	64.0
Green Pea	8	0.38	3.0	0.50	0.30	16.0
Potato	32	0.21	6.69	0.70	0.05	64.0
Okra	32	0.10	3.20	0.70	0.05	64.0
Bitter Gourd	32	0.10	3.34	0.30	0.05	64.0

5.2.9.2 Irrigation:

Irrigation has been a constraint in the way of intensify and putting more area under vegetable cultivation, especially during Rabi season. Due to lack of irrigation provision, cultivable land remaining fallow which is affecting cropping intensity and gross cropped area in a particular year. Farmers, who have been cultivating vegetable in small patches during Rabi, lift irrigation has been the major source of water for them (54.0 percent), followed by deep bore well (30.0 percent) and dug well (16.0 percent).

5.2.9.3 Vegetable Production:

Different vegetables are being produced by tribal farmers from the allocated land with the support of ITDA. Though support of ITDAs was for one time, still farmers are continuing vegetable cultivation as it has been supplementing their income. Production and productivity of different crops reveals that though less number of farmers are doing green pea (16.0 percent), production in terms of volume is higher than other crops, i.e. 15,200 Kg with productivity per unit area (acre) is 5066.67 Kg. Total brinjal produced by 64.0 percent farmers is around 4478 Kg with per acre productivity of 1990.22 Kg. About 64.0 percent families who have been cultivating okra, are having average production of 59.22 Kg and productivity of 592.19 Kg. Similarly, in case of bitter gourd and potato, which are cultivated by 64.0 percent farmers, are getting average production of 93.81 Kg and 302.97 Kg respectively. The yield rate of bitter gourd and potato have been 898.80 Kg and 1449.18 Kg per acre respectively (refer Table 101).

Table 101: Production of Different Vegetables

Vegetables	No. of HH	Average Production (in Kg.)	Total Production (in Kg.)	Maximum Production (in Kg.)	Minimum Production (in Kg.)	% of Total HH
Brinjal	32	139.94	4478	250	70	64.0
Green Pea	8	1900	15200	2500	1000	16.0
Okra	32	59.22	1895	90	20	64.0
Bitter Gourd	32	93.81	3002	122	40	64.0
Potato	32	302.97	9695	470	300	64.0
Other Vegetables	50	26.70	1335	60	3	100.0

Of the total 64.0 percent farmers who have been cultivating Brinjal, 6.25 percent are having production in the range of ≥ 50 Kg & < 75 Kg, 9.38 percent having production in the range of ≥ 75 Kg & < 100 Kg, highest of 50.0 percent farmers having production in the range of ≥ 100 Kg & < 150 Kg and remaining 34.38 percent are having production of brinjal in the range of ≥ 150 Kg. All green pea producing farmers are having production in the range of ≥ 150 Kg. All the farmers cultivating potato, are in the production range of ≥ 150 Kg. Of the total farmers producing okra, 18.8 percent are producing < 50 Kg, 50.0 percent farmers are producing in the range of ≥ 50 Kg & < 75 Kg and remaining 31.3 percent are having production in the range of ≥ 75 Kg & < 100 Kg. In case of bitter gourd, 6.3 percent farmers are having production < 50 Kg, 9.4 percent having production in the range of ≥ 50 Kg & < 75 Kg, 28.1 percent having production within ≥ 75 Kg & < 100 Kg and majority of 56.3 percent are having production in the range of ≥ 100 Kg & < 150 Kg. (refer Table 102).

Table 102: Vegetable Production Ranges

Vegetables	< 50 Kg		≥ 50 Kg & < 75 Kg		≥ 75 Kg & < 100 Kg		≥ 100 Kg & < 150 Kg		≥ 150 Kg		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Brinjal			2	6.25	3	9.38	16	50.0	11	34.38	32	100.0
Green Pea									8		8	100.0
Potato									32	100.0	32	100.0
Okra	6	18.8	16	50.0	10	31.3					32	100.0
Bitter Gourd	2	6.3	3	9.4	9	28.1	18	56.3			32	100.0
Other	35	70.0	15	30.0							50	100.0

5.2.9.4 Marketing of Produce:

Discussion with the beneficiaries reveals that major part of their vegetable produce is sold in the locality / market, apart from certain vegetables they grow for domestic use. About 89.0 percent brinjal, 81.0 percent bitter gourd, 89.0 percent potato and all green pea and okra produced is sold in the market for cash. Average selling of brinjal per household is about 124.38 Kg, whereas average selling of green pea, okra, bitter gourd and potato is 1900 Kg, 59.22 Kg, 76.09 Kg and 270.31 Kg respectively.

Table 103: Marketing of Different Vegetables

Vegetables	No. of HH	Average Production (in Kg.)	Total Production (in Kg.)	Average Selling (in Kg.)	Total Selling (in Kg.)	Percentage of Produce Marketed	% of Total HH
Brinjal	32	139.94	4478	124.38	3980	88.88	64.0
Green Pea	8	1900	15200	1900.0	15200	100.00	16.0
Okra	32	59.22	1895	59.22	1895	100.00	64.0
Bitter Gourd	32	93.81	3002	76.09	2435	81.11	64.0
Potato	32	302.97	9695	270.31	8650	89.22	64.0

Note: Other vegetables produced in small scale for domestic consumption and community distribution and normally not sold in the market.

Looking at the selling of vegetables in different ranges, it is evident that majority of the households sell around ≥ 100 Kg & < 150 Kg (56.25 percent) brinjal while 25.0 households sell ≥ 150 Kg of brinjal, 12.5 percent households sell ≥ 50 Kg & < 75 Kg and 3.13 percent household sell < 50 Kg and ≥ 75 Kg & < 100 Kg of brinjal in a season. On an average each green pea growers sell ≥ 150 Kg of peas while highest percentage of families, to the tune of 93.75 percent sell potato of the same range. Average household selling of okra is in the range of ≥ 50 Kg & < 75 Kg (50.0 percent families) followed by 31.3 percent selling ≥ 75 Kg & < 100 Kg. Majority of the farmers (65.6 percent) sell bitter gourd in the range of ≥ 75 Kg & < 100 Kg followed by 21.9 percent selling between ≥ 50 Kg & < 75 Kg. (refer Table 104).

Table 104: Vegetable Market Ranges

Vegetables	< 50 Kg		≥ 50 Kg & < 75 Kg		≥ 75 Kg & < 100 Kg		≥ 100 Kg & < 150 Kg		≥ 150 Kg		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Brinjal	1	3.13	4	12.5	1	3.13	18	56.25	8	25.0	32	100.0
Green Pea									8	100.0	8	100.0
Potato							2	6.25	30	93.75	32	100.0
Okra	6	18.8	16	50.0	10	31.3					32	100.0
Bitter Gourd	2	6.3	7	21.9	21	65.6	2	6.3			32	100.0

Marketing of the produce has been a problem for the vegetable growers. They normally depend upon local hats for selling of their produce which does not fetch desired profit. Secondly, individual aggregators / middle persons also procure vegetables from the farm gate with a lower price. Direct access to external markets is limited and it is difficult for marginal and small farmers, to venture to these markets with low production. Further, there is no such effective farmer organization / farmer producer group who can aggregate different produces, collecting it directly from the farmers / producers, establish linkage with different large-scale traders / mandis / business houses and market it attending required scale.

5.2.9.5 Expenditure:

On an average, a family is incurring expenditure to the tune of Rs.5332.00 towards vegetable cultivation, irrespective of area under vegetable cultivation. Of the total, highest expenditure is incurred towards hired labour (50.0 percent), followed by expenditure towards fertilizer (27.94 percent of total expenses) and irrigation (12.68 percent of total expenses).

Table 105: Expenditure Incurred in Vegetable Cultivation

Particulars	Broad Heads of Expenditure				Total Expenditure
	Fertilizer	Pesticide	Irrigation	Labour	
No. of HH	50	50	50	50	50
Average Expenditure	1490.00	500.00	676.00	2666.00	5332.00
Percentage of Expenditure	27.94	9.38	12.68	50.00	100.0
Maximum	2500	500	1000	3750	7500
Minimum	500	500	500	1500	3000
% of Total HH	100.0	100.0	100.0	100.0	100.0

There is no significant difference in expenditure incurred by farmers of different holding categories towards vegetable cultivation. The trend of expenditure remains more or less similar across the holding categories. Expenditure incurred towards hired labour is highest among all the expenditures, followed by expenditure towards fertilizer. Expenditure incurred by semi-medium farmer towards vegetable cultivation is marginally higher than marginal and small farmers (refer Table 106).

Table 106: Expenditure by Land Holding Categories

Land Holding Categories		Fertilizer	Pesticide	Irrigation	Labour	Total Expenditure
Marginal Farmer	No. of HH	22	22	22	22	22
	Average Expenditure	1568.18	500.00	638.64	2706.82	5413.64
	Minimum	500	500	500	1750	3500
	Maximum	2500	500	900	3700	7400
	% of Total HH	44.0%	44.0%	44.0%	44.0%	44.0%
Small Farmer	No. of HH	23	23	23	23	23
	Average Expenditure	1369.57	500.00	713.04	2582.61	5165.22
	Minimum	500	500	500	1500	3000
	Maximum	2500	500	1000	3600	7200
	% of Total HH	46.0%	46.0%	46.0%	46.0%	46.0%
Semi-Medium Farmer	No. of HH	4	4	4	4	4
	Average Expenditure	1750.00	500.00	662.50	2912.50	5825.00
	Minimum	1500	500	600	2600	5200
	Maximum	2500	500	750	3750	7500
	% of Total HH	8.0%	8.0%	8.0%	8.0%	8.0%
Medium Farmer	No. of HH	1	1	1	1	1
	Average Expenditure	1500.00	500.00	700.00	2700.00	5400.00
	Minimum	1500	500	700	2700	5400
	Maximum	1500	500	700	2700	5400
	% of Total HH	2.0%	2.0%	2.0%	2.0%	2.0%
Total	No. of HH	50	50	50	50	50
	Average Expenditure	1490.00	500.00	676.00	2666.00	5332.00
	Minimum	500	500	500	1500	3000
	Maximum	2500	500	1000	3750	7500
	% of Total HH	100.0%	100.0%	100.0%	100.0%	100.0%

Mapping of total households by expenditure categories reveals that only 8.0 percent households incur expenditure between Rs.2000/- to Rs.3,500/-, whereas remaining 92.0 percent households incur expenditure \geq Rs.3500/-, irrespective of vegetable cultivated area.

Table 107: Expenditure Ranges

Expenditure Categories	No. of Household	Percent
\geq Rs.2000/- & $<$ Rs.3500/-	4	8.0
\geq Rs.3500/-	46	92.0
Total	50	100.0

5.2.9.6 Income from Vegetables:

Average gross annual income of the vegetable cultivating families has been Rs.16,661/- and net annual income remains to be Rs.13,831/-. Net annual income of the households' ranges between a minimum of Rs.4,800/- to a maximum of Rs. 62,500.

Table 108: Gross and Net Annual Income

Particulars	Gross Annual Income	Net Annual Income
No. of HH	50	50
% of Total HH	100.0	100.0
Average Income (Rs.)	16,661.00	13,831.00
Maximum Income (Rs.)	65,200	62,500
Minimum Income (Rs.)	7,550	4,800

Average annual income by vegetable types reveals that farmers cultivating green pea (percentage of farmer cultivating green pea is only 16.0 percent) is having highest average annual income of Rs.47,500/- and the lowest by the farmers cultivating okra (Rs.1184.38).

Table 109: Income from Vegetable

Vegetables	No. of HH	Average Income (Rs.)	Total Income (Rs.)	Maximum Income (Rs.)	Minimum Income (Rs.)	% of Total HH
Brinjal	32	2,487.50	79,600	5,000	800	64.0
Green Pea	8	47,500.00	3,80,000	62,500	25,000	16.0
Okra	32	1,184.38	37,900	1,800	400	64.0
Bitter Gourd	32	2,282.81	73,050	3,000	750	64.0
Potato	32	3,781.25	1,21,000	8,000	1,000	64.0

Income ranges by types of vegetables cultivated shows that highest percentage of farmers (62.5 percent) cultivating brinjal are in the income range of \geq Rs.2000 & $<$ Rs.3500, followed by \geq Rs.3500 (18.75 percent) and \geq Rs.1000 & $<$ Rs.2000 (15.63 percent). All the farmers cultivating green pea are in the income range of \geq Rs.3500/-. Majority of the farmers cultivating potato are in the income range of \geq Rs.3500/- (50.0 percent) followed by \geq Rs.2000 & $<$ Rs.3500 (40.6 percent). In case of okra and bitter gourd, highest percentage of families are in the income range of \geq Rs.1000/- & $<$ Rs.2000/- (81.3 percent) and \geq Rs.2000 & $<$ Rs.3500 (78.1 percent) respectively (refer Table 110).

Table 110: Income Ranges

Vegetables	$<$ Rs.500		\geq Rs.500 & $<$ Rs.1000		\geq Rs.1000 & $<$ Rs.2000		\geq Rs.2000 & $<$ Rs.3500		\geq Rs.3500		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Brinjal			1	3.13	5	15.63	20	62.5	6	18.75	32	100.0
Green Pea									8	100.0	8	100.0
Potato					3	9.4	13	40.6	16	50.0	32	100.0
Okra	2	6.3	4	12.5	26	81.3					32	100.0
Bitter Gourd			1	3.1	6	18.8	25	78.1			32	100.0

Similarly, gross and net income ranges are presented in the Table 111. Highest percentage of farmers (46.0 percent) are in the net income ranges of \geq Rs.5000/- <Rs.7500/- followed by 32.0 percent farmers in the net income range of \geq Rs.7500/- <Rs.10,000/-.

Table 111: Gross and Net Annual Income Ranges

Income	$<$ Rs.3000		\geq Rs.3000/- & $<$ Rs.5000/-		\geq Rs.5000/- & $<$ Rs.7500/-		\geq Rs.7500/- & $<$ Rs.10,000/-		\geq Rs.10,000/-		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Gross Annual							21	42.0	29	58.0	50	100.0
Net Annual			1	2.0	23	46.0	16	32.0	10	20.0	50	100.0

5.2.9.7 Outcome / Impact:

Overall, vegetable cultivation has a positive impact on the tribal farmers who have been cultivating it and supported by the ITDA. Most of the farmers were cultivating vegetables prior to receiving support from ITDA under SCA but the scale of operation was less than post SCA support. Secondly, after support, some farmers take up other vegetables for cultivation, apart from the earlier ones which they have been cultivating in a small patch of land. As major focus has been on marginal and small farmers, they are the most benefitted families in the overall initiatives, though level of income varies among the vegetable cultivators. There is no change in Kharif crop status, even after the SCA support for vegetable cultivation. Farmers normally grow vegetables in Rabi and there is a positive change in area devoted for vegetable cultivation in Rabi from 0.24 acres to 0.37 acres. No. of farmers associated in vegetable cultivation also increased from pre-SCA situation.

Table 112: Outcome / Impact of Vegetable Cultivation (I)

Particulars	Total Area under Vegetable Cultivation in Kharif (in Ac.)		Total Production of Vegetables in Kharif (in Quintal)		Total Area under Vegetable Cultivation in Rabi (in Ac.)		Total Production of Vegetables in Rabi (in Kg.)		Quantum of Vegetable Sold in a Year (in Kg.)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
No. of HH	50	50	50	50	43	50	43	50	43	50
Average	0.00	0.00	0.00	0.00	0.24	0.37	468.98	731.40	408.49	643.20
Maximum	0	0	0	0	0.70	1.44	1036	2563	1000	2500
Minimum	0	0	0	0	0.05	0.05	165	290	150	240
% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Average production of vegetables in Rabi season has increased, with more area put to vegetable farming, from 468.98 Kg. to 731.40 Kg., i.e., a growth of about 55.96 percent. As discussed, vegetable cultivation is taken up only during Rabi season and in selected patches of land where irrigation facility is available. Hence, vegetable production in Rabi is more or less same to the total annual production of vegetables by the farmers. Coupled with higher production, quantum of vegetable sold in the market has also increased by 57.46 percent, i.e., from the average of 408.49 Kg. to 643.20 Kg.

Table 113: Outcome / Impact of Vegetable Cultivation (II)

Particulars	Quantum of Vegetable Consumed in a Year (Quintal)		Gross Annual Income from Vegetable Cultivation (Rs.)		Net Annual Income from Vegetable Cultivation (Rs.)		Annual Household Consumption of Vegetables (in Rs.)		Average days of Employment in Vegetable Cultivation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
No. of HH	43	50	43	50	43	50	43	50	50	50
Average	60.49	88.20	11236.05	16661.0	8341.86	13831.0	1209.77	1764.0	60.0	60.0
Maximum	140	175	27700	65200	25000	62500	2800	3500	60	60
Minimum	15	20	5800	7550	3000	4800	300	400	60	60
% of Total HH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Higher production of vegetables also increased annual domestic consumption (refers to non-marketed including community distribution and other uses) from the average of 60.49 Kg to 88.20 Kg. bringing food and nutritional security to the tribal families. Though, there is no noticeable change in days of engagement in the pre and post SCA support, but the average net annual income has increased by 65.80 percent which is basically attributed to more area under cultivation, higher production and increment in selling price of the commodities in the market in comparison to previous situation.

Table 114: Perceptual Ranking of Impact of Vegetable Cultivation

Indicators	Pre-SCA Rank					Post-SCA Rank				
	1	2	3	4	5	1	2	3	4	5
Production of Vegetables in Kharif	100.0					100.0				
Area under Vegetable Cultivation in Rabi	100						100.0			
Area under Vegetable Cultivation in a Year	100.0							100.0		
Production of Vegetables in Rabi		100.0						100.0		
Quantum of Vegetable Sold in a Year		100.0						84.0	16.0	
Quantum of Vegetable Consumed in a Year	100.0						100.0			
HH food and nutrition security		100.0						100.0		
Annual Income from Vegetable	100.0							100.0		
Average days of Employment		100.0						100.0		

Perceptual ranking of impact of vegetable cultivation reveals that there is positive shift in most of the measured indicators, though degree of impact varies by indicators. Significant impact has been production and income growth (refer Table 114).



Case: Cropping Pattern of a village changed after the introduction of vegetable cultivation (green motor) by ITDA. Vegetable cultivation helped to increase agricultural income of the tribal farmers. Siramanipur village comes under Rugudi GP of Jashipur block under ITDA Karanjia of Mayurbhanj district. Most of the villagers are farmers. Monocropping was the common practice among the farmers and Paddy was the main crop. Some of the farmers were cultivating vegetable, but the scale was very low and mostly for consumption purposes. In the year 2015-16, some of the villagers were newly covered under rubber plantation. Lift irrigation department arranged a bore well for the farmers for both rubber and vegetable cultivation (vegetable as inter cropping). In the same year, villagers and tribal rubber growers approached ITDA for good quality green motor seed so that same piece of land can be utilized and farmers can get additional income from the rubber field. In the next year 2016-17, ITDA supported the farmers with good quality green motor seed depending upon the requirement of the farmers. This was the 1st year of massive production of green motor and farmers got good profit from this, farmers themselves found out the market link (Keonjhar) to supply green motor. After this green motor intervention in the village most of the farmers concentrated on green motor cultivation. On an average, the farmers cultivating green pea have earned more than Rs.40,000.00 in a year.

Mr. Sankhali Nayak, 53 years is residing in the same Siramanipur village. He is a marginal farmer having 2 acres of own land. In the process, he got 5 kg green pea seed from ITDA in the year 2016-17. He cultivated 1 acre of land which belongs to his brother (Gangadhar Nayak), where irrigation facility was there and was having rubber plantation. In the same year he produced more than 35 quintal of green pea and become the first person of the village to produce such a huge amount of pea. He sold the produce on a whole sale basis at the rate of Rs. 25.00-30.00 per Kg. depending upon the production period. He earned more than Rs.95,000.00 from green motor cultivation alone. After the Rabi season, he purchased a two-wheeler (Honda Company/Honda Sign) amounting Rs.70,000.00. Now he is very happy with green pea farming and continue to do so looking at the market demand.

