

Executive Summary

The Western Odisha Rural Livelihoods Project (WORLP) was launched to restore the ecological balance of the local environment by harnessing, conserving and developing degraded natural resources including soil and water in the four poorest districts of Western Odisha: Kalahandi, Nuapada, Bargarh and Bolangir. This was known as the Watershed Management Programme. Such an initiative was useful in preventing soil erosion, regenerating natural vegetation through rain water harvesting, and recharging of the ground water table.

The Kalahandi Bolangi Koraput (KBK) region of western Odisha is home to people who are among the poorest in India. The local environment can be difficult to live in as rainfall is irregular leading to intermittent crop failures, and there is often a shortage of safe drinking water. The health and education status of the people is very poor, and hence, they are highly vulnerable to shocks. Inequitable social structures, distorted land distribution, and indebtedness contribute to the widespread poverty and impede access to resources by the socially excluded and marginalised. To address these problems, WORLP has developed a livelihood approach to their existing watershed programme.

Launched in August 2000, WORLP is a partnership between the Government of Odisha and the UK's Department for International Development (DFID). It is managed by the Odisha Watershed Development Mission, an autonomous State level agency constituted under the Department of Agriculture that plans, implements and monitors watershed development programmes in the State. Technical support given to the project is provided by NR International of the UK.

WORLP's livelihoods approach¹ focuses on leveraging the existing strengths and resources of rural communities. This model, also known as the Watershed Plus Programme, works to create an enabling environment for empowering people to make informed choices for their long-term well being. It involves all sectors of rural society across caste, class, gender and other divides. Many innovative processes and technologies have been tried under the programme's directive, and much of the work has been successful. Lessons have been learned and replicated in other parts of the country. In fact, the programme's guidelines are referred to at a national policy level.

This document will focus on WORLP's livelihood activities in Kalahandi District, Odisha. It will provide examples of a few interventions including mushroom cultivation, vegetable harvest and pisciculture in the villages of Malgaon, Srijdharan and Phatapara.

¹ The International Fund for Agricultural Development (IFAD)-specialised agency of the United Nations defines livelihood approach as a way to improve the understanding of the livelihoods of poor people. It draws on the main factors that affect poor people's livelihoods and the typical relationships between these factors. The SL framework places people, particularly rural poor people, at the centre of a web of inter-related influences that affect how these people create livelihoods for themselves and their households.



Background

WORLP began with building of appropriate infrastructure to conserve soil and water that helped to check and manage runoff, thereby reducing sedimentation of water bodies. In other words, the project focused on natural resource management. Over time, the project moved towards building sustainable livelihoods through developing new local employment opportunities that would contribute to an increase in incomes amongst the rural poor.

The project's objectives are:

- Increase incomes of small farmers and provide labour opportunities for landless
- Leverage technology to reduce drudgery, especially for women
- Improve management of drinking water and reduce vulnerabilities to drought
- Reduce environmental degradation
- Improve food security for poor families
- Empower communities to take decisions and improve their capacity to work together

KALAHANDI Fact File

Area: 7920 sq km Population: 1335494

(2001 census)
Male: 667526
Female: 667968

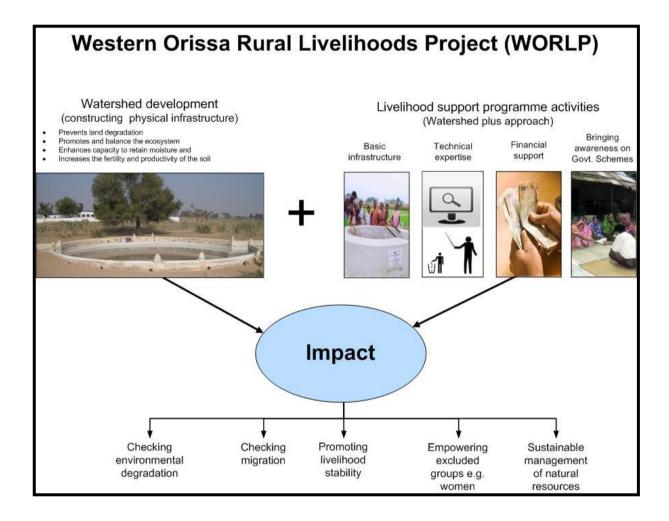
SC: 236019, ST: 385273 Total no of villages: 2236

