

**Title : Sustainable Rural Livelihood and Food Security to Rainfed Farmers of Orissa (Proponent : OUAT, Bhubaneswar)**

**Environmental and Social Safeguards Management in NAIP**

**No of consortium partners : 4**

**CL** - Orissa University of Agriculture & Technology, Bhubaneswar-751 003

**CP<sub>1</sub>** - Regional Centre for Tuber Crops Research Institute (ICAR), Bhubaneswar

**CP<sub>2</sub>** - Water Technology Centre for Eastern Region (ICAR), Bhubaneswar

**CP<sub>3</sub>** - Industrial Management Consultant of Orissa, 47, Madhusudan Nagar, Bhubaneswar

**CP<sub>4</sub>** - KARRTABYA, Chhoriagarh, Dist: Kalahandi – 766 023

**1. Basic information**

**A. Project Data**

• **Project Statistics**

No. of States/ UT covered : One (Orissa)

No. of Districts covered : 3 (Kandhamal, Dhenkanal and Kalahandi)

No. of beneficiary farmers : 1800

Duration : 4 Years (2008-09 to 2011-12)

Budget : Rs. 660.48 Lakhs

• **Project Objectives**

The proposed NAIP project will focus on following objectives:

- A.** To increase farm productivity through crop diversification, suitable soil water conservation measures and soil health management.
- B.** To increase farm profitability by selective farm mechanization to reduce cost of cultivation, linking farm produce to marketing, processing and value addition to farm produce, export of organic produce, particularly spices
- C.** To create more employment opportunities through introduction of commercial dairy , goatary, poultry, apiary, mushroom cultivation , pisciculture , nutritional garden and vocational activities (Leaf tray making and bamboo craft )
- D.** To promote capacity building through training / demonstration of farmers and farm women, formation of SHGs and creation of Farm Knowledge Centres

• **Brief Project Description**

The project aims at ensuring food and livelihood security to rainfed farmers in three selected disadvantaged districts of Orissa viz. Kandhamal, Dhenkanal and Kalahandi. The districts are hilly, mountainous and tribal dominated. The major livelihoods include i.e crop production, labour, collection and sale of minor forest produce (NTFP) and rearing of goat-

poultry- pig -fish. The productivity of crop and livestock is very low due to a number bio-physical, socio-economic, institutional, technological and cultural constraints. Hence the standard of living of people is very low. Improvement in existing livelihood condition can be made through increase in farm productivity and profitability, increasing employment opportunities and capacity building of farmers and farm women.

### **Major technological interventions proposed**

- Crop Diversification
- Soil health management
- Nutritional garden
- Forage Crops
- Agro-forestry
- Soil & Water Conservation
- Mushroom cultivation and Honeybee
- Poultry and Goatary
- Farm mechanization
- Farm Knowledge Centre
- Dal Processing
- Oil Extraction
- Khali making & Leaf tray stitching

The problems are complex and diverse. Hence consortium comprising OUAT, Bhubaneswar as consortium leader, RCCTCRI, Bhubaneswar, WTCER, Bhubaneswar; NGO, IMCO, Bhubaneswar and NGO, Karrtabya, Kalahandi has been formed to tackle the problems. The project will function in 6 selected clusters of villages. In each cluster approximately 300 farm families will be adopted . All small and marginal farmers and land less people will be covered. Technological support will be given to large farmers for a holistic development of the clusters. The total project outlay will be **Rs. 660.48 lakhs**.

The project aims at ensuring food and livelihood security to 1800 small and marginal farm families and landless within a period of 4 years i.e 2008-09 to 2011-12.

### **B. Environmental Category:**

#### **2. Major issues in the sub-project**

**Social :** The tribal farmers are less responsive to a new interventions. There is prevalence of age-old superstitions. Therefore, Capacity of farmers to adapt and sustain the productivity gains and whether the project activities will lead to participation, community action and social inclusion of disadvantaged people are the major social issues.

#### **Environmental :**

1. Soil erosion and land degradation problems are very serious due to high rainfall. Soil and water conservation measures with water harvesting structures has been given emphasis in the project.

