

Odisha Tribal Empowerment and Livelihood Programme

ST & SC Development, Minorities & Backward
Classes Welfare Department
Government of Odisha



Empowering Community & Ensuring Livelihood
Annual Progress Report 2014-15





Contents

1. Introduction	1
2. Capacity Building for Empowerment	8
3. Livelihoods Enhancement	16
4. Production System Enhancement	29
5. Community Infrastructure Fund (CIF) & Development Initiatives Fund (DIF)	63
6. Support for Policy Initiatives	68
7. Financial Progress	71
7. Programme Management	72
9. OTELP Plus : An Up-scaling strategy by the Govt. of Odisha to reach out more tribal community	74

Chapter 1

1.1 Introduction

The Odisha Tribal Empowerment and Livelihoods Programme (OTELP) is being implemented by the Scheduled Tribe & Scheduled Caste Development Department of Govt. of Odisha with financial aid from the DFID, IFAD and the WFP. The programme aims “to ensure that livelihoods and food security of poor tribal household are sustainably improved through promoting a more efficient equitable self managed and sustainable exploitation of the Natural Resources at their disposal and through off farm/non-farm enterprise development”.

The core objectives framed to attain the Programme goal are to;

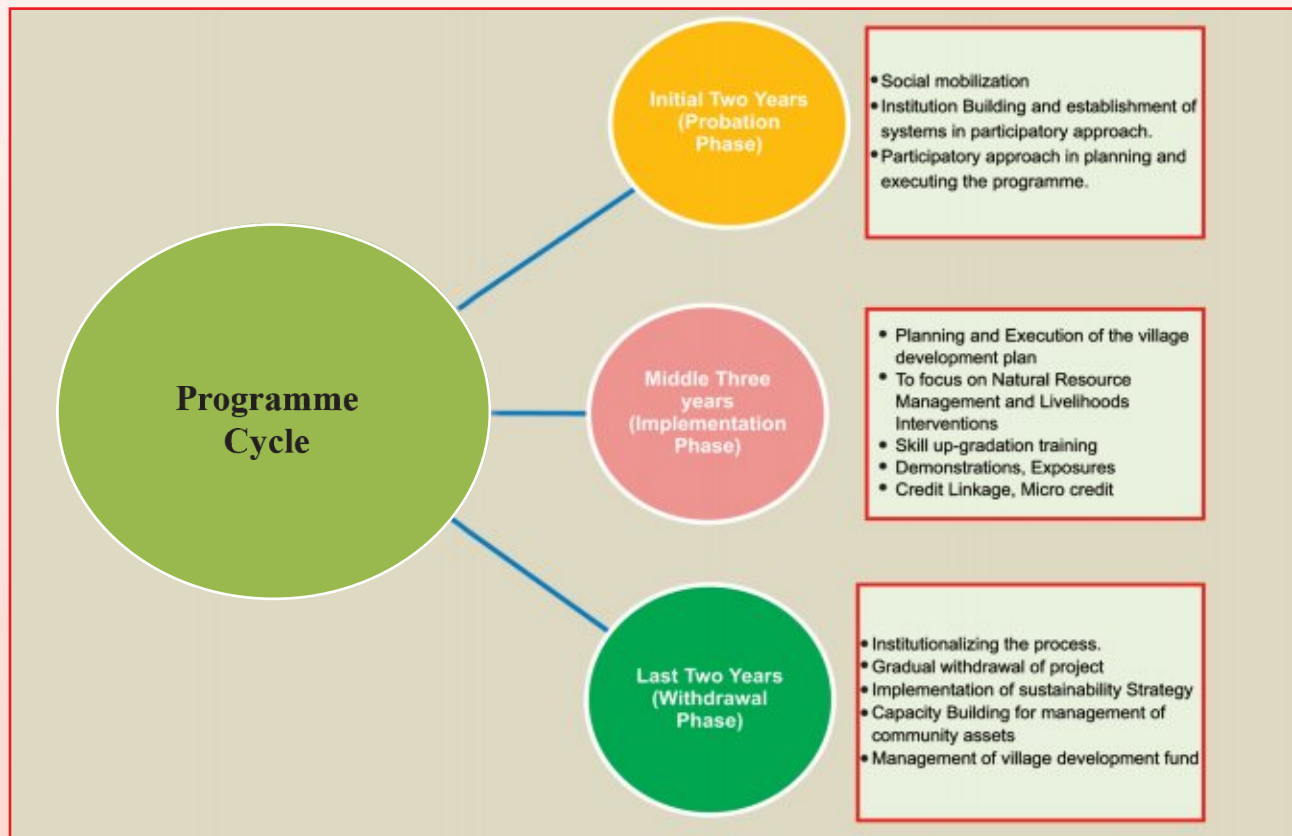
- Build the capacity of marginalized groups as individual and grass root institution.
- Enhance the access of poor tribal people to land, water and forest and increase the productivity of these resources in environmentally sustainable and socially equitable ways;
- Encourage and facilitate off-farm enterprise development focused on the needs of poor tribal households;
- Monitor the basic food entitlements of tribal households and ensure their access to public food supplies;
- Strengthen the institutional capacity of government agencies, Panchayati Raj Institutions, NGOs and civil society to work effectively on a participatory mode for poverty reduction with tribal communities;
- Encourage the development of a pro-tribal enabling environment through ensuring that legislation governing control of and access to, development resources by poor tribal households is implemented effectively and recommending other policy improvements;
- Build on the indigenous knowledge and values of tribal and blend these with technological innovations to ensure a speedier pace of development

The programme is being implemented in 3 phases. The Phase I of the programme was completed in 2007. The implementation of Phase II was started from 2008 based on the recommendations of the Phase I Mid Term Review Mission conducted during September, 2006. For both the phases, Hon'ble Chief Minister of Odisha S.J. Naveen Pattnaik launched the programme on 2nd October 2004 and 27th March 2007 respectively. Phase II Mid Term Review Mission fielded by IFAD during October 2010 and recommended to move up to the Phase III of implementation from April 2011 till end of the programme (March 2013). Currently the programme is in Phase III of implementation. Subsequently, basing upon the introduction of the programme lately in Phase II districts, the programme was further extended to 31st March, 2014. Further the programme is extended till September 2016 as it received additional funds from IFAD Rs. 90.20 crores.

Phase	Duration	Closing Date
Phase I	Three Years	March, 2007
Phase II	Four Years	March, 2011
Phase III	Two Years	March 2013

The programme adopts strategic participatory approach among all stakeholders. Communities are considered as the primary stakeholders who are facilitated by the FNGOs followed by technical backstopping from ITDA & PSU. The programme basically aims upon GO & NGO partnership mode for adding synergetic effect in order to work jointly for enhancing the capacity of the communities to take up sustainable livelihood activities.

The programme adopts an integrated micro watershed approach covering a cluster of 10 to 12 micro watersheds situated contiguously with an approximate area of 500 ha. The selection of the micro watersheds is made basing upon the boundary of one set of 10-12 micro watersheds which is coterminous with the Gram Panchayat. The programme has adopted a seven year project cycle management which is further divided into three distinct phases. The initial two years are called probation phase, the real implementation phase comes next for a period of three years and the last two years of the programme is known as consolidation phase/ withdrawal/exit phase.

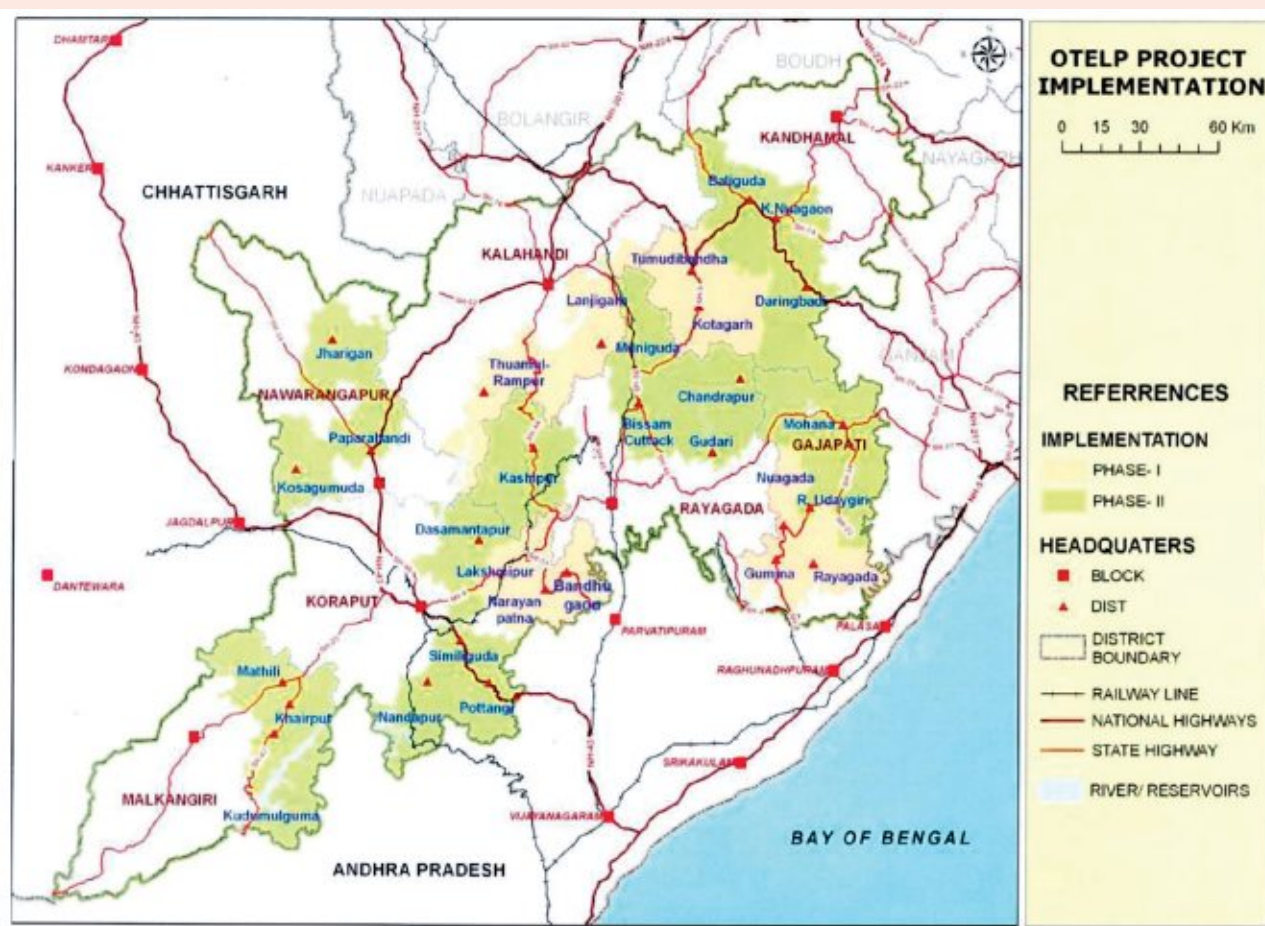


The programme aims to enhance the natural resources based livelihood activities of the poor tribal community with the available skill. The work participation of the tribes in the programme areas include wage labour, agriculture, sale of NTFPs, migration etc. and the intensity of the above activities are different basing upon the family economic status. The programme constantly endeavors to enhance all kinds of livelihood creating wage employment. This boosts them in earning direct cash and part of the cash paid through food grains. This helps in providing food security to the tribes round the year. The programme thrusts upon the development of livelihoods of the poor tribal people based on their natural resource and skill base. The livelihood profile of the poor communities in the programme areas covers different activities; like wage employment,

Agriculture, Sale of Forest Produces, Migration etc. and the intensity of dependence on the above are different based on the family economic status. However the programme constantly tries to improve each section of the livelihood option of the poor by creating maximum opportunities for wage employment for the poor people, where the people get direct cash and grain income from the wage employment and vis-à-vis created community assets for conservation and development of Natural Resources. The food security, which used to be for about 4 to 6 months per year, has improved due to direct intervention in creating wage employment opportunities and providing food in shape of grains as part of the wage, which directly impacts the food availability at the household level. Besides, efforts have been made for improving the production system at the village level in promoting sustainable agriculture, trying out innovations in Aquaculture, and improving the quality of life through community infrastructure and development initiatives.

1.2 Programme Area and Communities

The programme is operational in 30 backward blocks of seven districts of south west Odisha namely Koraput, Kalahandi, Gajapati, Kandhamal, Malkanagiri, Nawrangpur and Rayagada. This implementation programme has been made in a phased manner. 10 blocks in 4 districts have been taken up in Phase I, covering 19481 households in 390 villages in Koraput, Kalahandi, Gajapati and Kandhamal districts. From January 2008, Phase II operations have started in additional 9 blocks of the above districts along with additional micro watershed in the Phase I blocks of Kalahandi district. Implementation in Phase I villages are completed and villages under Phase II are now under implementation.



Map of South-West Odisha with programme locations

The total coverage in Phase-II areas of above districts are 9 Blocks covering 15129 Households living in 328 villages. The Phase-II operation in new districts namely Nawrangpur, Malkanagiri and Rayagada started from January 2009 in 11 Blocks covering 21570 Households in 324 villages. The details of the area targeted under the programme are as follows:

District	ITDA	MWS	Village	Area taken up (in Ha.)
Koraput	Koraput	70	231	35482.47
Gajapati	Paralakhemundi	60	163	31939.24
Kandhamal	Baliguda	59	174	25902.25
Kalahandi	Th. Rampur	59	158	25800.00
Nawrangpur	Nawrangpur	30	55	15420.64
Malkanagiri	Malkanagiri	30	85	15804.00
Rayagada	Gunupur	50	176	25019.68
	TOTAL	358	1042	175368.28

Source: MIS 2014-15

1.3 Demographic Profile

The programme targets 255661 people out of which half of the populations are women. 75% of these populations are schedule tribe. The major tribes included under the programme are Soura, Lanjia Soura, Kondha, Kutia Kondha, Paraja, Bonda, Bhumija and Koya. Out of the above tribal Lanjia Soura, Kutia Kondha and Bonda are the particularly vulnerable tribal groups (PVTG). Besides, tribal population, the programme also targets 15% of scheduled caste population and 11% of other backward class (OBC) population living in the programme areas.

District	Total Male	Total Female	ST Male (%)	ST Female (%)	SC Male (%)	SC Female (%)	Others Male (%)	Others Female (%)
Koraput	28826	29296	72	71	10	9	18	20
Gajapati	18333	18542	99	99		1	0	0
Kandhamal	16428	16486	64	65	28	27	8	7
Kalahandi	13864	14216	74	77	21	19	5	4
Nawrangpur	22372	22287	63	62	11	11	25	27
Malkanagiri	9123	8788	84	84		6	10	10
Rayagada	19033	18067	71	73	29	27	0	0
Total	127979	127682	74	75	15	14	11	11