WORLP Intervention

- 1442 self help groups formed
- 17829 members enrolled
- Rs 256.46 lakh savings mobilised
- Rs 95.79 lakhs collected as Watershed Development Fund
- * 896 Bank accounts/linkages
- ❖ 80 farm ponds, 700
 Ring wells, 15 masonry
 check dams and 50
 water harvesting
 structures and 432
 percolation tanks were
 constructed to
 conserve water, treat
 degradable lands and
 check drought
- Backyard plantation, agro forestry and miscellaneous tree plantation was done to protect soil erosion
- Multi cropping and livestock cultivation are practiced as income generating activities
- Shifting cultivation was stopped to improve soil fertility and yield better crop results

- Improve community access to government schemes
- Enhance the capacity of institutions to implement rural development projects

This schematic diagram outlines the processes and outcomes of the project's two major components: watershed development and livelihood support.



Working Design

The livelihood programme motivates village members to participate in income generating activities. Training, infrastructure and financial support are provided by WORLP in all activities.

To start a livelihood activity such as mushroom cultivation, WORLP first promoted the formation of Self Help Groups (SHGs) through training and initial funding. It also familiarised the local women with marketing procedures so that they could demand get fair prices for their products. Livelihood support teams of WORLP offered SHGs with technical expertise. To build strong social networks, WORLP mobilised all village members above 18 years of age to form a Watershed Association, out of which selected members represent a Watershed Committee that makes decisions regarding livelihood activities, management of funds, and provision of information to the rest of the community at the village level. In total, there are 383 registered watershed committees in Kalahandi. All members contribute 10 percent of their savings to the Watershed Community Development Fund which is reinvested in future livelihood activities.

WORLP has fostered over 5,000 self-help groups, totaling to a membership base of 65,000 people. Exposure to participatory planning processes, communal decision-making, management of finances, and management of common property resources have made people more resilient. They are now better prepared for crises and able to respond quickly and appropriately whenever required.

Scaling up

WORLP plans to institutionalise the Watershed Committees by establishing them as subsidiary bodies to the Gram Panchayats. The Committee's role will be to present the interests of the community to the government. Such local institutions and networks have made people, especially the most vulnerable, better prepared and more confident in dealing with high stress situations.

Working in partnership with State governments has enabled lessons learned to be efficiently captured and leveraged for rapid upscaling. Today, the Watershed Plus approach has been developed and piloted in Andhra Pradesh, Maharashtra, West Bengal and Bihar. WORLP's model has influenced other rural development programmes in the state and at the national level. WORLP intervention strategies have been incorporated in the new Common Guidelines for Watershed Development Projects (GOI, 2008). The common guidelines will shape the Integrated Watershed Management Programme on which the Ministry of Rural Development is about to embark. This programme aims to extend the benefits of the rural livelihoods approach to watersheds in all rainfed areas of India.

WORLP has empowered villagers to make their own decisions. The project has also mitigated migration and the difficulties that come with it, to which women are especially prone.

Organisational Structure

The successful implementation of the project owes to the entire management team that works at the state, watershed/block and village level. It is comprised of:

The **Watersheds Project Director (PD)** is responsible for overall management of all ongoing watershed projects in the district. Duties include:

- Ensure achievement of project outputs at district level
- Ensure implementation of project philosophy and values at district level
- Ensure effective and efficient utilisation of resources, both manpower and monetary sources
- Interpret and simplify project guidelines to ensure smooth implementation and transparency
- Influence and lead in convergence of government schemes and NGO programmes
- Provide feedback to Director of Watershed Management on project status
- Ensure documentation and dissemination of the events, milestones, process and learning of the project at the district level

The PD is assisted by three **Assistant Project Directors** (APDs), each of them handling a specific unit: a) Soil & Water Conservation b) Livelihoods and c) Monitoring and Evaluation. Their individual responsibilities are outlined in the table:

Departmental Units	Responsibilities		
APD of Soil & Water Conservation	Provide technical support on land and		
	water management. In-charge of all the		
	watershed projects.		
APD of Livelihoods	Offer technical expertise and organises		
	training in all livelihood support		
	programmes. Conducts exposure visits,		
	organises monthly watershed committee		
	and association meetings and workshops		
	for members.		
APD of Monitoring and Evaluation	Conducts impact assessment of all WORLP		
	activities. Prepares quarterly, monthly and		
	annual progress reports.		