2. Protection of local biodiversity resources
3. Impact of use of agro chemicals on environment

### 3. Safeguard Policies Triggered (World Bank Policies)

Safeguard Policies Triggered (World Bank Policies)		
	Yes	No
Environmental Assessment (OP/BP 4.01)	[✓]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[✓]
Pest Management (OP 4.09)	[✓]	[ ]
Cultural Property (draft OP 4.11-OPN 11.03 -)	[ ]	[✓]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[✓]
Indigenous Peoples (OD 4.20)	[✓]	[ ]
Forests (OP/BP 4.36)	[ ]	[✓]
Safety of Dams (OP/BP 4.37)	[ ]	[✓]
Projects in Disputed Areas (OP/BP 7.60)	[ ]	[✓]
Projects on International Waterways (OP/BP 7.50)	[ ]	[✓]

### 4. Risk related Issues (not covered under 3 above but perceived to be important in the sub-project)

- Weather aberrations as prolonged drought may become a problem, as the selected districts are predominantly rainfed. Another important issue is to mobilizing the local communities and interface with the community.

### 5. Impact Assessment (Enclosures –I and V)

The project will have positive impact as it will focus on increasing productivity, profitability, employment opportunity and empowerment of farmers and farm women with due regards to natural resource management and improvement in soil health. Wherever negative impacts are perceived through individual activities/interventions, appropriate mitigation measures have been suggested (Enc. I & II).

### 6. Potential indirect and / or long-term Impacts due to anticipated future activities in the project areas (assessment of anticipated conflict / complimentarily with the current as well as those proposed for the next five years) in the areas of activities of the sub-Project)

Since inception of the project, all sections of the society will be involved through Panchayat Raj Institutions (PRIs). Thus there will be no scope for social conflicts. The Common Property Resources (CPR) management have been planned with involvement of the PRIs. A great deal of synergy will be exploited between this project and other projects of Central and State Govt. viz. National Food Security Mission (NFSM), Rastriya Krishi Vikash Yojana (RKVY) and National Horticulture Mission (NHM). The work in villages nearby forests will be carried out in collaboration with Orissa Forest Sector Development Project (OFSDP).

### 7. Identify the key stakeholders and describe mechanisms for consultation with and to them done / disclosure so far done including pre-project consultations

**with the stake holders, stakeholders' workshop before formulating the full proposal, discussing the full proposal with some stakeholders before submission to the PIU**

The key stakeholders are farmers, PRIs, research institutions, extension agencies, Govt. and Non-Govt. organizations. Several rounds of pre-project discussions/consultations were made with the stakeholders. Three workshops/brain storming sessions were organized with consortium partners.

8. (a) Measures to address the environmental and social issues

In the subproject the viable adaptation technologies and options will be discussed and selected in consultation with the beneficiaries. The interventions will be demonstrated and monitored in cooperation with the extension staffs involving local communities. The benefit of interventions and best practices will be disseminated through several farmers' friendly tools like orientation meetings, field day, melas & exhibitions etc.

i. Environmental issues: An environmental screening has been done for environmental impacts and appropriate mitigation measures have been prepared as indicated in the Enclosure 1.

ii. Pest Management: IPM is one of the important mitigation measures that will be adopted.

iii) Indigenous people: The proposed sub-project interventions planned here are unlikely to have any adverse impact on the livelihoods of the tribal, however, planned efforts have been made to ensure that the tribals are included and they derive full benefits from these interventions.

8B) Risk related issues

i. The interface with the community:

The selection of the beneficiaries will be done through involvement of local institutions and communities as well as the Panchayats in consultation with development departments of the government. Project partners at local level will be drawn from various socio-economic strata while priority will be given to poor families and women headed families, and emphasis will be laid upon the spirit of solidarity and willingness to spread aims and benefits of the project to other farmers.

Local adaptation practices were identified by involving the community in participatory dialogue. The village specific intervention plans are to be prepared in consultation with the participating partners and the collaborating institutes and finally agreed implementation plans will be shared with the beneficiaries as well as the communities.

To enhance the transparency each beneficiary will be provided with some sort of "identification cards/slips", and at community level 'transparency board' indicating the project details will be displayed at prominent places.