5.2.10 Women Self Help Group

The group approach was developed bringing collaborations and cohesiveness among the group members which shall ensure long salvage period of the business in comparison to the individual entrepreneurship. Financial institutions prefer credit financing to groups than individual idealising above mentioned perspective of group dynamics. The evaluation covered a total of 21 women SHGs

across different studied ITDAs / Micro Projects to understand their functioning, involvement in IGA activities and support received from ITDAs under SCA to TSP for livelihood enhancement. The study covered six women SHGs from Bonai and same number of SHGs from Rairangpur ITDA, whereas, 4 SHGs were covered from Karanjia ITDA and five SHGs from Nabarangpur ITDA.

The study covered a total of 21 women SHGs from three studied districts, i.e., Mayurbhanj (47.6 percent), Nabarangpur (23.8 percent) and Sundargarh (28.6 percent). Samples were selected from ITDA, Bonei (28.57 percent), ITDA, Karanjia (19.05 percent), ITDA, Nabarangpur (23.81 percent) and ITDA, Rairangpur (28.57 percent).

Table 115: Distribution of Sample SHG by Study Districts

SN	Districts	Frequency	Percent
1	Mayurbhanja	10	47.6
2	Nabarangpur	5	23.8
3	Sundargarh	6	28.6
	Total	21	100.0

The SHGs have total member strength of 227, i.e. an average of around 10.81 members (median value 10) per SHG. Majority of the members in the SHGs belong to below the poverty line / economically poor section. In total 91.63 percent members of the total belong to below the poverty line / economically poor section. All the members of the SHGs studied under ITDA, Karanjia are below the poverty line whereas, more than 90.0 percent members belonging to economically poor category are observed in ITDA, Rairangpur and ITDA, Bonei.

Table 116: Total Members and Members of BPL Category

SN	ITDA	Total SHG	Total Member	Average Member	Total BPL Member	% of BPL Members
1	ITDA Bonei	6	63	10.50	59	93.65
2	ITDA Karanjia	4	39	9.75	39	100.00
3	ITDA Nabarangpur	5	64	12.80	50	78.13
4	ITDA Rairangpur	6	61	10.17	60	98.36
	Total	21	227	10.81	208	91.63

Looking at the date of formation of the SHGs, it is evident that all the groups are quite old and formed before 2010 while they received support between 2013-14 to 2017-18 (based on the assessment requirements, support provided in last three years are considered). However, discussion with SHG members reveals that they have got support in different forms even before 2013-14. Of the total SHGs, three SHGs of ITDA, Bonei are associated with cluster and GP level federations. No SHG is having its own functional office but all SHGs are having their bank account, either in RRBs or in scheduled commercial banks.

Table 117: Year of SHG Formation and Accessing Support

Year of Formation	Year of getting Support				Total	Percent
	2013-14	2015-16	2016-17	2017-18		
2000	0	0	0	1	1	4.8
2001	0	1	0	3	4	19.0
2003	0	0	0	2	2	9.5
2004	1	2	0	0	3	14.3
2005	1	0	0	1	2	9.5
2006	0	2	1	0	3	14.3
2008	1	1	0	1	3	14.3
2009	0	2	1	0	3	14.3
Total	3	8	2	8	21	100.0
Percentage	14.3	38.1	9.5	38.1	100.0	

The women SHGs are involved in different income generating activities, that are being supported by the respective ITDAs. Of the total SHGs, majority are engaged in livestock rearing (47.42 percent), followed by agriculture / horticultural activities (23.81 percent). Engagement in off-farm and non-farm activities are comparatively less (14.29 percent in each). In animal husbandry, more number of SHGs are involved in goat rearing (33.3 percent) than poultry (14.3 percent) due to higher profitability and comparatively less mortality than poultry. Of the total groups, one group is involved in preparing sanitary napkin, two groups managing paddy processing unit, one group is having catering instruments which is provided on rental basis and one groups is managing a garment shop (refer Table 118 and Table 119).

Table 118: SHGs in different IGA Activities

SN	IGA Activities	No. of SHG	Percentage
1	Agri. / Horti.	5	23.81
2	Livestock	10	47.62
3	Off-Farm	3	14.29
4	Non-Farm	3	14.29
	Total	21	100.00

Table 119: SHGs by IGA Activities

Activities	ITDA Name				Total	
	ITDA Bonei	ITDA Karanjia	ITDA Nabarangpur	ITDA Rairangpur	No.	Percentage
Catering Instrument	1				1	4.8
Farm Mechanisation (Power Tiller)		1			1	4.8
Garment Shop	1				1	4.8
Goatery		1	1	5	7	33.3
Mushroom			1		1	4.8
Poultry		1	2		3	14.3
Processing Unit (Paddy)		1		1	2	9.6
Sanitary Napkin	1				1	4.8
Vegetable	3		1		4	19.0
Total	6	4	5	6	21	100.0

The SHGs were provided financial support by the respective ITDA in different years for income generation activities under SCA to TSS. Of the total, 14.3 percent SHGs were provided support during 2013-14, 38.1 percent during 2015-16, 9.5 percent during 2016-17 and remaining 38.1 percent were supported during 2017-18

Table 120: Year of Support to SHGs

IGA Categories	Year of getting Support				Total
	2013-14	2015-16	2016-17	2017-18	
Catering Instrument	0	0	0	1	1
Farm Mechanisation (Power Tiller)	0	0	0	1	1
Garment Shop	0	0	0	1	1
Goatery	1	3	2	1	7
Mushroom	0	0	0	1	1
Poultry	2	0	0	1	3
Processing Unit	0	0	0	1	1
Rice Paddy Processing	0	1	0	0	1
Sanitary Napkin	0	0	0	1	1
Vegetable	0	4	0	0	4
Total	3	8	2	8	21
Percent	14.3	38.1	9.5	38.1	100.0

The SHGs maintain different records such as cash book, minutes book, loan register, ledger register, petty cash book, savings register etc. However, discussion with SHG members reveals that it is not

maintained / updated on regular basis. Members found reluctant to show their records as a result records of different SHGs could not be verified to ascertain their status.

Table 121: Records Maintained by SHGs

SN	Books / Records	Maintained by SHGs	Not Maintained by SHGs
1	Minutes Book	100.0	
2	Loan Register	100.0	
3	Ledger Book	100.0	
4	Member List	100.0	
5	Asset Register	28.6	71.4
6	Petty Cash Book	100.0	
7	Savings Register	100.0	
8	Loan Repayment Register	100.0	
9	Bank Reconciliation Statement		100.0
10	Cash Book	100.0	

5.2.10.1 Savings:

The group members have been doing monthly compulsory savings as a part of their financial function. Per member per month saving varies between Rs.100/- to Rs.300/-. In majority of the groups (42.9 percent), per month savings per member is Rs.100/- followed by per member monthly savings of Rs.200/- (19.0 percent) and Rs.150/- and Rs.250/- (14.3 percent in each savings category). Higher amount of saving by members of certain groups is linked to their expectation to access higher credit amount from bank based on their savings amount.

Table 122: Per Member Monthly Savings

ITDA	Per Member Savings Per Month						Total	Percent
	100	150	200	220	250	300		
ITDA Bonei	2	2	2	0	0	0	6	28.6
ITDA Karanjia	2	1	0	1	0	0	4	19.0
ITDA Nabarangpur	4	0	0	0	1	0	5	23.8
ITDA Rairangpur	1	0	2	0	2	1	6	28.6
Total	9	3	4	1	3	1	21	100.0
Percent	42.9	14.3	19.0	4.8	14.3	4.8	100.0	

While average per member savings per month remains to be Rs.162.86, average group savings amounts to Rs.30,352.38. Average per member saving has been Rs.2,812.13. Average savings per group found to be highest in ITDA, Rairangpur (Rs.38,083.33) and lowest in ITDA, Karanjia. Similarly, average per member savings is highest in ITDA, Rairangpur and lowest in ITDA, Nabarangpur.

Table 123: Group and Member Savings

ITDA	Total SHG Savings	Average Savings per SHG	Average Per Member Savings Per Month	Average Per Member Savings
ITDA Bonei	159900	26650.00	150.00	2551.52
ITDA Karanjia	100000	25000.00	142.50	2547.22
ITDA Nabarangpur	149000	29800.00	130.00	2230.45
ITDA Rairangpur	228500	38083.33	216.67	3734.09
Total	637400	30352.38	162.86	2812.13

SHGs are ranked by amount of savings and it is observed that highest percentage of SHGs are in rank 3 ($\geq 20,000$ & $< 35,000$) (47.6 percent) followed by rank 2 ($\geq 10,000$ & $< 20,000$) (23.8 percent) and rank 4 ($\geq 35,000$ & $< 50,000$). Less number of SHGs are observed in higher ranks rather than lower ranks.

Table 124: Ranking of SHGs by Savings Categories

SN	Ranks	No. of SHG	Percent
1	2 ($\geq 10,000$ & $< 20,000$)	5	23.8
2	3 ($\geq 20,000$ & $< 35,000$)	10	47.6
3	4 ($\geq 35,000$ & $< 50,000$)	4	19.0
4	5 ($\geq 50,000$)	2	9.5
	Total	21	100.0

Similarly, ranking of members by their total savings with SHG reveals that majority of the SHGs having per capita savings are in rank 2 ($\geq 1,000$ & $< 2,000$) (42.9 percent) followed by rank 3 ($\geq 2,000$ & $< 3,500$) (28.6 percent) and rank 4 ($\geq 3,500$ & $< 5,000$) (23.8 percent). So, looking at the age of the groups and per member savings, it is evident that average savings per capita in majority of the cases is less.

Table 125: Ranking of Members by Saving Categories

SN	Rank	No. of SHG	Percent
1	2 ($\geq 1,000$ & $< 2,000$)	9	42.9
2	3 ($\geq 2,000$ & $< 3,500$)	6	28.6
3	4 ($\geq 3,500$ & $< 5,000$)	5	23.8
4	5 ($\geq 5,000$)	1	4.8
	Total	21	100.0

5.2.10.2 Credit:

All the SHGs have taken credit from the formal financial institutions. The amount of credit taken per each SHG-bank linkage varies across the groups. About 47.6 percent SHGs have taken credit once, similar number of groups (47.6 percent) have taken credit from formal financial institutions twice and remaining 4.8 percent have taken credit more than once.

Table 126: Times of Bank Loan Taken by SHGs

SN	Times of Bank Loan	Frequency	Percent
1	1 (Once)	10	47.6
2	2 (Twice)	10	47.6
3	5 (More than Twice)	1	4.8
	Total	21	100.0

The average cumulative credit taken by SHGs from bank amounts to Rs. 2,14,952.38. The average bank loan taken by 52.38 percent SHGs during 2017-18 was Rs. 141272.73, Rs. 161428.57 during 2016-17 by 33.33 percent SHGs and Rs. 130714.29 in 2015-16 by 66.67 percent SHGs.

Table 127: Cumulative Credit Taken by SHGs from Banks

Particulars	Cumulative Credit from Bank by SHGs	Bank Loan by Year 17-18 (Rs.)	Bank Loan by Year 16-17(Rs.)	Bank Loan by Year 15-16(Rs.)	Bank Loan Outstanding with SHG	Per Member Cumulative Bank Loan
No. of SHG	21	11	7	14	15	21
Average	2,14,952.38	1,41,272.73	1,61,428.57	1,30,714.29	38,373.40	20,378.97
Total	45,14,000	15,54,000	11,30,000	18,30,000	5,75,601	4,27,958.33
Minimum	1,24,000	50,000	1,00,000	25,000	11,270	9,375.00
Maximum	4,80,000	2,00,000	2,00,000	2,30,000	81,500	43,636.36
% of Total SHG	100.0	52.38	33.33	66.67	71.43	100.0

The average cumulative credit per SHG from bank is highest in ITDA, Rairangpur and lowest among the SHGs of ITDA, Nabarangpur. SHGs of ITDA, Rairangpur is having highest average loan from bank during 2017-18. Average bank loan outstanding with SHGs (including loans taken in different

periods), is highest with SHGs of ITDA Bonei, followed by ITDA Rairangpur, whereas lowest outstanding is with SHGs of ITDA, Nabarangpur. So, average per member bank loan outstanding (taking cumulative loan in to account) is Rs.20,379.0, with highest in ITDA, Rairangpur (Rs.26,439.4) and lowest in ITDA, Nabarangpur (Rs.13,106.8).

Table 128: Credit by SHG / Members

ITDA	Average Cumulative Credit per SHG from Bank	Average Bank Loan by Year 17-18 (Rs.)	Bank Loan by Year 16-17 (Rs.)	Bank Loan by Year 15-16 (Rs.)	Bank Loan Outstanding with SHG	Average Per Member Cumulative Bank Loan
ITDA Bonei	2,35,833.3	1,25,000.0		1,52,500.0	45,586.7	22,603.5
ITDA Karanjia	1,66,250.0	1,45,000.0		42,500.0	33,580.0	17,041.7
ITDA Nabarangpur	1,60,800.0	1,37,000.0	1,76,666.7		31,333.3	13,106.8
ITDA Rairangpur	2,71,666.7	2,00,000.0	1,50,000.0	1,38,333.3	42,104.2	26,439.4
Total	2,14,952.4	1,41,272.7	1,61,428.6	1,30,714.3	38,373.4	20,379.0

All the studied SHGs are ranked by amount of cumulative credit taken over a period of time. The ranking reveals that majority of the SHGs are in the rank 2 ($\geq 1,00,000$ & $< 2,00,000$) (52.4 percent) followed by rank 3 ($\geq 2,00,000$ & $< 3,50,000$) and rank 4 ($\geq 3,50,000$ & $< 5,00,000$) (9.5 percent). Non-of the SHGs having cumulative credit amount more than Rs.5,00,000/-.

Table 129: Rank of SHGs by Cumulative Credit Categories

SN	Ranks of SHGs by Cumulative Credit	No. of SHG	Percent
1	2 ($\geq 1,00,000$ & $< 2,00,000$)	11	52.4
2	3 ($\geq 2,00,000$ & $< 3,50,000$)	8	38.1
3	4 ($\geq 3,50,000$ & $< 5,00,000$)	2	9.5
	Total	21	100.0

Further, ranking of SHGs based on the outstanding credit reflects that majority of the SHGs are having outstanding below Rs.10,000/- (Rank 1, 28.6 percent). Highest amount of credit outstanding is with 14.3 percent SHGs who fall to rank 5 ($> Rs. 50,000$) About 23.8 percent SHGs fall to rank 4 with credit outstanding between Rs.35,000 to Rs.50,000 ($\geq 35,000$ & $< 50,000$).

Table 130: Category of SHGs by Outstanding Bank Loan

SN	Rank	No. of SHG	Percent
1	1 ($< 10,000$)	6	28.6
2	2 ($\geq 10,000$ & $< 20,000$)	3	14.3
3	3 ($\geq 20,000$ & $< 35,000$)	4	19.0
4	4 ($\geq 35,000$ & $< 50,000$)	5	23.8
5	5 ($> 50,000$)	3	14.3
	Total	21	100.0

Ranking of members by cumulative bank loan availed during different years reflects that 33.3 percent members are having loan between Rs.15,000/- to Rs.20,000/- ($\geq 15,000$ & $< 20,000$) (rank 3) followed by Rs.20,000/- to Rs.25,000/- ($\geq 20,000$ & $< 25,000$) (rank 4). Lowest percentage of members are in the rank 1 with cumulative bank loan of less than Rs.10,000/-.

Table 131: Ranking of Members by Cumulative Bank Loan

SN	Rank	No. of SHG	Percent
1	1 ($< 10,000$)	1	4.8
2	2 ($\geq 10,000$ & $< 15,000$)	3	14.3
3	3 ($\geq 15,000$ & $< 20,000$)	7	33.3
4	4 ($\geq 20,000$ & $< 25,000$)	6	28.6
5	5 ($> 25,000$)	4	19.0
	Total	21	100.0

Apart from bank loan, SHGs have also given credit to its members from its own fund, generated through members savings, interest income and income generated from other sources, including IGA. Average amount of credit outstanding with members per SHG is about Rs.17,452.38 and average credit outstanding per member is around Rs.1,667.55.

Table 132: Credit taken by Members from SHGs (credit from own fund)

Particulars	Total Credit Outstanding with Members Per SHG	Av. Credit Outstanding per Member
No. of SHGs	21	21
Average (Rs.)	17,452.38	1,667.55
Total (Rs.)	3,66,500	35,018.56
Minimum	5,000	312.50
Maximum	35,000	3,500.00
% of Total SHGs	100.0	100.0

Ranking of groups on credit outstanding on members reflects that highest of 42.9 percent SHGs are in rank 3 with credit outstanding on members in between Rs.20,000 to Rs.35,000 followed by outstanding amount of Rs.10,000 to Rs.20,000/- (rank 2) by 33.3 percent. Credit of higher rank, i.e., Rs.35,000 to Rs.50,000 (rank 4) is lowest among the SHGs.

Table 133: Ranking of Groups by Credit Outstanding (Credit from own fund)

SN	Rank	Frequency	Percent
1	1 (<10,000)	4	19.0
2	2 (>=10,000 &<20,000)	7	33.3
3	3 (>=20,000 &<35,000)	9	42.9
4	4 (>=35,000 &<50,000)	1	4.8
	Total	21	100.0

Ranking of members by average credit outstanding with the members from the loan taken from SHGs own fund reflects that majority of the SHGs having members with credit outstanding in the rank of Rs.1000/- to Rs.2,000/- (rank 2, 42.9 percent), followed by rank 3 and rank 1. Average credit outstanding per member in the rank 4, i.e., Rs.3,500/- to Rs.5,000/- is low. The banks charge 7.0 percent interest to SHGs on credit while SHGs charge 12.0 percent (in 14.3 percent cases) to 24.0 percent (85.7 percent) to its members on bank loan as well as on own credit.

Table 134: Ranking of Members by Credit Outstanding Categories

SN	Rank	Frequency	Percent
1	1 (<1,000)	4	19.0
2	2 (>=1,000 &<2,000)	9	42.9
3	3 (>=2,000 &<3,500)	7	33.3
4	4 (>=3,500 &<5,000)	1	4.8
	Total	21	100.0

The SHGs have been generating funds from different sources such as per month savings by members (all SHGs with average of Rs.30,352.4), IGA activities (all SHGs with an average of Rs.2,14,952.4), funds from associated GP Level Federations (GPLF) (2 SHGs accessed funds), revolving funds from DRDA / OLM / Mission Shakti (all groups with an average of Rs.10,000/-) and bank credit. Taking sources of funds from all sources, each SHG is having a fund base of Rs.2,64,828.6.

Table 135: Source of Funds for SHGs

	GP Level Federation (GPLF)	SHG Members (Savings)	IGA/Activities (Loan Minus Subsidy)	DRDA/OLM (Revolving Fund)	Banks (Credit Fund)	Total
No. of SHG	2	21	21	21	21	21
Average	1,00,000.0	30,352.4	2,14,952.4	10,000.0	2,14,952.4	2,64,828.6
Total	2,00,000.0	6,37,400.0	45,14,000.0	2,10,000.0	45,14,000.0	55,61,400.0

Minimum	1,00,000.0	17,000.0	1,24,000.0	10,000.0	1,24,000.0	1,54,000.0
Maximum	1,00,000.0	62,000.0	4,80,000.0	10,000.0	4,80,000.0	5,39,000.0
% of Total SHG	100.0	100.0	100.0	100.0	100.0	100.0

5.2.10.3 Income and Expenditure:

The average income of the SHGs has been Rs. 44,302.4 and average expenditure has been Rs.6,964.8, i.e., the SHGs are making a profit out of its activities, which includes savings, credit and IGA. While income sources of the SHGs have been interest from banks on deposits, interest generated from lending and income from IGA; expenditures are in the heads of purchase of stationaries (books / records etc.), transportation, refreshment and interest payment.

