

# **Goat husbandry based integrated approach for livelihood security in disadvantaged districts of Bundelkhand region ( CIRG, Mathura)**

## **Environmental and Social Safeguards Management in NAIP**

### **1. Basic information**

#### **Project Data**

Component code	:	<b>03</b>
Name of CPI	:	Dr. Saket Bhusan
Lead Centre	:	Central Institute for Research on Goats,
No. of Consortium Partner	:	05
No. of States/UT covered	:	01
No. of Districts covered	:	02
No. of Clusters	:	08
No. of Villages	:	16
No. of Beneficiary Farmers:		800
Duration	:	4 years (2008-09 to 2011-12)
Budget	:	Rs. 516.519 Lakhs

#### **Project Objectives**

- Enhancement of livestock & crop productivity through goat based integrated farming.
- Development, up-gradation and management of forage, soil and water resources.
- Value addition of milk, meat, vegetables and their marketing for enhancing profitability.
- Capacity building, skill development and formation of self help group for long-term sustainability and employment opportunities.

**Brief Project Description:**

Bundelkhand area of Uttar Pradesh is spread over about 69,000 sq. km. in seven districts. Two districts (Mahoba, Hamirpur) of Bundelkhand region are taken for this program. The economy of Bundelkhand region is primarily agriculture and livestock based. The region is characterized by some of the lowest levels of per capita income and human development in the country. Productivity of goats are poor due to small flocks, non-descript population, lack of feed resources, problems of diseases and lack of scientific knowledge of goat farming. Farmers do not have marketing channels for profitable marketing of goats and their products. Milk and meat products of goats are not prepared in the region due to lack of knowledge of value addition. As forests are disappeared so that the possibilities of rainwater conservation below the ground is decreased since traditional tanks are also neglected. In the absence of effective monsoon, crop cultivation is very difficult in the region. Many farmers of the area are not able to meet their subsistence needs in the absence of goats and other livestock resources. Temporary and long-term out-migration of the families from rural villages in search of alternative sources of livelihood has become increasingly common in the region. In fact, very less modern agricultural technology has reached the farmers due to absence of effective programs. Goats are often termed as poor man's cow. In this condition, goat farming with integrated approach (fodder production, poultry production, cereal, pulse, vegetable production, vermi-compost) may give an effective alternate farming system. However, this programme is developed for sustainable food, nutrition and employment security to the people including the community those living below poverty line.

**Major Technological Interventions Proposed**

1. Improved Livestock practices (goat rearing and rural poultry farming) with development of forage resources. Value addition of milk and meat products (Paneer / cheese, flavoured milk, kulfi, meat cubes and meat sausages), agro-processing (fruit & vegetable) and marketing.

2. Improved the water availability through moisture conservation and water harvesting measures (contour and peripheral bund, farm pond and tube wells. At least one crop in one year using improved varieties and eco-friendly plant protection system.

**Environmental category issues in the subproject**

**Environmental Category: B**

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

- 1) Inclusion of disadvantaged groups like poor, women and other.
- 2) The capability 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 soil health.
- 2) Impact of use of chemical insecticide, pesticide and fertilizers on environment.

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

<b>Safeguard Policies Triggered (World Bank Policies)</b>		
	<b>Yes</b>	<b>No</b>
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]
Indian Peoples (OD 4.20)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP 7.60)	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[ ]	[X]

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

In addition to this issues covered in the table above, the issue of interface with the communities is also important to the subproject. Measures to address this issue are given in 8.

**5. Impact Assessment:**

- I. The project give mostly positive impacts, as it will increase the quality of crops, livestock, soils and water resources.
- II. The total productivity in terms of agricultural crops and animal products of the operational area will increase. It will generate employment opportunities of the rural poor and will enhance their livelihood security. The total production of agriculture and allied commodities of the area, as a whole will increase. The project will also facilitate the income and employment generation for women farmers and will reduce their drudgery. The capacity building of the farmers and other stakeholders will further increase the livelihood security of the rural people and productivity of the Bundelkhand region as a whole.

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

Beside the direct impact the project will have indirect impact to strengthen the socio-economic status of the rural poor which in turn will increase the educational and technological knowledge improvement of the distressed rural people of this disadvantaged area. The different farmers meetings/ group discussions, associations of the farmers and active involvement of different village's committees created for implementation of the project will be in the long term helpful for the area and in the long run it will increase the agricultural productivity as whole and maintain the ecological balance.

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

Farmers, Panchayat Raj Institutions, Research Institutions, Govt. Departments, SAU, different Non-Govt. organizations and banks were involved to prepare this project. Several rounds of discussion, exchange visits, field visits, group discussions were organized during the project formulation. After launching the project, the interaction meeting involving all the stakeholders and allied departments were organized in each cluster. At each cluster level possible interactions were carried out involving all the stakeholders including men and women farmers to identify issues to be addressed and relevant interventions to be undertaken.

**8(a). Measures to address issues:**

The subproject designed includes following measures

- I. **Environment-** One of the purpose of the sub project is to sustain and improve the degraded environment as much as possible. The screening of environmental issues has been done to include possible impacts and appropriate mitigation measures are proposed. Fertilizer will be used judiciously as per need of the soil. This would not hinder any chemical degradation in the soil vis-à-vis in water.
- II. **Pest management-** Encouraging the use of integrated pest management (IPM) practices will discourage the use of chemical insecticide and 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. Only prescribed IPH by GOI will be used.

**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 partners. 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.

**Gender issues** would be adequately addressed.

- 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**

Preliminary discussion has been made with the beneficiaries in the target sites of the project. Situation analysis has been made in the project sites and found favourable for implementation of the project. However, every means of formal and non-formal local communications will be made during the implementation of the project. Group meetings, workshops, inter and intra-cluster meetings of the farmers and all other stakeholders will be organized for sharing the experiences and exchange of views for successful implementation of the project in participatory mode. In addition websites, popular articles in electronic and print media will also be made use of.

**Consortia PI**

**National Coordinator**

**National Director**

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

Activities <sup>1</sup>	Issues	Anticipated level of Impacts <sup>3</sup>		Mitigation measures (Negative Impact) <sup>4</sup>
		Positive	Negative	
Goat and poultry farming	Improved animal health and disease control	4		.
	Development of forage resources		1	Utilization of wasteland, bunds etc for forage production, locally available material,
Introduction of high yielding varieties	Impact on use of agro chemicals		1	INM, IPM will be used particularly using locally available material
	Stress on water		1	Water harvesting
Management of soil and water resources	Improvement in soil health due to Soil conservation measures	2		

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

Activities <sup>1</sup>	Issues	Anticipated level of Impacts <sup>3</sup>		Mitigation measures (Negative Impact)
		Positive	Negative	
Enhancement of livestock & crop productivity through goat based integrated farming	Enhanced income	4		
	Unequal access to inputs		1	Necessary inputs to all the participating farmers would be ensured
Value addition of milk, meat and vegetables	Enhanced income, year round employment and nutritional security through value added products	4		
	Marketing of produce		1	Market linkages would be developed to ensure profitability
	Change in occupational pattern		1	Participatory approach, Adequate capacity building would be done
Formation of SHG's, FBG's & Producer Company	Economic empowerment	2		
	Social conflicts		1	All the interventions to be decided and implemented in participatory mode through involvement of village level and cluster level committee members