The general responsibilities of APDs include:

- Provide feedback to PD on project activities
- Provide timely and required report to PD
- Facilitate legitimate and smooth functioning of Capacity Building Teams
- Seek expertise from Capacity Building Teams for field level issues
- Enable Watershed Development Team (WDT) to implement different activities in effective way
- Be involved in selection procedure of WDT
- Nurture and empower the WDC
- Ensure participatory monitoring and evaluation
- Ensure transparency of operations

At the village level, the **Capacity Building Team** is stationed to directly engage with the village community and perform the following responsibilities:

- Needs assessment
- Training of Trainers
- Facilitation, organisation and implementation of training programmes
- Follow-up
- Design and pilot action research on important issues
- Promote and support institution building at the grassroots level
- Promote transparency at various levels
- Increase the awareness of the community
- Inform the PD about field realities on a sample-by-sample basis(through field visits)
- Initiate social audits
- Help devise and implement built-in mechanisms for proper targeting of resources

The **watershed development team** (WDT) has been created to build self help groups and impart technical guidance to them.

The following are examples of income generating activities of three SHGs supported by WORLP in Kalahandi district. These case studies illustrate the project's impact on the rural poor in the region:

Case Study 1: Mushroom Cultivation

Name of Self Help Group: Maa Santoshi

Village: Malgaon District: Kalahandi

Members: 12

Category: Rural, poor women

The Maa Santoshi SHG members were initially individual vegetable farmers and sheep rearers, but the activities were not sufficient to support themselves. In 2001, they formed their group and WORLP introduced them to mushroom cultivation (Dhingri during winters and Paal during summers)² as an alternative income generating activity. All support – money, training and marketing - was facilitated by WORLP³.

It costs Rs 20 per mushroom bed for all inputs, which includes plastic for the harvesting bag, seeds and straw. The same bed can be reused for up to four rounds of production. It takes 25 days to harvest one bed. Each bed harvests approximately 3 to 3.5 kilograms of mushrooms, which on average earns Rs 150, creating a profit of Rs 130 per bed. Around 10 to 12 kilograms of mushrooms are sold to local traders daily. Traders then sell the mushrooms to local market-goers.

The startup capital to buy seeds and other inputs was taken from a revolving, government supplied fund. All borrowed funds are repaid at the end of the year.

"Mushroom cultivation generates more profit than farming", says president, Ahalya Sahu. She pointed to further benefits of the activity, including low investment of time and allowance to pursue other household activities simultaneously.

Cost Benefit:

Sl. No	Term (revolving fund)	Expenses	Approx. income	Net profit
1		16,000	 	4000
1.	1 st phase	16,000	20,000	4000
2.	2 nd phase	20,000	28,000	8000
3.	3 rd phase	30,000	45,000	15,000
4.	4 th phase	50,000		

² Dhingri and Paal are varieties of mushroom

³ Training and marketing is provided by the Cluster Livelihood Resource Centre - an initiative of WORLP which has the mandate of developing and operationalising various modules, manuals, training materials, references, teaching methodologies in different theme areas.

Mushroom cultivation demonstration in Malgaon village



Description: The mushroom seeds are first taken out of the bottle (top left) and transferred to a plastic bag filled with moist straws (top right). Once the bag is full, it is tied up and stored in a dark place away from sunlight (bottom right bag). After 25 days, the seeds germinate and grow into mushrooms ready to be sold in the market (bottom left bag).