Table 136: Income and Expenditure of SHGs

Particulars	No. of SHG	Average	Total	Minimum	Maximum	% of Total N
Interest from Bank	17	1,070.2	18,193.7	16.0	3,333.0	80.95
Interest from Credit (Own Fund)	21	3,782.9	79,440.0	1,200.0	8,400.0	100.00
Interest from Credit (Bank Loan)	15	31,925.3	4,78,880.0	7,500.0	81,600.0	71.43
Income from Business (Net)	6	58,972.8	3,53,837.0	28,081.0	84,030.0	28.57
Total Income (Rs.)	21	44,302.4	9,30,350.7	10,740.0	89,628.8	100.00
Books / Records / Stationary	21	754.3	15,840.0	250.0	2,500.0	100.00
Transportation (meeting etc.)	21	739.3	15,526.0	200.0	1,500.0	100.00
Refreshments	21	457.3	9,603.0	178.0	1,500.0	100.00
Salary / Honorarium	1	50,000.0	50,000.0	50,000.0	50,000.0	4.76
Repair & Maintenance-Assets	1	5,000.0	5,000.0	5,000.0	5,000.0	4.76
Electricity / Other Utilities	1	10,000.0	10,000.0	10,000.0	10,000.0	4.76
Interest paid-off-Outside Loan	15	2,686.1	40,292.1	788.9	5,705.0	71.43
Total Expenditure (Rs.)	21	6,964.8	1,46,261.1	850.0	69,134.0	100.00
Less Expenditure	21	37,337.6	7,84,089.6	5,435.0	83,232.2	100.00

Among the different sources of income of the SHGs, average interest from bank has been low, i.e., Rs.1,070.2 whereas, income from IGA (for 6 SHGs involved in IGA activities as a group) and interest from bank credit channelized to members has been of higher order. ITDA wise average income of SHGs from different sources is presented in the table.

The SHGs spend in different group related activities such as purchasing books / records / stationaries, expenditure towards mobility for attending different meetings / activities, refreshment of members / guests, making honorarium payment, repair and maintenance of assets, payment towards electricity / other utilities and payment of interest for outstanding loan. Average annual expenditure incurred by SHGs, irrespective of ITDAs, calculated to be Rs. 6,964.8.

Table 137: Average Annual Expenditure of SHGs

Heads of Expenditure	ITDA Bonei	ITDA Karanjia	ITDA Nabarangpur	ITDA Rairangpur	Total
Books / Records / Stationary	535	698.5	900.8	888.7	754.3
Transportation (meeting etc.)	426.7	1,105.0	621	906.8	739.3
Refreshments	305	348.8	790	404.7	457.3
Salary / Honorarium	50,000.0				50,000.0
Repair & Maintenance-Assets	5,000.0				5,000.0
Electricity / Other Utilities	10,000.0				10,000.0
Interest paid-off-Outside Loan	3,191.10	2,350.60	2,193.30	2,947.30	2,686.10
Total Expenditure (Rs.)	13,695.50	4,502.90	3,627.80	4,656.20	6,964.80
Income Minus Expenditure	44,037.5	36,209.4	22,323.2	43,901.8	37,337.6

Note: No. of SHGs by heads of expenditure differs

Looking at income and expenditure, it is evident that SHGs in all the ITDAs are having surplus funds (average surplus of Rs.37,337.6) after incurring need-based expenditure. Based on the income and expenditure, highest amount of surplus is generated by SHGs in ITDA, Bonei (Rs.44,037.5) and ITDA, Rairangpur (Rs.43,901.8) and lowest in ITDA, Nabarangpur (Rs.22,323.2).

5.2.10.4 Usefulness of SHG:

The SHGs have been useful in different ways, such as providing guidance to members on IGA activities, provide required information to members, solving problems of the members, resolve conflict and disputes among the members, promoting transparency in financial transactions through maintenance of records etc. Details of usefulness of SHGs for the members is presented in the table.

Table 138: Usefulness of SHG for Tribal Members

SN		ITDA Name				Total	Percent	
		ITDA Bonei	ITDA Karanjia	ITDA Nabarangpur	ITDA Rairangpur			
	Providing guidance to members on IGA activities	Yes	6	4	5	6	21	100.0
	Assisting in information sharing among members	Yes	6	4	5	6	21	100.0
	Helping define problems and identify solutions	Yes	6	4	5	6	21	100.0
	Facilitating appraisal of member performance	Yes	6	4	5	6	21	100.0
	Encouraging members to offer ideas and opinions	Yes	6	4	5	6	21	100.0
	Resolving conflicts / Disputes among members	Yes	6	4	5	6	21	100.0
	Conducting meetings and facilitating group decisions	Yes	6	4	5	6	21	100.0
	Organizing implementing and coordinating group plans	Yes	6	4	5	6	21	100.0
	Facilitating financial transactions during group meetings	No	2	1	1	2	6	28.6
		Yes	4	3	4	4	15	71.4
	Maintaining and keeping records of accounts	Yes	6	4	5	6	21	100.0
	Maintaining a bank account	Yes	6	4	5	6	21	100.0
	Representing the group's interests to outside bodies.	No	1	0	1	1	3	14.3
		Yes	5	4	4	5	18	85.7
	Negotiations and doing business with others	No	0	1	1	0	2	9.5
		Yes	6	3	4	6	19	90.5
	Rendering truthful and correct accounts to members	No	1	0	0	0	1	4.8
		Yes	5	4	5	6	20	95.2
	Selecting leaders on consensual basis *	No	2	0	0	1	3	14.3
		Yes	4	4	5	5	18	85.7
	Developing functional systems and procedures	No	6	4	5	6	21	100.0
	Mechanism for rotation of leadership	No	6	4	5	6	21	100.0
	Changing leadership in case of requirement	No	4	2	3	4	13	61.9
		Yes	2	2	2	2	8	38.1
	Training / Capacity Building of Members	Yes	6	4	5	6	21	100.0

Note: *Educated and literate Person, who can talk and discuss at outside are selected as leaders

The SHGs have taken up different social activities in their locality such as movement for liquor prohibition (61.9 percent), creation of awareness on government schemes / programs (28.6 percent), immunization promotion (28.6 percent) etc. Based on this, it can be deduced that apart from thrift and credit, SHGs have been involving themselves in community welfare activities. Apart from involvement in social activities, the groups have also been active in developing business attitude among the members and their family members. The groups have also been motivating other women

members of the village and nearby locality to form women group and start business activities (76.2 percent).

Table 139: Key Social Activities Taken up by SHGs

SN	Social Activities	No. of SHG	Percent
1	Awareness about Govt programmes	6	28.6
2	Liquor free movement	13	61.9
3	Polio drop distribution, immunisation, and resolve conflicts	6	28.6
4	After complaining the village road has been repaired	1	4.8
5	Complained about drinking water to Sarpanch	1	4.8

According to members, impact of SHGs has been many fold, such as (1) increased awareness of members / families on government schemes / programs by which they can approach and access for enrolment, (2) involvement in different income generating activities by which they are supplementing their family income, (3) enhancement in leadership quality / taking leadership in the locality in different social issues, (4) having access to bank and doing financial transactions with the banks, (5) inculcated savings habit and enhanced savings and (6) members have been able to put their signature due to their involvement in group activities which was not there earlier.

Table 140: Suggestion of SHGs

SN	Suggestions of the SHG Members	No. of SHG	Percent
	Awareness and training on specific IGA	1	4.8
	Money should not be distributed among members after getting loan	3	14.3
	More financial support as per the need of the members	14	66.7
	Training on record keeping to all the members	1	4.8
	Organising exposure visit for SHGs	21	100.0
	Motivation and counselling	2	9.5
	Monitoring and Supervision of the SHGs activities, including IGAs	6	28.6

In order to improve the functioning of the SHG, members feel that there should be awareness drive and training to members on different IGA by which their performance can be improved. After receiving credit from banks, it is normally get distributed among the members equally. Some members feel that such system may be avoided and credit fund should be provided as per the need of the member and / or income generating activities can be taken up at the group level using the credit funds. Some are of the opinion that more financial support should be provide to the SHGs as per the identified need of the members. Exposure visit can be a part of SHG promotion and strengthening measures by which members can learn from different initiatives taken by others and they can adopt it suitably. Further, according to some members, monitoring and supervision of SHG activities and IGA taken up by the group / member would be of immense help to improve the functioning of SHGs and making income generating activities more profitable.

Performance of SHGs is mapped based on certain indicators under broad heads, i.e., (1) vision, mission and goal of the SHG, (2) size of the SHG, (3) economic status of the members, (4) savings, (5) credit etc. The outcome of the mapping is presented in the table against each mapped indicator (refer Table 141).

Table 141: Performance of SHGs

Aspects	Indicators	Percentage of SHGs
Vision, Mission, and Goals	Discussed and established in the SHG with the participation of all members Written down and easily available on request (may also be displayed prominently in the community hall)	0.0
	Discussed and established in the SHG with the participation of around 75% or more members	38.10
	May be discussed, but not well established and written down.	42.86
	Not discussed and not established.	23.81

	Known to all members	42.86
	Written down but may or may not be displayed or easily available.	
	Even if established, and written down, it is more due to the effort made by staff.	
	Some group members may be aware that other SHGs are engaged in this process, but even this knowledge does not interest them to do the same in their own SHG.	
	Members make efforts to see that all their actions are in consonance with their Vision, Mission, and Goals	0.0
	Not all members are familiar with it.	61.90
	Less than 50% of the members are familiar with it. Only the representative may know what it is. Aligning SHG activities with the Vision and Goals is absent.	100.0
	Even if staff initiate discussions, participation by members is poor.	0.0
	SHG activities are not consciously aimed at achieving the Vision and Goals	95.24
Size of SHG	1-14	90.48
	15 to 20 members	9.52
	21 to 30 members	0.0
	31 to 35 members	0.0
	36 and more members	0.0
Economic status of members	All members are poor, from the lowest economic strata of the village	0.0
	A mixture of better off and poor members.	100.0
	Better off members are more in number.	0.0
	All members are from the better off sections of the village	0.0
Older SHGs (over 3 years)	More than 50% of the members show improved economic status.	38.10
	Less than 50% of the members show improved economic status. Status of many poor and poorest members unchanged.	61.90
	Interactions with members Observations	0.0
	Some are poor, some continue to be poorest	0.0
Meetings Frequency	Weekly meetings Regularly held	NA
	Fortnightly Regularly held	NA
	Fortnightly or weekly but not so regularly held	NA
	Monthly meeting Not very regularly conducted	38.10
Time and Place of Meeting	Fixed day, time, & place; known to all and followed	38.10
	Fixed day, time, & place. Known but not well maintained	0.0
	Fixed day, time, & place. Not clear to all and not kept	0.0
	These details may be fixed or not. Not many know or care	61.90
Attendance of members at meetings	Average attendance, 95% or more per meeting.	38.10
	Absence only with prior intimation	0.0
	Average attendance around 75% or more.	47.62
	Average attendance around 60%. No system of prior intimation. No explanations asked or given	0.0
	Explanations maybe given later	0.0
	Average attendance below 60%. No system of prior intimation. No explanations asked or given	14.29
Participation of members in decision making	Issues fully understood by all members; Decisions fully collective by all members	28.57
	Issues understood by representatives/ promoters and some members, who	76.19

	also influence decisions	
	Understanding of issues and decision taking limited to representatives and one or two members; Staff also influence decisions	100.0
	High dependence on Promoter and/ or on Staff to take all decisions	0.0
Participation of members in responsibility sharing	All members regularly rotate and share responsibilities. Representatives & cheque signatories changed each year	0.0
	Cheque signatories & representatives not changed for 2 years. Responsibilities for other tasks rotated among same few members	33.33
	Cheque signatories & representatives not changed for more than 2 years. Same people take responsibility for other tasks also, or depend on Promoter & Staff	66.67
	No change in cheque signatories or representatives since inception. High dependence on Promoter and/or Staff even to initiate other tasks that involve responsibilities.	0.0
Rules and Regulations	Exist. Known to all. Followed by all. Understood by all. Penalties enforced. for breaking rules.	0.0
	Exist. Known to most. Understood by most. Not fully followed. Penalties enforced in some but not all cases.	23.81
	Exist. Not many members are aware, since rules are not followed and there are no penalties for violating them.	76.19
	Only Promoter and Staff say that they exist. Members do not know of them. So, the question of following them and enforcing penalties never arises.	0.0
Savings	SHG fixes a minimum (but not maximum) amount to be saved by each member each month; More than 95%members comply by saving at-least the minimum stipulated amount per month	100.0
	SHG fixes a minimum amount to be saved per member per month; Compliance is around 75%. Some save less than the minimum specified; some do not save each month.	0.0
	Average of around Rs.120/- per member per year	0.0
	Average of less than Rs.120/- per member per year	0.0
Sanctioning of Loans	Loan requests are debated in SHG meetings; details are known to all members.	0.0
	Loan requests are brought to SHG meetings and discussed.	100.0
	Loan requests are made to Promoters and Staff. Though brought to the SHG, approval depends more on Promoter/ Staff, who may insist on productive loans even if other needs are critical.	0.0
	Loan requests are routinely decided by Promoters/Staff.	0.0
	All members get a fair chance to borrow.	100.0
	All members get a fair chance to borrow.	0.0
	Repayment terms and conditions are made but not recorded.	0.0
	Some members get more favoured than others who are also in need.	100.0
	Productive investments are emphasised more.	0.0
Productive investments are preferred but not encouraged.	0.0	
Repayment terms are not clear to the SHG nor to the borrowers.	0.0	
Loan Repayments	More than 95% repayment against demand and in accordance with pre-established terms.	0.0
	75% or more against demand and in accordance with pre-established terms.	38.10
	60% to less than 75%.	0.0
	Below 60%.	61.90

	Rescheduling of repayment time only under extreme circumstances.	0.0
	Repayment schedules changed without adequate reason.	0.0
	Not much evident effort to improve recovery.	0.0
	Members are neither aware nor concerned to improve the situation.	0.0
Rotation of Common Fund	Equal to or More than 100%	0.0
	75% or more, but less than 100%	95.24
	50% or more but less than 75%	0.0
	Less than 50%	0.0
Idle Capital	Nil. All money is loaned or intelligently invested.	28.57
	Up to 25% of total funds.	66.67
	Up to 50% of total funds.	0.0
	More than 50% of total funds.	0.0
Cash handling	Regularly rotated among all members on a designated basis.	0.0
	Responsibility only taken by few members and representatives.	95.24
	Only fixed representatives or Promoters. No rotation.	0.0
	Promoters or Staff only.	0.0
Resource Mobilisation	Successful efforts made to mobilise funds through bank linkages, govt. schemes, local mobilisations, etc.	38.10
	Efforts made to mobilise resources from members & community. No institutional links other than Project.	0.0
	Only members are approached for small contributions. Project is seen as the only other source for funds.	0.0
	No efforts made to mobilise resources other than expecting the Project to fulfil all demands.	61.90
Book keeping and Documentation	All books up to date and correctly maintained.	0.0
	All books opened but only some are maintained and updated.	66.67
	Major books only opened.	33.33
	Very few (basic minimum) books opened.	0.0
	Book writer from within SHG or hired locally and paid by SHG out of its own funds.	19.05
	Sketchy documentation of Minutes, so Minutes Book cannot be called as 'Mother Book'.	0.0
	Not well maintained or regularly updated.	100.0
	Incomplete documentation, & books updated only due to staff effort. In some cases, staff are writing the books.	0.0
	All books in safe custody of SHG (not in Project Office)	100.0
	Book writer not very competent.	100.0
	Members are dominated by book writer, who may or may not be fully competent in book keeping.	0.0
	No concern for the safety of books and records. Most members not even aware of the need for book keeping and where the books are.	0.0
	All books readily available for scrutiny of members and other authorised persons	76.19
	All members not fully aware of the importance of book keeping.	0.0
	Books in custody of book writer, even if not a member of the SHG. Supporting bills, etc. often not traceable. Staff effort is more in ensuring that at least few basic books are kept.	28.57
	Supporting documents frequently not traceable.	0.0

	All members aware of importance of book-keeping	80.95
	Books are in safe custody with SHG and available for scrutiny.	100.0
Planning, Implementing, Monitoring, and Evaluating programmes	All members fully understand the need and the processes. Responsibilities are well distributed among members, and responsibly discharged	23.81
	Understanding of these processes and sharing of responsibilities is limited to some members and representatives, who do a reasonably good job.	
	Members take responsibility only if repeated pressure is brought on them by Staff. Then too, the representatives are expected to do most of the work. Output quality not up to expectations.	76.19
	Not much interest in these processes, Promoter/Staff have to bear almost all the load. Output quality depends only on them.	71.43
Social Actions and Community Action Programmes	Self-initiated involvement, including budgeting, fund-raising (including Project contributions), planning, implementing, monitoring, and follow-up.	38.10
	Self-initiated involvement or good response to external initiative, but funding dependence may be more on the Project.	0.0
	No internal initiative.	61.90
	Programmes are initiated to serve the interests SHG members and the community.	0.0
	Inadequate management and follow-up	0.0
	Responds only to external initiative. Therefore, agenda may also be based on external assessment of the need for such action, rather than internally experienced by the SHG members themselves. Little involvement in management and follow-up.	0.0
	Poor response to external initiative, unless all the funding is also taken care of by the external party. No concern for management and follow-up	0.0
Education, Literacy, and Numeracy	All SHG members know how to sign their own names (learnt after joining SHG)	52.38
	70% members or more know how to sign their names (learnt after joining SHG) 50% members or more know how to read basic numbers (learnt after joining SHG)	42.86
	Around 50% members have learnt how to sign their own names.	0.0
	Less than 50% members with school age children are sending their children to school	0.0
	At-least 70% members are able to read basic numbers (learnt after joining SHG)	100.0
	75% members with school age children are sending their children to school	100.0
	Around 30% members have learnt to identify basic numbers	0.0
	All members with children in school- going age are sending their children to school	100.0
Around 50% members with school age children are sending their children to school; Less than 50% members know, or are even interested to know, how to sign their own names.; Hardly anyone has learnt to identify basic numbers	0.0	

Note: Figures not additive in certain aspects due to no response or inappropriate response

5.3 Skill Development:

Skill Development for ST Youths

Technological changes have forced both Central and State Governments to arm youths with the new and changing technological and professional skills. To accommodate with this changing technological environment, skill development and creation of job are inevitable now as professional skills and domain knowledge are the driving forces of socio-economic development in the present scenario. Acquiring professional and technical skills, including domain knowledge and soft skills have become more important at present than before. To cope with the upcoming technological changes and to transform state / national economy, specialized skill sets are required for which training and skill development is primarily a prerequisite. To ensure gainful employment, either in public sector and/or in private sector, creation of required quantity and quality skilled human resources is very much essential.

Under such circumstances, Tribal Development Department of Odisha has been scaling up skill development initiative with diversified activities to provide sustainable employment, in terms of skill-based employment & self-employment for upliftment of tribal youth. It was understood that there is a need to emphasis on creating awareness among the ST youth on alternative employment opportunities in potential sectors and to turn them up for skill development trainings. In order to improve their participation in skill-based employment and self-employment, trainings for Self-Employment and Pre-Examination coaching for formal employment is also required, looking at their present skill status.

Skill Development Policy of the Tribal Development Department

- Impart Training in Basic & Soft Skills coupled with the sector specific skills as per the choice to enhance the employability opportunities of the ST Youth.
- Facilitate the access to wage employment through organizing Direct Placement Drives.

Tribal Development Department of the Government of Odisha, has initiated to strengthen infrastructure for skill up-gradation and training of tribal youths and facilitating their placement. The Department has prepared a report and proposed to utilize and equip the existing training centers, making to full-fledged operational training centers to serve as Skill Development Centers of Excellence (SDCE) for conducting skill up gradation activities for employability of the Scheduled Tribe youths. Initially, as a part of the plan the government decided to utilize these 28 Youth Training Centers (YTCs) as Skill Development Centers of Excellence (SDCEs) for conducting skill up-gradation activities for employability of the Scheduled Tribal youths. As part of the initiation of the work, following actions have been undertaken.