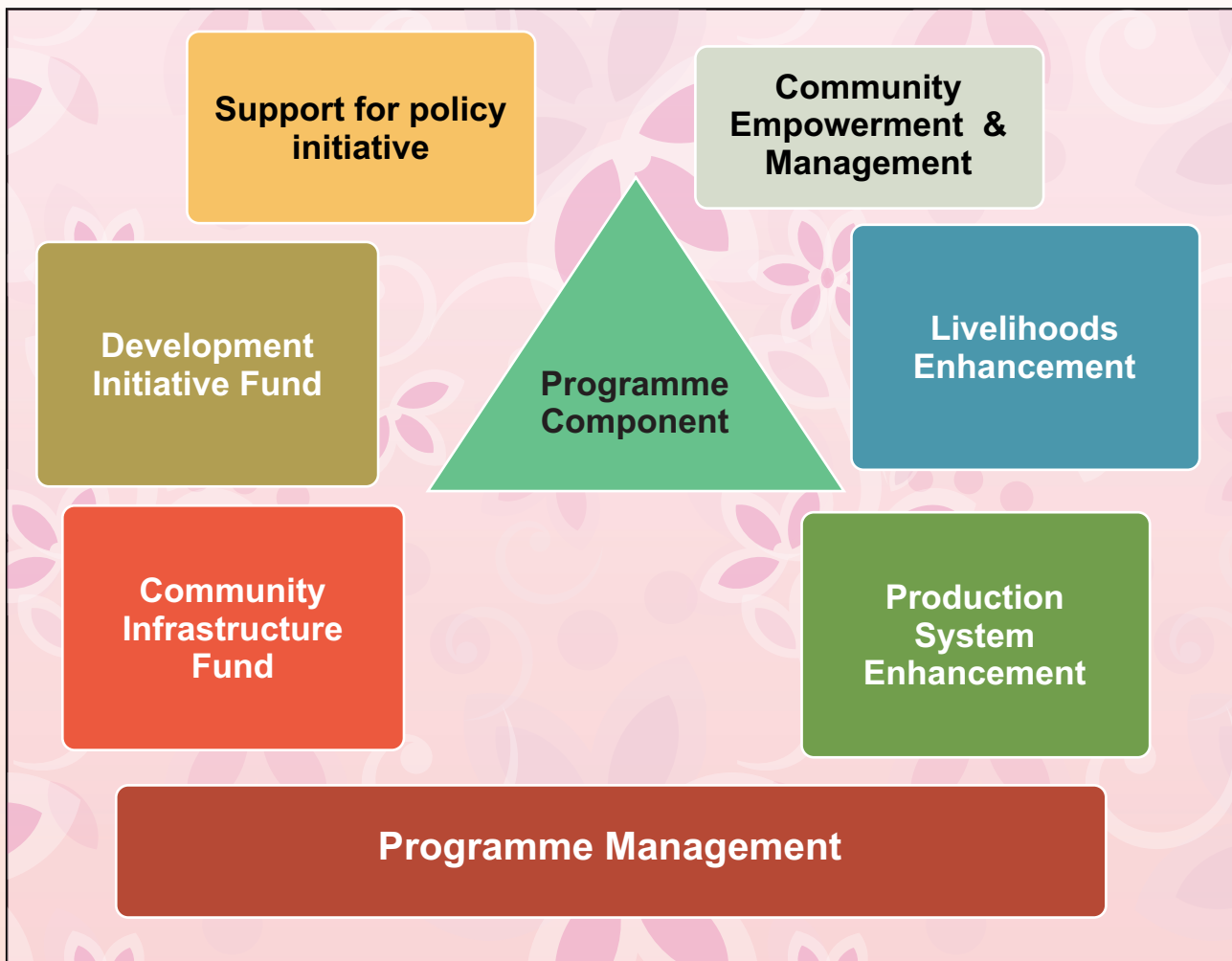
Source: MIS 2014-15

The regions covered under our programmes are poverty stricken and backwardness. It is characterized based upon land holding and access to various assets. However 68% of targeted families fall in BPL category as per the govt. records but in reality all families lies in the same line. The table also speaks about 24 % of households do not have land. To provide them sustainable livelihood option is the big challenge before programme. Incidence of poverty is very acute in the programme locations. Tribal economics are based on the agriculture and forests. For agriculture land is the most essential asset for production. In the programme area more than 80% of the families have less than one standard hector land holding. Nevertheless, 21% of targeted family's situation is even worst as they do not posses any land. Livelihoods improvements of these families are key challenges before the programme. The following table depicts the district wise targeted beneficiaries under OTELP & OTELP Plus.

Particulars	OTELP			OTELP Coverage	OTELP Plus
	Phase I	Phase II		Phase -I + Phase-II	(2011-2018)
	(2004-2007)	(2008- 2013)			
Districts	Koraput, Gajapati, Kalahandi, Kandhamal	Koraput, Gajapati, Kalahandi, Kandhamal	Nawrangpur, Malkanagiri, Rayagada	Koraput, Gajapati, Kalahandi, Kandhamal, Nawrangpur, Malkanagiri, Rayagada,	Koraput, Malkanagiri, Gajapati, Nawarangpur, Kalahandi, Kandhamal, Rayagada Keonjhar and Mayurbhanj
Blocks	10	9	11	30	32
No of Micro-Watershed	135	113	110	358	585
No of Villages	390	346	306	1042	1566
Treatable area (in ha)	63219.43	55904.53	56244.32	175368.28	310157.73
Total Households (HH)	19481	15129	21570	56180	82353
ST Households	16301	10438	15462	42201	61420
SC Households	2360	2276	3433	8069	9130
BPL Households	16277	10314	12883	39474	36446
Landless Households	4990	2935	4470	12395	3023
Vulnerable/Destitute HH	3101	1546	1474	6121	12450
No. of FNGOs	12	11	11	34	49 + 5 Consortium

Source: MIS 2014-15

1.4 Programme Focused



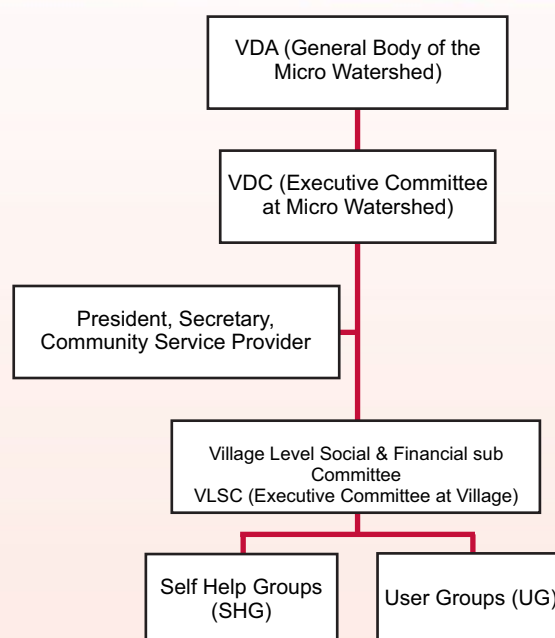
1.5 Institutional Framework for Implementation of the Programme

The programme adopts a public private and community partnership approach in implementation of the activities. In this PPCP mode, community have taken the lead role in planning, executing, monitoring and evaluating the programme where as the government provides the technical assistance and support, and the NGOs play the role of facilitator in mobilizing community and empowering them. The programme is implemented through SHG, UG and CIG.

Name of stakeholders	Roles & Responsibility
Community	Planning, implementation, monitoring & evaluation, governance, documentation.
Non-Government Organization	Facilitation for planning, technology transfer, capacity building, handholding support for implementation
Government	Technical Assistance and Support
Donor agency	Financial support along with technical inputs & support

The programme follows the guidelines prescribed by the MoRD. It gives trace on all the families covered within the geographical boundary of one micro watershed. It consists of two to three villages termed as Village Development Association (VDA) and it needs to be registered under society act 1860 to be treated as VDC where all the adult members are part of this association. VDC is the Executive body of VDA. This executive body comprises of 15-20 members.

There are various community based organization promoted through the programme such as SHG, VDC, VLSC, UGs, CIGs etc. and managed by the community itself in sustainable manner. In all cases women are included on priority basis to empower them for taking up livelihood activities to lead smooth and better life with dignity. All these institutions are responsible for taking up implementation of developmental activities at grass-root level.



We Believe in:

1. Grassroots democracy
2. Grassroots action
3. Learning by doing
4. Building on their Skill & knowledge
5. Managed, Owned & Controlled by Community
6. Maintain Transparency
7. Participatory approach
8. Involve all stakeholders

Chapter 2

Capacity Building for Empowerment

Odisha Tribal Empowerment & Livelihoods Programme (OTELP) has been graduated from 1st phase to 2nd phase and then subsequently to OTELP Plus with newer districts and blocks of tribal dominated inaccessible remote pockets of Odisha. Success of OTELP largely depends upon the capacity and skill of primary stakeholders in planning, execution and participatory monitoring. Accordingly, the programme underpins the need to build the capacity of the community members on their skill relating to thematic and managerial aspects. So keeping in mind the programme core objectives and varied capacity building (CB) need of different stakeholders for effective implementation of the programme in a participatory way, the entire capacity building activities has been broadly categorized in to three main domains. There are as below.

1. **Community Empowerment & Management**
2. **Skill Development of Primary Stakeholders**
3. **Capacity Building for Staffs of FNGOs & Other Support Agencies**

So a distinct element of the design of OTELP is the Capacity Building component that exists as a backbone to the project. From the PSU to village level institution, at each stage there is a group of individuals that is playing a critical role. Each of these groups must function well if the project objectives are to be achieved. The most important group whose capabilities have to be built are the village community. The ultimate aim of formulating CB strategy for OTELP is aimed towards empowerment and livelihoods security of target communities. It is therefore important from programmatic point of view to ensure that all the different actors in the programme have the capacity to do their jobs well and eventually lead towards the outcome.

This strategy also underlines the strength of the CBOs and community service providers, who are the key factors for successful implementation of OTELP. These community level workers promoted as service providers at the local level to transfer skills to the communities.

The programme has fixed and dedicated two years period meant for Community Mobilisation during the beginning of the programme in order to ensure a vibrant and informed community as well.

2.1 COMMUNITY EMPOWERMENT & MANAGEMENT

OTELP is a community driven participatory developmental programme. Entire programme is planned, executed and monitored by the communities. Numbers of community based organizations (CBOs) are formed/strengthened for optimum utilization of resources in addressing the issues of tribal empowerment & food security. The representatives of village level institutes through regular sensitization camps, trainings, exposure visits and through interaction with other communities, who have practiced the same earlier have acquired great deal of understanding on the programme components, implementation modalities and a great sense of effective management.



Care has been taken for all sorts of CB inputs such as trainings, exposures, cross learnings, community meets, hands on support etc. which are inevitable for preparing the communities to know the programme components, implementation modalities and skills required for effective management of the CBOs in a sustainable way which are to be covered under the head of Community Empowerment and Management

Capacity Building inputs under Community Empowerment & Management during the probation phase of programme cycle aim at generating the awareness among the community members and building the community based organizations. Similar inputs are continued till the end of the programme cycle. However, during the consolidation phase, during more attention is given on sustainability of the institutions and the capacity of community for effective management of assets created in a equitable way. .

The interventions taken up under the Community Empowerment and Management are as below:

2.1.1 Community Mobilization & Empowerment

Series of community mobilization activities have been taken up in the programme villages to sensitize the communities on various developmental oriented issues including the different schemes/ provisions of Govt. and other non govt. organizations. Villagers have been oriented on the expected benefit of the programme and the modalities for programme implementation through meetings, sensitization camps, cultural shows, wall writing, hoardings etc. A series of community mobilization activities were taken up on which includes the different schemes/ provisions of Govt. and other non govt. organizations, training on tribal rights in order to sensitize them on their responsibilities to avail the entitled benefits. Also to include in the chain, activities like human health camps, veterinary camps etc. have been organized.

In order to saturate all households fall under SHG, campaign mode drive initiated to include at least one member form each households. Initiatives were taken to strengthen the health of SHGs onwards with continuous CB measures meant for the individual members and group as a whole. Steps are also taken to federate the SHGs for formation and functioning of apex instituting. For preparation of village development and livelihoods plan the community members were facilitated in order to enable them to plan for the future by themselves only. Attention of the community was drawn on their land right issues through various training/ sensitization meetings on schemes/acts like OPLE, OGLS, FRA, Vasundhara etc. Communities were also sensitized to take the advantages of various govt. schemes for implementation or take up the benefit at village level through the support of PRIs having their presence in all the programme villages and a part of the village development committee to take various developmental interventions in a more focused way. Exposure visits at different times strengthened the community as a whole to gain confidence and positiveness for implementation of the programme.

Likewise, various Communities based institutions like SHG, VDC, VLSC, VSS etc. were imparted training in the areas of leadership, group dynamics, accounts, organization management, managing convergence etc. as part of increasing their capability to manage the implementation of the programme. A quick snapshot of different trainings and other relevant activities that were undertaken during the specific period are presented in the table.

Activities	During 2014-15	Cumulative Total Up to March,15
Community Mobilization (Health, Camp/ Awareness Camp/ Animal Health, Camp/ Video Shows/ Cultural Programmes/wall writing etc.	159	5571
Training Programme for SHGs (Leadership, Group Dynamics, Accounts, organizational, Management etc	140	5127
Training Programme for VDCs/ VLSC/ UG (Leadership, Accounts, organizational management, Tribal Rights, Convergence etc.)	247	5962
Total	546	16660

Source: MIS 2014-15

2.2 BENEFICIARIES SKILL DEVELOPMENT



Capacity Building inputs under this sub component include trainings and exposures in order to upgrade the skills of beneficiaries (primary stakeholders) for execution of different activities under the programme for enhanced livelihoods such as production enhancement components (Land & Water, Agriculture, Horticulture, Pisci-culture, PFM, CIF etc.) and income generating activities (RFS) etc. Thus the capacity building of communities fill the gaps between the existing skill base and the required skill base for taking up the activities selected by the communities in order to enhance their livelihood. Each year accordingly, in line with the activities planned and incorporated in the Annual

Work Plan & Budget, various need based training, field demonstrations, exposures etc. are designed. The training or exposure under this is mostly conducted before the intended activity is taken up at the village level

Various resource organizations/ agencies/individuals have been identified under different thematic areas jointly by the staff from ITDA and FNGOs. ICAR institutes, State training Institutes under various departments, OUAT managed Krishi Vigyan Kendras and other private owned training institutes were tied up with OTELP programme districts. In some training, resource persons support from various line department & local NGO is also taken. The various training programme conducted during 2012-13 are presented in the following table.



Activities	During 2014-15	Cumulative Total up to March 2015
Training and exposure under Land & Water Management	77	1677
Training and exposure on improved practices of Agri / Horti, PFM	344	2896
Training and exposure on improved rearing practices for Livestock & Aquaculture Development	178	1445
Training and exposure on preparation of business plan and implementation of Non Farm Activities	86	1696
Vocational Training to Youth	47	319
Total	732	8033

Source: MIS 2014-15

2.2.1 Skill Development through Placement Linked Vocational Training Programme for Unemployed Youth of OTELP

The 40% of youth between the age group of 18 to 35 years of age of total targeted population of OTELP operational area are sometimes seen as disguised unemployed in agricultural field. Therefore, they invariably migrate to urban areas in search of work due to the scarcity of employment opportunities in rural areas. The school dropout rate in these areas is also alarming. Since the dropout rate is high and these youth lack pure academic qualification, there is a limited scope for employability. Rural youth capital is one of the major inputs for the improvement of the quality of life of the rural community but it is not true when they migrate to other areas to earn a measly income of Rs.50 to 60 per day which becomes difficult for them to meet the basic necessities of life.



In keeping with the vision of the ST & SC Development Department, OTELP embarked upon a strategy to provide short terms skill development and placement related training programmes for youth of OTELP villages. The training programme has equipped the rural youth of OTELP villages with enough marketable skills and many of them have been capacitated to secure employment in the organized sector or have been able to set up micro enterprise for self employment. The trades which attract these unemployed youth include Masonry, Gardener, Grafting, Beekeeping, Mushroom production, Pisciculture, Housekeeping, House Keeping, Tractor & Power tiller and 4 wheeler driving, Mobile repair, Computer Training, Fitter and mechanist, Tailoring , Plumbing, Welding, Carpentry etc. About 1100 nos. of youth have been gainfully employed after getting this training programme in nearby cities and some in outside state. OTELP is conducting these training programmes through convergence with the Odisha Scheduled Caste and Scheduled Tribe Financial Development Corporation (OSFDC) through the empanelled training providers. Besides OSFDC, OTELP has also converged with Khadi and Village Industries Commission to impart various skill development training programmes. These youth according to their qualification and interest do take part in the training institutions in phased manner depending on the vacancies. This has created a ripple effect with youth from the adjoining villages demanding vocational training with a view to enhance their employable skill. Out of 10,013 nos. of unemployed youth identified from OTELP operational areas with proper counseling & trades of interest , at present a total of 2239 unemployed youth have been trained and 140 candidates are currently under training in different training institutions The details of the training programme is given in the following table district wise.



OTELP VOCATIONAL TRAINING - Trained Status - April,2015		
ITDA	Trades	No. of Candidates Trained
Nawarangpur	Domestic BPO	10
	Desktop and Laptop Maintenance	36
	Driving	176
	Security Guard	7
	Data Entry Operator	46
	Electrician	13
	Tailoring	22
	Hard ware	36
	Mason	74
	Plastic Processing Operator	12
	Total	432
Gunupur	Domestic BPO	1
	Desktop and Laptop Maintenance	14
	Driving	30
	Electrical and Electronic Home Appliances	6
	Tailoring	51
	Mobile repairing	3
	Hard ware	14
	Welding	33
	Electrician	48
	Fitter	2
	Total	202
Th.Rampur	Tailoring	11
	Driving	12
	Nursing	5
	Total	28
Malkangiri	Driving	51
	Tailoring	85
	Brick Making	178
	Mason	269
	Grafter	30
	Petty Contractor	39
	Total	652
	Security Guard	55
	Driving	67
	Mason	90
	Desktop and Laptop Maintenance	22
	Electrician	54
	Electrical and Electronic Home Appliances	14
	Hard ware	22

Koraput	Tailoring	123
	Petty Contractor	83
	Total	530
Paralakhemundi	Security Guard	34
	Driving	180
	Data Entry Operator	73
	Tailoring	91
	Fitter	26
	Mobile repairing	2
	Electrician	62
	Domestic BPO	12
	Nursing	16
	Mason	2
	Plastic Processing Operator	22
	Welder	4
	Tally	3
	Beauty Care	3
	Hospitality Management	10
	Total	540
Balliguda	Data Entry Operator	304
	Fitter	49
	Welding	61
	Desktop and Laptop Maintenance	12
	Domestic BPO	15
	Driving	157
	Hard ware	12
	Electrician	15
	Tailoring	35
	Total	660
	Grand Total	3044

Source: MIS 2014-15

2.3 Capacity Building for staff of FNGOs and other Support Agencies

Effective implementation of programme activities by the villagers in a participatory approach largely depends on the quality facilitation support from the staff of facilitating non government organizations(FNGOs).The Experts, Team Leaders, WDTs, Community Service Providers are solely responsible for necessary facilitation to the village communities. Hence, it becomes indispensable to build the facilitation skill of the FNGO staff. They are adequately trained in regular intervals on the respective thematic areas so that they in turn impart the same to the community members.

