

Environmental and Social Framework for the SRLS Project under Component-3-NAIP

Title: Integrated Farming System (IFS) for enhancing sustainable rural livelihood security in Sahibganj and Pakur Districts of Jharkhand

Template for Environmental and Social Safeguards Management

No. of consortium partners: 3

1. Gramin Vikas Trust (GVT), 212, Pani Jahaj Kothi, Kanke Road Ranchi-834008
2. Birsa Agricultural University (BAU), Kanke Ranchi-834006
3. Society for Rural Industrialisation (SRI), Bariatu, Ranchi-834009

No. of States/UT covered:	One
No. of Districts covered :	Two (Sahebganj and Pakur)
Number of beneficiary farmers:	3000
Household	
Duration:	3 Years 3 months(2009-10 to 2012-13 upto June)
Budget:	Rs. 279.65670 lakhs

Project Objectives:

1. New strategies for sustainable system for crop production and development of farming models and diversification in farming system through crops, vegetables, fruits, aquaculture and organic farming.
Livelihood improvement by diversification of second crop on mono-crop area, vegetable production, aquaculture, organic farming, dairy, poultry & piggery development and medicinal plant cultivation
2. Introduction of new irrigation modules like flexi-dams, drip irrigation etc.
3. Creation of short term storage facilities, processing units for value addition and improved market.
4. Increased income by intervention of processing & standardization of farm produces through value addition

Brief Project Description:

The approach of this project is to set Pilot/ Exemplary modules in the targeted areas of Sahibganj and Pakur districts of Jharkhand and ensure substantial growth of the economy of the targeted area during and after the “phasing out” of this Project. The Project envisages to effectively addressing the existing food-insecurity, low soil fertility, alternative livelihood options through participatory mode and diversification of agriculture and allied activities. The Consortia through introduction-validation-acclimatisation of suitable agricultural technologies, value addition of the produce, market linkups, market led production schedules and micro-enterprises based on farm produces wants to foster a paradigm shift in the livelihood pattern at the target areas.

Major technological interventions proposed

1. Introduction of early maturing, Birsa Vikas Dhan 109 & 110
2. Introduction of HYV , Like Suwan & Birsa Vikas Maize2
3. Introduction of HYV & Rainfed Tomato Like Swarn smridhi and Swarn lalima
4. Introduction of flexi-dams for economic use of water
5. Milk yield enhancement for nutritional improvement
6. Integrating T X D breed of pig and black-Bengal goat which will produce 4 kids and piglets resulting in recycling within the farming community for further yield.
7. Developing satellite based info-center for quick dissemination of the technology
8. Introducing fry production for aquaculture development
9. Introduction of Cool House – a Geodesic dome structure for preserving vegetables for 6 – 7 days.

B. Environmental Category: B

2. 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 (OP 4.10)	[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]

- No involuntary resettlement is expected as the area of individual sites is very small and all proposed interventions are within farmers boundaries.

(Measures to address these issues is given in 8(a)

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

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

5. Impact Assessment (Enclosures- I and II):

I. The project will mostly have positive impacts, as it will increase the productivity of degraded and low productive soil of rainfed area.

II. The total productivity in terms of agricultural crops, fishes and animal products of the area will increase. It will generate high employment opportunities of the rural poor and will enhance their livelihood security. The total production of agriculture and allied commodities of the country, 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 region/ country as a whole.

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):

Besides the direct impact the project will have indirect impact on the socio-economic upliftment of the rural poor which in turn will increase the educational and technological knowledge improvement of the distressed rural people of the most disadvantaged areas. The different groups/ associations of the farmers created for implementation of the project will be in the long term helpful for the development of the whole village/ region. The environment and soil health of the area will be better conserved which in the long run 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 stake holders, stakeholders' workshop before formulating the full proposal, discussing the full proposal with some stakeholders before submission to the PIU

Farmers, Gram Sabhas, Research Institutes, Govt. Departments, SAU, different Govt. and Non-Govt. organizations, Farmers Groups, voluntary organizations etc. who are engaged in improving rural livelihood are the key stakeholders for 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 of the workshop involving all the stakeholders, allied departments, and banks will be 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 Measures to address issues

The subproject designed includes following measures

- i. **Environment**- The very purpose of the sub project is to sustainably improve the degraded environment existing in the rainfed area. 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 tribal population in the project area is around 40 %. The majority of the tribal people in the area are land less/ marginal farmers having very poor livelihood and educational status. In the implementation of the project priority will be given for landless and marginal tribal farmers. The interventions like, livestock management, fish cultivation, nursery raising, diversification of farming, capacity building, etc. will be more suitable for tribal farmers

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.

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.

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**National Coordinator
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Enclosure I

A: Environmental Safeguard: Activities, Issues, Impact and Mitigation Measures

Table 1: Environmental Safeguard: Activities, Issues, Impact and mitigation measures

Activities	Issues	Anticipated level of Impacts		Mitigation measures (Negative Impact) ⁴
		Positive	(Negative)	
Sustainable enhancement of the productivity of land	Poor soil fertility, uneven topography, and large scale runoff of the rain water, and associated socio-economic ecological and environmental issues.	(4)		Soil health will be improved through slope management and expanded small-scale water management, improved access to better seeds, instilling confidence and continuous social mobilization with active participation of the stakeholders.
	Absence of dry land technologies causing poverty and food insecurity		(1)	Introduction of dryland technologies developed by BAU, other SAUs and national agriculture institute and validation of these technologies through participatory approach on communities' basis for alleviation of poverty and increasing food security.
	Rainfed condition and absence of irrigation facility causing food insecurity	(4)		Introduction of Integrated Farming System to provide alternative livelihood option other than crops in real predicament. Introduction of Flexi Dams and renovation of existing Water harvesting structures
Enhancement of livelihood security and employment generation for the poor farming communities of the rainfed area	Mono-cropping in nature and dependence on traditional concept of farming system		(1)	Change in cropping pattern by introducing double-crop and drought prone-early maturing-high yielding crop variety, crop diversification Scientific and balanced use of fertilizer and pesticides, Use of INM and IPM practices. Field demonstration and farmers training on INM & IPM are an integral part of the sub project
	Stress on water due to change in cropping pattern		(1)	Rain water harvesting will ensure creation of good quality of water and will also provide water for supplemental irrigation.
	Less spread of animal diseases in the area and less animal borne human diseases through health care and improved feed of livestock	(3)		

Enclosure II

B. Social Safeguard : Activities, Issues, Impact and mitigation Measures

Table 2: Social Safeguards: Activities, Issues, Impact and mitigation measures

Activities ¹	Issues ²	Anticipated level of Impacts ³		Mitigation Measures (Negative Impact) ⁴
		Positive	Negative	
Sustainable enhancement of the productivity of dry land	Improvement in productivity of dry land through land shaping, creating water harvesting structures, proper land management etc	(4)		
			(1)	The profitability of growing crops to cover the opportunity cost including initial investment would be ensured through selection of high value and low water requiring drought prone crops.
Enhancement of livelihood security and employment generation for the poor farming communities of the rainfed area	Enhanced income due to introduction of HYV, crop diversification, vegetable cultivation, fish farming in fresh water, piggery, goatery, improved health care and feed of livestock	(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, fish etc.	(4)		
Empowerment through capacity building and skill development of stakeholders including men and women farmers.	Drudgery reduction due to introduction of farm equipment	(3)		
	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/ SHG Federation	(4)		
	Gender empowerment through involvement of women in different committees, formation of 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, Gram Sabha members