1. Preparing operational guidelines for the utilization of Youth Training Centers;
2. Preparing indicative list of furniture and training equipment for each Youth Training Centre;
3. Preparing the annual training calendar of Skill Development Centre of Excellence (SDCE);
4. The Engineer-in-Chief (TW) is instructed to take further necessary action for early completion of all the remaining works of Youth Training Centers;
5. Workshops at different levels were organized with proper roadmap and plan for execution of training programmes in 28 YTCs in collaboration with Andhra Pradesh State Skill Development Corporation (APSSDC), Employment Generation and Marketing Mission (EGMM), Department of Rural Development, Employment & Training Department and Technical Education Department;
6. To meet the expenditure towards maintenance of these YTCs / (SDCEs), budgetary provision has been made under Tribal Sub-Plan (TSP).

The main aim of vocational training in tribal areas is to upgrade the skills of the tribal youth in various traditional / modern vocations depending upon their educational qualification, present economic trends and the market potential, which would enable them to gain suitable employment or enable them to become self-employed. Vocational training scheme is now dropped from NGO funding and subsumed under the scheme of SCA to TSS. The 'Vocational Training' is being discontinued as a part under program for promotion of education from 2018-19 since vocational training [skill / livelihood] is now considered by a Project Appraisal Committee (PAC) for funding under SCA to TSS / Grants

under Article 275(1) of the Constitution or by State Governments from their own funds for tribal development. The objectives of Skill Development activities in the State are.

1	2	3	4	5
<ul style="list-style-type: none"> To enhance employability of tribal youths (wage/self-employment) and ability to adapt to changing technologies and labour market demands 	<ul style="list-style-type: none"> To improve productivity and living standards of the tribal youths through skill development, and training and capacity building 	<ul style="list-style-type: none"> To create opportunities for tribal youths to acquire skills and to provide employment for them after getting requisite training and skill development 	<ul style="list-style-type: none"> To develop a high-quality skilled workforce / entrepreneur relevant to current and emerging employment market needs 	<ul style="list-style-type: none"> To create of human resource professionals with technical skills including domain knowledge and soft skills

Strategy

Based on the analysis of the existing situation of skill development in the state, following strategy is being adopted for effective implementation of skill development initiatives:

Category-wise Strategies		
SN	Category	Adopted Strategy
1	Creating awareness among the ST youth	<ul style="list-style-type: none"> Organizing 2-days residential orientation camps (Bhavitha) at mandal level to create awareness on various skill development initiatives.
2.	Career counseling and guidance	<ul style="list-style-type: none"> During Bhavitha camps, the APSSDC and ITDA staff will provide career counseling and guidance to the youth. So, the youth themselves can choose the best way based on his/her skills ability, interest etc. The same service available at YTC/SDCE
3.	Youth interest for placement-oriented Trainings	<ul style="list-style-type: none"> Sponsoring the interested youth for basic/soft skills and sector specific skill trainings of TWD run through APSSDC training partners in the 28 YTCs.
4.	Youth interest for immediate private job (direct placement)	<ul style="list-style-type: none"> Mobilization of youth for direct placement drives (job mela) to provide them immediate wage employment in private sector. The TWD is also providing post placement support to ST youth to meet the food and accommodation when they joined in new job If the youth need skill training to get better jobs, the TWD will provide soft-skill trainings
5.	Youth interest for government employment	<ul style="list-style-type: none"> Wide publicity in respect of government recruitment notification by utilizing “Bhavitha” as an effective forum Imparting pre-examination coaching in PETCs, i.e., Police/Para military, Railway recruitment, Banking recruitment, DSC & Civil services, etc. Sponsoring the youth for study circles for coaching and also providing competitive exam coaching through ASSSDC partners
6.	Youth interested in self-employment	<ul style="list-style-type: none"> Imparting training through VTIs in MES courses. Sponsoring youth to reputed technical training institutes for self-employment trainings. i.e., Rural Technology Part (NIRD), National Institute of Tourism & Hospitality Management (NITHM), CIPET, NIMSME, APBIRED & RSETI, etc. Tapping financial support of Economic Support Scheme (ESS0 in respect of micro enterprises Tapping financial support of DIC, KVICs in respect of micro, small & medium scale enterprises.
7.	Youth need post placement support to continue in the	<ul style="list-style-type: none"> The TWD will provide the financial support to the youth who got the placement/new job opportunity at towns and other places. The small financial support will help them to meet their food and

Category-wise Strategies		
SN	Category	Adopted Strategy
	new job	accommodation needs initially.

As a part of human resource development, the ITDAs have taken up skill building activities, which covers Skill Development Training (SDT), Pre-Recruitment Training and Placement Linked Employability Training (PLET). Different vocational employable trades area covered under Skill Development Training, such as tailoring, DTP, health care, hospitality, security system, electrician, beauty care, mobile repairing, driving etc. The ITDAs have also taken up Pre-Recruitment Training (PRT) and Placement Linked Employability Training (PLET) covering different trades.

Mayurbhanj-Karanjia: Computer Multimedia, D.Pharm, DCA, PPO, Certificate course in Computer Aided Engineering, DMLT, Fitter, Electrician, Hospitality, Driving cum Mechanic, Welder, Dip. In Hotel Management, General Duty Attendant

Mayurbhanj-Kaptipada: Diploma in Laboratory Technology, Diploma In Medical Radio Technology, Advance Diploma In Computer Hardware And Network Management, Condensed Diploma In Tool & Die Making, Computer Aided Engineering, Diploma In Serving of Beverage, Diploma in Computer Application (DCA), Diploma In Information Technology, Plastic Processing Operator (PPO), Electrical Maintenance, Advance Welding & Fabrication, Industrial Fitting

Sundargarh: ANM, GNM, Basic Mechanic, DMLT, Electrician, GNM, Welding & Fabrication, Driving, Hair Skin and Make up, Health care and Multi-Purpose worker, Hospitality Asst, Mobile Repairing, Security Guard, Driving etc.

Different academic / training institutions, empaneled with the government, are associated in conducting specialized trainings for the selected persons. Different institutions associated in imparting skill training are like CIPET, KIIT, Bhaba Institute of Medical Science and Research etc. The institutions are empaneled based on their area of specialization like Sanjog school of nursing for skill-based training on ANM / medical care, Data-pro Computer Pvt. Ltd for developing skill on computer application / DTP etc. These institutions have covered different number of trainees by the time of assessment based on type of skills. Of the total samples, highest of 20.0 percent trainees were covered CEPET followed by Upasana Education Trust (16.0 percent), Data-pro Computer Pvt. Ltd. (10.7 percent) and CCD, Sundargarh (10.0 percent) (refer Table 142).

Table 142: Institutions Associated in PLET

Name of the Institution	ITDA Kaptipada	ITDA Karanjia	ITDA Nabarangpur	ITDA Panposh	ITDA Sundargarh	Total No.	Total %
AISECT Rourkela					12	12	8.0
ASTM Skills Pvt. Ltd					10	10	6.7
Bhaba Institute of Medical Science & Research, BBSR	11					11	7.3
CCD Sundargarh				15		15	10.0
CIPET, BBSR	14	1	15			30	20.0
Data-pro Computer Pvt.Ltd.			16			16	10.7
KIIT, BBSR		12				12	8.0
Sanjog School of Nursing, Udala		5				5	3.3
Sikhaya Bharati Trust				8		8	5.3
Tarini School of Nursing, Baisinga		7				7	4.7
Upasana Education Trust BBSR			19	2	3	24	16.0
Total	25	25	50	25	25	150	100.0
Percentage	16.67	16.67	33.33	16.67	16.67	100.00	

Of the total trained, highest number of persons are trained in 2017-18 (43.3 percent), 25.3 percent trained in 2013-14, 20.7 percent in 2014-15 and remaining 10.7 percent trained in 2015-16. Skill based trainings are imparted in different sectors like health care management, basic mechanic, hospitality etc.

Table 143: Year of Training by Trade Categories

Trade Name	Year of Training								Total	
	2013-14		2014-15		2015-16		2017-18		No.	%
	No.	%	No.	%	No.	%	No.	%		
ANM	12	75.0			4	25.0			16	10.7
B.Sc. Nursing					4	100.0			4	2.7
Basic Mechanic	11	100.0							11	7.3
Beauty Therapy							5	100.0	5	3.3
DMLT	4	33.3			8	66.7			12	8.0
Driving			15	75.0			5	25.0	20	13.3
Electrician			12	100.0					12	8.0
GNM	7	100.0							7	4.7
Hair Skin and Make-up							7	100.0	7	4.7
Health care and Multi-Purpose worker							8	100.0	8	5.3
Hospitality Asst.			4	25.0			12	75.0	16	10.7
Mobile Repairing							10	100.0	10	6.7
Security Guard							10	100.0	10	6.7
Testing & Quality							8	100.0	8	5.3
Welding & Fabrication	4	100.0							4	2.7
Total	38	25.3	31	20.7	16	10.7	65	43.3	150	100.0

These institutions imparted different skills to the selected aspirants, based on their interest like health care management (ANM), beauty care, driving, hospitality management, security, welding and fabrication etc. The vocations covered are looking at the market demand and employability based on the skill. About 16.7 percent are trained in ITDA, Kaptipada; 16.7 percent in ITDA, Karanjia, ITDA, Sundargarh and ITDA, Panposh. Highest of 33.3 percent are trained in ITDA, Nabarangpur. Of the total, highest percentage are trained on driving (13.33 percent) followed by hospitality assistance (10.67 percent), ANM (10.67 percent) and electrician (8.0 percent) etc. Lowest number of persons trained are in Nursing (B. Sc. Nursing), welding and fabrication (2.67 percent) and beauty therapy (3.33 percent). Details of trades covered and number / percentage of trainees covered are presented in Table 144.

Table 144: Trade wise Skill Training by ITDA

Trade Name	ITDA Kaptipada		ITDA Karanjia		ITDA Nabarangpur		ITDA Panposh		ITDA Sundargarh		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
ANM			12	75.0	4	25.0					16	10.67
B.Sc. Nursing					4	100.0					4	2.67
Basic Mechanic	10	90.9	1	9.1							11	7.33
Beauty Therapy							5	100.0			5	3.33
DMLT	4	33.3			8	66.7					12	8.00
Driving					15	75.0	2	10.0	3	15.0	20	13.33
Electrician			12	100.0							12	8.00
GNM	7	100.0									7	4.67
Hair Skin and Make-up					7	100.0					7	4.67
Health care and Multi-Purpose worker							8	100.0			8	5.33
Hospitality Asst.					4	25.0			12	75.0	16	10.67
Mobile Repairing							10	100.0			10	6.67
Security Guard									10	100.0	10	6.67
Testing & Quality					8	100.0					8	5.33
Welding	4	100.0									4	2.67

&Fabrication												
Total	25	16.7	25	16.7	50	33.3	25	16.7	25	16.7	150	100.0

Duration of skill-based training varies between 1.5 months to 4 months, based on the content of the training and coverage of thematic areas. Training on driving and security management is covered in 1.5 months and also 3 months training is imparted on driving. Four months skill-based training is imparted on beauty care (hair, skin and make-up) and on testing and quality control. Most of the trainings are conducted for a period of 3 months, such as ANM, nursing, basic mechanics etc. (refer Table 145).

Table 145: Duration of Trade Based Training

Trade name	Duration (In Months)						Total	
	1.5 Months		3.0 Months		4.0 Months		No.	%
	No.	%	No.	%	No.	%		
ANM			16	100.0			16	10.67
B.Sc. Nursing			4	100.0			4	2.67
Basic Mechanic			11	100.0			11	7.33
Beauty Therapy			5	100.0			5	3.33
DMLT			12	100.0			12	8.00
Driving	5	25.0	15	75.0			20	13.33
Electrician			12	100.0			12	8.00
GNM			7	100.0			7	4.67
Hair Skin and Make-up					7	100.0	7	4.67
Health care and Multi-Purpose worker			8	100.0			8	5.33
Hospitality Asst.			16	100.0			16	10.67
Mobile Repairing			10	100.0			10	6.67
Security Guard	10	100.0					10	6.67
Testing & Quality					8	100.0	8	5.33
Welding & Fabrication			4	100.0			4	2.67
Total	15	10.0	120	80.0	15	10.0	150	100.0

As the imparted skill-based trainings are placement linked, the facilitating institutions ensured placement of the skilled persons after training. Majority of the trained persons were placed inside Odisha (78.0 percent) in comparison to placement outside the State (22.0 percent). Those who are placed outside the state are of skill set in mechanic, driving, security and testing and quality control. Persons trained in health care, beauty therapy etc. are placed inside Odisha (refer Table 146).

Table 146: Place of Employment After Training

Trade Name	Place of Employment				Total	
	Inside Odisha		Outside Odisha		No.	%
	No.	%	No.	%		
ANM	16	100.0			16	100.0
B.Sc. Nursing	4	100.0			4	100.0
Basic Mechanic	6	54.5	5	45.5	11	100.0
Beauty Therapy	5	100.0			5	100.0
DMLT	12	100.0			12	100.0
Driving	10	50.0	10	50.0	20	100.0
Electrician	12	100.0			12	100.0
GNM	7	100.0			7	100.0
Hair Skin and Make-up	7	100.0			7	100.0
Health care and Multi-Purpose Worker	8	100.0			8	100.0
Hospitality Asst.	16	100.0			16	100.0
Mobile Repairing	10	100.0			10	100.0
Security Guard			10	100.0	10	100.0
Testing & Quality			8	100.0	8	100.0
Welding & Fabrication	4	100.0			4	100.0

Total	117	78.0	33	22.0	150	100.0
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The duration of placement was up to three months for the majority of the skilled persons (69.3 percent), followed by employment for 4-6 months (12.0 percent). Number of skilled persons employed for a longer period of time is less, i.e., 6.0 percent for 7-12 months, 7.33 percent for 13-18 months and 5.33 percent for more than 18 months. Of the total employed persons, 71.3 percent were provided accommodation facility by their respective employer whereas, remaining 28.7 percent arranged their own accommodation at the work place (refer Table 148).

Table 147: Employment Duration

Months of Employment	No. of Persons	Percent
Up to 3 Months	104	69.33
4-6 Months	18	12.00
7-12 Months	9	6.00
13-18 Months	11	7.33
> 18 Months	8	5.33
Total	150	100.0

Table 148: Accommodation in Working Place

Accommodation	No. of Persons	Percent
Paid Accommodation (No Free Accommodation)	43	28.7
Free Accommodation	107	71.3
Total	150	100.0

Monthly remuneration of the skilled persons, employed in different places, normally varies between Rs.6,000/- to Rs.12,181/-. Employed persons of different skill sets getting monthly remuneration up to Rs.7500/- is higher, i.e., a smaller number of employed persons were getting remuneration higher than Rs.7,500.00.

Table 149: Monthly Remuneration by Trade

Trade Name	Getting Monthly Remuneration (In Rs.)																Total	
	6000		6500		7000		7500		8000		8500		11500		12181		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ANM	10	62.5	6	37.5													16	100.0
B.Sc. Nursing											4	100.0					4	100.0
Basic Mechanic					6	54.5			5	45.5							11	100.0
Beauty Therapy			5	100.0													5	100.0
DMLT					12	100.0											12	100.0
Driving							20	100.0									20	100.0
Electrician	12	100.0															12	100.0
GNM			7	100.0													7	100.0
Hair Skin and Make-up			7	100.0													7	100.0
Health care and Multi-Purpose worker	8	100.0															8	100.0
Hospitality Asst.	12	75.0	4	25.0													16	100.0
Mobile Repairing	10	100.0															10	100.0
Security Guard														10	100.0		10	100.0
Testing & Quality													8	100.0			8	100.0
Welding & Fabrication					4	100.0											4	100.0
Total	52	34.7	29	19.3	22	14.7	20	13.3	5	3.3	4	2.7	8	5.3	10	6.7	150	100.0

Of the total skilled and employed persons, 58.0 percent have already left their job (job where they were placed after skill training) and remaining 42.0 percent are continuing. Majority of the skilled persons who left the job belong to skill area like beauty care (hair, skin and make-up), testing and quality control, welding and fabrication, driving etc. Lowest percentage of placed persons who left their job are like mobile repairing, electrician, basic mechanics etc. (refer Table 150).

Table 150: Current Status of Employment

Trade Name	Status of Employment (Continuing / Left the Job)				Total	
	Continuing		Left Job		No.	%
	No.	%	No.	%		
ANM	6	37.5	10	62.5	16	100.0
B.Sc. Nursing	2	50.0	2	50.0	4	100.0
Basic Mechanic	7	63.6	4	36.4	11	100.0
Beauty Therapy	3	60.0	2	40.0	5	100.0
DMLT	7	58.3	5	41.7	12	100.0
Driving	3	15.0	17	85.0	20	100.0
Electrician	8	66.7	4	33.3	12	100.0
GNM	2	28.6	5	71.4	7	100.0
Hair Skin and Make-up	2	28.6	5	71.4	7	100.0
Health care and Multi-Purpose worker	3	37.5	5	62.5	8	100.0
Hospitality Asst.	6	37.5	10	62.5	16	100.0
Mobile Repairing	8	80.0	2	20.0	10	100.0
Security Guard	3	30.0	7	70.0	10	100.0
Testing & Quality	2	25.0	6	75.0	8	100.0
Welding & Fabrication	1	25.0	3	75.0	4	100.0
Total	63	42.0	87	58.0	150	100.0

Comparing person who left the job by their placement location, it is evident that of the total persons placed inside the State (Odisha), 52.99 percent have left the job. Whereas, of the total persons who were placed outside the State (Odisha), 75.76 percent have already left the job. So, percentage of persons who left the job is higher in case of persons who were placed out of the State (Odisha) in comparison to persons who were placed inside the State. However, in both the cases, percentage of persons leaving the job is higher.

Table 151: Place of Placement and Job Continuity

Place of Placement	Continuing		Left Job		Total	
	No.	%	No.	%	No.	%
Inside Odisha	55	47.01	62	52.99	117	78.0
Outside Odisha	8	24.24	25	75.76	33	22.0
Total	63	42.00	87	58.00	150	100.0

Major reasons of leaving the job is attributed to home sickness (19.3 percent), followed by need of job / looking for job at the local area (13.3 percent), low salary and aspiration for higher salary (12.7 percent) and problem of communication due to linguistic barrier (7.3 percent).

Table 152: Reasons of Leaving Job

Trade Name	Reasons of Leaving job													
	Family Problem		Health problem		Home Sickness		Language Problem		Higher Salary Required		Need Job at local		Total Left the Job	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ANM					5	31.3			2	12.5	3	18.8	10	100.0
B.Sc. Nursing					2	50.0							2	100.0
Basic Mechanic	1	9.1			1	9.1					2	18.2	4	100.0
Beauty Therapy					1	20.0			1	20.0			2	100.0
DMLT	1	8.3			3	25.0			1	8.3			5	100.0
Driving			4	20.0	2	10.0	6	30.0			5	25.0	17	100.0
Electrician											4	33.3	4	100.0
GNM					5	71.4							5	100.0
Hair Skin and Make-up					4	57.1					1	14.3	5	100.0
Health care & Multi-Purpose worker									5	62.5			5	100.0
Hospitality Asst.					2	12.5			8	50.0			10	100.0
Mobile Repairing					1	10.0			1	10.0			2	100.0
Security Guard	1	10.0					5	50.0	1	10.0			7	100.0
Testing & Quality			1	12.5							5	62.5	6	100.0

Welding & Fabrication					3	75.0							3	100.0
Total	3	2.0	5	3.3	29	19.3	11	7.3	19	12.7	20	13.3	87	100.0

Note: N: Number

Assessment finds that culturally, skilled tribal youths who have low educational background, less prefer to be employed in other localities, including out of state employment. The prime reason has been the socio-cultural difference, less exposure to outer world / other places, shyness and poor ability to get recognized / connected with other communities. So, attempt can be made to identify vocations / skill sets that are more required in the locality (district may be the unit), covering diversified areas and identifying opportunities where they can be more suitably employed in the locally. Secondly, apart from getting employment, avenues of self-employment can also be explored, establishing / facilitating credit and other linkages.