All the FNGO staff & Community Service Providers are trained on participatory planning process, facilitative role in micro planning processes, understanding on governance, gender and equity issues.

They are also exposed to different govt. & non govt. schemes relating to empowerment and livelihoods. Besides each expert/WDT is adequately educated on the specific role they play and also on the subject matter he/she is to be deal with.

Similarly the capacity of the staff of line departments and the staff of other organizations operating in the programme areas is also enhanced in order to develop skill base at the local level. Adequate coordination is established with these resource persons to cater to the diversified training need of the primary stakeholders.

The ITDAs have organized number of exposure visit for staff of ITDA and FNGO to different institutes, areas for different thematic aspects of programme components. In different times, emphasis was given to expose different stakeholders to old existing OTELP areas in order to enable the participants a clear understanding of the modalities of community driven implementation of the programme.

Types of Training	During 20 14-15	Cumulative Total up to March 2015
No. of Trainings for FNGO staff	25	384
No. of training on Community Mobilization and Institution Building for FNGO Staff	12	401
Training for line Dept. Staff /Support Organizations	4	196
Total	41	981

Source: MIS 2014-15

Training programme on various cross cutting subjects such as Communication, Micro Level Planning, Gender Mainstreaming, Knowledge Management etc for the staff of ITDAs and FNGOs were also organized by the PSU in different times.

Series of trainings, workshops, seminars, exposures organized on various thematic areas, policy issues and also facilitated the district team to organize similar training programmes.

PSU has developed different module and manuals on Book Keeping for SHGs, Gender, Communication, MLP, Land & Water Management etc.

Specialized training programmes for staff of FNGOs, ITDAs were organized on various aspects. To mention a few:

- Training Programme on various Govt. Schemes at IMAGE, Bhubaneswar, Odisha
- Training Programme on Duckery & Poultry Farming at PSU, OTELP, Bhubaneswar, Odisha
- Training Programme on Seed Production Technology in Cereals, Pulses & Oilseeds at OSSOPCA, Bhubaneswar, Odisha
- Training Programme on GIS Technology & its Application at ORSAC, Bhubaneswar, Odisha
- Training programme on " Sustainable livelihoods through tuber & fruit crops" at RC-CTCRI (ICAR) and CHES(ICAR), Bhubaneswar, Odisha
- Workshop on Time & Stress Management at PSU, OTELP, Bhubaneswar, Odisha
- Workshop on Agriculture & Horticulture Convergence Programme and Preparation of Project Proposal at OFMRDC, Bhubaneswar, Odisha
- Workshop on Formulation of Project Proposal on RKVY for 2015-16 at OFMRDC, Bhubaneswar, Odisha

Chapter 3

Livelihoods Enhancement

Tribals constitute about 75% of total population in the programme area; who were characterized by a lifestyle distinct from agrarian communities. They subsisted on different combinations of shifting cultivation, hunting and gathering of forest products: all activities linked with forest. Dependency on natural resources lies at the heart of the tribal economy but recent decades have seen a process of transition in the tribal livelihoods from forest based to a predominantly land based one.

In tribal dominated areas, ecological degradation, erratic rainfall and high risk of drought have resulted in food insecurity, increasing out-migration, periodic deaths and starvation. A small land base, low agricultural productivity and low-income levels led to rising indebtedness, trapping tribal into a vicious circle of exploitation. The life of tribal is increasingly vulnerable due to persistent lack of assured entitlements to their resource base.

The livelihoods enhancement component of the programme adopts a sustainable livelihoods approach which is people-centric approach to development; supporting people's effort to achieve their livelihoods goal. The programme focuses the development of livelihood assets at the disposal of tribal; namely natural, human, social, financial and physical within a sustainable livelihoods framework.

Livelihoods is 'sustainable' when it can cope with, and recover from stresses and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities to the next generation and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term" (Chamber, R; Conway, G 1992). Tribal livelihoods can be grouped into three categories, namely (i) land based livelihoods (which include agriculture, horticulture and NTFP); (ii) livestock based livelihoods (which include animals fisheries) and (iii) micro-enterprises.

Livelihoods enhancement component of the programme consists of sub-components namely (i) land and water management, (ii) participatory forest management, (iii) agriculture and horticulture development, (iv) livestock and aquaculture production, (v) rural financial services and (vi) community infrastructure addressing the issues on poverty and provides alternative livelihoods options as the tribal people are mostly depends on the available natural resource bases.

The fund under this component is directly invested within the micro watershed villages for development of natural resources base as well as establishing the livelihoods support system for the tribal communities.

3.1 Land & Water Management

Crop production in the programme area is constrained not so much the overall scarcity of rainfall, but by the skewed distribution of rainfall and its extreme unreliability. Almost 80% of rainfall occurs in a single season (June to September) limiting the crop production to a single season; and the rainfall which erratic and sometimes of high intensity puts rainfed crops constantly at high risks. As the rainfed crops are practised mainly in scattered patches situated in a highly undulating terrain; high intensity rainfall damages the crops severely with flash floods and high rate of soil erosion. Similarly erratic distribution of rainfall with dry spell period of more than 10 days is sufficient enough to damage the standing crops.

In this situation, the major focus is to increase the moisture retention and to reduce the soil erosion so as to rehabilitate degraded environments and foster better resource conservation and management with an aim to increase the carrying capacity of watersheds to sustain tribal livelihoods.

The positive impacts include improved water Conservation and more environmentally sound and sustainable agriculture, through, among others, the control of run-off, enhanced soil moisture-holding capacity and better vegetative cover on degraded forestlands and hill slopes.

The tribal have a long and rich experience of traditional land and management practices which are also environmentally sound. Blending these enriched indigenous land and water management practices with few adaptable modern technologies; attempts has been made to move from traditional soil and water conservation approach to integrated natural resource management approach focusing on production system enhancement on sustainable basis.

Rather than laying down predefined treatment measures, the programme assists the communities in identifying appropriate interventions on a case-by-case basis through a detailed participatory micro planning exercise and to finalize all site specific activities including mechanical structures and agronomic practices for conservation and restoration of the natural resource base at their disposal to enhance productivity of land on sustainable basis.

3.1.1 Conservation of shifting cultivation patch

The programme area consists of mainly runoff watersheds concentrated with 1st order and 2nd order streams and mostly having hilly and mountainous terrain with degraded forests. The age old practice of shifting cultivation contributes substantially to the food security of tribal in general. Simultaneously, gradually reducing cycle of shifting cultivation results in massive soil erosion, siltation of reservoir, drying of springs, reduced fertility, heavy flood, water scarcity and deforestation. For tribal, shifting cultivation is not just a means of their livelihood, but is a way of life as many rituals revolve around it and their culture is built upon it. Since shifting cultivation contributes substantially to the food baskets of tribal, it cannot be avoided completely. Alternatively, various attempts were made by the programme to improve productivity of shifting cultivation patches and to reduce dependency on shifting cultivation which includes physical, agronomic and socio-economic measures. This attempt not only improves the productivity of degraded lands located at upper reaches; but also reduces the potential threat of floods, soil loss, siltation of reservoir located in middle and lower reaches.



Stone bunds in series



During the programme intervention, various mechanical measures like Stone Bunds, staggered trenches, continuous trenches and water absorption trenches are constructed and reinforced with appropriate biological measures to reduce the run off velocity and soil loss from those patches and to conserve and improve its productivity. The major activities undertaken in hill slopes and shifting cultivation patches are as per the following table:

Activity	Unit	During 2014-15	Cumulative Total up to March, 2015
Mechanical Filter Strip/ Stone Bund	ha.	54	2956
Trench (CCT/ SCT)	ha.	-	6543
Water Absorption Trench	ha.	1	317

Source: MIS 2014-15

3.1.2 Drainage line treatment

The catchment area treatment measures described above though retain silt and moisture; are not sufficient enough to handle the entire runoff. This is because the programme area is located in South western region of Orissa, mostly comprising the hills of Eastern ghats with highly undulating



Loose Boulder Structure

During monsoon, instant runoff passes through these streams causing severe erosion of the stream beds. These eroded soil, sand, stone and pebbles etc., damaging low laying fields. Hectares of paddy cultivated, during kharif (Rainy) season in low lands (bahal and berna) gets damaged due to sand casting caused by flash floods. This not only damages the crop for the season but also the farmer losses his/ her family labour to reclaim the land, where women from the family suffers most. These low lands over the stream bed are about 10-12% of the total cultivable land, which are mostly productive and fertile in nature. The tribal families mainly depend upon this land to grow paddy for meeting their food requirement.

To considerably arrest the silts and runoff flowing down in the streams and to minimise the crop damage at the lower patches; the programme adopted interventions like gully control structures, retaining wall, guard wall, brush wood check dam etc. in series. These treatments across the streams retain sand, stone, pebbles, silts etc. flowing from the podu areas and deposit in the gully beds. This effort not only stabilises gullies, increases the base flow and flow duration; but also simultaneously creates small fertile patches across the stream bed and sustain vegetative growth. The paddy crop cultivated in the lower patches are also saved and even get adequate water during moisture stress conditions in rainy season. The major activities undertaken are presented in the table below.

Activity	Unit	During 2014-15	Cumulative Total up to March, 2015
Gully Control Structure (EGP / LBS / LBCD/ BWCD)	nos.	54	80703
Masonry Gully Plug/ Gabions	nos.	5	29
Masonry Drop Structure	nos.	97	979
Nalla Bank Stabilization/ Stream Bank Erosion Control	nos.	1	18
Retaining wall/ Guard wall (Masonry)	nos.	16	263
Retaining Wall/ Guard Wall (Dry)	nos.	36	107

Source: MIS 2014-15

3.1.3 Land development intervention

Various land development interventions for the cultivable lands located in the middle reaches for improving productivity of these lands are then attempted to after treatment of upper reaches and drainage lines.

The cultivable lands out of which upland and medium land constitutes about 82% are found in discrete patches in the programme area. These land though unproductive in nature; contributes significantly towards a major proportion of income by growing paddy, Niger, millets, maize, mustard and vegetables etc.

These lands are mostly rainfed and unbunded and generally cultivated once in a year. The lands are cultivated by the tribals with a high risk due to erratic rainfall, soil loss, nutrient deficiencies, lack of irrigation etc., resulting in poor crop husbandry. Besides, crops grown in these patches are cash crops and also content nutritional values for which it is important to treat these lands to increase its productivity.



30x40 model



Water absorption Trench



Masonry Canal



Field Bunding

The programme has facilitated the farmers to adopt various in situ moisture conservation measures to conserve moisture and top soil, retaining the soil fertility. The farmers are also facilitated for bund plantation, compost pit in field and improved farming practices to increase productivity. The major interventions for development of these lands are given in the table below.

Activity	Unit	During 2014-15	Cumulative Total up to March, 2015
Contour Bund/ Field Bund/Earthen Bund	ha.	11	8253
30x40 Model	ha.	-	526
5% Model	ha.	-	578
Terracing	ha.	5	76
Land leveling	ha.	22	1597

Source: MIS 2014-15

3.1.4 Water Resources Development

Though the annual average rainfall is about 1500mm which is more than the state and national average; most of the rainfall passes as runoff due to high intensity of rainfall and erratic distribution over the year, highly sloping terrain and inadequate harvesting measures for productive use. All these parameters force the tribal to depend on rain fed agriculture resulting in uncertainty of crop production and yield.

The interventions for treatment of upper catchment, drainage line treatment, land development in up and medium land are mainly meant for increasing the time of concentration of runoff by lengthening the flow path, providing more time for infiltration and thereby reducing soil loss and runoff intensity. As a result of these interventions, in many cases, there is visible increase in stream flow, flow duration in stream and moisture status in soil.

Programme has adopted the strategy to conserve, divert and harvest this excess runoff both above and underground for productive use. As a part of this strategy, various types of water bodies and irrigation structures were promoted by the programme. Water bodies are meant to provide protective irrigation during kharif. The irrigations structures such as diversion weirs, check dam, canal etc. are constructed/ renovated to ensure protective irrigation during kharif and also support post rain crops cultivated by farmers resulting in increased cropping intensity and volume of production. There are evidences of crop diversification and improved cropping practices due to additional irrigation facility.





Ongoing DBI Project



Check Dam



Masonry canal

Besides, water is tapped from perennial springs with filtration arrangement and provided to household through buried pipes. This not only mitigates the household needs, but also the surplus water is used for irrigating the backyards for growing vegetables meeting the family nutritional requirements. This also provides additional income to the tribal families and saves lot of time which was otherwise lost in fetching water from distant sources.

The presence of small mountainous streams and perennial springs in the OTELP operating villages offer a larger scope for diversion based water supply system through buried pipes. The major advantages of buried pipe line system over open canal includes increased irrigation efficiency by minimizing water loss, more economic return per unit of water and much lesser operation and maintenance cost and time.

On recommendation of JRM on OTELP, buried pipe irrigation projects were also taken up in large scale which proved to be advantageous over traditional small scale irrigation systems in terms of durability and cost.



DBI Irrigating vegetable field



Hydraulic Ram for Upland Irrigation

To cover more area under irrigation with the available water i.e. to increase water use and irrigation efficiency, the programme further facilitated micro-irrigation systems out of its own fund and in convergence with National Horticulture Mission, the details of which are discussed in subsequent chapters.

The major interventions made for development of water resources are given in the table placed below:

Activity	Unit	During 2014-15	Cumulative Total up to March, 2015
Check dam (New)	nos.	43	541
Check dam (Renovation)	nos.	1	17
Diversion Weir (New)	nos.	5	172
Diversion Weir (Renovation)	nos.	2	25
Diversion based irrigation structure (piped)	nos.	8	68
Lift Irrigation projects (river/ open source/ bore well/ dug well)	nos.	7	446

Piped water supply project for domestic use & irrigation (gravity fed)	nos.	17	401
Piped water supply project for domestic use & irrigation (sanitary well/ bore well)	nos.	24	211
Field Canal / Earthen Canal (New)	nos.	3	381
Field Canal / Earthen Canal (Renovation)	nos.	0	176
Masonry canal (new)	nos.	2	418
Masonry canal (renovation)	nos.	0	466
Water Harvesting Structure/ Irrigation tank (New)	nos.	7	597
Water Harvesting Structure/ Irrigation tank (Renovation)	nos.	10	101
Farm Pond	nos.	7	1240
Percolation tank/ sunken pond	nos.	1	184
Irrigation well/ chuan (open)	nos.	33	1196
Hydram project for upland irrigation & domestic use	nos.	3	24
Renovation of Open well / dug well	nos.	0	277

Source: MIS 2014-15

3.1.5 Biological Measures



Cover Crop

Biological measures and practices are low cost measures in watersheds and meant for moisture retention and reduction of soil erosion. When combined with mechanical measures, it provides structural stability to the mechanical measures and increases its effectiveness and life span. In addition to, it provides additional income to the farmers. All types of plantations, cover cropping, mulching etc. comes under this category.



The major activities under biological measures are presented in the following table.

Activity	Unit	During 2014-15	Cumulative Total up to March, 2015
Forestry/ Mixed tree species plantation	ha.	0	2492
Horticultural plantation	ha.	45	1925
WADI model plantation	ha.	25	1731
Backyard Plantation	HH	0	9844
Bund / Contour Plantation	rmt.	0	637510
Avenue plantation	km.	0	90

Source: MIS 2014-15

3.2 Outcomes: Land & Water Management

a. Conversion of non-arable land to arable land:

The land development interventions undertaken by the programme during the year benefited 1537 families by converting 622 ha. Non-arable land into arable. These families are cultivating paddy, maize, pulses, oilseeds and vegetables etc. and have increased their income. The details of output during the year and since inception of the programme are as per the following table.

Particulars	During 2014-15	Cumulative Total up to March, 2015
Non arable land converted to arable (ha.)	33	11937
Farmers benefited (nos.)	1537	44534

Source: MIS 2014-15

b. Additional irrigation support :

Water resources development helped in providing irrigation facilities to the non-irrigated land as a result of which additional land was covered under irrigation and cropping intensity was also increased.