Case Study 2: Vegetable Cultivation

Name of Self Help Group: Maa Sarala

Village: Singhjharan District: Kalahandi Members: 13

Category: Other backward caste (OBC) women

Formed in 2005, this group cultivates brinjal, cauliflower, cabbage, tomato and pulses for sale. This practice has improved their capacity to earn and save. At first, they received financial support in the form of the Revolving Fund (RF) from their village committee. Other technical support was provided to them by the WORLP Livelihood Support Team (LST). Also, inputs such as seeds, fertilizer, equipment for cultivation etc. was provided by WORLP at a subsidised rate.

During the first phase of cultivation, they borrowed Rs 20,000. Within four months of production, the SHG was able to sell 2500 quintiles of vegetables at the rate of Rs 15 per kilogramme. Total earnings during this period amounted to Rs 37500, making them profitable by Rs 17500 (37500-20000(RF))

In their first year, they earned approximately Rs 52500. This has motivated them to take up more land for vegetable cultivation to sustain their improved livelihoods.





Description: The president and Secretary of SHG Maa Sarla are proud of their vegetable cultivation.

Case Study 3: Pisciculture

Name of Self Help Group: Maa Sarla Shakti

Village: Phatpara District: Kalahandi Members: 10 women

Earlier, these women cultivated pulses, but with WORLP's support they learned pisciculture through which they have benefitted the in terms of food, employment and income generation. WORLP provided them with guidelines and basic necessities including farm ponds, fishnets and fishlings. Through field exposure visits, the women were educated in aquaculture. Prior to the introduction of pisciculture, the village women earned Rs 40 per kilogramme of pulses, but with fish farming they are earning Rs 100 per kilogramme.

This SHG has been fish farming for the past five years. In the beginning, they took Rs 20,000 out of RF and after selling 13 quintals of fish in the first year, they earned Rs 25000, earning a profit of Rs 5000.



Description: Maa Sarla Shakti SHG members stand in front of a man-made pond used for fish farming as an income generating activity.

Methodology

The OneWorld Foundation India Governance Knowledge Centre (GKC) research team identified WORLP as best practice in public service delivery through online background research.

The team interviewed the WORLP Project Director and capacity building team of Kalahandi district in Bhawanipatna. There, the entire implementation process and working design of the project was explained in detail. This was followed by visits three villages - Malgaon, Phatpara and Singhjharan - to observe mushroom cultivation, pisciculture and vegetable cultivation respectively. All activities are undertaken by women self help groups. The SHG representatives demonstrated their livelihood activities and elaborated on the benefits and overall impact of the activities. Each woman expressed feelings of WORLP having improved their living standards.

Key Stakeholders

Partners/Governing Body

- 1. **Odisha Watershed Development Mission (OWDM):** The Government of Odisha (GoO) set up OWDM in August 2000. It is a registered body under the Societies Registration Act. It was created to plan, coordinate, supervise and monitor all watershed projects in Odisha.
- 2. **Department for International Development (DFID):** The United Kingdom's government department responsible for promoting development for the reduction of poverty.
- 3. **Natural Resources International Limited (NR International):** Runs programmes related to natural resources, the environment and rural development, with a particular focus on institutional development. Set up by the University of Edinburgh, the Imperial College of Science, Technology and Medicine and the University of Greenwich.

Impact of WORLP:

- Controlled soil erosion through plantation and civic structures like check dams
- Increased crop productivity by 20%
- Checked drought through watershed harvesting structures
- Decreased food scarcity
- Created new employment opportunities -fishery, poultry, farming, etc
- Increased income by 50% due to regular wage activities
- Increased of savings through promotion of SHGs
- Checked migration through creation of village employment
- Empowered women through alternative training, increased exposure and formation of groups

Lessons Learned

The livelihood approach of WORLP has helped to gain the maximum output from natural resources through the introduction of local technologies, provision of training, education of government schemes and building of local capacity. Lessons learned from this project are as follows:

- 1) Reducing poverty through appropriate reduction strategies: WORLP recognised the key problem of western rural Odisha to be food insecurity and unemployment. They determined that a bottom up approach could help in accurate assessment of the problems as well as their mitigation. The watershed cum livelihood programme raised awareness about government schemes and policies, and offered technical guidance and financial support to start income generating activities.
- 2) Including the socially excluded: Earlier, village women in Kalahandi were passive and did not directly participate in non-household activities. They were dependent on their husbands for income, but with WORLP's intervention they have become empowered to start their own economic activities with local technology. Women are now decision makers and also owners of their own resources.
- 3) Built networks of social support: WORLP has strengthened local institutions and built common funds, making villagers no longer reliant on external support and saving them from taking loans from private money lenders.