Quality of skill-based trainings are well recognized by the trained persons as 45.3 percent found it good. According to 38.7 percent, training quality was very good and it was average for 16.0 percent trainees. Though, ranking of quality of training of different trades vary, overall it remains satisfactory for the majority of the trainees.

Table 153: Quality Aspects of Skill based Trainings

Quality Aspects	Ranking										Total	
	Poor		Average		Good		V. Good		Excellent		N	%
	N	%	N	%	N	%	N	%	N	%		
Training Quality			24	16.0	68	45.3	58	38.7			150	100.0
Residential Quality			22	14.7	1	0.7	81	54.0	46	30.7	150	100.0
Food Quality			15	10.0	3	2.0	79	52.7	53	35.3	150	100.0
Institutional Skill / Capacity			11	7.3	4	2.7	81	54.0	54	36.0	150	100.0
Duration of Training	50	33.3	25	16.7	38	25.3	37	24.7			150	100.0

Residential quality during the training period was very good for 54.0 percent trainees and it was excellent for 30.7 percent trainees. Looking at ranking of residential quality, it can be concluded that during skill-based training, emphasis was given to ensure that quality of staying of the trainees remain comfortable. Food quality and duration of training was also marked satisfactory by majority of the trainees (refer Table 153).

5.3 Infrastructure Development:

The ITDAs have taken up different infrastructure development activities under SCA to TSP, that can be considered as incidental to IGA / economic activities. Activities that are taken up are like electricity supply, construction of market sheds, construction of MIP / check dams, construction of culvert, paddy platform etc. But there are certain activities that are taken up are not having any direct relation to IGA but to improve the quality of life of tribal such as bathing step, water supply etc. Looking at the infrastructures taken up during 2013-14 to 2017-18, it is evident that emphasis is given for improving road connectivity (road: 15.9 percent; road & culverts: 28.1 percent), construction of MIP / check dams (11.2 percent) and market sheds (10.2 percent) (refer Table 154).

Table 154: Infrastructure Development Activities by Year

Infrastructure Development Works	Year										Total	
	2013-14		2014-15		2015-16		2016-17		2017-18		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%		
Bathing Step	2	100.0									2	0.2
Bore well	3	100.0									3	0.3
Bridge	1	14.3	1	14.3	3	42.9	2	28.6			7	0.6
Building	2	3.7	4	7.4	6	11.1	34	63.0	8	14.8	54	4.9
Compound wall									1	100.0	1	0.1
Cross drainage	37	40.7	18	19.8	14	15.4	6	6.6	16	17.6	91	8.3

Culvert	3	3.5	27	31.4	31	36.0	6	7.0	19	22.1	86	7.8
Drainage			2	33.3	2	33.3	1	16.7	1	16.7	6	0.5
Drinking Water	3	30.0	4	40.0	2	20.0	1	10.0			10	0.9
Electricity	1	12.5	3	37.5	3	37.5	1	12.5			8	0.7
Guard wall	3	3.7	18	22.2	22	27.2	16	19.8	22	27.2	81	7.3
Hat and Market Shed	43	38.4	17	15.2	23	20.5	16	14.3	13	11.6	112	10.2
MIP/Check Dam	107	86.3	1	0.8			16	12.9			124	11.2
Paddy Platform	5	71.4	1	14.3			1	14.3			7	0.6
Protection Wall	4	16.0	10	40.0	1	4.0	3	12.0	7	28.0	25	2.3
Road	21	12.0	50	28.6	40	22.9	25	14.3	39	22.3	175	15.9
Road and culvert	74	23.9	64	20.6	88	28.4	44	14.2	40	12.9	310	28.1
Water Supply			1	100.0							1	0.1
Total	309	28.0	221	20.0	235	21.3	172	15.6	166	15.0	1103	100.0

Types of infrastructures taken up by ITDAs / micro projects during 2013-14 to 2017-18 is presented in the Table 155. In most of the ITDAs / micro projects, more or less similar nature of activities are taken up during the period 2013-14 to 2017-18, such as bridges, market sheds, road connectivity, construction of culverts for easy communication etc. Among all the ITDAs, only in ITDA, Bonei two types of activities are taken up, i.e., construction of market shed and road & culvert (refer Table 155).

Table 155: Types of Infrastructures by ITDA / Micro Projects (MP)

Name of the ITDA / MP	Infrastructure Works	Year					Total
		2013-14	2014-15	2015-16	2016-17	2017-18	
ITDA Baripada	Bridge	1		2			3
	Culvert			1			1
	Hat and Market Shed	2	1	3	2	1	9
	MIP/Check dam (Irrigation)				2		2
	Road	2				1	3
	Road and Culvert		1	17	10	2	30
	Total	5	2	23	14	4	48
ITDA Bonei	Hat and Market Shed		1	1			2
	Road and culvert	1	1	1	1	1	5
	Total	1	2	2	1	1	7
ITDA Kaptipada	Bridge		1		2		3
	Building		3		1	1	5
	Culvert			1		1	2
	Drinking Water		3				3
	Hat and Market Shed	2	4	2	4	2	14
	Road	8	13	13	2	8	44
	Water Supply		1				1
	Total	10	25	16	9	12	72
ITDA Karanja	Building				2		2
	Culvert			4		1	5
	Hat and Market Shed				3		3
	Paddy Platform				1		1
	Road and culvert	18	23	15	10	3	69
	Total	18	23	19	16	4	80
ITDA Nabarangpur	Bathing Step	2					2
	Building			1	4		5
	Cross drainage	1					1
	Culvert	2	23	19	5	16	65
	Drainage		2	1	1	1	5
	Guard wall		10	9	4	7	30
	Hat and Market Shed	35		1	2	5	43
	Paddy Platform	5	1				6
	Protection Wall	2	9	1		7	19
	Road	11	35	23	22	26	117
	Road and culvert	20	16	17	5	18	76
	Total	78	96	72	43	80	369
ITDA Panposh	Bridge			1			1
	Building	2	1	5	24		32
	Culvert			3			3

	Electricity		3	3	1		7
	Guard wall			2			2
	Hat and Market Shed		8	13	2	3	26
	Road and culvert	1	5	14	2	5	27
	Total	3	17	41	29	8	98
ITDA Rairangpur	Drinking Water	2					2
	Hat and Market Shed	4	3	3	3	2	15
	MIP/Check dam (Irrigation)	14			4		18
	Protection Wall				1		1
	Road and culvert	20	13	22	15	9	79
	Total	40	16	25	23	11	115
ITDA Sundargarh	Building				3	7	10
	Compound wall					1	1
	Cross drainage	36	18	14	6	16	90
	Culvert	1	3	3	1	1	9
	Drinking Water	1	1	2	1		5
	Electricity	1					1
	Guard wall	3	8	11	12	15	49
	MIP/Check dam (Irrigation)	93	1		10		104
	Road		1	4		2	7
	Road and culvert	12					12
	Total	147	32	34	33	42	288
HKMDA	Protection Wall		1				1
	Road and culvert			1		1	2
	Total		1	1		1	3
LDA	Drainage			1			1
	Road and culvert			1	1	1	3
	Total			2	1	1	4
PBDA	Bore well	3					3
	Culvert		1				1
	Protection Wall	2			2		4
	Road		1		1	2	4
	Road and culvert	2	5				7
	Total	7	7		3	2	19

Note: LDA: HKMDA: Hill Khadia Mankirdia Development Agency, Lodha Development Agency, PBDA: Paudi Bhuyan Development Agency, MP: Micro Project

During the period 2013-14 to 2017-18, total funds received by ITDAs and micro projects is Rs.7944.12 crores for 1103 projects. The tribal development agencies have implemented different activities with 99.18 percent physical achievement and 99.41 percent financial achievement. ITDA and micro project wise physical and financial achievement is presented in the Table 156.

Table 156: Funds Received and Utilised by ITDAs

Name of the ITDA		Fund Received	Fund Utilised	Name of the ITDA		Fund Received	Fund Utilised
ITDA Baripada	No. of Works	48	48	ITDA Rairangpur	No. of Works	115	115
	Av. Funds/Work	16.78	17.71		Av. Funds/Work	8.85	8.85
	Minimum (Rs.)	4.00	4.00		Minimum (Rs.)	1.50	1.50
	Maximum (Rs.)	75.00	90.35		Maximum (Rs.)	35.89	35.89
	Total Funds (Rs)	805.64	850.15		Total Funds (Rs)	1018.15	1018.15
	% of Total Work	4.4	4.4		% of Total Work	10.4	10.5
ITDA Bonei	No. of Works	7	7	ITDA Sundargarh	No. of Works	288	288
	Av. Funds/Work	40.72	47.38		Av. Funds/Work	5.00	5.00
	Minimum (Rs.)	12.00	12.00		Minimum (Rs.)	5.00	5.00
	Maximum (Rs.)	116.20	116.20		Maximum (Rs.)	5.00	5.00
	Total Funds (Rs)	285.01	331.68		Total Funds (Rs)	1440.0	1440.0
	% of Total Work	0.6	0.6		% of Total Work	26.1	26.3
ITDA Kaptipada	No. of Works	72	66	SO, HKMDA	No. of Works	3	3
	Av. Funds/Work	6.62	6.54		Av. Funds/Work	6.81	6.81
	Minimum (Rs.)	0.80	0.72		Minimum (Rs.)	2.33	2.33
	Maximum (Rs.)	29.75	24.10		Maximum (Rs.)	15.10	15.10
	Total Funds (Rs)	476.60	431.35		Total Funds (Rs)	20.43	20.43
	% of Total Work	6.5	6.0		% of Total Work	0.3	0.3

ITDA Karanjia	No. of Works	80	80	LDA, Morada (Lodha Dev. Authority)	No. of Works	4	4
	Av. Funds/Work	7.41	6.75		Av. Funds/Work	3.99	3.99
	Minimum (Rs.)	3.00	0.00		Minimum (Rs.)	0.61	0.61
	Maximum (Rs.)	32.00	30.00		Maximum (Rs.)	9.60	9.60
	Total Funds (Rs)	592.90	540.21		Total Funds (Rs)	15.96	15.96
	% of Total Work	7.3	7.3		% of Total Work	0.4	0.4
ITDA Nabarangpur	No. of Works	369	369	PBDA	No. of Works	19	19
	Av. Funds/Work	5.52	5.52		Av. Funds/Work	4.01	3.49
	Minimum (Rs.)	1.00	1.00		Minimum (Rs.)	1.00	0.00
	Maximum (Rs.)	93.30	93.30		Maximum (Rs.)	8.00	8.00
	Total Funds (Rs)	2035.20	2035.20		Total Funds (Rs)	76.16	66.26
	% of Total Work	33.5	33.7		% of Total Work	1.7%	1.7
ITDA Panposh	No. of Works	98	95	Total	No. of Works	1103	1094
	Av. Funds/Work	12.02	12.08		Av. Funds/Work	7.20	7.22
	Minimum (Rs.)	2.93	2.93		Minimum (Rs.)	0.61	0.00
	Maximum (Rs.)	65.00	65.00		Maximum (Rs.)	116.20	116.20
	Total Funds (Rs)	1178.07	1148.07		Total Funds (Rs)	7944.12	7897.46
	% of Total Work	8.9	8.7		% of Total Work	100.0	100.0

Note: All Rs. in Lakh

Case: Creation of market shed which is Incidental to IGA comes under infrastructure development scheme. It has been found that numbers of market sheds have been constructed under ITDA Panposh, Sundargarh. During the evaluation period, a team visited to Khuntagaon block areas, where the market sheds were constructed. But, unfortunately none of the hats were opened. The team discussed with about 10 numbers of people who were available near by the market. Most of them were customers and only one of them was a shopkeeper of the permanent market. Pre and post scenario of the market was discussed. Interesting and valuable findings were derived.



Infrastructure Development under SCA to TSS

Prior to the construction of the market shed, the sellers were sitting on the ground to sell their products. They were keeping their agricultural commodities (vegetables and others) on the ground with the help of polythene. During rainy days, the products were becoming muddy for which they were getting less value of their produces. Duration of business in a day was also limited during rainy days and hot summer days as there was no shed. Within the market place movement of people from one place to other was also difficult due to unorganized sitting arrangement for selling of commodities. Coupled with this, availability of electricity was also a problem. These issues have greater degree of impact on both buyer and seller.

In order to minimize these constraints, ITDA Panposh constructed three market sheds costing about 18 lakhs in the year 2012-13 from SCA fund. But constructed three market sheds could not fulfill the requirement of all the sellers who were depending upon that local market. Some sellers were still sitting on the ground due to lack of space. Realising the need of additional sheds, another two sheds were constructed in the year 2015-16 under SCA to TSP amounting Rs.14.83 lakh. Now the bi-weekly hat has got a new life after construction of five sheds. Due to the construction of the market sheds, about 150 to 170 sellers of the locality are benefited directly. The sheds have been helpful in increasing business house in market days, reduce spoilage of agricultural commodities and overall improved marketing conditions.

Chapter Six: Conclusion and Recommendations:

The Special Central Assistance (SCA) of the Ministry of Tribal Affairs to the state govt. is an additive to the state tribal sub-scheme (TSS). From the 10th five year plan period, the objective and scope of SCA to TSS which was originally meant for filling up of the critical gaps in the family based income generation activities of the TSS, has been expanded to cover the employment cum income generation activities and the infrastructure incidental there to not only family based but also run by the SHGs. Thus SCA is primarily meant for family oriented income generating schemes in the sectors of agriculture, horticulture, irrigation, sericulture, animal husbandry, village small scale cottage industries, skill dev. Training etc., and 30.0 percent is permitted to be utilized for the development of infrastructure incidental to such income generating schemes. Further, information education and communication related programs in the tribal areas have been implemented under the funding of the SCA to TSS. Ministry of Tribal Affairs releases SCA in the shape of grant in aid to the state Govt. keeping in view the tribal population percentage of the state.

The SCA funds are passed on to the ITDAs, micro projects, MADA and clusters for the implementation of income generation schemes (IGS) and infrastructure development schemes (IDS). A portion of SCA is allocated to OSFDC for implementation of dispersed tribal development plan (DTDP).

While SCA to TSS has been allocated based on tribal population, allocation of funds under SCA to TSS shows a fluctuating trend when there has been growth in tribal population in the State. Looking at allocation of funds under SCA to TSS during the period 2002-03 to 2017-18, it is evident that allocation of funds under SCA during 2002-03 was Rs. 6,495.30 lakhs which increased to a maximum of Rs. 14, 925.04 lakhs during 2014-15 and further reduced to Rs. 8,385.00 lakhs during 2017-18.

There has been substantial reduction in allocation of funds to different tribal development and administration agencies such as ITDAs and MADA pockets. Overall, there is reduction of 34.79 percent in allocation of funds to different agencies during 2016-17 in comparison to 2013-14. However, in 2016-17, micro projects, cluster pockets and TDCC were provided funds under SCA to TSS. Similar trend is observed with regards to funds flow to the ITDAs and micro projects of study districts. Fluctuation in funds flow may be attributed to a number of administrative and other factors, but it ultimately results in reduction of vertical and horizontal expansion of intervention and coverage of beneficiaries.

In conformity with the guidelines, SCA funds are being utilized by the tribal development and administration units for economic development of the tribals. Funds are also utilized for the creation of different infrastructures that are supportive to IGA. But in many cases, the results remain below the expectation due to reasons like less ownership by the target mass, poor planning and execution, inadequate monitoring and follow-up, more focus on rendering support to tribal families rather than strategy for the sustainability of support provisions etc. On the other hand, there are incidences of success where participation is ensured, ownership is established, return on investment is visible to the people and people have harvested the benefit because of the support. So, it can be said that execution of different activities under SCA to TSS reflects a mixed result across the ITDAs and micro projects.

The planning process has been inadequate and less effective. It has failed to capture the actual needs of the tribal and preparing plan accordingly for a sustained growth in economic spheres. Secondly, the planning process should take in to account convergence benefits of other schemes/ programs implemented by other line departments that support livelihood improvement of tribals.

In most of the ITDAs, staff positions are remaining vacant in comparison to sanctioned post, including key staff, for example, position of PA ITDA of Panposh and Bonei are remaining vacant and Project Manager position in Panposh is remaining vacant. Apart from this, there is gap in the

availability of Subject Matter Specialist (SMS). Necessary steps may be required to ensure that required human resources are in place and ensure effective implementation of the schemes / program.

The evaluation finds most of the activities, after its execution, are not monitored the way it is required. Visit to the site, discussion with the target mass, assessing the progress and outcome of the investments and ensuring corrective measures in case of identified gaps is deficient. Every intervention in income generation activities and in infrastructure development require to have a proper monitoring and supervision strategy. Periodic assessment should be conducted to understand the overall outcome of the specific investment and its outcome at the tribal household and community level.

Quarterly review of progress, monitoring the quality of the activities implemented and providing guidance to the district / sub-district level tribal development administrative units may be taken up by the nodal department.

Collaboration, regular consultation and review meetings with related line departments, who can support technically in the implementation process, will be helpful to have a greater outcome of the interventions.

At the department level, it may be useful to devise an exclusive Management Information System (MIS) of each scheme / program to track physical and financial progress, keeping track of the outcomes and making appropriate decision. Such mechanism will also be useful during planning process.