Year	Cum. Area Irrigated (in Ha.)	Cum. Additional Area cultivated (in Ha.)	
		Kharif	Rabi
2005 -06	464	25	2
2006 -07	2126	768	272
2007 -08	6308	1639	1350
2008 -09	9746	3306	2621
2009 -10	11425	4592	3826
2010 -11	12058	8862	5419
2011 -12	13974	14197	6756
2012 -13	17131	18634	7405
2013 -14	18789	20914	7865
2014 -15	19475	23915	8745

Source: MIS 2014-15

The below table indicates that 3881 farmers are benefited by the irrigation infrastructures developed which created irrigation facility for 1658 ha. of land during 2014-15.

Particulars		During 2014-15	Cumulative Total up to March, 2015
Additional area irrigated (ha.)	ha.	686	19475
Farmers benefited (nos.)	nos.	3881	28057

Source: MIS 2014-15



Chapter 4

Production System Enhancement

4.1 Agriculture and Horticulture Development

Odisha is an agrarian state. Almost 70 percent population of the state is dependent on Agriculture. The Agriculture sector contributes about 16 percent of the Gross State Domestic Products, with more than 70 % population dependent resulting in Low Per Capital Income. The tribal communities and other caste in the OTELP programme areas live in mountainous areas undulated with hills and valley. They are still in the state of subsistence agriculture. They have not been able to encash the benefits of modern agriculture technology. OTELP has attempted to bring a paradigm shift in socio –economic development of the tribal families through community empowerment and Livelihood promotion of the tribals of OTELP areas as they get more of their income from Agriculture sector. Priority has been given for technological improvement for production enhancement of agriculture, Bio diversity conservation of local varieties, up scaling of the best practices, Crop diversification, demonstration of nutrition dense crops promotion of backyard kitchen garden, practices of low monetary inputs, Informal seed production, drusery reduction farm machineries etc are some of the key programme interventions taken up during the year 2014-15.

Key activities through programme initiation:

4.2. Cropping Strategy:

a. Diversification of Cropping :

Water is the most limiting factor for agricultural production and erratic distribution of rainfall is one of the major reason for Low production in unbounded high lands. In order to mitigate the moisture stress/ drought situation the farmers are encourage for to take non – paddy crops in rainfed up land. Crops like coarse cereals (Maize, Jowar, Ragi & Minor millets), Pulses (Pigeon pea, Black gram, Cowpea, Horse gram), Oil seeds (Groundnut, Niger), Vegetables, Tuber crops, Spices (Ginger, Turmeric) are promoted alone or in combination instead of paddy crop. 2535 ha of upland paddy area have been diverted to non paddy crops by 10674 farmers in different programme districts during 2014-15



1. Achievement on Agri. & Hort. During 2014-15 (DCP)									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	260	1170	312	1248	622	2488	1194	4906
2	Paralakhemundi	234	663	61	242	192	303	487	1208
3	Balliguda	26	55	42	88	25	58	93	201
4	Th.Rampur	10	37	10	46	25	340	45	423
5	Nawarangpur	0	0	0	0	0	0	0	0
6	Malkanagiri	0	0	170	1293	180	1727	350	302
7	Gunupur	0	0	366	916	0	0	366	916
Total		530	1925	961	3833	1043	4916	2535	10674

b. Inter Cropping system

Two or more crops are promoted simultaneously in same piece of land under rainfed high lands for acting as an insurance against the crop failure. A combination of legume & cereal crops (pigeon pea + paddy in 2:5 ratio) are promoted as this system reduces input of nitrogen and give partial substitution of paddy. Besides other inter cropping systems like pigeon pea + ragi (2:4), maize + cowpea (2:2), yam + maize (1:2) and maize + runner bean (2:2) have also been promoted for giving higher income in aberrant weather, in the non irrigated highlands instead of mixing 4-5 crops and going for mixed cropping by the farmers traditionally. 2112 ha of upland area covering 8613 farmers in different programme districts have been up scaled during rainy season, 2014.



2. Achievement on Agri. & Hort. During 2014-15 (Intercropping System)									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	125	670	175	1060	223	1168	523	2898
2	Paralakhemundi	247	1075	165	755	145	681	557	2511
3	Balliguda	45	105	67	75	28	35	140	215
4	Th.Rampur	8	80	6	55	12	120	26	255
5	Nawarangpur	0	0	400	1500	220	600	620	2100
6	Malkanagiri	0	0	56	147	80	260	136	407
7	Gunupur	0	0	110	227	0	0	110	227
Total		425	1930	979	3819	708	2864	2112	8613

c. Sequential Cropping :

In sequential cropping, two or more crops are promoted in same piece of land in succession one after another. Farming system & location wise details are placed below:

Under rain-fed ecosystem :-

This is divides decides of moisture region on the soil Field pea /black gram / mustard / chickpea is promoted after paddy in medium and lowlands instead of keeping fallow of the lands after harvest of Kharif paddy for increasing household income. Besides mustard/ black gram/ kulthi is also grown after harvest of kharif maize. Field pea/ black gram is also sown 15-20 days before harvesting of medium land paddy in the programme areas. In such situation, after harvest of the kharif paddy the field pea crop is successfully grown under residual soil moisture condition. The above 2nd crops under rain-fed situation are harvested successfully availing residual moisture and few showers of rain in the post rainy season and farmers get additional income from these crops. 8612 farmers of OTELP areas taken up 2nd crop in an area of 2856 ha in the rainfed ecosystem during post rainy season 2014.

3. Achievement on Agri. & Hort. During 2014-15 (Sequential cropping) Rain fed									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	135	252	242	1403	456	567	833	2222
2	Paralakhemundi	129	239	90	522	244	292	463	1053
3	Balliguda	37	69	52	303	62	75	151	447
4	Th.Rampur	230	426	140	815	150	195	520	1436
5	Nawarangpur	0	0	340	1992	292	351	632	2343
6	Malkanagiri	0	0	95	551	83	102	178	653
7	Gunupur	0	0	79	458	0	0	79	458
Total		531	986	1038	6044	1287	1582	2856	8612

Under irrigated ecosystem :- Irrigation facilities have been developed in most of the villages through interventions under land and water management component. The popular two crop patterns in the programme areas are: rice– mustard/black gram/vegetables/chick pea, monsoon potato-winter vegetables, kharif tomato/ cauliflower./cabbage/radish-winter vegetables, maize - vegetables/mustard. Besides three crop patterns like rice – vegetable – vegetable and vegetable – vegetable – vegetable are also done in programme areas. Based on the experience of previous years 7804 farmers have taken up 2nd crop/3rd crop in an area of 2700 ha in the irrigated ecosystem during post rainy season 2014 .

4. Achievement on Agri. & Hort. During 2014-15 (Sequential cropping) Irrigated									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	75	375	160	815	305	1525	540	2715
2	Paralakhemundi	93	477	52	264	152	608	297	1349
3	Balliguda	65	135	95	210	85	185	245	530
4	Th.Rampur	42	396	36	296	64	452	142	1144
5	Nawarangpur	0	0	450	700	175	482	625	1182
6	Malkanagiri	0	0	25	104	28	110	53	214
7	Gunupur	0	0	268	670	0	0	268	670
Total		275	1383	1086	3059	809	3362	2100	7804

d. Introduction of new crops and varieties

Introduce appropriate technologies and management practices for enhancement productivity of promising rice Land races Kala Jeera & machakanta along with other high yielding paddy variety Paddy (Khandagiri, Lalat, Naveen, Swarna, Jajati, MTU 1010, Surendra sahabhagi), Pratikhya Maize (PAC751, 3401,3501, All rounder), Ragi (Bhairabi,Chilika, GP428, CPU67) Pigeon pea (Asha), Chick pea (ICC37 (desi) & KAK 2 (kabuli)), Black gram (PU94-2), Ground nut Devi), Niger (GA-10), Turmeric (Lakadong), Lakmi marati Kamica Elephant foot yam (Gajendra), Pineapple (Queen,Que), Orange flesh sweet potato, Brinjal (Green star,Blue star), Off season cauliflower (Pusa early, Pusa deepali), Offseason cabbage (Konark, Deepa), Runner bean (Pottangi local, Udayagiri local, Radish (Pusa Chetki), Tomato (Utkal Pallavi, Utkal Dipit ,Utkal Kumari), Okra (Utkal Gourav), Chilly (var - Utkal Abha), Monsoon potato (var- Kufri Jyoti), Onion (var: Agri found derkred have been promoted in the programme areas.



The details of areas under introduction of new crops during 2014 Kharif are as follows:

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	172	516	318	1082	465	1398	955	2996
2	Paralakhemundi	1929	5877	1150	3158	1537	4621	4616	13656
3	Balliguda	65	195	108	327	20	50	193	572
4	Th.Rampur	9	37	16	51	19	68	44	156
5	Nawarangpur	0	0	82	262	110	275	192	537
6	Malkanagiri	0	0	123	395	117	392	240	707
7	Gunupur	0	0	157	587	0	0	157	587
Total		2175	6625	1954	5862	2268	6804	6397	19291

The details of areas under introduction of new crops during 2014-15 Rabi are as follows:

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	22	132	65	392	92	552	179	1076
2	Paralakhemundi	237	753	124	791	275	1459	636	3003
3	Balliguda	24	400	36	600	0	0	60	1000
4	Th.Rampur	0	0	0	0	0	0	0	0
5	Nawarangpur	0	0	47	350	50	156	97	506
6	Malkanagiri	0	0	54	851	69	1261	123	2112
7	Gunupur	0	0	5	255	0	0	5	255
Total		283	1285	331	3239	486	3428	1100	7952



4.2.3. Informal seed production and linkage with village seed banks

Farmers have realized that productivity of different crops increase significantly due to use of quality seeds. Basing on the learning experience of the previous years, a systematic programme was drawn up for informal seed production during Kharif, 2014 and linking the same to village seed bank. The idea of operationalisation of the concept of 'village seed bank', (VSB) is to make village self-sufficiency in production and distribution of quality seeds. Accordingly, 45 village level seed banks were established during 2014-15. 911 qtls of paddy seeds procured by women SHGs of village level seed banks from the seed growers & sold to 7592 farmers after processing, bagging and stitching of the bags.



Sl No.	Name of The ITDA	Quantity (qtl)
1	Balliguda	72.00
2	Paralakhemundi	250.00
3	Gunupur	272.00
4	Malkanagiri	100.00
5	Nawarangpur	80.00
6	Koraput	136.80
	Total	911.00

The Average Profit / SHG is Rs. 6234.00

4.2.4. Vermi composting (Recycling wastes into valuable organic fertilizers):

272 Vermi compost units were established and 56224 kg vermin compost produced in different programme areas as stated below during 2014.

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		unit	Quantity (Kg)	unit	Quantity (Kg)	unit	Quantity (Kg)	unit	Quantity (Kg)
1	Koraput	0	0	45	9302	0	0	45.00	9302
2	Paralakhemundi	20	4134	27	5581	0	0	47.00	9715
3	Balliguda	0	0	0	0	0	0	0.00	0
4	Th.Rampur	0	0	0	0	0	0	0.00	0
5	Nawarangpur	0	0	100	20670	0	0	100.00	20670
6	Malkanagiri	0	0	35	7235	45	9302	80.00	16537
7	Gunupur	0	0	0	0	0	0	0.00	0
Total		20	4134	207	42788	45	9302	272	56224

4.2.5 Promotion of farm mechanization:

Farm mechanization is the process of using Agricultural Machineries for increasing production & productivity of land, return & profitability to the farmer and comfort & safety by timeliness of operation, saving labour requirement, cropping intensity and reduction in human drudgery. In OTELP, Farm Mechanization is taken up by way of owning Agricultural Machineries (Tractor, Power tiller & other equipments) by SHGs. These machineries are being utilized for summer ploughing & other agricultural operations on custom hiring to fellow farmers. This has been introduced as an income generating activities of SHGs. Summer ploughing helps to kill weeds hibernating insects and disease causing organisms by exposing the soil to summer heat. Besides summer ploughing improves soil structure due to alternate drying and cooling. Soil permeability is increased by breaking the compacted layers. 20 nos. Tractor and 102 Power Tillers have been purchased by the SHG during the year 2014-15. The source of funding is from SCA to TSP, Article-275 subsidy from Agriculture Department, and Contribution by SHGs

Sl No.	Name of The ITDA			OTELP Plus			Total		
		Power Tiller	Tractor	Tiller (nos.)	Tractor (nos.)	Other Implements (nos.)	Tiller	Tractor (nos.)	Other Implements (nos.)
1	Koraput	17	0	7.00	0	0	10	0	0
2	Paralakhemundi	19	0	0	0	0	13	0	0
3	Balliguda	4	8	1.00	0	250	2	3	610
4	Th.Rampur	7	0	0	0	0	0	0	17
5	Nawarangpur	31	4	25.00	35	153	43	36	193
6	Malkanagiri	21	0	10.00	0	45	29	0	81
7	Gunupur	3	8	0.00	0	0	2	8	0
	Total	102	20	43	35	448	99	47	901

The Average Profit / SHG is Rs. 29,258.00



4.2.6 Practice of low cost technology:

Ploughing across the slope, Summer ploughing, seed treatment, timely sowing & planting, growing of short duration variety of crops in upland & medium lands, application of organic manure (vermin compost / green manuring), use of bio-fertilizers, use of neem seed extract solution & its application against pest, use of bio- pesticides & micro- nutrients are some of the low cost technologies have practiced in OTELP areas during the year. They also reduces environmental hazards, thus accepted by the farmers. 34600 farmers are practicing low cost technology in an area of 18438 ha during the 2014-15.

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	223	1045	723	5095	1119	9314	2065	15454
2	Paralakhemundi	84	242	31	168	125	316	240	726
3	Balliguda	2132	2367	3504	3212	2565	3155	8201	8734
4	Th.Rampur	0	0	39	1291	0	0	39	1291
5	Nawarangpur	0	0	6200	3000	100	800	6300	3800
6	Malkanagiri	0	0	125	670	214	1051	339	1721
7	Gunupur	0	0	1254	2874	0	0	1254	2874
Total		2439	3654	11876	16310	4123	14636	18438	34600



4.2.7 Ragi Development

In order to generate consumer demand for nutri cereal millets based food OTELP gave emphasis on Ragi Development. Ragi is a popular crop in the tribal areas as because it provides major food security to them. It is also highly nutritious. In the programme areas the tribal mostly consume Ragi at least once or twice daily. Bhairabi Chilika GPU 67 Ragi varieties are promoted by OTELP with Support from OUAT and Agriculture Department during the year 2014-15. These varieties of ragi have been taken up in OTELP areas in 907 ha covering 3612 famers.

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	60	222	200	637	330	825	590.00	1684
2	Paralakhemundi	25	133	32	168	30	196	87	497
3	Balliguda	10	85	15	67	15	110	40.00	262
4	Th.Rampur	10	78	20	133	0	0	30.00	211
5	Nawarangpur	0	0	30	220	10	75	40.00	295
6	Malkanagiri	0	0	30	150	50	250	80.00	400
7	Gunupur	0	0	40	263	0	0	40.00	263
Total		105	518	367	1638	435	1456	907	3612

4.2.8 Cultivation of Hybrid Maize

The maize is the C4 plants OTELP promotes cultivation of maize both in Kharif and Rabi for carbon harvesting. The maize grows well in the climatic condition of the programme areas. It provides food for human being and livestock. Maize is gaining popularity among the tribal farmers of programme areas special in Gajapati, Nawragapur, Koraput & Malkanagiri districts 11621 farmers an area of 5790 hect during 2014 Kharif and 1473 farmers in an area of 536 ha during Rabi have taken up maize.



Cultivation of Hybride maize: Kharif									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	24	120	60	300	100	500	184.00	920
2	Paralakhemundi	629	1347	642	1492	595	1743	1866.00	4082
3	Balliguda	22	55	25	65	20	50	67.00	170
4	Th.Rampur	10	25	14	35	16	40	40.00	100
5	Nawarangpur	0	0	1800	2460	1580	2316	3380.00	4776
6	Malkanagiri	0	0	65	305	82	1002	147.00	1307
7	Gunupur	0	0	106	266	0	0	106.00	266
Total		685	1547	2712	4923	2393	5151	5790	11621

With the creation of additional irrigation in OTELP areas cultivation of maize in rabi is increasing every years.