Gender sensitivity: Women specific approach and plans will be stressed upon to facilitate inclusion of women in project implementation and assessment processes. Activities (training, demonstration and visits) have been designed for capacity building of women in technological and entrepreneurial uptake. Women SHGs will be mobilized for micro-finance and income

generating activities at household levels. The project beneficiary households will be sensitized through group meetings for involving women in decision making regarding project activities. Drudgery reduction in agricultural operations will be one of the important considerations of the project.

**9. Consultation / disclosures to be done in future : Local disclosure through mechanisms such as launch workshop, interfaces during the implementation stage of the sub-project for sharing the results and soliciting feedback, circulating project brochures and implementation progress from time to time, putting up annual reports on the web site and annual stakeholder workshops wherever feasible**

- (1) Organisation of Launch workshop
- (2) Interfaces during implementation of the sub-project
- (3) Collection of feedback
- (4) Circulation of project brochure
- (5) Putting up annual reports in website
- (6) Annual stakeholders workshop
- (7) Publication of booklets
- (8) Telecasting of success stories
- (9) Preparing popular article achievements for publication in newspaper
- (10) Opening of Web-site and releasing reports to the Web site.

**Consortia PI**

**National Coordinator**

**National Director**

**Enclosure I**

Safeguards Template for NAIP Projects				
A: Environmental Safeguard : Activities, Issues, Impact and Mitigation Measures				
Table 1: Environmental Safeguard : Activities, Issues, Impact and mitigation Measures				
Activities <sup>1</sup>	Issues <sup>2</sup>	Anticipated level of Impacts <sup>3</sup>		Mitigation measures
		Positive	Negative	
Crop diversification, suitable soil water conservation measures and soil health management for increasing farm productivity	Improve soil health , increase carrying capacity of land, reduce soil erosion , reduce pollution through Agroforestry	3		
	Improve availability of water by Water harvesting measures	3		
	Improve agro bio diversity	3		
	Impact of use of agro chemicals		1	Balanced use of chemicals and fertilizers through adoption of INM and IPM practices, Demonstration and training of the stakeholders on INM and IPM is an integral part of the subprojects,
Introduction of improved breed of goats and Poultry	Loss of forests / vegetation cover		2	The goats will browse / graze in nearby bushy grazing field, hillocks and roadside vegetation, which is not suitable for others
	Improve animal bio diversity	3		
Mushroom cultivation	Bio-waste utilization	-	1	Utilization of spent mushroom substrate (SPS) for vermi-composting
Improved health care for livestock.	Nutrition and disease management of livestock.	2		
	Availability of feed and Fodder shortage		1	Using mangers, supplementation with locally available material, using byproducts

**Enclosure II**

<b>B. Social Safeguard : Activities, Issues, Impact and mitigation Measures</b>				
<b>Table 2 : Social Safeguard : Activities, Issues, Impact and mitigation Measures</b>				
<b>Activities<sup>1</sup></b>	<b>Issues<sup>2</sup></b>	<b>Anticipated level of Impacts<sup>3</sup></b>		<b>Mitigation Measures (Negative Impact)<sup>4</sup></b>
		<b>Positive</b>	<b>Negative</b>	
Crop diversification, suitable soil water conservation measures and soil health management for increasing farm productivity	Enhanced income due to introduction of HYV, crop diversification, improved health care and feed of livestock mushroom cultivation and bee keeping	(4)		
	Increased employment and reduced out migration all round the year due to above interventions	(4)		
	Improvement in food and nutritional security due to increased availability of grain, vegetables, etc.	(4)		
	Drudgery reduction due to introduction of farm machines	(3)		
Post harvest and value addition /Dal processing, activities around women etc.	Employment and income for farm women	2		
	Change in occupational pattern		1	Capacity building of farm women through training.
Capacity building and social mobilization through training / demonstration of farmers and farm women, formation of SHGs	Enhanced skill for adoption of different interventions through different training programmes, exposure visits etc, information dissemination through establishment of rural technology centers	(4)		
	Reduced role of middle men, contractors through formation of SHG/CIG/SHG Federation	(4)		
	Gender empowerment through involvement of women in different committees, women SHGs	(4)		
	Social conflicts among different members		(1)	All the interventions to be decided and implemented in participatory mode through involvement of village level committees, panchayati raj members