Annexure

Tribal Population in Study Districts

Particulars	Total Rural Urban	No. of HH	Total Population	Male Population to Total Population	Female Population to Total Population	Total Literate Population to Total Population	Male Literate Population to Total Male Population	Female Literate Population to Total Female Population
1	2	3	4	5	6	7	8	9
India	T	21511528	104545716	50.26	49.74	49.51	57.36	41.59
	R	19302332	94083844	50.24	49.76	47.58	55.69	39.38
	U	2209196	10461872	50.50	49.50	66.95	72.28	61.50
ODISHA	T	2163110	9590756	49.29	50.71	43.96	53.35	34.82
	R	2031543	8994967	49.23	50.77	42.89	52.41	33.66
	U	131567	595789	50.22	49.78	60.01	67.29	52.67
Sundargarh	T	235685	1062349	49.59	50.41	56.20	63.65	48.87
	R	201145	908475	49.56	50.44	54.36	62.09	46.77
	U	34540	153874	49.77	50.23	67.04	72.85	61.29
Mayurbhanj	T	326463	1479576	49.37	50.63	44.65	54.60	34.94
	R	317694	1439002	49.37	50.63	44.15	54.21	34.34
	U	8769	40574	49.52	50.48	62.35	68.50	56.31
Nabarangapur	T	146661	681173	49.18	50.82	31.48	40.30	22.95
	R	143773	668056	49.20	50.80	31.16	40.01	22.58
	U	2888	13117	48.30	51.70	48.10	55.63	41.06

Source: Census, 2011; Note: T: Total; R: Rural; U: Urban

Block Wise ST Population in Sundargarh

Block Name	No of HH	Total Population	Total Male	Total Female	ST Total	ST Male	ST Female	% Total ST to total population
Rajagangapur	22391	105065	52401	52664	85116	42285	42831	81.01
Gurundia	14701	66988	33187	33801	53195	26315	26880	79.41
Kutra	17598	80470	40380	40090	62040	30991	31049	77.10
Kuanmunda	23055	106913	53460	53453	82264	40933	41331	76.94
Koida	19713	86818	44024	42794	60938	30243	30695	70.19
Lahunipara	22953	99526	49510	50016	67541	33365	34176	67.86
Nuagaon	23133	106156	52730	53426	70233	34582	35651	66.16
Baragaon	16730	71242	35599	35643	46292	22934	23358	64.98
Lathikata	32001	146312	75117	71195	85181	42542	42639	58.22
Baneigarh	16937	69891	34727	35164	37448	18476	18972	53.58
Sundargarh	18046	70911	35523	35388	37392	18617	18775	52.73
Bisra	18857	90185	45179	45006	45846	22719	23127	50.84
Hemgir	20953	84559	42670	41889	38312	19115	19197	45.31

Block Wise ST Population in Mayurbhanj

Block Name	No of HH	Total Population	Total Male	Total Female	ST Total	ST Male	ST Female	% Total ST to total
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								populatio n
Khunta	17550	74155	36466	37689	58608	28717	29891	79.03
Bijatola	14667	64193	31684	32509	48627	23842	24785	75.75
Thakurmunda	22607	104694	51220	53474	78442	38131	40311	74.93
Tiring	13118	57076	28223	28853	42559	20837	21722	74.57
Udala	17720	76147	38104	38043	56642	28277	28365	74.39
Baripada	16048	69782	35587	34195	51716	26255	25461	74.11
Jamda	13422	59402	28784	30618	43641	20935	22706	73.47
Jashipur	23461	101058	49862	51196	70521	34512	36009	69.78
Bangiriposi	25259	103880	51880	52000	72362	35821	36541	69.66
Bisoi	17213	74572	36357	38215	51723	24848	26875	69.36
Karanja	20389	91518	45310	46208	62110	30497	31613	67.87
Shamakhunta	19263	79883	39892	39991	53306	26410	26896	66.73
Kaptipada	33362	148717	74462	74255	99053	49275	49778	66.61
Kuliana (Koliana)	23935	101151	50722	50429	67045	33302	33743	66.28
Kusumi	20848	93116	45530	47586	59758	28924	30834	64.18
Sukruli	13706	60577	29823	30754	38146	18578	19568	62.97
Bahalda	21100	86081	42727	43354	49974	24520	25454	58.05
Saraskana	24410	100816	50904	49912	58337	29227	29110	57.86
Gopabandhunagar	18414	75345	37452	37893	41712	20459	21253	55.36
Rasagobindapur	21472	96526	48808	47718	52715	26568	26147	54.61
Raruan	15610	66504	33093	33411	35670	17600	18070	53.64
Rairangpur	14610	60565	29715	30850	32402	15742	16660	53.50
Badasahi (Barsahi)	35175	146232	73567	72665	74120	37155	36965	50.69
Muruda	25167	103775	51577	52198	45695	22801	22894	44.03
Betanati	34325	150434	75706	74728	61880	30929	30951	41.13
Suliapada	24918	102263	51425	50838	41429	20902	20527	40.51

Block Wise ST Population in Nabarangpur

Block Name	No of HH	Total Population	Total Male	Total Female	ST Total	ST Male	ST Female	% Total ST to total population
Raighar	37097	182285	91362	90923	119560	59467	60093	65.59
Umarkote	34962	166909	83253	83656	108008	53492	54516	64.71
Jharigan	33693	150063	74107	75956	93605	45926	47679	62.38
Kosagumud a	34987	160785	79515	81270	98951	48885	50066	61.54
Dabugan	15515	67654	33297	34357	40496	19860	20636	59.86
Nabarangapur	18356	79484	39351	40133	46109	22715	23394	58.01
Paparahandi	30680	134145	65981	68164	76358	37172	39186	56.92
Tentulikhunti	20779	84310	41214	43096	38239	18439	19800	45.36
Nandahandi	14852	62405	30689	31716	27454	13334	14120	43.99

Gross Income by IGA Categories

Name of IGA		Gross Income	Name of IGA		Gross Income
Backyard Poultry	No. of HH	45	Pump set	No. of HH	55
	Av. Income	464.67		Av. Income	17010.91
	Median	560.00		Median	17600.00
	Std. Deviation	389.96		Std. Deviation	7080.57

	Maximum	1120.00		Maximum	29900.00
	% of Total HH	9.4		% of Total HH	11.5
Farm Mechanisation	No. of HH	35	Rubber Plantation	No. of HH	50
	Av. Income	4285.71		Av. Income	32716.68
	Median	6000.00		Median	29264.00
	Std. Deviation	3937.54		Std. Deviation	28451.48
	Maximum	9000.00		Maximum	96996.00
	% of Total HH	7.3		% of Total HH	10.4
Fishery	No. of HH	50	Sericulture	No. of HH	50
	Av. Income	18916.00		Av. Income	9874.94
	Median	19500.00		Median	9180.00
	Std. Deviation	4003.92		Std. Deviation	1788.30
	Maximum	29000.00		Maximum	17160.00
	% of Total HH	10.4		% of Total HH	10.4
Goatery	No. of HH	30	Vegetable Cultivation	No. of HH	50
	Av. Income	3581.33		Av. Income	15304.60
	Median	2400.00		Median	10115.00
	Std. Deviation	3972.29		Std. Deviation	15225.10
	Maximum	12000.00		Maximum	62500.00
	% of Total HH	6.3		% of Total HH	10.4
Lac Cultivation	No. of HH	40	Wadi	No. of HH	45
	Av. Income	6248.75		Av. Income	3004.44
	Median	6050.00		Median	0.00
	Std. Deviation	805.55		Std. Deviation	4362.96
	Maximum	9000.00		Maximum	14000.00
	% of Total HH	8.3		% of Total HH	9.4
Lemon Grass	No. of HH	15	Total	No. of HH	480
	Av. Income	1604.00		Av. Income	12301.92
	Median	1500.00		Median	8568.00
	Std. Deviation	412.88		Std. Deviation	14739.26
	Maximum	2400.00		Maximum	96996.00
	% of Total HH	3.1		% of Total HH	100.0
Mushroom	No. of HH	15			
	Av. Income	29410.00			
	Median	28900.00			
	Std. Deviation	4161.65			
	Maximum	37400.00			
	% of Total HH	3.1			

Net Income by Days of Engagement

Engagement Days		Net Income	Engagement Days		Net Income
<= 30 Days	No. of HH	70	>91 & <=182 Days	No. of HH	61
	Av. Income	23438.49		Av. Income	10754.05
	Median	10286.00		Median	9258.00
	Std. Deviation	28165.48		Std. Deviation	4382.48
	Maximum	96996.00		Maximum	24900.00
	% of Total HH	14.6%		% of Total HH	12.7%
>30 & <=60 Days	No. of HH	178	>182 Days	No. of HH	104
	Av. Income	8400.90		Av. Income	5633.65
	Median	5500.00		Median	840.00
	Std. Deviation	9593.77		Std. Deviation	9025.65

	Maximum	53300.00		Maximum	32400.00
	% of Total HH	37.1%		% of Total HH	21.7%
>60 & ≤91 Days	No. of HH	67	Total	No. of HH	480
	Av. Income	12155.52		Av. Income	10817.44
	Median	9000.00		Median	6600.00
	Std. Deviation	6482.79		Std. Deviation	14336.39
	Maximum	35800.00		Maximum	96996.00
	% of Total HH	14.0%		% of Total HH	100.0%

Net Income by IGA Categories

Name of IGA		Net Income	Name of IGA		Net Income
Backyard Poultry	No. of HH	45	Pump set	No. of HH	55
	Av. Income	464.67		Av. Income	12750.91
	Median	560.00		Median	13100.00
	Std. Deviation	389.96		Std. Deviation	6455.06
	Maximum	1120.00		Maximum	24900.00
	% of Total HH	9.4%		% of Total HH	11.5%
Farm Mechanisation	No. of HH	35	Rubber Plantation	No. of HH	50
	Av. Income	3314.29		Av. Income	32716.68
	Median	4800.00		Median	29264.00
	Std. Deviation	3011.46		Std. Deviation	28451.48
	Maximum	6800.00		Maximum	96996.00
	% of Total HH	7.3%		% of Total HH	10.4%
Fishery	No. of HH	50	Sericulture	No. of HH	50
	Av. Income	18304.00		Av. Income	9127.94
	Median	18500.00		Median	9000.00
	Std. Deviation	3581.75		Std. Deviation	1565.62
	Maximum	27000.00		Maximum	15410.00
	% of Total HH	10.4%		% of Total HH	10.4%
Goatery	No. of HH	30	Vegetable Cultivation	No. of HH	50
	Av. Income	3581.33		Av. Income	9674.60
	Median	2400.00		Median	4427.50
	Std. Deviation	3972.29		Std. Deviation	14053.19
	Maximum	12000.00		Maximum	53300.00
	% of Total HH	6.3%		% of Total HH	10.4%
Lac Cultivation	No. of HH	40	Wadi	No. of HH	45
	Av. Income	6248.75		Av. Income	2008.89
	Median	6050.00		Median	0.00
	Std. Deviation	805.55		Std. Deviation	3171.24
	Maximum	9000.00		Maximum	10000.00
	% of Total HH	8.3%		% of Total HH	9.4%
Lemon Grass	No. of HH	15	Total	No. of HH	480
	Av. Income	1604.00		Av. Income	10817.44
	Median	1500.00		Median	6600.00
	Std. Deviation	412.88		Std. Deviation	14336.39
	Maximum	2400.00		Maximum	96996.00
	% of Total HH	3.1%		% of Total HH	100.0%
Mushroom	No. of HH	15			
	Av. Income	26076.67			
	Median	25700.00			
	Std. Deviation	3915.21			
	Maximum	32400.00			
	% of Total HH	3.1%			

Household Expenditure by Heads

Heads of Expenditure	Particular	Mean	Median	Std. Deviation
Food	Before	14742.92	14000.00	3373.338
	Present	17609.58	17000.00	4034.480
	Difference	2866.67	3000.00	
	Difference %	19.44	21.43	
Clothing	Before	2571.13	2000.00	1572.391
	Present	3338.70	3000.00	1651.18215
	Difference	767.57	1000.00	
	Difference %	29.85	50.00	
Health	Before	2056.72	2000.00	902.148
	Present	2735.74	3000.00	1114.03097
	Difference	679.03	1000.00	
	Difference %	33.02	50.00	
Education	Before	2248.35	2000.00	1252.383
	Present	2198.37	2200.00	1753.87083
	Difference	-49.99	200.00	
	Difference %	-2.22	10.00	
Entertainment	Before	1144.78	1000.00	601.055
	Present	1713.53	1500.00	1105.88126
	Difference	568.74	500.00	
	Difference %	49.68	50.00	
House Construction / Maintenance	Before	2617.82	2000.00	1581.132
	Present	3252.38	3000.00	1958.76610
	Difference	634.56	1000.00	
	Difference %	24.24	50.00	
Agri / Business Investment	Before	3560.43	3000.00	1143.177
	Present	4002.88	4000.00	1233.77033
	Difference	442.45	1000.00	
	Difference %	12.43	33.33	
Credit Repayment	Before	2076.92	2000.00	837.808
	Present	2876.19	3000.00	1269.60811
	Difference	799.27	1000.00	
	Difference %	38.48	50.00	
Mobility	Before	200.00	200.00	
	Present	500.00	500.00	
	Difference	300.00	300.00	
	Difference %	150.00	150.00	
Social / Religious	Before	2109.09	2000.00	858.052
	Present	2197.66	2000.00	643.008
	Difference	88.57	0.00	
	Difference %	4.20	0.00	
HH Assets	Before	1490.51	1000.00	917.628
	Present	1671.09	1100.00	1028.88613
	Difference	180.58	100.00	
	Difference %	12.12	10.00	
Utility Payment	Before	1872.67	1800.00	744.906
	Present	1982.70	1900.00	797.77614
	Difference	110.03	100.00	
	Difference %	5.88	5.56	
Other Expenditure	Before	1870.07	2300.00	575.102
	Present	1243.72	1300.00	774.954
	Difference	-626.35	-1000.00	
	Difference %	-33.49	-43.48	

Total Expenditure	Before	27518.54	27400.00	5720.880
	Present	34750.04	34565.00	7678.730
	Difference	7231.50	7165.00	
	Difference %	26.28	26.15	

Source of Funds for SHGs by ITDA

ITDA Name		GP Level Federation (GPLF)	SHG Members (Savings)	IGA/Activities- Loan Minus Subsidy	DRDA/OLM (Revolving Fund)	Banks (Credit Fund)	Total
ITDA Bonei	No. of SHG	2	6	6	6	6	6
	Average	1,00,000.0	26,650.0	2,35,833.3	10,000.0	2,35,833.3	3,05,816.7
	Total	2,00,000.0	1,59,900.0	14,15,000.0	60,000.0	14,15,000.0	18,34,900.0
	Minimum	1,00,000.0	17,000.0	1,75,000.0	10,000.0	1,75,000.0	2,14,300.0
	Maximum	1,00,000.0	34,000.0	3,80,000.0	10,000.0	3,80,000.0	5,07,000.0
	% of Total SHG	100.0	28.6	28.6	28.6	28.6	28.6
ITDA Karanjia	No. of SHG		4	4	4	4	4
	Average		25,000.0	1,66,250.0	10,000.0	1,66,250.0	2,01,250.0
	Total		1,00,000.0	6,65,000.0	40,000.0	6,65,000.0	8,05,000.0
	Minimum		17,000.0	1,50,000.0	10,000.0	1,50,000.0	1,77,000.0
	Maximum		37,000.0	2,15,000.0	10,000.0	2,15,000.0	2,62,000.0
	% of Total SHG		19.0	19.0	19.0	19.0	19.0
ITDA Nabarangpur	No. of SHG		5	5	5	5	5
	Average		29,800.0	1,60,800.0	10,000.0	1,60,800.0	2,00,600.0
	Total		1,49,000.0	8,04,000.0	50,000.0	8,04,000.0	10,03,000.0
	Minimum		18,000.0	1,24,000.0	10,000.0	1,24,000.0	1,54,000.0
	Maximum		62,000.0	2,00,000.0	10,000.0	2,00,000.0	2,28,000.0
	% of Total SHG		23.8	23.8	23.8	23.8	23.8
ITDA Rairangpur	No. of SHG		6	6	6	6	6
	Average		38,083.3	2,71,666.7	10,000.0	2,71,666.7	3,19,750.0
	Total		2,28,500.0	16,30,000.0	60,000.0	16,30,000.0	19,18,500.0
	Minimum		18,000.0	1,50,000.0	10,000.0	1,50,000.0	1,78,000.0
	Maximum		52,000.0	4,80,000.0	10,000.0	4,80,000.0	5,39,000.0
	% of Total SHG		28.6	28.6	28.6	28.6	28.6
Total	No. of SHG	2	21	21	21	21	21
	Average	1,00,000.0	30,352.4	2,14,952.4	10,000.0	2,14,952.4	2,64,828.6
	Total	2,00,000.0	6,37,400.0	45,14,000.0	2,10,000.0	45,14,000.0	55,61,400.0
	Minimum	1,00,000.0	17,000.0	1,24,000.0	10,000.0	1,24,000.0	1,54,000.0
	Maximum	1,00,000.0	62,000.0	4,80,000.0	10,000.0	4,80,000.0	5,39,000.0
	% of Total SHG	100.0	100.0	100.0	100.0	100.0	100.0

Income of SHGs

ITDA Name		Interest from Bank	Interest from Credit (Own Fund)	Interest from Credit (Bank Loan)	Income from Business (Net)	Total Income (Rs.)
ITDA Bonei	No. of SHG	5	6	3	3	6
	Average	771.7	3,420.0	35,700.0	71,640.0	57,733.0
	Total	3,858.3	20,520.0	1,07,100.0	2,14,920.0	3,46,398.3
	% of Total SHG	29.4	28.6	20.0	50.0	28.6
ITDA Karanjia	No. of SHG	3	4	2	2	4
	Average	1,297.7	3,780.0	16,500.0	55,418.0	40,712.3
	Total	3,893.0	15,120.0	33,000.0	1,10,836.0	1,62,849.0
	% of Total SHG	17.6	19.0	13.3	33.3	19.0
ITDA	No. of SHG	4	5	5		5

Nabarangpur	Average	1,028.8	2,592.0	22,536.0		25,951.0
	Total	4,115.0	12,960.0	1,12,680.0		1,29,755.0
	% of Total SHG	23.5	23.8	33.3		23.8
ITDA Rairangpur	No. of SHG	5	6	5	1	6
	Average	1,265.5	5,140.0	45,220.0	28,081.0	48,558.1
	Total	6,327.3	30,840.0	2,26,100.0	28,081.0	2,91,348.3
	% of Total SHG	29.4	28.6	33.3	16.7	28.6
Total	No. of SHG	17	21	15	6	21
	Average	1,070.2	3,782.9	31,925.3	58,972.8	44,302.4
	Total	18,193.7	79,440.0	4,78,880.0	3,53,837.0	9,30,350.7
	% of Total SHG	80.95	100.0	71.43	28.57	100.0

Expenditure of SHGs

ITDA Name		Books / Records / Stationary	Transportation (meeting etc.)	Refreshments	Salary / Honorarium	Repair & Maintenance -Assets	Electricity / Other Utilities	Interest paid-off-Outside Loan	Total Expenditure (Rs.)	Income Minus Expenditure
ITDA Bonei	No. of SHG	6	6	6	1	1	1	3	6	6
	Average	535.0	426.7	305.0	50,000.0	5,000.0	10,000.0	3,191.1	13,695.5	44,037.5
	Total	3,210.0	2,560.0	1,830.0	50,000.0	5,000.0	10,000.0	9,573.2	82,173.2	2,64,225.1
	% of Total SHG	28.6	28.6	28.6	100.0	100.0	100.0	20.0	28.6	28.6
ITDA Karanjia	No. of SHG	4	4	4				4	4	4
	Average	698.5	1,105.0	348.8				2,350.6	4,502.9	36,209.4
	Total	2,794.0	4,420.0	1,395.0				9,402.4	18,011.4	1,44,837.6
	% of Total SHG	19.0	19.0	19.0				26.7	19.0	19.0
ITDA Nabarangpur	No. of SHG	5	5	5				3	5	5
	Average	900.8	621.0	790.0				2,193.3	3,627.8	22,323.2
	Total	4,504.0	3,105.0	3,950.0				6,580.0	18,139.0	1,11,616.0
	% of Total SHG	23.8	23.8	23.8				20.0	23.8	23.8
ITDA Rairangpur	No. of SHG	6	6	6				5	6	6
	Average	888.7	906.8	404.7				2,947.3	4,656.2	43,901.8
	Total	5,332.0	5,441.0	2,428.0				14,736.5	27,937.5	2,63,410.9
	% of Total SHG	28.6	28.6	28.6				33.3	28.6	28.6
Total	No. of SHG	21	21	21	1	1	1	15	21	21
	Average	754.3	739.3	457.3	50,000.0	5,000.0	10,000.0	2,686.1	6,964.8	37,337.6
	Total	15,840.0	15,526.0	9,603.0	50,000.0	5,000.0	10,000.0	40,292.1	1,46,261.1	7,84,089.6
	% of Total SHG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Placement Linked Employability Training, ITDA, Karanjia

Sl. No.	Name of the Institute & Address	Trade	Persons Trained	Placement
Year 2013-14				
1	Hi-Tech School of Nursing, Bhubaneswar	ANM	10	5
	Hi-Tech School of Nursing, Bhubaneswar	GNM	8	8
2	Tarini School of Nursing, Baisinga	ANM	4	2
3	Sahik School of Nursing, Baripada	GNM	4	3
4	Datapro Computer Pvt. Ltd, Bhubaneswar	Computer	80	80