Cultivation of Hybride maize: Rabi									
Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	0	0	0	0	0	0	0.00	0
2	Paralakhemundi	0	0	0	0	0	0	0.00	0
3	Balliguda	0	0	0	0	0	0	0.00	0
4	Th.Rampur	0	0	0	0	0	0	0.00	0
5	Nawarangpur	0	0	150	210	350	910	500.00	1120
6	Malkanagiri	0	0	15	125	21	228	36.00	353
7	Gunupur	0	0	0	0	0	0	0.00	0
Total		0	0	165	335	371	1138	536	1473

4.2.9 System of Rice Intensification (SRI) & Line Transplanting of Paddy

SRI is a fascinating case of rural innovation that has been developed outside the formal rice research establishment. It is one of the resource conservation technology. This has been taken up in an area of 722 ha covering 3967 farmers during 2014-15.

Many farmers have felt that there is increase of root system in both volume and weight and increases tillers. The ultimate result is increase of productivity by 20-25 % compared to traditional practice.



Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	9	45	22	110	30	150	61.00	305
2	Paralakhemundi	142	575	32	163	64	440	238.00	1178
3	Balliguda	4	15	175	875	20	35	199.00	925
4	Th.Rampur	6	15	0	0	0	0	6.00	15
5	Nawarangpur	0	0	40	125	68	232	108.00	357
6	Malkanagiri	0	0	45	542	65	645	110.00	1187
7	Gunupur	0	0	0	0	0	0	0	0
Total		161	650	314	1815	247	1502	722	3967

Line transplanting of Paddy

Agriculture departments supporting farmers for line transplanting. It is easy for inter cultural operation like weeding hoeing and applications of fertilities and taking plant protection measures. Line sowing is gaining popularity OTELP areas. This has been taken up in an area of 2377 ha covering 6679 farmers during 2014-15. The details are as follows.

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	45	225	200	1000	300	1500	545.00	2725
2	Paralakhemundi	247	729	122	273	382	933	751.00	1935
3	Balliguda	24	52	132	250	22	45	178.00	347
4	Th.Rampur	52	132	11	25	22	56	85.00	213
5	Nawarangpur	0	0	207	348	170	355	377.00	703
6	Malkanagiri	0	0	30	150	50	250	80.00	400
7	Gunupur	0	0	361	356	0	0	361	356
Total		368	1138	1063	2402	946	3139	2377	6679

4.2.10 Growing of Orange flesh sweet potato:

Sweet potato is an important crop taken up for food, feed and raw materials for industries. Vines can be used as fodder for cattle during off season. Malnutrition is a serious threat to health & productivity of people in most of the tribal areas. Vitamin A deficiency increases the risk of night blindness. One possible solution for addressing vitamin A deficiency is through a food based approach using orange-fleshed sweet potato as an inexpensive source of beta-carotene (the pre-cursor to vitamin A). community nurseries have been established for supply of vines to meet the demand of the community. An area of 20 ha was covered by 178 farmers during 2014 as detailed below.



4.2.11 Backyard Kitchen Gardening for nutrition security and supplementary source of income:

For greater nutrition security and dietary diversity at household leveled Back yard kitchen garden (Home garden) were promotes in 7430 house hold to meet their daily vegetables required for the kitchen. Fresh fruits and vegetable from home garden provide carbo hydrate, proteins, vitamins, minerals & fats that are essential to our body. Hence home garden provides convenient and economic source of nutritious and balance diet for the rural and tribal family. Inclusion local varieties of tasty vegetables (Sag) tuber s like radish Gazar and vegetables like, Brinjal, vendi, Beans, cumcubits, Tamato etc. Fruit bearing plants like Papaya, Banana, Lemon, Drumstick and Curry leaf were also planted on the border of kitchen garden

ITDA	Area (Ha)	No of farmers
Koraput	13	90
Paralakhemundi	7	88
Total	20	178

4.2.12 Poly House :

Crops/Seedlings are grown in protected environment. Hence poly green house regulates temperature, ventilation, light intensity, humidity etc & facilitates for raising of quality seedlings. 59 poly nurseries each 160 m² area have been functional in OTELP Programme areas. Programme staff facilitates Women SHGs for procurement of quality seeds for raising seedlings in the poly houses and supply the same to the farmers. On an average ,each women SHG has got a net profit varies from of Rs.14000 to Rs. 21000 by selling vegetable seedlings from one poly house.

ITDA	Poly houses (no.)
Koraput	10
Paralakhemundi	20
Balliguda	15
Nawarangpur	6
Gunupur	8
Total	59



4.3.1 IMPACT OF IFAD ASSISTED SCAMPIS -Micro Irrigation Project

The project successfully demonstrated the improved water use efficiency in enhancing productivity of vegetable and other crops in 469 villages of programme areas of Gajapati and Koraput district by providing 15105 units of micro irrigation system covering 11500 households. The upscaling programme during 2014 is given below:

ITDA	No of micro irrigation kits used		
	Bucket kit	Drip kit	Treadle pump
Koraput	147	161	48
Paralakhemundi	760	608	852
Total	907	769	900

4.3.2 Enhancing livelihood of tribal through promotion of vegetable cultivation.

The agro climatic zone of the programme areas of OTELP is very much suitable for vegetable cultivation especially off-season vegetables. Vegetables are low in fat but content good amounts of vitamins and minerals. The tribal farmers of the programme areas mostly do not take required quantities of vegetables. Many tribal farmers consume only carbohydrates for which there is acute mal nutrition. Emphasis has been given for production of vegetables. During 2014-15 5430 ha vegetables mainly Brinjal, Tomato, Radish, Cucurbits, Leaf vegetables taken up in the OTELP areas by 28089 farmers. This intervention address the nutritional food security of the tribal farmers.

Kharif

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	125	920	232	1656	265	2285	622	4861
2	Paralakhemundi	204	1243	140	857	164	918	508	3018
3	Balliguda	332	830	565	1412	250	627	1147	2869
4	Th.Rampur	48	506	43	1195	42	454	133	2155
5	Nawarangpur	0	0	85	275	72	220	157	495
6	Malkanagiri	0	0	112	680	143	1217	255	1897
7	Gunupur	0	0	60	1500	0	0	60	1500
Total		709	3499	1237	7575	936	5721	2882	16795

Rabi

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	62	558	115	920	222	1676	399	3154
2	Paralakhemundi	64	455	55	404	90	538	209	1397
3	Balliguda	432	1225	765	1950	350	905	1547	4080
4	Th.Rampur	35	360	30	246	57	425	122	1031
5	Nawarangpur	0	0	89	282	0	0	89	282
6	Malkanagiri	0	0	86	520	96	830	182	1350
7	Gunupur	0	0	0	0	0	0	0	0
Total		593	2598	1140	4322	815	4374	2548	11294

Promotion of Potato & Onion cultivation

Govt. of Odisha providing incentives to farmers for Patato & onion crops. OTELP areas climate is suitable for growing potato and onion both – Kharif & Rabi season Potato and onion cultivated an OTELP areas during 2014-15 as indicates

Potato

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	15	75	60	260	20	120	95.00	455
2	Paralakhemundi	6	66	8	93	0	0	14.00	159
3	Balliguda	54	150	95	240	42	110	191.00	500
4	Th.Rampur	5	30	6	41	12	72	23.00	143
5	Nawarangpur	0	0	32	108	52	155	84.00	263
6	Malkanagiri	0	0	32	153	35	171	67.00	324
7	Gunupur	0	0	8	139	0	0	8.00	139
Total		80	321	241	1034	161	628	482	1983

Onion

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	36	116	51	206	40	240	127	562
2	Paralakhemundi	8	95	4	78	20	133	32	306
3	Balliguda	108	265	190	385	85	175	383	825
4	Th.Rampur	5	48	4	43	5	39	14	130
5	Nawarangpur	0	0	110	225	100	325	210	550
6	Malkanagiri	0	0	3	65	7	93	10	158
7	Gunupur	0	0	9	132	0	0	9.8	132
Total		157	524	371	1134	257	1005	785	2663

Enhancing livelihood of tribal through Gravity based drip irrigation for vegetable cultivation on raised beds.

Productivity & profitability from vegetable cultivation is increased by use of low pressure drip irrigation system as compared to traditional flood irrigation. Poly house is very suitable to provide favorable climate for germination of seeds and protection of seedlings from adverse weather conditions and quality seedlings are raised. Considering the above facts 2257 farmers each with having 1000 M2 area have taken up commercial vegetable cultivation in the raised beds after laying pressure compensated drip kits.

546 farmers of OTELP areas have taken up commercial cultivation of vegetables with trellis. The ITDA wise detail as indicated.



The achievements of the few farmers under the above programme are placed below:

ITDA	No. of Functional Drip	No off treills	Total Nos
Koraput	870		
Paralakhemundi	222	87	309
Balliguda	579	165	744
Th.Rampur	208	82	290
Nawarangpur	178	84	262
Malkanagiri		65	65
Gunupur	200	93	263
Total	2257	546	2803



Name of the Grower	Village/ District	Crop	Yield obtain from 1000sqmt in qtl.	Average sale rate(Rs) in Kg	Net amount (Rs.)
Thabira Bharta	Sirisiguda PapadahandiNawarangpur	Chilly	13.00(green)	20-30	26500
			1.00(dry)		
Sadasenapati	Gullel	L finger	10	20-30	20000
	Semeliguda				
	Koraput				
Dayanidhi pujari	Gullel	Bitter gourd	6.4	25-30	16000
	Semeliguda				
	Koraput				
Arjuna Bathra	Jabaguda	Chilly	12	15-30	23000
	Nawarangpur	Brinjal			
Pipa Hikaka	Begalguduri	Tamato	25	20-25	30400
	Bissamcuttack	Brinjal			
		Bittergourd			
Nikapoki Hikaka	Jambuguda	Tamato	20	20-25	18940
	Bissamcuttack	Brinjal			
Rasa Pradhan	Gudrumla	Cabage	20	15-20	24000
	Balliguda				

Vegetable cooperatives facilitated the vegetable growers for market linkage in Bissamkatak & Balliguda areas through producer co-operative. Two sale centre was opened at Balliguda of Kandhamal & Bissamkatak of Rayagada district for sale of vegetable like cabbage, tomato, cauliflower & beans directly by the famers eliminating middleman. 21 no. of aggregation centre & 6 no. of vegetable co-operative are in progress for providing market linkage to the vegetable growers of Koraput, Balliguda, Nawarangpur & Gunupur OTELP areas.



4.3.3RKVY

The agro climate situation of OTELP areas is very favorable for production of Tuber crops, Organics spices and vegetables. The Tribals grow traditional varieties of these crops with traditional practices in sloppy and marginal land for which the productivity is low. In order to bring the tribal farmers to the main stream of Agricultural development, OTELP implemented a programme during 2014-15 with support from RKVY. **The programme supplementing Livelihood options in OTELP programme areas through field based cropping** with a financial outlay of Rs. 501 lakhs. The major project interventions were on Bio-diversity conservation of traditional crops, Replication & up scaling of best practices, Promotion of tuber crops spices & vegetable and Crop demonstrations for the PoPs. The details of demonstrations conducted as indicated below:.

Crop demonstration	No. of Households	Unit area in Sq.m	Area (ha)
i) Bio-diversity conservation of traditional crops			
Paddy	640	1000	64.0
Ragi	510	1000	51.0
Nutritious cereals & Lesser millet	370	1000	37.0
Pulses	155	1000	15.5
Total	1675		167.5
ii) Replication & upscaling of best practices			
Ragi	1030	1000	103.0
Oil seeds -Niger	280	1000	28.0
Oil seeds - Mustard	600	1000	60.0
Total	1910		191
iii) Tuber crops			
Elephant foot yam	522	100	5.22
Total	522		5.22
iv) Organic spices			
Turmeric	3395	200	67.9
Chilly	1700	200	34.0
Onion	4500	200	90.0
Total	9595		191.9
v) Vegetables including off season vegetables			
Brinjal	4000	400	160.0
Tomato	3970	400	158.8
Radish	4057	400	162.28
Potato (Monsoon)	2100	400	84.0
Total	14127		565.08
vi) Crop demonstration programme for Poorest of the Poor (PoP)			
Paddy & Ragi	900	4000	360.0
Total	900		360.0
A. Grand total (i to vi)	28729		1480.7

Capacity building

Trainers training of Agriculture Experts of ITDAs and Livelihood Experts at FNGO level were done on production technology of tuber crops, organic spices and vegetables at CTCRI / CHES, Bhubaneswar

At village level 4500 farmers & farm women have been trained on improved technology of different crops taken up under RKVY through 150 training camps. The scientists from ICAR Institute & SAU, senior specialists from Agriculture Deptt. & retired scientist / specialist on the relevant subject imparted the training. 20 nos. exposure visit programme to RCCTCRI & CHES was organize & 320 nos. farmers have been participated.

4.3.4 Promotion of WADI Model of Orchard

A fruit based agro-forestry system of plantation under upland situation comprises of a combination of perennial & annual plant species in same piece of land for maximum productivity from the unit area. Fruit trees like mango, cashew, as pure crop or combination are sufficient enough for providing higher economic return even under stress conditions as compared to annual crops like paddy, pulses, oil seeds & even vegetable and spices. The different combination of fruit species covered under the programme areas are mango + cashew & Mango pure crops. The programme was converse with MGNREGS. The ITDA wise achievements during 2014-15 are as follows:



Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	0	0	0	0	123	263	123	263
2	Paralakhemundi	143	298	0	0	217	465	360	763
3	Balliguda	37	26	0	0	49	42	86	68
4	Th.Rampur	40	107	0	0	6	16	46	123
5	Nawarangpur	0	0	0	0	218	354	218.00	354
6	Malkanagiri	0	0	0	0	0	0	0	0
7	Gunupur	0	0	0	0	0	0	0	0
Total		220	431	0	0	613	1140	833	1571

Plantation taken under SCA to TSP

Sl No.	Name of The ITDA	Phase-I		Phase-II		OTELP Plus		Total	
		Area	Beneficiary	Area	Beneficiary	Area	Beneficiary	Area	Beneficiary
1	Koraput	50	45	85	41	0	0	135.00	86
2	Paralakhemundi	0	0	0	0	0	0	0.00	0
3	Balliguda	0	0	0	0	0	0	0.00	0
4	Th.Rampur	0	0	0	0	0	0	0.00	0
5	Nawarangpur	0	0	0	0	0	0	0.00	0
6	Malkanagiri	0	0	18	55	120	251	138.00	306
7	Gunupur	0	0	0	0	0	0	0	0
Total		50	45	103	96	120	251	273	392

4.3.5. Inter cropping in WADI

1151 WADI farmers have taken up intercropping with vegetables and spices in the programme areas or OTELP during 2014-15. On an average each WADI farmer has got a net profit of Rs.5250.

4.3.6. Support for ultra poor

In order to bridge the gap between poor and ultra poor during 2014-15 IFAD provided support for Rs.980.18 Lakhs under creation and development of irrigation infrastructure and focus livelihoods interventions. Water lifting devices for the irrigation of crops and commercial vegetable cultivation with drip / trellis are provided to the ultra poor families of OTELP areas. The ITDA wise achievements during 2014-15 are indicated as below.



Sl. No.	Name of the ITDA	Support for the water lifting devices		Commercial vegetable cultivation	
		Physical in nos.	Financial(Rs. in lakhs)	Physical in Nos.	Financial (Rs. in lakhs)
1	Koraput	156	23.39	438	162.07
2	Paralakhemundi	1021	151.76	262	202.86
3	Balliguda	131	16.20	205	46.24
4	Th.Rampur	14	1.98	185	88.06
5	Nawrangapur	135	19.58	98	47.32
6	Malkanagiri	92	13.95	65	75.05
7	Gunupur	158	24.31	63	23.14
Total		1707	251.17	1316	644.74

4.4 LIVESTOCK AND AQUACULTURE PRODUCTION

In OTELP operation villages about 75% households are below the poverty line (BPL) & 24% are absolute landless. These tribal families depend on subsistence agriculture. OTELP adopts micro watersheds as a unit of planning & implementation with community participation for livelihood promotion including farm, off farm & nonfarm enterprise interventions. The income from traditional agriculture being low due to seasonal (rain fed) is unable to provide full employment for working class. The major issues for the poor & landless tribal are food security & risk spreading through subsidiary income. Therefore, there is dependency on non-farm activities like poultry & goatery for supplementary income. Backyard poultry farming requiring hardly any infrastructure set-up is a potent tool for upliftment of the poorest of the poor. Small-scale poultry production through individual broiler farming also has the potential to stimulate economic growth of resource poor households. In order to overcome this problem, it may be necessary to take up scientific rural poultry production by introduction of low input technology dual purpose birds & improved broiler farming so as to meet the requirement of the rural sector where the poultry farming constitute a source of subsidiary occupation, generating subsistence income to boost the nutritional standards, income levels and health of rural masses.



The income from this activity, equivalent to 200 wage days reduces outward migration and helps the family to invest in existing resources-most notably in her land (arable or homestead) further augmenting the sufficiency in the hither to deficit house hold.

