

Improving rural livelihood security through sustainable integrated farming system model and allied enterprises in Bastar region of Chhattisgarh

Environmental and Social Safeguards Management

Basic information

No. of districts covered:	2
Duration:	4 years (2008-09 to 2011-12)
Budget	: Rs. 887.42 lakhs

Consortium Partners

- i. S.G. College of Agriculture & Research Station (Indira Gandhi Krishi Vishwavidyalaya) Jagdalpur, (Bastar) Chhattisgarh - Lead Centre
- ii. Participatory Action for Rural Development Society (PARDS), Jagdalpur (NGO)
- iii. Agrocret Society for Rural Development (AGROCRET), Raipur (NGOs)
- iv. Ramkrishna Mission Ashram, Narayanpur (RKM) (NGOs)
- v. Central Soil & Water Conservation Research and Training Institute (CSWCRTI), (ICAR), Sunabeda, Koraput. Orissa
- vi. Sanjeevani, Chhattisgarh Rajya Laghu Vanopaj (Business & Development) Sahkari Sangh Maryadit, Raipur.
- vii. Indian Institute of Natural Resins and Gums (IINRG), (ICAR), Ranchi.

Project Objectives

- i. Improving productivity and profitability of integrated farming systems by adoption of improved practices, efficient use of natural resources and diversification.
- ii. Employment and income generation through primary processing and value addition, market linkages, and allied activities.
- iii. Empowerment through capacity building and skill development, in core and allied agricultural sectors for sustainability of self-help groups.

Brief Project Description

This project aims at improving the livelihoods of tribal people of Bastar plateau in southern part of Chhattisgarh. It comprises of Bastar, Dantewada and Kanker, districts out of which two districts namely Bastar and Kanker is targeted in this project. This region is one of the poorest (income < Rs 8000/ annum), environmentally degraded and rainfed region with high rainfall (1400 mm).

The major livelihoods in this area are crop production, labour, NTFP, poultry-pig-goat and fish. The issue of livelihood improvement is addressed through measures that help in draught mitigation, risk reduction, resource conservation and optimization and income and employment generation. For this purpose improvement of the existing farming systems is addressed by introduction of the relevant technologies, demonstrations and capacity building of the farmers and other stakeholders in crop production, animal husbandry and fish farming. Demonstration of synthesized technology package of crop production for, less external input sustainable agriculture, including INM and IPM, deep placement of NPK in briquette form, and formation of village seed bank is targeted. Rain water harvesting & soil conservation, integrated rice-fish, Poultry / Duck –Fish in farm ponds will be adopted. Innovative biophysical approach for developing rainfed farming system (cadastral level participatory land use planning) using PRA, remote sensing, GIS application, and modelling will be used for resource management planning. Improvement in the animal husbandry (poultry, pig & goat) is targeted through breed, nutrition and health.

Primary processing and value addition of non timber forest produce (NTFP), introduction of allied enterprises like bee keeping and lac culture, and micro enterprise like custom hiring centres for implements and mushroom production and processing will be introduced for increasing employment and income. Partners for marketing is also identified.

Environmental Category: B

Major issues in the subproject:

Social: Major social issues likely to arise on implementation of the projects are –

- 1) Inclusion of poor and disadvantaged groups
- 2) The capacity of farmers to adapt and sustain the productivity gains
- 3) Demonstration of economic benefits of the interventions

Environmental: Major environmental issues likely to arise on implementation of the projects are –

1. Protection of local biodiversity resources
2. 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)	X	
Natural habitats (OP/BP 4.04)		X
Pest management (OP 4.09)	X	
Cultural property (draft OP 4, 11-OPN 11.03-)		X
Involuntary resettlement (OP/BP 4.12)		X

Indigenous peoples (OD 4.20)	X	
Forests (OP/BP 4.36)	X	
Safety of dams (OP/BP4.37)		X
Projects in disputed areas (OP/BP 7.60)		X
Projects on international waterways (OPBP 7.50)		X

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

The target districts are extremely prone to naxalite. Hence, there is every chance that the project implementation may affect at any stage. In this context, the issue of interface with the communities is important to the subproject. Measures to address this issue is given in 8(b)

5)Impact assessment (enclosures I and II)

The project mostly will have positive impact as it involves improving the natural resource management and enhancing the crop and animal productivity through integrated farming systems approach. Wherever negative impact is perceived through individual interventions, appropriate mitigation measures have been planned which are detailed in Enclosures I and 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.