		Multimedia		
5	Seemanta Institute, Jharpokharia	D.Pharm	2	2
6	Sanjog School of Nursing, Udala	ANM	2	2
7	Kanakmanjari institute of Pharmacy, Rourkela	D.Pharm	1	0
8	NIIT, Bhubneswar	DIT	6	3
	NIIT, Bhubneswar	DCA	1	1
9	CIPET-II, Bhubnaeswar	PPO	6	6
	CIPET-II, Bhubnaeswar	PPO	26	26
10	CIPET-I, Patia, Bhubnaeswar	PPO	6	6
11	KIIT, Bhubaneswar	Fitter	10	10
	Total		166	154
	Year 2014-15			
	CTTC, Bhubaneswar	Certificate course in Computer Aided Engineering	5	5
1	Kasinath institute of Technological Education, Baripada	DMLT	5	5
2	Bhava institute of Medical Science & Research, Bhubaneswar	DMLT	14	14
3	NIIT Bhubaneswar	DIET	4	2
	NIIT Bhubaneswar	DCA	3	2
	KIIT Bhubaneswar	Electrician	2	2
	KIIT Bhubaneswar	Fitter	4	4
	Xavier College of Hotel Management	DHM	9	9
	Maharaja Asutosh Hotel management Baripada	DHM	7	7
	IIR&S, Bhubaneswar	DMLT	7	7
	Tarini School of Nursing, Baisinga	ANM	1	0
	Sanjog school of Nursing, Udala	ANM	2	0
	Hitech School of Nursing, Bhubaneswar	ANM	9	0
	Datapro, Bhubaneswar	Computer Multi media	50	50
	Total		122	107
	Year 2015-16			
1	Baitarani ITC, Neuliposi, Turumunga	Welding & Fabrication	40	10
2	KIIT Bhubaneswar	Electrician	5	3
3	Mausumi Social & Charitable Organisation, Bhubaneswar	Driving cum Mechanic	5	5
4	Asutosh Maharaja college of Management & technology, Baripada	Hospitality	17	12
5	CEPET-II, Bhubaneswar	PPO	5	5
6	Sunanda Technical Education, Baripada	PGDCA	30	0
	Sunanda Technical Education, Baripada	Computer H & N	30	
7	Sarbasidhanta Trust, Bhubaneswar	DEO	24	0
	Sarbasidhanta Trust, Bhubaneswar	General Duty Attendant	15	
	Total		171	35
	Year 2016-17			
1	State Institute of Hotel Management, Balangir	Dip. In Hotel Mangement	3	3
2	Gram Tarang, Jatani	COPA	4	0
	Gram Tarang, Jatani	Welder	2	2
	Gram Tarang, Jatani	RAC	8	5
3	APPTC, Balasore	TQC	11	11
4	Xavier Institute of Hotel management, Cuttack	DHM	20	20
5	Priyanka school of nursing, Puri	ANM	5	0
6	Sanjog School of Nursing, Udala	GNM	3	0
7	Mayurbhanj School of nursing, Baripada	ANM	2	0

8	Mahavir School of nursing, Bhubaneswar	GNM	2	0
9	CEPET -II, Bhubaneswar	PPO	10	0
	Total		70	41

Placement Linked Employability Training, ITDA, Kaptipada

Name of the ITDA - ITDA, Kaptipada, Udala			
Trade wise Training and Employment details			
Trade Name	Trade Specification	No of students	No of employment
For the year 2013-14			
A.N.M.	PLET	13	
G.N.M.	PLET	5	
Diploma in Laboratory Technology	PLET	3	
Diploma in Medical Radio Technology	PLET	6	
Advance Diploma in Computer Hardware & Network Management	PLET	1	
Condensed Diploma in Tool & Die Making	PLET	1	
Computer Aided Engineering	PLET	3	1
Diploma in Serving of Beverage	PLET	1	
Diploma in Computer Application (DCA)	PLET	3	3
Diploma in Information Technology	PLET	5	4
Plastic Processing Operator (PPO)	PLET	3	1
Electrical Maintenance	PLET	3	2
Advance Welding & Fabrication	PLET	2	2
Industrial Fitting	PLET	5	
Total		54	13
For the Year 2014-15			
A.N.M.	PLET	17	
Diploma in Medical Laboratory Technology	PLET	5	
Diploma in Information Technology	PLET	4	3
Diploma in Computer Application (DCA)	PLET	2	2
Fitter	PLET	1	
Electrician	PLET	1	
Electronic Mechanic	PLET	1	
Electrical Maintenance	PLET	1	1
Plastic Processing Operator (PPO)	PLET	2	
Total		34	6
For the Year 2015-16			
Data Entry Operator	PLET	25	19
Driving-cum-Mechanic	PLET	9	2
Plastic Processing Operator	PLET	1	1
Total		35	22
For the Year 2016-17			
TQC	PLET	39	39
FEMO	PLET	9	9
Diploma in Hotel Management	PLET	21	21
Fitter	PLET	4	
Electrician	PLET	12	
Copa ITI	PLET	13	
CNC	PLET	1	
ANM	PLET	8	
DMLT	PLET	1	
GNM	PLET	4	
Total		112	69

Skill Development Training, ITDA, Kaptipada

Name of the ITDA – ITDA, Kaptipada, Udala			
Trade wise Training and Employment details			
Trade Name	Trade Specification	No of students	No of employment
For the Year 2014-15			
Electrician	SDT	5	
Welding & Fabrication	SDT	19	
Driving	SDT	19	
House Wiring	SDT	6	
Tally Accounting	SDT	6	5
Data Entry Operator	SDT	5	
Total		60	5
For the Year 2015-16			
Electrician	SDT	12	
Welding & Fabrication	SDT	17	
Driving	SDT	15	
House Wiring	SDT	11	
Tally Accounting	SDT	10	6
Plastic Processing Operator	SDT	3	3
Total		68	9
For the Year 2016-17			
BPO	SDT	10	
Tailoring	SDT	5	
Accounting	SDT	5	
Driving-cum-Mechanic	SDT	5	5
Fitter	SDT	1	
Electrician	SDT	3	
House Wiring	SDT	4	
Poultry Management	SDT	4	
Total		37	5

Monthly Remuneration by Trade

Trade Name		Getting Monthly Remuneration (In Rs.)	Total Remuneration (In Rs.)
ANM	No. of Persons	16	16
	Average Remuneration	6187.50	16218.75
	Minimum	6000	6500
	Maximum	6500	19500
	% of Total Persons	10.7	10.7%
B.Sc. Nursing	No. of Persons	4	4
	Average Remuneration	8500.00	108375.00
	Minimum	8500	17000
	Maximum	8500	204000
	% of Total Persons	2.7	2.7
Basic Mechanic	No. of Persons	11	11
	Average Remuneration	7454.55	17636.36
	Minimum	7000	7000
	Maximum	8000	24000
	% of Total Persons	7.3	7.3
Beauty Therapy	No. of Persons	5	5
	Average Remuneration	6500.00	6500.00
	Minimum	6500	6500
	Maximum	6500	6500
	% of Total Persons	3.3	3.3
DMLT	No. of Persons	12	12
	Average Remuneration	7000.00	67083.33

	Minimum	7000	14000
	Maximum	7000	154000
	% of Total Persons	8.0	8.0
Driving	No. of Persons	20	20
	Average Remuneration	7500.00	60000.00
	Minimum	7500	7500
	Maximum	7500	180000
	% of Total Persons	13.3	13.3
Electrician	No. of Persons	12	12
	Average Remuneration	6000.00	71000.00
	Minimum	6000	12000
	Maximum	6000	132000
	% of Total Persons	8.0	8.0
GNM	No. of Persons	7	7
	Average Remuneration	6500.00	11142.86
	Minimum	6500	6500
	Maximum	6500	19500
	% of Total Persons	4.7	4.7
Hair Skin and Make-up	No. of Persons	7	7
	Average Remuneration	6500.00	20428.57
	Minimum	6500	6500
	Maximum	6500	32500
	% of Total Persons	4.7	4.7
Health care and Multi-Purpose worker	No. of Persons	8	8
	Average Remuneration	6000.00	15750.00
	Minimum	6000	6000
	Maximum	6000	24000
	% of Total Persons	5.3	5.3
Hospitality Asst.	No. of Persons	16	16
	Average Remuneration	6125.00	39500.00
	Minimum	6000	12000
	Maximum	6500	97500
	% of Total Persons	10.7	10.7
Mobile Repairing	No. of Persons	10	10
	Average Remuneration	6000.00	16800.00
	Minimum	6000	6000
	Maximum	6000	18000
	% of Total Persons	6.7	6.7
Security Guard	No. of Persons	10	10
	Average Remuneration	12181.00	30452.50
	Minimum	12181	12181
	Maximum	12181	60905
	% of Total Persons	6.7	6.7
Testing & Quality	No. of Persons	8	8
	Average Remuneration	11500.00	35937.50
	Minimum	11500	11500
	Maximum	11500	69000
	% of Total Persons	5.3	5.3
Welding & Fabrication	No. of Persons	4	4
	Average Remuneration	7000.00	14000.00
	Minimum	7000	7000
	Maximum	7000	21000
	% of Total Persons	2.7	2.7
Total	No. of Persons	150	150
	Average Remuneration	7282.07	37143.50
	Minimum	6000	6000
	Maximum	12181	204000
	% of Total Persons	100.0	100.0

Total Remuneration Received

Trade Name	No. of Persons	Average Remuneration	Median Value	Minimum	Maximum	% of Total Persons
ANM	16	16218.75	18000.00	6500	19500	10.7
B.Sc. Nursing	4	108375.00	106250.00	17000	204000	2.7
BASIC MECHANIC	11	17636.36	21000.00	7000	24000	7.3
Beauty Therapy	5	6500.00	6500.00	6500	6500	3.3
DMLT	12	67083.33	21000.00	14000	154000	8.0
Driving	20	60000.00	30000.00	7500	180000	13.3
Electrician	12	71000.00	81000.00	12000	132000	8.0
GNM	7	11142.86	6500.00	6500	19500	4.7
Hair, Skin and Make-up	7	20428.57	19500.00	6500	32500	4.7
Health care and Multi-Purpose worker	8	15750.00	18000.00	6000	24000	5.3
Hospitality Asst.	16	39500.00	36000.00	12000	97500	10.7
Mobile Repairing	10	16800.00	18000.00	6000	18000	6.7
Security Guard	10	30452.50	24362.00	12181	60905	6.7
Testing & Quality	8	35937.50	28750.00	11500	69000	5.3
Welding & Fabrication	4	14000.00	14000.00	7000	21000	2.7
Total	150	37143.50	19500.00	6000	204000	100.0

Funds Received by ITDAs under SCA to TSS: Mayurbhanj

Financials in Lakhs; Physical in No.	2013-14			2014-15				2015-16			
	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growt h in Funds Allocation	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growt h in Funds Allocation
Mayurbhanj	2009.76	1990.78	99.06	2481.40	3056.55	123.18	23.47	2021.81	2123.18	105.01	-18.52
Administrative Cost to FNGO	0.25	0.25	100.00	32.60	19.70	60.43	12940.00				-100.00
Agriculture Activities	3.79	3.79	100.00	36.67	8.34	22.74	867.55	16.50	18.89	114.48	-55.00
Assistance to SHG for livelihood enhancement	116.86	116.86	100.00	78.53	126.23	160.74	-32.80	179.67	128.35	71.44	128.79
Backyard Poultry	19.26	19.26	100.00	33.40	25.00	74.85	73.42	5.00	5.00	100.00	-85.03
Diary Development Programme	36.47	36.47	100.00	33.05	38.94	117.82	-9.38	40.00	50.00	125.00	21.03
Dryingyard at Mahuldiha TRCS under Thakurmunda Block											
Farm Mechanisation								2.81	2.81	100.00	
Fishery	4.72	4.72	100.00	11.13	10.18	91.46	135.81	1.50	1.50	100.00	-86.52
Handloom								4.14	4.14	100.00	
Horticulture Plantation & Maintenance	77.65	77.65	100.00	0.00	26.37		-100.00	20.00	20.00	100.00	
Infrastructure Development Scheme	564.20	559.52	99.17	564.99	725.20	128.36	0.14	562.05	538.90	95.88	-0.52
Irrigation	485.18	481.51	99.24	98.41	411.45	418.10	-79.72	20.00	19.99	99.95	-79.68
Lac Cultivation & processing	3.50	3.50	100.00	11.00	7.62	69.27	214.29	5.00		0.00	-54.55
Livelihood Training for tribal youth	119.87	119.87	100.00				-100.00				
Monitoring & Evaluation								1.50	1.50	100.00	
NTFP Cluster Promotion								0.00			
PGT				20.00	15.00	75.00					-100.00
Production Centre /Processing Units											

Provision for PTG other than micro project area								30.00	30.0	100.0	
Provision of Filling gap of Ashram School				300.0	63.74	21.25					-100.0
Renovation of Bulk Cooler at KM Kota, Bangriposi	10.00	10.0	100.0				-100.0				
Rubber Plantation & Maintenance	410.39	399.91	97.45	708.24	790.40	111.60	72.58	597.86	735.59	123.04	-15.59
Sericulture	10.00	10.0	100.0	10.00	5.00	50.00	0.0	38.00	38.0	100.0	280.0
Sewing Machine supply to Adolescent Girls under SABALA											
Training				43.12	347.69	806.33		58.03	58.83	101.38	34.58
Training (PLET)	77.78	77.63	99.81	134.94	168.17	124.63	73.49	109.56	106.20	96.93	-18.81
Training (PRT)	5.71	5.71	100.0	8.32	8.32	100.0	45.71	28.23	33.0	116.90	239.30
Training (SDT)	14.90	14.90	100.0	148.34	167.18	112.70	895.57	262.60	324.37	123.52	77.03
Vegetable Cultivation				0.0				0.0			
Vocational education in SSD schools											
Wadi Plantation	49.23	49.23	100.0	208.66	92.02	44.10	323.85	39.36	6.11	15.52	-81.14

Financials in Lakhs; Physical in No.	2016-17				2017-18				Five Year		
	Fund received	Fund Utilised	of Funds Utilised	Growt h in Funds Allocation	Fund received	Fund Utilised	of Funds Utilised	Growt h in Funds Allocation	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised
Mayurbhanj	1584.47	1546.71	97.62	-21.63	1556.99	1285.49	82.56	-1.73	9654.43	10002.71	103.61
Administrative Cost to FNGO									32.85	19.95	60.73
Agriculture Activities	35.57	33.24	93.45	115.58	39.18	39.48	100.77	10.15	131.71	103.74	78.76
Assistance to SHG for livelihood enhancement	72.44	58.92	81.34	-59.68	92.05	64.15	69.69	27.07	539.55	494.51	91.65
Backyard Poultry	9.30	9.30	100.00	86.00	43.00	23.00	53.49	362.37	109.96	81.56	74.17
Diary Development Programme	34.50	38.00	110.14	-13.75	0.00			-100.00	144.02	163.41	113.46
Dryingyard at Mahuldiha TRCS under Thakurmunda Block											
Farm Mechanisation	17.86	7.56	42.33	535.59	10.00	10.00	100.00	-44.01	30.67	20.37	66.42
Fishery	63.50	71.50	112.60	4133.33	55.00	55.00	100.00	-13.39	135.85	142.90	105.19
Handloom				-100.00					4.14	4.14	100.00
Horticulture Plantation & Maintenance	17.65		0.00	-11.75	32.50	24.40	75.08	84.14	147.80	148.42	100.42
Infrastructure Development Scheme	293.32	371.70	126.72	-47.81	345.68	320.68	92.77	17.85	2330.24	2516.00	107.97
Irrigation	79.96	82.16	102.75	299.80	90.50	65.27	72.12	13.18	774.05	1060.38	136.99
Lac Cultivation & processing	37.50	37.50	100.00	650.00	10.00		0.00	-73.33	67.00	48.62	72.57
Livelihood Training for tribal youth									119.87	119.87	100.00
Monitoring & Evaluation				-100.00					1.50	1.50	100.00
NTFP Cluster Promotion	3.34		0.00		15.00		0.00	349.10	18.34		0.00
PGT									20.00	15.00	75.00
Production Centre /Processing Units	3.61		0.00		9.00	4.70	52.22	149.31	12.61	4.70	37.27
Provision for PTG other than micro project area	40.00	40.00	100.00	33.33				-100.00	70.00	70.00	100.00
Provision of Filling gap of Ashram School									300.00	63.74	21.25

Renovation of Bulk Cooler at KM Kota, Bangriposi									10.00	10.00	100.00
Rubber Plantation & Maintenance	428.22	390.36	91.16	-28.37	375.90	357.51	95.11	-12.22	2520.61	2673.77	106.08
Sericulture	10.00	10.00	100.00	-73.68	0.03	0.03	100.00	-99.70	68.03	63.03	92.65
Sewing Machine supply to Adolescent Girls under SABALA	0.00	2.37							0.00	2.37	
Training				-100.00	54.00	10.77	19.94		155.15	417.29	268.96
Training (PLET)	177.37	110.56	62.33	61.89	101.15	79.93	79.02	-42.97	600.80	542.49	90.29
Training (PRT)	50.70	53.74	106.00	79.60	23.93	9.93	41.50	-52.80	116.89	110.70	94.70
Training (SDT)	162.85	209.60	128.71	-37.99	170.87	133.02	77.85	4.92	759.56	849.07	111.78
Vegetable Cultivation	24.19	10.00	41.34		37.50	36.32	96.85	55.02	61.69	46.32	75.09
Vocational education in SSD schools	0.00	10.20							0.00	10.20	
Wadi Plantation	22.59		0.00	-42.61	51.70	51.30	99.23	128.86	371.54	198.66	53.47

Funds Received by ITDAs under SCA to TSS:Nabarangpur

Financials in Lakhs; Physical in No.	2013-14			2014-15				2015-16			
	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation
Nabarangpur	1520.82	1384.22	91.02	1034.98	1033.52	99.86	-31.95	1058.24	886.97	83.82	2.25
Administrative Cost to FNGO				16.80	16.80	100.00					-100.00
Aggregation Centre & Cool Chamber								69.86			
Agriculture Activities				52.25	47.25	90.43		30.00		0.00	-42.58
Assistance to SHG for livelihood enhancement	40.00	109.25	273.13	37.84	105.50	278.82	-5.40	159.19	84.10	52.83	320.71
Backyard Poultry	310.36	256.85	82.76	49.50			-84.05	22.39		0.00	-54.77
Crates Support									9.15		
Farm Mechanisation				37.90	37.90	100.00		10.00		0.00	-73.61
Fishery	27.97	27.97	100.00	12.03			-56.99	20.35	42.74	210.02	69.18
Goat Rearing	192.37	41.75	21.70				-100.00	89.17	89.17	100.00	
Handloom											
Horticulture Plantation & Maintenance	50.75		0.00				-100.00	31.46	0.99	3.16	
Infrastructure Development Scheme	467.16	467.16	100.00	536.48	536.48	100.00	14.84	260.70	250.00	95.90	-51.41
Irrigation	266.17	266.17	100.00	30.00	30.00	100.00	-88.73		17.84		-100.00
Lac Cultivation & processing	10.00	8.89	88.90	68.62	9.82	14.31	586.20	15.00		0.00	-78.14
NTPP Cluster Promotion											
Piped Drinking Water	53.25	53.25	100.00				-100.00				
Production Centre								14.45		0.00	

/Processing Units											
Refrigerated Van									48.05		
Training (PLET)				24.00	108.49	452.05		61.53	30.90	50.22	156.38
Training (PRT)				6.00		0.00		30.00		0.00	400.00
Training (SDT)	40.00	90.14	225.35	21.00	18.96	90.27	-47.50	127.01	73.82	58.12	504.81
Vegetable Cultivation				36.01	9.28	25.77		56.82	50.00	88.00	57.78
Wadi Plantation	62.79	62.79	99.99	106.55	113.05	106.10	69.68	130.17	120.35	92.46	22.17

Financials in Lakhs; Physical in No.	2016-17				2017-18				Five Year		
	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Total Sum of Fund received	Total Sum of Fund Utilised	of Funds Utilised
Nabarangpur	1137.59	794.44	69.84	7.50	799.50	634.55	79.37	-29.72	5551.13	4733.70	85.27
Administrative Cost to FNGO									16.80	16.80	100.00
Aggregation Centre & Cool Chamber										69.86	
Agriculture Activities	16.00		0.00	-46.67	26.00		0.00	62.50	124.25	47.25	38.03
Assistance to SHG for livelihood enhancement	74.26	35.95	48.41	-53.35	45.00	34.80	77.33	-39.40	356.29	369.60	103.74
Backyard Poultry	20.00		0.00	-10.67	15.00	0.92	6.13	-25.00	417.25	257.77	61.78
Crates Support										9.15	
Farm Mechanisation				-100.00	21.00	9.02	42.95		68.90	46.92	68.10
Fishery				-100.00					60.35	70.71	117.17
Goat Rearing		13.00		-100.00					281.54	143.92	51.12
Handloom		0.94								0.94	
Horticulture Plantation & Maintenance	27.00	13.50	50.00	-14.18	33.00	22.94	69.52	22.22	142.21	37.43	26.32
Infrastructure Development Scheme	485.06	485.06	100.00	86.06	296.50	296.50	100.00	-38.87	2045.90	2035.20	99.48
Irrigation									296.17	314.01	106.03
Lac Cultivation & processing	38.00		0.00	153.33	30.00	16.13	53.76	-21.05	161.62	34.84	21.56
NTPF Cluster Promotion	7.00		0.00		7.00		0.00	0.00	14.00		0.00
Piped Drinking Water									53.25	53.25	100.00
Production Centre /Processing Units		70.00		-100.00	29.00		0.00		43.45	70.00	161.10
Refrigerated Van										48.05	
Training (PLET)	171.00	75.89	44.38	177.91	80.00	50.00	62.50	-53.22	336.53	265.28	78.83
Training (PRT)	19.29	7.91	41.01	-35.70	85.00	85.00	100.00	340.64	140.29	92.91	66.23
Training	201.48	23.82	11.82	58.63	59.00	59.00	100.00	-70.72	448.49	265.73	59.25