Community mobilisation is crucial during times of crisis and the WORLP initiative has helped to community development. nurture Rural communities are now able to govern and manage their own resources. SHGs have become common platforms to share information and collectively demand needs. Thev organised are federations which allow them to become more involved in decision making processes.

- **4) Skill building and knowledge generation**: WORLP interventions have built structures and processes that enhance skills and confidence. It has enabled villagers to articulate their needs and demand improved services. The poor and marginalised are given guidance to become active and effective in planning and developing their livelihood programmes.
- **5) Effective and regular monitoring procedures**: Monitoring is essential to identify and solve gaps in operation so that all beneficiaries derive the maximum benefit from the project. Some monitoring tools used by WORLP are as follows:
 - Group self assessment: quality capacity assessment of SHGS used for progress assessment, group processes and finding out areas for further improvement and capacity building requirements.
 - Participation Index: captures mens' and womens' participation in various project activities.
 - Simplified Micro-Credit Accounting System (SMACS): captures monthly savings and credit creating of SHGs-both at the individual and group level in a comprehensive manner.

After extensive monitoring, the team prepares monthly/ annual reports which are followed by review meetings where decisions are taken and implemented in due course of time.

Research was carried out by the OneWorld Foundation, Governance Knowledge Centre (GKC) team.

Documentation was created by Research Associate, Attrika Hazarika

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Appendix-A

- 1. What is the watershed plus approach of WORLP? What is the Project doing for the community in Kalahandi?
- 2. How will the Project interventions be sustained by the community after the
- 3. Project withdraws? How does the community develop ownership? How are they empowered to continue?
- 4. How can resources be developed and utilised in a sustainable way? What areland-based activities for soil and water conservation? What are the modern
- 5. techniques available?
- 6. The livelihoods programme (WORLP) under the Watershed Mission aims to reduce poverty. Can you explain the connection between watershed management and the reduction of poverty?
- 7. Can you provide us with data/background on the water bodies/water-related areas that exist in Kalhandi district?
- 8. How are these water bodies being managed to effectively benefit the local population?
- 9. How has OWDM/WORLP facilitated and provided the following services to the people in Kalahandi-
 - Better irrigation for their agricultural activities,
 - drinking water supply and
 - sanitation facilities.
- 10. How does WORLP help the local population –both in terms of training and financial support to practice in non timber forest products, aquaculture, orchard maintenance and handicrafts for income generation and livelihood?
- 11. How do you monitor and measure the impact assessment of all the watershed projects in the district? What are the parameters on which they are measured?
- 12. What are the successes and failures?
- 13. How is WORLP addressing gender, equity and empowerment, health, literacy 14. and social issues

Self-Help Groups

- 1. How many self-help groups (SHGs) have formed under the watershed management/livelihood programme in Kalahandi district? How do they help to improve water management? What sorts of activities are they involved in?
- 2. What are the qualitative and quantitative benefits of forming them in Kalahandi?
- 3. Are SHGs given training? Please explain.
- 4. Has there been an attitudinal change in the people of Kalahandi?

Self-Governance

5. How have Worlp initiatives has helped communities in Kalahandi to be actively involved in governing, managing their own resources and play an important role in decision-making in their households in relation to watershed management specifically?

Gender

- 6. What was the condition of women prior to WORLp intervention? What are the changes now in terms of:
- Employment and standard of living
- Health
- Nutritional security
- Education
- Capacity building and skill building
- Decision making

General Questions

- 7. In the last 5 years, has there been a scaling up of activities in the district? If yes, can you describe them?
- 8. Who are the partners in the project and what is their role?

References

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