

Title of NAIP sub-project: Improvement of Rural Livelihood Security in Hardoi and Fatehpur Districts of Uttar Pradesh through Diversification in Agriculture (CSUAT, Kanpur)

Environmental and Social Safeguards Management Framework

No. of consortium partners: 4

1. Chandra Sekhar Azad University of Agriculture and Technology, Kanpur- Lead Centre
2. Central Soil & Water Conservation Research and Training Institute, Research Centre, Datia M.P.) ICAR)
3. State Institute of Rural Development, Bakshi Ka Talab, Lucknow
4. Society for Management of Agricultural Rural Project (SMARP), Kanpur

No. of States/UT covered: One (Uttar Pradesh)

No. of Districts covered : Two (hardoi and Fatehpur)

Number of beneficiary farmers: 3200

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

Budget: Rs. 678.794 lakhs

Project Objectives:

1. Raising productivity and profitability from farming through adoption of innovative production technologies and promotion of input exchange
2. Mitigating soil and water losses and enhancing bio-mass production through management of natural resources on watershed basis
3. Creating participatory rural structures /processes for socio economic capacity building of farmers / farm women and developing five-faced (production- saving –finance- enterprise-insurance) SHG models

Brief Project Description:

Two disadvantaged districts in Uttar Pradesh, viz. Hardoi and Fatehpur, and two clusters each in these districts have been selected for the project with the goal of creating a sustainable rural livelihood security model through diversification in agriculture, development of rural institutions and facilitating linkages with agricultural, marketing, finance and insurance agencies.

The objectives of the Project are directed towards site-specific identification and improvement in the performance of farming systems in the identified watershed through an optimum combination of technologies, judicious use of natural resources for ensuring sustainable production, and strengthening of local Institutions and capacity building,. The cumulative budget of the Project spanning four years is Rs. 678.794 lakhs.

The deliverables/outputs envisaged at the end of the Project implementation period (4 years) are in increase in the productivity of crops by at least 25%, a reduction in runoff and soil loss by at least 25%, an increase in ground water recharge by at least 40%, irrigation water saving by at least 50%, increase in milk production by 30%, increase in biomass productivity by 40%, increase in area under agro-forestry systems by at least 80%, increase in seed replacement rate from 10 to 40%, reduction in migration by least 30% and at least 50% percent rise in income of the beneficiaries

Major technological interventions proposed

1. Promotion of innovative input management systems through exchange method and optimum utilization.
2. Planning and introduction of site-specific farming systems (cropping system-livestock-alternate land uses-enterprises) with improved package of practices for all the components
3. Watershed based cost effective mechanical and bioengineering soil conservation techniques to arrest runoff and soil loss.
4. Promotion of the innovative concept of bio-industrial watershed management in one of the clusters as a model
5. Promotion of *in-situ* water harvesting techniques, introducing irrigation water and energy savers from sowing to harvest of crops
6. Creation of a unique goat revolving system in the villages and development of para-services for agriculture and livestock related needs of the farmers
7. Establishment of participatory seed and fodder bank at micro-watershed level.
8. Strengthening rural institutions through creation of SHGs of men and women and federations of SHGs

9. Ensuring livelihood security through capacity building and creation of micro-enterprises.
10. Creation of linkages among SHGs, KVKs, line departments, input agencies, banks and insurance agencies, cooperatives, agro industries and markets to sustain the working model

B. Environmental Category:

2. Major issues in the subproject:

- Social: Social inclusion, beneficial effect and sustainability and of interventions
- Environmental: Effect on agro-bio-diversity, Availability of water and pest management

3. 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.

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

No other risk is anticipated other than those covered under Enclosures I and II

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

I. The project will mostly have positive impacts, as it will reduce soil erosion, improve soil and water quality, and increase crop productivity. In other words, this project is focused on sustainability of natural resources.

II. Employment generation and ensuring livelihood security are expected to positively influence the socio-economy of the clusters.

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):

Different capacity building programmes to be organized during the project period are expected to improve the knowledge-base and skills of the farmers, and effect a positive shift in attitude of the stakeholders towards integrated farming and natural resources management.

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 include the consortia partners, KVKs, NGOs, PRI, farmers, self help groups, various line departments, input agencies, marketing agencies, banks, cooperatives and insurance agencies. All the stakeholders were consulted during various stages of formulation of the project.

8. Measures to address issues

- i. **Environment-** 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.

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

Disclosures /consultations with stakeholders /interaction meetings /exchange of project-related information /exposure visits would be done at appropriate stages of the project implementation period

Enclosure-I

Environmental safeguard: Activities, issues, impact and mitigation measures

| Activities ¹ | Issues | Anticipated level of Impacts ³ | | Mitigation measures (Negative Impact) ⁴ |
|--|---|---|----------|--|
| | | Positive | Negative | |
| Land shaping, contour and field bunding, cover crops, contour farming, strip cropping, gully plugs (bio-engineering) | Reduced soil erosion, vegetation cover | √ (4) | | |
| | Reduced land degradation through reclamation of salt-affected soils | √ (3) | | |
| Crop diversification | Enhanced Farm productivity, vegetation cover through agro-forestry | √ (3) | | |
| Soil and water testing; site-specific and integrated nutrient and pest management | Soil and water quality, agro-biodiversity, reduced pest resurgence | √ (3) | | |
| Water harvesting structures and ground water recharge | water availability, water quality | √ (4) | | |
| | Reduced land for agriculture | | √ (1) | Will be compensated through multiple use of water |
| Saving of energy/fuel | Environment quality, water productivity through micro-irrigation and bullock drawn pump | √ (3) | | |
| Livestock improvement | Animal productivity, better health | √ (4) | | |

Enclosure II

Social safeguard: Activities, issues, impact and mitigation measures

| Activities ¹ | Issues | Anticipated level of Impacts ³ | | Mitigation measures (Negative Impact) |
|---|---|---|----------|--|
| | | Positive | Negative | |
| Planning and introduction of site-specific farming systems | Improved income, reduced migration through Crop diversification, Seed production, livestock, agro-forestry | √ (4) | | |
| Capacity building programmes, formation of SHGs of men and women | Skill development, Employment, livelihood and social security, reduced role of middlemen, reduced drudgery of women, human health | √ (4) | | |
| | Reduced Migration | √ (3) | | |
| | Social conflicts (ego/group clashes, profit sharing) | | √ (2) | Participatory approach, Regular monitoring by the PI and through resolution mechanisms |
| Creation/promotion of micro-enterprises | Employment, income patterns, livelihood security, migration | √ (4) | | |
| | Risks associated with entrepreneurship, failures, marketing of produce/products | | √ (2) | Ensuring support through linkages with finance and insurance agencies and line departments |
| Linkages/Liaison with financial Institutions, Government and non-Governmental organizations, input agencies, Universities | Sustainability, livelihood security, reduced role of middlemen | √ (3) | | |