(SDT)							0				
Vegetable Cultivation	30.28	26.24	86.66	-46.71	28.00	21.52	76.86	-7.53	151.11	107.04	70.84
Wadi Plantation	48.22	42.13	87.37	-62.96	45.00	38.72	86.04	-6.68	392.73	377.03	96.00

Funds Received by ITDAs under SCA to TSS:Sundargarh

Financials in Lakhs; Physical in No.	2013-14			2014-15				2015-16			
	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Sum of Fund received	Sum of Fund Utilised	of Funds Utilised	Growth in Funds Allocation
Sundargarh	2789.20	2036.67	73.02	1466.62	1016.52	69.31	-47.42	1531.96	1317.79	86.02	4.46
Administrative Cost to FNGO				34.80	22.20	63.79		16.80	13.20	78.57	-51.72
Agriculture Activities	12.56	12.56	100.00	8.00			-36.31	12.75	11.41	89.49	59.38
Assistance to SHG for livelihood enhancement	751.94	21.50	2.86	9.50	9.50	100.00	-98.74	76.32	19.05	24.96	703.37
Backyard Poultry	30.00	30.00	100.00	5.60	5.60	100.00	-81.33	45.00		0.00	703.57
Cool Chamber				24.00	8.00	33.33					-100.00
Diary Development Programme								48.98	5.55	11.33	
Farm Mechanisation											
Fishery				5.09	4.18	82.12		50.00	16.86	33.72	882.32
Horticulture Plantation & Maintanance	562.32	562.32	100.00	3.00	3.00	100.00	-99.47	72.68	29.93	41.18	2322.67
Infrastructure Development Scheme	765.90	812.57	106.09	444.20	514.20	115.76	-42.00	627.47	627.47	100.00	41.26
Irrigation	140.00	128.30	91.64		35.00		-100.00		140.00		
Lac Cultivation & processing	11.54	11.54	100.00				-100.00				
NTFP Cluster Promotion				8.70	8.70	100.00					-100.00
Production Centre /Processing Units											
Refrigerated Van				6.00	4.90	81.67					-100.00
Rubber Plantation & Maintenance											
Sericulture				0.53	0.53	100.00		8.54	8.54	100.00	1511.32
Training	49.03	42.98	87.66				-100.00	40.68	81.44	200.20	
Training (PLET)	15.32	15.32	100.00	229.10	199.27	86.98	1395.43	78.48	114.30	145.64	-65.74
Training (PRT)								5.00	13.14	262.80	
Training (SDT)	450.59	399.58	88.68	68.76	88.16	128.21	-84.74	218.88	185.53	84.77	218.32
Vegetable Cultivation								53.50		0.00	
Wadi Plantation				619.34	113.28	18.29		176.88	51.37	29.04	-71.44
Grand Total	6319.78	5411.67	85.63	4983.00	5106.60	102.48	-21.15	4612.01	4327.95	93.84	-7.45

Financials in Lakhs; Physical in No.	2016-17				2017-18				Five Year		
	Fund received	Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Fund received	Fund Utilised	of Funds Utilised	Growth in Funds Allocation	Total Fund received	Total Fund Utilised	of Funds Utilised
Sundargarh	2364.32	2166.70	91.64	54.33	1200.44	869.53	72.43	-49.23	9352.54	7407.22	79.20
Administrative Cost to FNGO	16.80	13.20	78.57	0.00				-100.00	68.40	48.60	71.05
Agriculture Activities	1.17	1.17	100.00	-90.82	16.70	3.70	22.16	1327.35	51.18	28.84	56.35
Assistance to SHG for livelihood enhancement	771.39	740.79	96.03	910.73	69.00	32.20	46.67	-91.06	1678.15	823.04	49.04
Backyard Poultry	14.44	14.44	100.00	-67.91	27.00	12.65	46.85	86.98	122.04	62.69	51.37
Cool Chamber									24.00	8.00	33.33
Diary Development Programme				-100.00					48.98	5.55	11.33
Farm Mechanisation	8.90	8.90	100.00		27.00	9.00	33.33	203.37	35.90	17.90	49.86
Fishery	10.58	9.17	86.67	-78.84	10.00	22.08	220.80	-5.48	75.67	52.29	69.10
Horticulture Plantation & Maintenance	10.93	8.20	75.02	-84.96	27.70	3.70	13.36	153.43	676.63	607.15	89.73
Infrastructure Development Scheme	727.49	728.48	100.14	15.94	370.85	340.85	91.91	-49.02	2935.91	3023.57	102.99
Irrigation	126.66	126.66	100.00		40.00	55.00	137.50	-68.42	306.66	484.96	158.14
Lac Cultivation & processing					10.00	5.91	59.10		21.54	17.45	81.01
NTPP Cluster Promotion	2.89	2.89	100.00		12.00	5.00	41.67	315.22	23.59	16.59	70.33
Production Centre /Processing Units	3.12	3.12	100.00		6.00	3.00	50.00	92.31	9.12	6.12	67.11
Refrigerated Van									6.00	4.90	81.67
Rubber Plantation & Maintenance					0.00				0.00		
Sericulture	20.00	20.00	100.00	134.19	30.00		0.00	50.00	59.07	29.07	49.21
Training	9.85	9.85	100.00	-75.79				-100.00	99.56	134.27	134.86
Training (PLET)	408.50	320.98	78.58	420.51	418.90	306.05	73.06	2.55	1150.30	955.92	83.10
Training (PRT)				-100.00					5.00	13.14	262.80
Training (SDT)	145.28	96.71	66.57	-33.63	32.11	27.36	85.21	-77.90	915.62	797.34	87.08
Vegetable Cultivation	16.98	2.75	16.20	-68.26	26.70	3.70	13.86	57.24	97.18	6.45	6.64
Wadi Plantation	69.34	59.39	85.65	-60.80	76.48	39.33	51.43	10.30	942.04	263.37	27.96
Grand Total	5086.38	4507.85	88.63	10.29	3556.93	2789.57	78.43	-30.07	24558.10	22143.63	90.17

SHGs in the Studied Villages and Member

ITDA Name		Total HH in the Village	No. of SHGs in the Village	No. of Total Member	No. of BPL/Poor Members of Total Member
ITDA Bonei	N	6	6	6	6

	Sum	1549	48	63	59	93.65
	Mean	258.17	8.00	10.50	9.83	
	Median	109.50	6.00	10.50	9.50	
	% of Total N	28.6	28.6	28.6	28.6	
ITDA Karanja	N	4	4	4	4	
	Sum	629	31	39	39	100.00
	Mean	157.25	7.75	9.75	9.75	
	Median	85.50	6.00	10.00	10.00	
	of Total N	19.0	19.0	19.0	19.0	
ITDA Nabarangpur	N	5	5	5	5	
	Sum	340	20	64	50	78.13
	Mean	68.00	4.00	12.80	10.00	
	Median	70.00	4.00	11.00	10.00	
	of Total N	23.8	23.8	23.8	23.8	
ITDA Rairangpur	N	6	6	6	6	
	Sum	468	28	61	60	98.36
	Mean	78.00	4.67	10.17	10.00	
	Median	76.00	5.00	10.00	10.00	
	of Total N	28.6	28.6	28.6	28.6	
Total	No. of SHG	21	21	21	21	
	Total	2986	127	227	208	91.63
	Average	142.19	6.05	10.81	9.90	
	Median	80.00	5.00	10.00	10.00	
	% of Total SHG	100.0	100.0	100.0	100.0	

Savings by SHGs in ITDAs

ITDA Name		Per Member Savings Per Month	Total Savings	Av. Per Member Savings	Total Credit Outstanding (member)	Av. Credit Outstanding per Member
ITDA Bonei	N	6	6	6	6	6
	Mean	150.00	26650.00	2551.52	16916.67	1604.97
	Sum	900	159900	15309.09	101500	9629.80
	Minimum	100	17000	1700.00	6000	600.00
	Maximum	200	34000	3200.00	32000	2909.09
	% of Total N	28.6	28.6	28.6	28.6	28.6
ITDA Karanja	N	4	4	4	4	4
	Mean	142.50	25000.00	2547.22	19125.00	1973.61
	Sum	570	100000	10188.89	76500	7894.44
	Minimum	100	17000	1888.89	12500	1250.00
	Maximum	220	37000	3700.00	27000	2700.00
	% of Total N	19.0	19.0	19.0	19.0	19.0
ITDA Nabarangpur	N	5	5	5	5	5
	Mean	130.00	29800.00	2230.45	12000.00	970.68
	Sum	650	149000	11152.27	60000	4853.41
	Minimum	100	18000	1750.00	5000	312.50
	Maximum	250	62000	3875.00	20000	1363.64
	% of Total N	23.8	23.8	23.8	23.8	23.8
ITDA Rairangpur	N	6	6	6	6	6
	Mean	216.67	38083.33	3734.09	21416.67	2106.82
	Sum	1300	228500	22404.55	128500	12640.91
	Minimum	100	18000	1800.00	12500	1250.00
	Maximum	300	52000	5200.00	35000	3500.00
	% of Total N	28.6	28.6	28.6	28.6	28.6
Total	N	21	21	21	21	21
	Mean	162.86	30352.38	2812.13	17452.38	1667.55
	Sum	3420	637400	59054.80	366500	35018.56
	Minimum	100	17000	1700.00	5000	312.50
	Maximum	300	62000	5200.00	35000	3500.00
	% of Total N	100.0	100.0	100.0	100.0	100.0

ITDA wise Cumulative Credit Taken by SHGs from Bank

ITDA Name		Cumulative Credit from Bank	Bank Loan by Year 17-18(Rs.)	Bank Loan by Year 16-17(Rs.)	Bank Loan by Year 15-16(Rs.)	Bank Loan Outstanding with SHG	PER MEMBER CUMULATIVE BANK LOAN
ITDA Bonei	N	6	4		6	3	6
	Mean	2,35,833.3	1,25,000.0		1,52,500.0	45,586.7	22,603.5
	Sum	14,15,000.0	5,00,000.0		9,15,000.0	1,36,760.0	1,35,621.2
	Minimum	1,75,000.0	50,000.0		25,000.0	34,560.0	15,909.1
	Maximum	3,80,000.0	1,50,000.0		2,30,000.0	57,000.0	38,000.0
	of Total N	28.6	36.4		42.9	20.0	28.6
ITDA Karanjia	N	4	4		2	4	4
	Mean	1,66,250.0	1,45,000.0		42,500.0	33,580.0	17,041.7
	Sum	6,65,000.0	5,80,000.0		85,000.0	1,34,320.0	68,166.7
	Minimum	1,50,000.0	1,00,000.0		35,000.0	24,000.0	15,000.0
	Maximum	2,15,000.0	1,80,000.0		50,000.0	45,000.0	21,500.0
	of Total N	19.0	36.4		14.3	26.7	19.0
ITDA Nabarangpur	N	5	2	3		3	5
	Mean	1,60,800.0	1,37,000.0	1,76,666.7		31,333.3	13,106.8
	Sum	8,04,000.0	2,74,000.0	5,30,000.0		94,000.0	65,534.1
	Minimum	1,24,000.0	1,24,000.0	1,50,000.0		17,000.0	9,375.0
	Maximum	2,00,000.0	1,50,000.0	2,00,000.0		42,000.0	20,000.0
	of Total N	23.8	18.2	42.9		20.0	23.8
ITDA Rairangpur	N	6	1	4	6	5	6
	Mean	2,71,666.7	2,00,000.0	1,50,000.0	1,38,333.3	42,104.2	26,439.4
	Sum	16,30,000.0	2,00,000.0	6,00,000.0	8,30,000.0	2,10,521.0	1,58,636.4
	Minimum	1,50,000.0	2,00,000.0	1,00,000.0	50,000.0	11,270.0	15,000.0
	Maximum	4,80,000.0	2,00,000.0	2,00,000.0	2,00,000.0	81,500.0	43,636.4
	of Total N	28.6	9.1	57.1	42.9	33.3	28.6
Total	N	21	11	7	14	15	21
	Mean	2,14,952.4	1,41,272.7	1,61,428.6	1,30,714.3	38,373.4	20,379.0
	Sum	45,14,000.0	15,54,000.0	11,30,000.0	18,30,000.0	5,75,601.0	4,27,958.3
	Minimum	1,24,000.0	50,000.0	1,00,000.0	25,000.0	11,270.0	9,375.0
	Maximum	4,80,000.0	2,00,000.0	2,00,000.0	2,30,000.0	81,500.0	43,636.4
	of Total N	100.0	100.0	100.0	100.0	100.0	100.0

Income of SHGs

ITDA Name		Interest from Bank	Interest from Credit (Own Fund)	Interest from Credit (Bank Loan)	Income from Business (Net)	Total Income (Rs.)
ITDA Bonei	No. of SHG	5	6	3	3	6
	Average	771.7	3,420.0	35,700.0	71,640.0	57,733.0
	Total	3,858.3	20,520.0	1,07,100.0	2,14,920.0	3,46,398.3
	Minimum	240.0	1,440.0	30,600.0	63,080.0	33,661.9
	Maximum	1,141.9	5,160.0	45,900.0	84,030.0	85,710.0
	% of Total SHG	29.4	28.6	20.0	50.0	28.6
ITDA Karanjia	No. of SHG	3	4	2	2	4
	Average	1,297.7	3,780.0	16,500.0	55,418.0	40,712.3
	Total	3,893.0	15,120.0	33,000.0	1,10,836.0	1,62,849.0
	Minimum	260.0	3,000.0	7,500.0	32,335.0	10,740.0
	Maximum	3,333.0	5,280.0	25,500.0	78,501.0	82,401.0
	% of Total SHG	17.6	19.0	13.3	33.3	19.0
ITDA Nabarangpur	No. of SHG	4	5	5		5
	Average	1,028.8	2,592.0	22,536.0		25,951.0
	Total	4,115.0	12,960.0	1,12,680.0		1,29,755.0
	Minimum	16.0	1,200.0	10,000.0		14,110.2
	Maximum	2,670.2	4,800.0	30,600.0		32,168.0
	% of Total SHG	23.5	23.8	33.3		23.8
ITDA Rairangpur	No. of SHG	5	6	5	1	6
	Average	1,265.5	5,140.0	45,220.0	28,081.0	48,558.1
	Total	6,327.3	30,840.0	2,26,100.0	28,081.0	2,91,348.3
	Minimum	195.6	3,000.0	25,500.0	28,081.0	33,900.0
	Maximum	2,508.8	8,400.0	81,600.0	28,081.0	89,628.8
	% of Total SHG	29.4	28.6	33.3	16.7	28.6
Total	No. of SHG	17	21	15	6	21
	Average	1,070.2	3,782.9	31,925.3	58,972.8	44,302.4
	Total	18,193.7	79,440.0	4,78,880.0	3,53,837.0	9,30,350.7
	Minimum	16.0	1,200.0	7,500.0	28,081.0	10,740.0
	Maximum	3,333.0	8,400.0	81,600.0	84,030.0	89,628.8
	% of Total SHG	100.0	100.0	100.0	100.0	100.0

Expenditure of SHGs

ITDA Name		Books / Records / Stationary	Transportation (meeting etc.)	Refreshments	Salary / Honorarium	Repair & Maintenance- Assets	Electricity / Other Utilities	Interest paid-off- Outside Loan	Total Expenditure (Rs.)	Income Minus Expenditure
ITDA Bonei	N	6	6	6	1	1	1	3	6	6
	Mean	535.0	426.7	305.0	50,000.0	5,000.0	10,000.0	3,191.1	13,695.5	44,037.5
	Sum	3,210.0	2,560.0	1,830.0	50,000.0	5,000.0	10,000.0	9,573.2	82,173.2	2,64,225.1
	Minimum	250.0	200.0	200.0	50,000.0	5,000.0	10,000.0	2,419.2	850.0	16,576.0
	Maximum	1,155.0	775.0	450.0	50,000.0	5,000.0	10,000.0	3,990.0	69,134.0	67,524.0
	of Total N	28.6	28.6	28.6	100.0	100.0	100.0	20.0	28.6	28.6
ITDA Karanjia	N	4	4	4				4	4	4
	Mean	698.5	1,105.0	348.8				2,350.6	4,502.9	36,209.4

	Sum	2,794.0	4,420.0	1,395.0				9,402.4	18,011.4	1,44,837.6
	Minimum	259.0	855.0	245.0				1,680.0	3,498.9	5,435.0
	Maximum	1,085.0	1,450.0	450.0				3,150.0	5,305.0	78,902.1
	of Total N	19.0	19.0	19.0				26.7	19.0	19.0
ITDA Nabarangpur	N	5	5	5				3	5	5
	Mean	900.8	621.0	790.0				2,193.3	3,627.8	22,323.2
	Sum	4,504.0	3,105.0	3,950.0				6,580.0	18,139.0	1,11,616.0
	Minimum	570.0	456.0	350.0				1,190.0	1,734.0	10,350.2
	Maximum	1,285.0	1,000.0	1,500.0				2,940.0	5,940.0	30,434.0
	of Total N	23.8	23.8	23.8				20.0	23.8	23.8
ITDA Rairangpur	N	6	6	6				5	6	6
	Mean	888.7	906.8	404.7				2,947.3	4,656.2	43,901.8
	Sum	5,332.0	5,441.0	2,428.0				14,736.5	27,937.5	2,63,410.9
	Minimum	450.0	350.0	178.0				788.9	1,321.0	29,296.1
	Maximum	2,500.0	1,500.0	1,000.0				5,705.0	7,426.0	83,232.2
	of Total N	28.6	28.6	28.6				33.3	28.6	28.6
Total	N	21	21	21	1	1	1	15	21	21
	Mean	754.3	739.3	457.3	50,000.0	5,000.0	10,000.0	2,686.1	6,964.8	37,337.6
	Sum	15,840.0	15,526.0	9,603.0	50,000.0	5,000.0	10,000.0	40,292.1	1,46,261.1	7,84,089.6
	Minimum	250.0	200.0	178.0	50,000.0	5,000.0	10,000.0	788.9	850.0	5,435.0
	Maximum	2,500.0	1,500.0	1,500.0	50,000.0	5,000.0	10,000.0	5,705.0	69,134.0	83,232.2
	of Total N	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Staff Position of ITDA Panposh, Sundargarh

Sl. No.	Name of the post	Sanctioned strength	Men in Position
1.	Project Administrator	01	Vacant
2.	Special Officer	01	Vacant
3.	Asst. Executive Engineer	01	01
4.	Asst. Engineer	02	02
5.	Head Clerk/Accountant	01	01
6.	Statistical Asst.	01	Vacant
7.	Sr. Stenographer	01	01
8.	Soil Conservation Asst.	01	Vacant
9.	Sr. Clerk	02	02
10.	Jr. clerk	02	Vacant
11.	Driver	01	01

12.	Class IV	06	03
13.	Watchman	01	01
14.	Work Supervisor		01 (Contractual)
15.	Data Entry operator		01 (Contractual)

Source: ITDA Panposh, Sundrargarh, As on 25.04.2019