

Title: **Promote sustainable livelihoods of Small and Marginal farmers with a focus on women empowerment in Nawada and Purnea district of Bihar. (Proponent: BSFL, BASIX)**

Environmental and Social Safeguards Management

No. of consortium partners: 5

- Rajendra Agriculture University Pusa Samsatipur Bihar
- Krishi Vigyan Kendra Nawada Bihar (Gram Nirman Mandal)
- Women Development Corporation Patna Bihar
- Animal Development Private Ltd
- IARI Pusa Samsatipur Bihar

No. of Districts covered: 2 (Purnea & Nawada)

Duration: 3 years.

Budget: Rs. 423 Lakhs.

Project Objectives:

- Develop and strengthen suitable and sustainable institutions of the poor with a special focus on women
- Strengthen the livelihood of poor households through productivity enhancement and cost reduction in kharif and summer paddy and dairy sub sector
- Facilitate market linkage of small and marginal producers
- To provide linkages with main stream financial institutions and making available saving credit, and insurance services to the poor households.

Brief Project Description:

This is a multi disciplinary approach wherein work is being mooted to be carried out in both farm and non-farm sector in the Purnea and Nawada districts of Bihar. The focus is on transfer of technology, trying of new methodologies to supplement income of poor households and also work in the value chain, wherever possible.

Major Technological Interventions Proposed

Productivity enhancement of paddy using SRI (System of Rice Intensification) technology
Commercial vegetable cultivation (Onion) with supply of seeds and technology with help of KVKs and Research stations.

- Productivity enhancement in dairy through selection and improvement of local breeds, supply of adequate feed & fodder and ensuring veterinary services
- Development of low cost fisheries using ditches and also in paddy fields (rice fish culture & short cycle species in ditches and seasonal ponds)
- Interventions related true potato seed cultivation ensuring seed supply among the community through its cultivation and distribution
- Seed multiplication of paddy
- Wheat cultivation through zero tillage machine and water conservation technique

- Using the by products of Banana such as the bark for producing high value artistic materials. Focus will be on enhancing the skills of the local artisans/women to get value added products.

Environmental Category: B

2. Major issues in the sub-project:

Social: The major social issues to be addressed are the following:

To ensure fair participation of women in the project given the socio-economic and cultural aspects in Bihar

To tackle issues of underlying tensions between classes, castes and political systems

To ensure positive benefits flow to the beneficiaries as some of the interventions to be tried out is new.

Environmental: The major environmental issues to be addressed are the following:

To ensure deleterious impact on the environment through balanced use of chemical and organic chemicals in the proposed interventions.

To use the waste not only from farm but also from households to produce organic fertilizers and thus reducing overall impact on the 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)	[]	[]
Pest Management (OP 4.09)	[X]	[]
Cultural Property (draft OP 4.11-OPN 11.03 -)	[]	[]
Involuntary Resettlement (OP/BP 4.12)	[]	[]
Indigenous Peoples (OD 4.20)	[X]	[]
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):

Several development programmes (both government and donor funded) have implemented in Bihar have been using methods to identify the poor and backward classes. Despite using the same, there could be cases of omission of beneficiaries due to local constraints as well as individual endowments and preferences.

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 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.

The demonstration effect on productivity through use of technology and its testing will be helpful for the line departments to scale it up in future. This is more so in the case of rice and commercial vegetable cultivation. Low cost fisheries would be another approach which is perceived to be become an integral program of the fisheries department and it has an immense scope of working with poor and landless with small investments. The work in banana fibre can be taken up by the District Industries centre where banana cultivation is large. Small producer companies and co-operatives can be floated to boost local employment

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.

Farmers, SHG federations, research institutions, KVKs, government line departments would be key stakeholders in this project.

During project design phase in the districts, intensive consultation with the villagers and rural households will be done to explain the project and ensure their continuous participation and support. A continuous liaison with research stations, KVKs will be done to provide technical support. Programs of state and central governments would be leveraged through the line departments. Workshops and other form of consultations will used during pre and post design stage as well as during implementation.

8. Measures to address issues

The subproject designed includes following measures

Environment- The very purpose of the sub project is to sustainably improve the environment . The screening of environmental issues has been done to include possible impacts and appropriate mitigation measures are proposed (enclosed)

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.

Indigenous people- The tribal population in the project area is less than 2 %. The majority of the tribal people in the area are land less/ marginal farmers having very poor livelihood and educational status. In the tribal families the women are more active while men are relatively lazy. In the implementation of the project priority will be given for landless and marginal tribal farmers. The interventions like craft making in which tribals are engaged ,besides fisheries, capacity building, building their local institutions and mainstreaming them will be given emphasis keeping into consideration their local culture and ethos.

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)

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 and hence we will charge a small registration fee for those interested to be associated with the project. The selection of the families would have proportionate representation from small, marginal and landless farmers, women and 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 and given emphasis .

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. Annual workshops at state level, workshops in district including various stakeholders will be done to disseminate the findings of the work and get feedback and then act upon the same.

Consortium PI

National Coordinator

National Director

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

Table1: Environmental safeguard: Activities, Issues, Impact and Mitigation Measures.

Activities	Issues	Anticipated level of Impacts		Mitigation Measures (Negative Impact) ⁴
		Positive	Negative	
Interventions related to productivity enhancement of paddy Using SRI Technology , Commercial vegetable cultivation (Onion) and true potato seed cultivation	Effect of change in cropping pattern on soil health due to Introduction of HYV	3		
	Enhanced agro bio diversity through crop diversification	3		
	Depletion of soil nutrients in SRI cultivation		1	Balanced use of organic and inorganic chemicals by following IPM and INM practices
	Use of agro chemicals		1	Field demonstration and farmers training on INM & IPM are an integral part of the sub project
Productivity enhancement in dairy	Enhanced biodiversity	4		
	Improved animal health with supply of adequate feed and fodder, Ensuring veterinary services			
Interventions in low cost fisheries	Effect on biodiversity due to development of low cost fisheries using ditches and also in paddy fields	3		

Enclosure II

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

Activities	Issues	Anticipated level of Impacts		Mitigation Measures (Negative Impact) ⁴
		Positive	Negative	
Enhancement of livelihood security and employment generation for the poor farming communities of the region	Enhanced in income and increased employment due to increased crop productivity	4		
	Improvement in food and nutritional security due to increased availability of grain, vegetables, fish etc.	4		
Interventions in low cost fisheries	Alternate source of income through development of low cost fisheries using ditches and also in paddy fields	3		
Interventions related true potato seed cultivation	Change in seed use and consequent impact on income	3		
	Availability of seed		1	Ensuring seed supply among the community through its cultivation and distribution
Empowerment through capacity building and skill development of stakeholders including men and women farmers.	Enhanced skill for adoption of different interventions through different training programmes, exposure visits etc	(4)		
	Reduced role of middle men, contractors through formation of SHG/CIG/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, panchayati raj members