Looking into vast scope of Poultry farming both in terms of backyard poultry farming with low input technology & dual purpose birds & improved broiler farming amongst the rural poor & tribal families in OTELP operational area, poultry was taken as focused livelihood intervention in OTELP operational area with the assistance under SCA to TSP & SCA to SCSP. The interventions were as follows:

- Establishment of day old chick rearing units (mother units) by the women SHGs.
- Backyard poultry & Duckery farming by the tribal families
- Improved broiler & layer farming by the individual tribal families

The programme also focused on goat rearing and pisci-culture in an improved manner for sustainable livelihood of the tribal farmers in OTELP blocks of tribal districts of the state. Each of these programme are elaborated below:

4.4.1 Establishment of day old chick rearing units (mother units) by the women SHGs :

As the day old chicks are vulnerable to predators in free range conditions, the day old chick rearing units were established so as to rear the day old chicks in a reasonably controlled condition with proper brooding facility, balanced feeding, vaccination & medication up to 28-30 days and thereafter provided individual tribal households to be reared in open range conditions. The poultry birds Vanaraja, Colour plus, Rainbooster & Kuroiler etc are reared under backyard poultry programme . They are multi coloured birds with high egg laying capacity like exotic layers and high weight gain like those of broilers. The SHG managing the mother chick unit for a period of 28 days makes an additional income of Rs. 9000 to 10000 per cycle & there by a SHG receives an additional income of Rs.45000 to 50000 per annum in 5 cycles. As on 31st March, 2015, 93 Nos. of Mother Chick Units are functional under OTELP operational area.



4.4.2 Improved Broiler Farming:

Under rural poultry farming, improved broiler farming has been introduced by individual tribal households in small units of 400 chicks capacity. The tribal family is provided assistance to build a shed of 400 sq.ft. for rearing 400 nos day old broiler chicks (Cobb 400) for a period of 35 to 40 days. Efforts are also made to build the capacity of the tribal famers in shed management, chick management, feeding, vaccination & water management etc. 548 nos. individual broiler units are already in place and functioning as on 31st March, 2015. Each tribal family earns on an average additional income of Rs.4000/- per cycle and thus earns Rs.20,000/-per annum from this livelihood activity by devoting 1 to 2 hours per day. In addition to this the Poultry Co-operative also transfers a part of its profit as dividend at the end of the financial year as per quantity of chicken supplied to the Co-Operative. The poultry Co-Operative has passed on Rs.4/- per Kg as additional incentive to the members managing broiler units. The improved poultry farming (Broilers) is facilitated by SwornaJyoti Womens' Poultry Co-Operative Federation Ltd. (SWPCFL). The Federation provides the backward & forward linkages for broiler farming through its district level co-operatives in ITDAs Koraput , Nawarangapur & Gunupur.



4.4.3 Supply of Chickens to ITDA Schools:

The quality chickens are supplied by the poultry Co-operative & the SHGs to the residential school hostels of ITDAs & Ashram Schools of the ST & SC Development Deptt. on regular basis at weekly intervals. As per norm each schoolchildren staying in the residential hostel is provided 100gms chicken once in a week and eggs twice in a week. Out of these 158 nos of ITDA residential schools with student strength of 30,709 are provided chickens once in a week preferably on Sunday. By promotion of poultry activities as an important livelihood intervention, this has not only increased the per capita income of the tribal families but also provides nutritional supplement to the poor tribal household and high quality protein rich diet to the school going children. The priority has been given for supply of quality chickens to the ITDA residential school hostels on regular basis. This initiative would ensure high quality protein rich diet to the school going children. The protein consumption in the tribal family would also increase and the poultry enterprise will provide a sustainable livelihood for the poor landless, small and marginal farmers of the tribal areas of Odisha. The status of supply of chickens to ITDA Schools is as follows:

Sl.No.	Name of the ITDA	No. of ITDA schools supplied chicken during 2013-14
1	Koraput	43
2	Gunupur	106
3	Nawarangpur	37
4	Malkangiri	12
5	Paralakhemundi	13
6	Th.Rampur	5
	Total	216

Source: MIS 2014-15

4.4.4 Establishment of Vanaraja Layers Parent Stock Farm:

In order to meet the demand of day old chicks for the Mother Chick Units, fund has been sanctioned under SCA to TSP during 2011-12 through the ST & SC Dev. Deptt. for establishment of Vanaraja Parent Stock farm with a capacity to rear 16000 Vanaraja layers out of the incentive grant of Rs.238.38 lakhs in ITDA, Koraput. An area measuring 28.00 acres in village Dimiriput of Koraput block has been provided with advance possession in favor of ITDA, Koraput and the civil works construction is in full swing. Further Rs.102.58 lakhs has also been sanctioned under article 275 by MoTA during 2013-14 for establishment of a Goat Breeding cum Training Centre at the same place.

4.4.5 Poultry Co-operatives:

The SwornaJyoti Women's Poultry Co-operative Federation Ltd. (SWPCFL), with its office at Jeypore, Koraput and HARSHA TRUST have made agreement with OTELP and the ITDAs to look after the poultry and Goatery activities being established in the tribal districts of Koraput, Nawarangapur & Rayagada and provide the backyard and forward linkages to the tribal families rearing broilers as well as Vanaraja /Kuroilers/ Rain booster variety poultry birds under backyard poultry farming. The Federation through its district level poultry co-operatives provides the day old chicks, feed, medicines, and vaccines at the doorstep apart from providing the marketing facility to the beneficiaries. There is a plan to promote poultry cooperative in each OTELP functional district. The SWPCFL has also been entrusted to facilitate poultry & goatery projects in ITDA, Koraput, Nawarangapur sanctioned under SCA to TSP during 2014-15. Mean while a Poultry company has been established namely "Kandhamal Poultry Development Corporation Ltd.(KPDCL) registered under Company Act during May,2012 under ITDA, Balliguda in the district of Kandhamal..Similarly OPOLFED shall facilitate rural backyard & layer poultry farming projects in ITDA, Parlakhemundi in Gajapati District.

Duck rearing (Indian Runner) gives on an average 150 to 200 eggs per year has also been started as a pilot project in the night shelters established under backyard poultry programme covering 79 nos. of households under ITDA, Koraput. The result from these activities quite encouraging as the tribal family earns an additional income of Rs.50/- to Rs.60/- per day by selling duck eggs. The poultry cooperative has also placed advance with Central Avian Research Institute (CARI),



Govt. of India, Bhubaneswar to supply 2000 nos. of day old Khaki Campbell ducklings during May, 2014. This variety of ducks (Khaki Campbell) gives on an average 250 to 300 eggs per year.

The SWPCFL has also started layer farming in the individual broiler units of 400 sqft. in 7 tribal households under ITDA, Koraput and in 3 MCU under ITDA, Nawarangpur by providing 200 nos. layer birds (BV – 300) to each household which are being reared in the broiler units. The birds are now 5 months of age and laying 100 to 120 eggs per day. It is estimated that each family rearing layer shall get additional income of Rs.15,000/- to Rs.18,000/- in a year from 200 birds. In a similar way the cooperative has also introduced a dual purpose bird called “Gramapriya” to be reared in the night shelters under scavenging condition. This bird has the capacity to lay 160 to 180 nos. of eggs up to 72 weeks. 48 tribal household have been covered under this programme.



4.4.6 SCA to SCSP Assisted Goatery Project:

The programme is also leverage funds through SCA to SCSP for promotion of Goatery unit. As off now we have procured 1795 mother goats and 83 bucks in Baliguda, Gunupur, Koraput, Malakanagiri & Th.Rampur ITDAs.

4.4.7 OTELP Intervention under Improved Goatery Farming:

In order to enhance the livelihood of Scheduled Caste Community under SCA to SCSP through various Livestock related interventions i.e. poultry, goatery, dairy, duckery & fishery, an amount of RS.2198.09 Lakhs has been sanctioned by the ST & SC Development Department to benefit 5203 SC & BPL beneficiaries under OTELP,ITDAs. Rs. 658.89 lakhs has been sanctioned by ST & SC Development Deptt. during the year 2013-14. The guidelines for implementing livestock activities along with the incentive based payments on activity wise to paravets & livestock Inspectors to be paid by the ITDAs, FNGOs, Poultry Co-operatives, Producer groups & VDC have also been communicated to all ITDAs along with transfer of fund required towards the investment cost, CB and Incentive to be paid to the paravets and livestock inspectors for the first 2 quarters.

4.4.8 IFAD TOP UP Assistance Loan Goatery Project:

The present goat rearing practices amongst the tribal is very traditional and unscientific. Kid mortality and mother mortality are as high as 40 % and 30% respectably. Hardly any tribal family avails veterinary service available from the government's veterinary department. OTELP plan is to further strengthen the services like regular health check up at the doorstep and regular vaccination, medication provided by the trained Para-veterinarians along with improvement of the local breeds by supply of improved quality Bucks. Thus it will restrict the kid mortality and mother mortality to 15% and 10 % respectively. Improved shed construction, enhanced knowledge of tribal about improved rearing practice, with crèche for kid goats, and feed supplement for pregnant and lactating mother goats will help in mitigating the risks in production. Proper feeding practice (preparation of dry fodder and silage, azolla cultivation also helps in increasing the immunity in goats and in increasing their body weight within a short duration. With the existing skill a tribal can easily rear 6 to 8 mother goats to get additional annual income of Rs.15,000 from the 3rd year of involvement in this activity.

Studying the success of the OTELP activities, the donor agency IFAD, had agreed to provide financial assistance for promoting different livelihoods activities in the operational areas. Goatery & Poultry is one among them. This assistance was provided for two years i.e. 2014-15 & 2015-16. The details for promotion of Goatery unit for the year 2014-15 as follows;



Progress of goat rearing unit in different ITDAs as on March 2015.						
ITDA	Target in AWPB 2014-15	No. of Sheds Completed	No. of goats required to be procured @ 5 per unit	No. of goats actually procured	No. of bucks required to be procured @ 1 per 5 unit	No. of bucks actually procured
Baliguda	309	309	1545	994	77	62
Gunpur	25	25	125	125	6	5
Paralakhemundi	825	825	4125	-	206	-
Koraput	332	332	1660	1530	76	78
Malkanagiri	127	127	635	635	32	32
Nawarangpur	238	238	1190	985	57	47
Th.Rampur	447	389	2235	721	111	34
Total	2303	2245	11515	4990	565	258

As reflected in the above table it indicates that out of 2303 projects 2245 goats sheds have already completed and 4990 mother goats as well as 258 bucks procured. Rest of the animals will be procured during the first quarter of 2015-16. The due emphasis is also given upon ensuring 100 percent goat insurance.

The existing goat cooperative is helping the tribal by providing services like regular medication, vaccination, timely castration, imparting training on improved goat rearing, grooming of paravets, arranging feed, insurance and sale of goats at a fair price etc. The focus is on women rearers involved in goat rearing and sustainably even after the end of the project.

4.4.9 OTELP Intervention Under Pisci Culture through DHAN Foundation:

Thus OTELP planned to promote inland fishery to maximize the utilization of existing water bodies & generate additional income for the farmers in Koraput & Nawarangapur district through DHAN Vayalagam (Tank) Foundation (DVTF). The DVTF is giving importance to conservation of minor rain fed water bodies such as Tanks and Ponds to receive water through rain water runoff during South west and North east monsoon period, only from their free catchments area without any other supplemental source. Normally these water resources are used for irrigation as well as for percolation.

DHAN is giving importance to develop community Inland fisheries development in these rural minor rainfed water bodies by providing “dead storage” in these water bodies. Dead Storage is the stored water below the sill level of Sluice which cannot be taken by gravitational force for irrigation. This will help to store water for two more months which help to rear fishes additional for two months and also helps as drinking source to cattle. The main objectives are to utilize existing water bodies, Supplement food & nutrition security through fish consumption in tribal villages and additional income by developing skills in Pisciculture.

In order to implement improved fish farming an agreement was executed between the OTELP and DHAN Vayalagam (Tank) Foundation, a public charitable Trust, Madurai, Tamilnadu since September 2012 for piloting inland fishery in 10 village ponds and 20 farm ponds as additional livelihood and added nutrition activities in Dasmantpur Block of Koraput district under ITDA, Koraput at a projected cost of Rs.11.58 lakhs. During 2012-13 inland fishery was piloted in 24 individual farm ponds & 10 community ponds under ITDA, Koraput with community approach covering about 140 households through two primary producers' group (PPG).



After seeing promising prospects it is decided to expand inland fishery in 50 community managed tanks & 70 individual ponds under ITDA Koraput & Nabarangpur under SCA to TSP during 2013-14. Nabarangpur is highly feasible for fish rearing as large numbers of village ponds are available in the district. Apart from that second crop was also geared up in thirty water bodies as continuation of previous Piloting project under ITDA, Koraput. After piloting fish rearing activities in OTELP areas of Dasmantpur block last season, some lessons learnt which are helpful in designing the course of action for fish rearing in the new project. The steps were taken up towards organizing the community. The fish growth & production is also an important instrument which highly motivates the community to continue this activity in a scientific way. Total 61 farm ponds & 29 community/ SHG managed ponds in four blocks of Nabarangpur and 38 individual farm ponds & 21 community/ SHG managed ponds out of which 20 farm ponds & 20 community/ SHG managed selected ponds are supported by ITDA, Koraput were taken up for fish rearing activities in three blocks of Koraput. More than 600 ST households were covered in this project. In short about 750 poor tribal families have been covered through 176 water bodies during the season in 2013-14 in both projects under ITDAs Koraput & Nabarangpur.



Sl no	Activity	ITDA, Koraput	ITDA, Nabarangpur	Total
1	No of Blocks	4	4	8
2	No of villages	34	17	51
3	Farm ponds	56	61	117
4	Community ponds	30	29	59
	Total	86	90	176

Major Project Activities Undertaken

- Five primary producers' group (PPG) in Koraput Dist. formed and six primary producers' group (PPG) are in process in Nabarangpur Dist
- All the ponds pre stock liming is done @100 to 200 kg/acre as per the pond condition and Post stock liming ensured during winter
- 350 finger lings stocked in farm ponds and 1000 to 2000 finger lings stocked in community tanks as per the water area.
- Raw cow dung applied regularly pre stock as well as monthly once post stock.
- Pro biotic used for disease control and growth of plankton
- At least three partial harvests per season were ensured to train the farmers about multiple stocking and harvest for better yield.

Impact of Pisciculture in Tribal Area Financial

- Income from individual farm pond ranges from Rs.5000 to Rs.10000
- Income from community tank ranges from Rs.12000 to RS.30000
- Money earned through pisci culture partially used for agriculture (Summer Paddy Harvest) & Special Saving for coming season fish rearing.

Social & Environmental

- Awareness was Created on Systematic Fish Rearing
- More Farmers are coming forward to take up Fish Rearing
- More ponds were created with focus on Inland fishery
- The farmers realized their responsibility resulting increased production and Income

Way Forward

In undivided Koraput district water resources are plenty in form of tanks and reservoir. There is a need to have context specific design and up scaling based on the experience gained. Most important is to build social capital and groom them as entrepreneurs. The inland fishery will definitely become a source of income as well as food and nutrition security for tribal households.

4.5 Rural financial services

Rural financial services ensure financial inclusion of the vulnerable groups. It provides financial services at door step. As per financial inclusion policy, Govt. of India, all households are to be covered under formal banking institutions. In spite of all efforts, the banking services could not reach to the targeted families who are deprived since ages as because the banking infrastructures in the programme areas are very poor. One Regional Rural Bank caters services to the whole block covering more than 200 villages. People face recurring problems in accessing banking services like saving, loan etc.

Analyzing the peripheral environment, the programme was designed to include rural financial services as a sub component of livelihoods enhancement component. Self Help Groups are promoted taking 10 to 12 women members through which these micro financial services were provided. RFS has two major areas of support. First, providing the seed capital support to the newly formed SHGs or dysfunctional SHGs to stabilize their internal process of thrift and credit. Second, revolving fund support is given to SHG to take up various income generating activities by the women SHGs.



Particulars	Coverage
Total No of SHGs	4273
No of Groups conducting meeting regularly	3851
No of group following rotational leadership	1137
No of Groups undertaking savings regularly	3851
Cumulative Savings Rs. In Lakhs	1306.15
Average Savings per SHG Rs. In Lakhs	30568
No. of SHGs taking Loan from RFS	2447
% of Members of SHGs taking loan from these groups	57.3%
Amount of Loan Taken by these groups from RFS Fund Rs. in Lakhs	347.53
Per capita loan by SHGs Rs. In lakhs	14202
Amount Repaid by these groups Rs. In Lakhs	123.71

Source: MIS 2014-15

The programme has adopted the strategy to assess the performance of the SHGs on half yearly basis. The Performance indicators are developed for categorizing the groups. It helps in taking up appropriate steps in providing capacity building and financial support to these groups. Efforts are taken for the poor performer SHG to bring them up. The details are given in the table.