All the sectors of society will be involved through PRIs from the beginning hence chances of social conflicts will be minimized. The CPRs will be managed through PRIs and the same has already been discussed with Sarpanch of villages. A good deal of synergy is envisaged between this project and other initiatives of the central and state governments like the National Rural Employment Guarantee Programme (NREGA), Drought Prone Area Development Program (DPAP), Integrated Wasteland Development Program (IWDP). The work in forest villages will be carried out through / in consultation of forest department.

7. Identify the key stakeholders and describe mechanisms for consultation with and to them done/disclosure so far done including pre-project consultation with the stakeholders, stakeholders' workshop before formulating the full proposal, discussing the full proposal with some stakeholders before submission to the PIU.

The key stakeholder are farmers, Panchayat Raj Institutions, research institutions, government and non-government institutions. Several rounds of field visits to farms and rural households, discussions and brainstorming sessions with stakeholders and workshops were organized during the pre project consultation. Preliminary discussions were done with all the consortium partners (KVKs and NGOs). The meetings were also held with Public institutes and Jila Panchayat. Stakeholder meeting was also called and the partners were briefed about NAIP, its objectives and possible impacts . The chronology of meeting is given in tabular form

8 Measures to address issues

(a) The subproject designed includes following measures

- i. **Environment-** The very purpose of the sub project is to sustainably improve the degraded environment existing in coastal lands.. The screening of environmental issues has been done to include possible impacts and appropriate mitigation measures are proposed (enclosure I)
- ii. **Pest management** – Encouraging the use of Integrated pest management practices will discourage the use of chemical pesticides. This will provide advantage of environment and health security to the farmers. Field demonstrations and training of farmers on IPM and INM are integral part of the subproject.

iii. **Indigenous people**

The proposed interventions are either through augmenting or making adjustments in the livelihood system of the indigenous people without causing any major changes in their way of life. It will only improve their income, nutrition and livelihood security. However, planned efforts would be made to ensure that tribals are included and derive full benefit from the projects intervention.

8(b)

i. **Interface with the communities**

The selection of beneficiaries will be made through involvement of local institutions and communities; preference will be given to a willing partner. The selection of the families would have proportionate representation from the following groups:

- a. Small, marginal and landless farmers
- b. Women
- c. SC and ST group

Subproject implementation plan would be prepared and agreed with the communities and displayed. Participatory approach and transparency in the implementation would be maintained.

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 website and annual stakeholder workshops wherever feasible.

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Trainings, demonstrations and workshops on improved package of practices, specific production technologies, primary processing and value addition, storage and marketing will be organised. The project findings / success stories will be disclosed time to time through publication, kisan melas, field days. The public institutes, local administration, PRIs, Public leaders will be involved.

Consortium PI

National Coordinator

National Director

Annexure I: Environmental safeguard: Activities, issues, impact and mitigation measures

Activities	Issues	Anticipated level of Impacts		Mitigation measures (Negative Impact)
		Positive	Negative	
Improving the existing methods and structures of composting	Reduced loss of nutrient	4		
Interventions on poultry, pig and goat	Increased demand of food & fodder		1	IFS and Silvi-pasture models will be developed
	Improved sanitation, hygiene through Improved housing of livestock	3		
Rain water harvesting and management	Enhanced availability of water and Reduced soil erosion and land degradation by <i>in-situ</i> soil and moisture conservation	5		
Demonstration of improved practices of crop production	Use of fertilizers and insecticide, improved varieties, loss of biodiversity		2	Integrated nutrient and IPM will be adopted , Land races of important crops will be collected and conserved
Integrated rice fish aquaculture	Enhanced rice field biodiversity	3		
Development of pasture land	Deforestation by Silvi-pastoral models	4		
	Enhanced availability of food & fodder			

Annexure II: Social safeguard: Activities, issues, impact and mitigation measures

Activities	Issues	Anticipated level of Impacts		Mitigation measures (Negative Impact)
		Positive	Negative	
Crop intensification, Improved package of practices	Increased income	5		
	Greater competition for natural resources		2	Natural resource conservation Intercropping,
	Long term availability of food, fuel and fodder due to Change in Land use pattern	5		
	Reduction of social disparity	5		
	Dependence on external resources		1	Seed production at village level
Primary processing and value addition	Increased income and employment specially for women	5		
	Change in occupational pattern		1	Capacity building. Participatory approach
Draught reduction and risk management through conservation and insurance	Reduced poverty and indebtedness	5		