SHG Gradation	No of SHG
A	2247
B	1452
C	387
Non-Graded	187
Total	4273

Source: MIS 2014-15

4.5.2 SHG Federation & Apex Federation

Institutions are highly essential for sustainable of the programme. As the institutions are promoted at grass root level and managed by the community, hence after withdrawal of the programme these communities based organizations will keep supporting for all aspects. SHG federations are promoted at VDC level where all SHGs are part of this institution. This will provide technical guidance & monitoring the activities being taken up by SHGs. These SHG federations are responsible for the management of the Rural Financial Services. Besides, these institutions are also working as a pressure group at the village level for taking up various social causes like education, health and sanitation etc.

Apex federations are promoted at block level within the programme operational areas. It provides both technical and managerial services to SHG & SHG federation. The details are as follows;





Name of ITDA	No of MWS	No of SHG Federation Promoted	No of Apex cooperative promoted
Baliguda	59	50	2
Koraput	70	65	2
Nabarangpur	29	29	3
Malkanagiri	30	30	0
Paralakhemundi	60	60	4
Th.Rampur	60	58	1
Gunupur	50	50	0
Total	358	327	12

Source: MIS 2014-15

4.5.3 Linkage with financial institutions

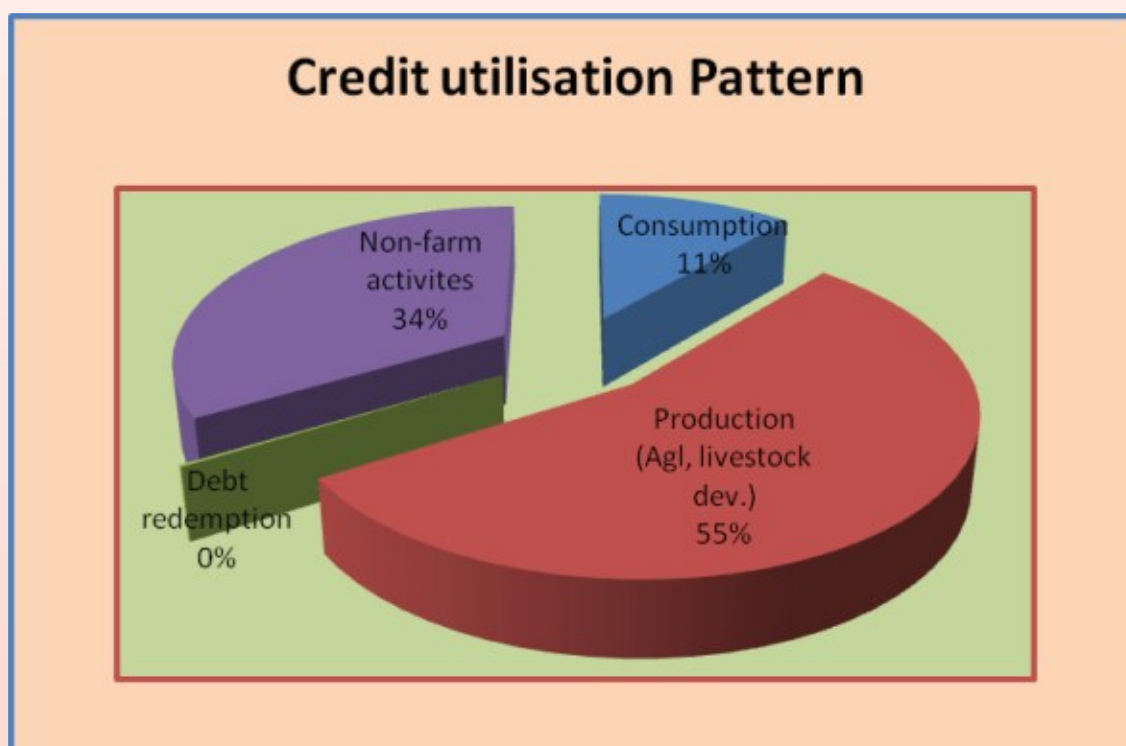
It is not just a support from the project rather; mainstreaming these groups was the priority for the programme. To avail financial linkage from the formal financial institutions is the core objective of the programme. RFS triggers these groups in supporting micro credit to demonstrate access and management of micro finance operations. Subsequently these groups are linked with banks for higher credit linkage for taking up income generating activities. The details of the SHG bank linkage made with facilitation of the programme are given below:

Linkage with banks	Rs. In lakh.
No. of SHG in cumulative	2105
Cumulative fund mobilization	1235.72
No. of SHG during the year	123
Fund mobilization during last year	86.10

Source: MIS 2014-15

4.5.4 Credit utilization pattern

Credit always plays a pivotal role in enhancing livelihoods option of the poor. As it is mentioned above that access to the formal banking institutions are difficult on the part of poor tribal due to poor banking infrastructure facilities, remoteness etc. hence, SHG movement was emphasized and it plays crucial role in providing financial support to the poor for all kinds of activities in inaccessible areas.



The programme is eyeing on promoting large numbers of feasible microenterprise through SHG and its federation. It is key pin for enhancing livelihood activities of tribal poor leading to a better livelihoods option. The SHG and its federation has availed loan for taking up different types of business activities particularly value addition of surplus agriculture produces and Non-timber forest products. It helps them to be empowered in terms of socially, economically and politically. The different kinds of microenterprises are preparing tamarind cake, turmeric powder, flour mills, oil extraction unit, chick feed unit, nutritional food processing unit, leaf plate making unit etc. The credit utilization pattern indicates that maximum loan is meant for business and productive purposes.



Chapter 5

Community Infrastructure Fund (CIF) & Development Initiatives Fund(DIF)

5. Community Infrastructure Fund (CIF) and Development Initiatives Fund (DIF)

The programme area is characterized by hilly terrain, scattered small settlements and low density of population. As a result, the area lags behind in the provision of rural infrastructure though significant resources are being allocated by Government.

Therefore, in addition to general watershed treatment and livelihoods based approach, provision has been made by the programme for additional components like Community Infrastructure Funds and Development Initiatives Fund to meet community needs and to support and strengthen the interventions under livelihoods support activities.

5.1 Community Infrastructure fund (CIF):

The Community Infrastructure Fund is meant to finance community infrastructure needs identified by the community. The principal aim is to fill critical gaps for small and remote communities which may not be covered in near future under other mainstream rural infrastructure development programme as available funds are allocated first to communities with higher population.

Programme adopted a strategy to access CIF through a demand driven approach with communities identifying critical infrastructure constraints. The priority area under this component are- (i) improving the linkages to market for those communities which are producing significant surplus, particularly during the monsoon season (ii) reducing the workload of women by ensuring supply of safe drinking water close to the habitations, (iii) improving the access to food supply through PDS (iv) child care (v) health care, (vi) supplementing educational infrastructure etc. Besides, economic activities like creating work sheds for the communities for income generating activities like NTFP processing unit, storage centers, mills etc. can also be covered. These facilities are used by the communities and

managed by the VDCs through the common user groups. Emphasis has been given on community responsibility for maintenance of the infrastructures so developed and women are encouraged to take up this responsibility. The major activities taken up so far under this sub-component are given in the table below:

Sl.	Activity	Unit	During 2014-15	Cumulative up to March 2015
1	Multipurpose community center	nos.	8	170
2	Storage godown	nos.	9	458
3	Drying Yard	nos.	8	211
4	Threshing Platform	nos.	170	177
5	Work shed	nos.	0	36
6	Villages under piped water supply project for (gravity fed)	nos.	0	154
7	Villages under piped water supply projects (sanitary well/ bore well)	nos.	3	43
8	Toilet & Bathroom	nos.	131	8224
9	Chuan / Open well	nos.	1	77
10	Agricultural Pump set	nos.	6	44
11	Village approach road/ causeway/ culvert	nos.	1	6
12	Oil extraction mill	nos.	0	6
13	Poultry Firm	nos.	0	11
14	Community animal Shed	nos.	36	43
15	Rice / flour / dal/ turmeric processing unit	nos.	0	7
16	Saloon	nos.	0	1
17	Solar Lantern	nos.	0	111
18	Water storage tank	nos.	3	15
19	Solar Street Lights	nos.	8	140
20	Bore well	nos.	0	1

Source: MIS 2014-15

5.2 Development Initiative Fund:

As an innovative strategy in programme design, Development Initiative Funds provides an additional funding with adequate flexibility to address to areas of demand as expressed by communities through the participatory processes during the course of programme implementation. This fund also supplements to those components / interventions of the programme which yields very good results. It also enables the communities to implement activities which are not accommodated in other programme components. Under this component, provisions has been made for targeting the traditionally excluded households e.g. single women headed households, landless, destitute, physically challenged and those who are unable to be part of the SHG or other income generating activities.

The activities under DIF are broadly divided into four categories such as;

- Supplementary funding to other programme component
- Experimenting / up scaling innovative activities for livelihoods
- Promotion of low cost, time & labour saving technologies for reduction of drudgery
- Support to the vulnerable and destitute households living in the programme villages.



Individual toilet & bathrooms



Grocery Shop



Community managed storage go-down



Cycle Mart

The activities undertaken so far under this sub-component are given in the table below:

Sl.	Activity	Unit	During 2014-15	Cumulative up to March 2015
A.	Supplemental funding to other programme components			
1	Multipurpose Community Center	nos.	18	77
2	Storage godown	nos.	5	47
3	Mother chick Unit	nos.	0	37
4	Backyard Poultry	HH	0	1,990
5	Diary unit	nos.	0	1
6	Goatery shed	nos.	0	319
7	Backyard kitchen garden	HH	860	6,575
8	Nutritional garden (schools)	nos.	54	351
9	Drying yard	nos.	37	191
10	Bathing ghat/ river steps	nos.	67	54
11	Village drain	nos.	13	23
12	Market yard	nos.	7	18
13	Introduction of Buck	nos.	0	18
14	Tube well Platform	nos.	0	223
15	Night shelter	nos.	0	764
16	Yam Seed Production	HH	0	931
17	Retaining Wall/ guard wall	nos.	15	8
18	Extension of Cement Canal to the existing one	rmt.	0	1,718
19	Gully Control Structures	nos.	0	12
20	Renovation of well	nos.	0	2
21	Supply of Sunflower seeds to Households	HH	0	125
22	Earthen canal	rmt.	0	107
23	Earthen check dam	nos.	0	7
24	Renovation of D/W and canal		0	5
25	Earthen bund	nos.	0	1
26	Well/ Chuan	nos.	27	14

27	Lift Irrigation projects (river/ open source/ bore well/ dug well)	nos.	4	2
28	Poly greenhouse nursery	nos.	0	17
29	Masonry Drop structure	nos.	0	2
30	Gravity Flow Irrigation Structure	no.		6
31	Gravity Fed Drinking Water Project	no.	6	77
32	Drip Irrigation System	nos.	7	29
33	Well	nos.	4	12
34	WADI model plantation	Ha	-	133
35	Vegetable Cultivation (By Group)	nos.	43	79
36	Bore well	nos.	-	1
B. Experimenting / up-scaling innovative activities for livelihoods				
37	Grain storage bin (Silo)	nos.	-	3,966
38	Work shed	nos.	2	41
39	Animal shed	nos.	6	18
40	Cashew processing unit	nos.	-	6
41	Fruit processing unit	nos.	-	1
42	Rice / flour / dal processing unit	nos.	-	23
43	Tamarind processing unit	nos.	1	29
44	Medicinal plant unit	nos.	-	1
45	Bee keeping box	HH	-	19
46	Sanitary napkin unit	nos.	-	1
47	Tailoring unit	nos.	-	16
48	Leaf plate stitching	nos.	3	12
49	Drug bank	nos.	-	2
50	Turmeric boiling Drum	nos.	231	492
51	Power tiller with accessories	nos.	1	6
52	Farmers information center	nos.	-	1
53	Oil Extracting Unit	nos.	15	41
54	Brick Making Machine	nos.	-	5
55	Agricultural pump set	nos.	529	1,123
56	Television set with accessories	nos.	2	4

57	Refrigerator	nos.	1	11
58	Barbed wire fencing	ha.	2	4
59	Vermi compost	Nos.	14	558
60	Mobile Charging Station	nos.	-	3
61	Hydram	nos.	-	6
62	Grain storage bin (Silo)	nos.	-	3,966
C.	Promotion of low cost, time & labour saving technologies for reduction of drudgery			
63	Smokeless Chula	HH	259	2,859
64	Toilet & Bathroom	nos.	26	2,000
65	Water Filter	nos.	-	998
66	Farm equipments	HH.	34	4,113
67	Solar lantern	nos.	28	867
68	Water storage tank	nos.	5	31
D.	Support to the Vulnerable and Destitute Households			
69	Support to vulnerable groups (goatery, poultry, roofing etc.)	HH	747	3,313
70	Saloon	nos.	-	4
71	Cycle Mart	nos.	-	5
72	Grocery shop	nos.	57	140
73	Sound box with generator set	nos.	2	9
74	Stretcher	nos.	-	1
75	Small Business (Vending)	nos.	99	340
76	Roofing for Landless HH	HH	87	324
77	Tribal music group	nos.	8	13
78	Off farm Equipments (carpentry, blacksmith, masons)	nos.	65	103

Source: MIS 2014-15

The major outcomes of activities are detailed in the following table:

Outcomes	During 2014-15	Cumulative up to March 2015
Villages served with piped drinking water	114	685
Villages covered with complete sanitation (individual toilet and bathroom)	0	210
Households covered with Total Sanitation (individual toilet and bathroom)	-	8564
Vulnerable/ Destitute Household supported with livelihood activities	1,429	5,059
Covered with storage facilities (Multipurpose centers and storage go-down)	108	654

Source: MIS 2014-15

Chapter 6

Support for Policy Initiatives

The Odisha Tribal Empowerment & Livelihoods Programme (OTELP) in order to further extends its livelihoods and food security agenda, identified land as a critical area of intervention. While proactively organizing various workshops, focussed group discussion etc, OTELP has been coming out with measures which can be implemented by the Government as part of its policy to improve the existing livelihoods of the tribal population at large. However, land has been focal to such initiatives under the support for policy initiative component.



Therefore, it has been one of the prime objective of OTELP to cover all the absolute landless households in the Programme village by facilitating in grant of land titles. Through various proactive measures and with the active collaboration of Revenue & Disaster Management Department Govt. of Odisha, lands have been provided to the landless families under OPLE (Odisha Prevention of Land Encroachment) Act, 1972, OGLS (Odisha Government Land Settlement) Act, 1962; Mo Zami Mo Dhia programme and Vasundhara Schemes. These combined with restoration of land under Regulation 2 of 1956 as well as Grant of individual land titles under Forest Rights Act, 2006 have helped 26038 families to get land titles as per the table given below:

Sl. No.	Schemes/Programme/Provisions	No. of Families Settled with Land
1	OGLS	2905
2	OPLE	9773
3	Vasundhara	3515
4	Mo Jami Mo Dhia	638
5	FRA	8611
6	Regulation-2	596
	Total	26038

Source: MIS 2014-15

Also to ensure land to the landless, OTELP scaled a model that Landesa (Rural Development Institute) had designed and piloted. The model uses a trained local youth to provide additional capacity to the field level Revenue Officials. These local youths called as the Community Resource Person are working in all the 1042 villages and as on date have facilitated grant of close to 13000 land titles in last two year other than the one indicated above. This land allocation programme has become a community led process and the Government of Odisha have extended this to 18000 villages in the 118 Tribal Sub-Plan Blocks of 12 districts in the State. The status of land allocation programme in OTELP operational villages is placed below:

Status of Land Allocation Programme in OTELP Operational Areas						
Name of the District	No of Villages	No. of HHs	Absolute Landless (Zero House site and Zero Farmland)	Households allotted House sites	Households allotted Farm land	Total
Nawarangpur	47	10267	2009	1831	245	2076
Malkangiri	83	4624	1690	760	27	787
Koraput	242	12467	2473	6995	230	7225
Gajapati	161	7627	916	962	761	1723
Kandhamal	165	7963	805	355	0	355
Kalahandi	170	6732	1655	1771	33	1804
Rayagada	174	8596	2570	2946	710	3656
Total	1042	58276	12118	15620	2006	17626

Source: MIS 2014-15

550 CRPs' facilitated the programme in OTELP, where as, 334 CRPs' are working in OTELP Plus area and are facilitating in providing land titles to the homesteadless and landless families.

The programme also facilitated community as a whole to avail community forest rights (CFR) under FRA, 2006. Necessary steps are taken to identify the land, demarcate the traditional boundary following due procedure for getting right over the forest by the community. The table below reflects the ITDA wise claims filed and title received under CFR:



Status of land title given to community under CFR		
Name of ITDA	Total no of CFR claims filed	Total no. of CFR titles received
Baliguda	154	56
Koraput	9	0
Paralakhemundi	38	6
ThuamulRampur	18	2
Gunpur	42	5
Mallkanagiri	163	4
Nawarangpur	23	1
Total	447	74

The Grant of CFR under FRA 2006 has been facilitated by various civil society organizations working in the project district and management plan by converging various community managed practices are being incorporated to manage these forests sustainably.

Source: MIS 2014-15



Chapter 7

Financial Progress

The programme prepares Annual Work Plan and Budget for every year which is being approved by the government against which fund allocated and spent. The year wise approved annual work plan and budget from 2003-04 to 2014-15 and expenditure as details against each component is given below.



Financial Year	AWPB (Rs. In Lakhs)	Expenditure (Rs. In Lakhs)
2003-04	4.00	4.38
2004-05	4.00	57.96
2005-06	1016.97	273.07
2006-07	3588.76	1209.69
2007-08	4184.45	2231.35
2008-09	5013.16	3982.07
2009-10	5358.9	4214.42
2010-11	4400.00	4121.77
2011-12	5600.00	5486.87
2012-13	5069.12	5184.91
2013-14	5038.00	3045.96
2014-15	11000.57	7488.12

Source: MIS 2014-15

Programme Component wise Expenditure for the Financial Year 2014-15

The below table and pie chart indicates that maximum fund goes for livelihoods enhancement.

Component	Expenditure during 2014-15 (Rs. In Lakhs)
Capacity Building for Empowerment	280.32
Livelihood Enhancement	807.71
Support For Policy Initiatives	6.97
Development Initiative Fund	5941.37
Programme Management	451.75
Food Handling	--
Grand Total	7488.12

Source: MIS 2014-15

Chapter 8

Programme Management

8. Programme Management

8.1 Monitoring & Evaluation

Monitoring & Evaluation system plays important role in impacting on livelihoods in the lives of targeted audience. It has developed means and ways to monitor its activities in regular interval through various agencies at different level. This method also ensures the involvement of community at their disposal. The tools and techniques used for it are given below:

A. Maintenance of Books of account for Community Based Organization (SHG/VLSC/VDC/Federation/Cooperative)

- A standardized set of books/registers are developed and maintained to keep each and every record. This includes a set of books meant for accounting purposes and other set is for minute's i.e. the discussion of the organization to be recorded along with decision taken.
- This gives very good transparent records and built the confidence among all stakeholders.
- This helps in tracking success or failure and built upon from there.

B. Voucher based Monitoring System

- Any payment or expenditure needs to be supported by payment voucher and in same way any fund received requires receipt slip from the organization.
- The payment made for wage labourer is recorded in muster roll.
- A single muster roll format has been developed for all payments and shared in the meeting



- All the entries are summed up in the report and the final figure along with the related documents (case record) are presented before the Village Social & Financial Audit Committee which is the Palli Sabha of the Village for approval of the expenditures made in each month from 22nd to 25th of each month.
- On approval of the same the original and duplicate copy (generated using carbon paper) sent to the VDC keeping the triplicate for record.
- The VDC receives the reports from each village within the micro watershed and consolidates the expenditures against each programme component and reports to the FNGO and ITDA.
- Accordingly the FNGO and ITDA consolidate the information and add the expenditure incurred at their level and submit the reports.
- All these expenditure reports are being accepted as utilization certificate of the funds spent.

c. Physical Progress Reporting (Output & Outcome reporting)

- The FNGOs and ITDAs prepare Half Yearly Progress Reports against the Annual Work Plan & Budget for the year presenting the outputs achieved during the period and cumulative achievement.
- Besides, the ITDAs based on these reports, prepares Half yearly and Annual Performance Report which is an output linked outcome report presenting the change in various physical indicators for both RIMS and log frame.

d. Concurrent Evaluations

- Mid Term Review (MTR) for phase II conducted by IFAD completed during October 2010.
- Joint Review Mission (JRM) for the year 2014 conducted by IFAD completed during November 2015.

8.2 Web Based M&E Software

The web based M&E Software designed and implemented in the programme have been further upgraded based on the use and information need at various level. Due to low infrastructure availability at the remote project locations, it has become difficult to update data in the software in a real time manner. Subsequently, the planning and M&E module along with the SHG module has been delinked and made standalone desktop based software where the data entry can be done offline at the FNGO level and integrated with the web based software at the ITDA/ PSU level depending upon the availability of the internet.

Tally ERP 9 has been provided to keep track of the Financial accounts, which is further customized to get the MPR reports and the standardized accounting reports and also synchronized by the accounts section to get the data of the ITDA's at PSU level.

Land Allocation and Management System has also developed and implemented for the effective management of the land title allocation and distribution system with the help of RDI. This system has kept the information on the landless families and follows up the steps for allocation of land titles.

Besides, a field monitoring system tool has been developed and piloted to track the field movement of the staff at ITDA and FNGO level.

8.3 Implementation of RIMS

The other method applied in the field is result impacted management systems (RIMS). Basically it is conducted to know the status of programme in the field. It is conducted in sample basis. Proper methodology is being followed for identifying the sample villages as per the criteria set by the IFAD. This gives an interval picture of the programme to strengthen or replicate wherever possible. This year the RIMS report has been prepared and submitted to IFAD based on the field level data collected and consolidated.

8.4 Annual Outcome Survey

The project has conducted its annual outcome survey for the year 2014-15 during April, 2015. This survey was conducted based on a predefined questionnaire administered to a randomly selected sample households from both programme and control villages. 900 programme and 450 sample households were interviewed by a team of enumerators. Qualitative data were also collected and incorporated in the report. The final report is to be published and circulated.

Chapter 9

OTELP plus: An Up-scaling strategy by the Govt. of Odisha to reach out more tribal community

Odisha Tribal Development Programme has been appreciated as one of the best programme of Govt. of Odisha. It created its identity because of bottom of planning, execution and monitoring process by the community facilitated by the NGOs at the field and ITDA at district level. This programme purely managed, owned and controlled by the people forming different cadres of people institutions at different level. The success of this programme smelled across the stakeholders during the implementation period of OTELP in Phase-I & II.

Basing on the degree of success of the programme, the chairperson of DPMC across all existing OTELP submitted strategic paper to operate the Extended OTELP in new additional MWSs with the existing mode of operation. There are nine proposals submitted to Govt. for necessary approval. The Govt. of Odisha has pleased to approve those entire proposals with an estimated budget of Rs. 59997.63 lakhs. This extended OTELP in new additional MWS is termed as OTELP Plus which is formally inaugurated on 2nd October 2011. There are 585 MWSs are covered under OTELP Plus areas in nine districts. The details of the programme coverage under OTELP Plus are mentioned below.



Sl. No	District	ITDA	No. of Micro Watersheds to be taken up under OTELP Plus	Proposed Area (in Ha.) for treatment
1	Koraput	Koraput	102	65824
2	Gajapati	Paralakhemundi	80	40959
3	Kandhamal	Baliguda	51	25500
4	Kalahandi	Th. Rampur	38	19000
5	Nawrangpur	Nawrangpur	50	27077
6	Malkanagiri	Malkanagiri	102	56621
7	Rayagada	Gunupur	50	25000
8	Keonjhar	Keonjhar	53	31376
9	Mayurbhanja	Karanjia	59	18800
	Total		585	310157

Source: MIS 2014-15

Here emphasis has been given on the convergence linked implementation programme of the Govt. It is a purely convergence programme. Fund will be leveraged from MGNREGA, BRGF, BKBK, Biju Gajapati & Biju Kandhamal, RKVY, NHM, SCA to TSP, SCA to SCP, Art.275, and State Plan. The State Plan is meant for Management cost & Capacity Building and rest of the programme cost will be sourced from convergence. The details are mentioned below.

Though OTELP Plus was launched in 2nd October 2011 but it was operationalised from December 2011. Initially, it was started in Koraput and Malkanagiri district. Within these two years of time period all nine tribal dominated districts have submitted their proposal and approved by the govt. of Odisha. As it is already mentioned it was started in Koraput and Malkanagiri districts, the progress of these two districts is also better as compare to others. Both the districts have prepared their VDLP a vision document prepared by the community to built upon their livelihoods strategy with available resources.

The financial progress of OTELP Plus since beginning of the programme as follows;



Component and Source wise Total Budget for Nine districts in OTELP Plus		
Programme Component	Source of fund	Total budget (Rs. in lakhs)
Capacity Building For Empowerment	Govt. (State Plan)	2705.30
Livelihoods Enhancement	Convergence & Govt. (State Plan)	31277.00
Development Initiative Fund	Govt (State Plan)	2818.00
Assistance to community for enhancement of food security	Govt (State Plan)	10120.13
Programme Management	Govt (State Plan)	13077.20
Grand Total		59997.63

Financial Year	AWPB (Rs. In Lakhs)	Expenditure (Rs. In Lakhs)
2011-12	41.98	584.59
2012-13	2339.00	986.91
2013-14	6617.39	2,299.95
2014-15	6045.11	4830.71

Source: MIS 2014-15

The best coping mechanism for sustainable development in inaccessible tribal domain

- Promotion of different cadres of people institutions such as SHG, SHG Federation, Apex Federation, VDC, VLSC UG & CIG (Community Mobilization)
- Proper planning through preparing a vision documents called “Village Development Livelihoods Plan” is prepared by the community itself facilitated by a team of professional
- Involvement of community at large in terms of planning, execution and monitoring
- Unemployed local young youths are trained to extend their support for programme implementation
- Funds vested in their hand
- Facilitations of NGOs having their presence within the community
- Programme emphasizes upon the holistic development of the tribal poor through watershed approach
- A team of dedicated professionals placed at district level for facilitation and to take this programme forward
- Special emphasis has also been given for different category of vulnerable families so that nobody should be excluded from the programme
- Social audit system is also developed where community members do the audit of all expenditure
- Different monitoring mechanism criteria are also in place to provide necessary support for best way of implementing the programme

All these above mentioned aspects make programme more successful and reach to the tribal people. More importantly they have been capacitated enough to do all these activities after withdrawal of the programme.

List of Implementing Agency working with OTELP in different ITDAs				
Sl No	Name of District	Phases	Name of Block	Name of FNGO
1	Koraput	II	Nandapur	Tagore Society for Rural Development
2	Koraput	II	Semiliguda	Tagore Society for Rural Development
3	Koraput	II	Pottangi	Life Academy of Vocational Studies
4	Koraput	II	Dasmantpur	Center for Youth & Social Development
5	Koraput	I	Narayanpatana	Harsha Trust
6	Koraput	I	Bandhugaon	Foundation for Ecological Security
7	Koraput	I	Laxmipur	Center for Youth & Social Development
8	Koraput	Plus	Lamtaput	Professional Assistance for Development Action
9	Koraput	Plus	Boipariguda	CHETNA Organic Farmers Association
10	Koraput	Plus	Boipariguda	HARSHA TRUST
11	Koraput	Plus	Boipariguda	Center for Youth & Social Development
12	Koraput	Plus	Nandapur & Pottangi	Tagore Society for Rural Development
13	Koraput	Plus	Narayanpatana	VIKASH
14	Koraput	Plus	Narayanpatana	Foundation for Ecological Security
15	Koraput	Plus	Bandhugaon	HARSHA TRUST
16	Koraput	Plus	Bandhugaon	HARSHA TRUST
17	Kandhamal	II	Balliguda	Professional Assistance for Development Action
18	Kandhamal	II	K.Nuagaon	Professional Assistance for Development Action
19	Kandhamal	II	Daringibadi	Integrated Tribal Development Agency (ITDA)
20	Kandhamal	I	Kotagarh	Jagurti
21	Kandhamal	I	Tumudibadha	Social welfare agency and training institute
22	Kandhamal	Plus	Tikabali	Professional Assistance for Development Action
23	Kandhamal	Plus	Tikabali	Social welfare agency and training institute
24	Kandhamal	Plus	Raikia	KALPAVRIKSH
25	Kandhamal	Plus	Chakapad	Organization for Rural reconstruction & Integrated Social Service Activities
26	Kandhamal	Plus	Chakapad	HARSHA TRUST
27	Malkangiri	II	Mathili	Integrated Tribal Development Agency (ITDA)
28	Malkangiri	II	Kudumulugumma	PARIVARTTAN
29	Malkangiri	II	Khairput	HARMONY
30	Malkangiri	Plus	Korukonda	Sahid Laxman Nayak Development Society
31	Malkangiri	Plus	Kudumulgumma	Malkanagiri Organization for Development & Education
32	Malkangiri	Plus	Korukonda	Sisu O Mahila Kalan Samiti
33	Malkangiri	Plus	Kalimela	SAMUHA VIKAS
34	Malkangiri	Plus	Kudumulgumma	Integrated Tribal Development Agency (ITDA)

35	Malkangiri	Plus	Korukonda	Tagore Society for Rural Development
36	Malkangiri	Plus	Kalimela	Gopabandhu Development Society
37	Malkangiri	Plus	Podia	Utkal Minorities Weaker Section Development Society
38	Malkangiri	Plus	Khairiput	Integrated Tribal Development Agency (ITDA)
39	Malkangiri	Plus	Mathili	Organization for Rural reconstruction & Integrated Social Service Activities
40	Malkangiri	Plus	Kudumulgumma	Watershed Support Services & Activities Network
41	Nabarangpur	II	Papdahandi	Institute of Rural Development & management Studies
42	Nabarangpur	II	Kosagumuda	Regional Center for Development Co-operation
43	Nabarangpur	II	Jharigaon	Integrated Tribal Development Agency (ITDA)
44	Nabarangpur	Plus	Tentulikhunti	Association of Volunteer Action
45	Nabarangpur	Plus	Tentulikhunti	Integrated Agency for Education Environment & Technology
46	Nabarangpur	Plus	Tentulikhunti	Bharatiya Agro Industries Foundation
47	Nabarangpur	Plus	Dabugaon	Institute of Rural Development & management Studies
48	Rayagada	II	Kashipur	SHAKTI Organization
49	Rayagada	II	Bissam Cuttack	Adivashi Krushi Swathya Sishkya Unyan Samiti
50	Rayagada	II	Gudari	Integrated Tribal Development Agency (ITDA)
51	Rayagada	II	Chandrapur	Integrated Tribal Development Agency (ITDA)
52	Rayagada	II	Muniguda	Friends Association for Rural Reconstruction
53	Gajapati	II	R_Udayagiri	Society for Welfare of Weaker Section
54	Gajapati	II	Mohana	Gram Vikash
55	Gajapati	I	Gumma	Centre for Community Development
56	Gajapati	I	Nuagada	Jana Kalyan Pratistan
57	Gajapati	I	Rayagad	Society for Welfare of Weaker Section
58	Gajapati	I	Nuagada	Jana Kalyan Pratistan
59	Gajapati	Plus	Nuagada	Jana Kalyan Pratistan
60	Gajapati	Plus	Mohana	Social Action for Community Alternative Learning
61	Gajapati	Plus	Mohana	Suraksha
62	Gajapati	Plus	Gumma	Centre for Community Development
63	Gajapati	Plus	R.Udayagiri	Institute of Social Action and research activities
64	Gajapaati	Plus	R.Udayagiri	Society for Welfare of Weaker Section
65	Gajapati	Plus	Rayagada	Gram Vikas
66	Gajapati	Plus	Mohana	Suraksha
67	Kalahandi	II	Th.Rampur	Gram Vikas

68	Kalahandi	II	Lanjigarh	Gram Vikas
69	Kalahandi	I	Th.Rampur	Gram Vikas
70	Kalahandi	I	Th.Rampur	Antodaya
71	Kalahandi	I	Lanjigarh	Integrated Tribal Development Agency (ITDA)
72	Kalahandi	Plus	Th.Rampur	Professional Assistance for Development Action
73	Kalahandi	Plus	Th.Rampur	Gram Vikas
74	Kalahandi	Plus	Lanjigarh	Professional Assistance for Development Action
75	Kalahandi	Plus	Lanjigarh	Lutheran World Service International Trust
76	Keonjhar	Plus	Banspal	PRAKALPA
77	Keonjhar	Plus	Banspal	Professional Assistance for Development Action
78	Keonjhar	Plus	Banspal	Foundation for Ecological Security
79	Keonjhar	Plus	Harichandanpur	Women Organization for Socio Cultural Awareness
80	Keonjhar	Plus	Harichandanpur	Foundation for Ecological Security
81	Mayurbhanj (Karnjia)	Plus	Thakurmunda	Professional Assistance for Development Action
82	Mayurbhanj (Karnjia)	Plus	Jashipur	Lutheran World Service International Trust
83	Mayurbhanj (Karnjia)	Plus	Jashipur	Sambandh
84	Mayurbhanj (Karnjia)	Plus	Siluapada	Development of Humane Action Foundation









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