1. **Country and Sector Background**

   (a) About 80% of the 260 million people living below the poverty line in rural areas of India depend on agriculture for their livelihood. At the same time, the natural resources and ecological foundations essential for sustained advances in the agricultural productivity are rapidly shrinking and declining under anthropogenic and socio-economic pressures and climate change.

   (b) A number of factors lead to this deteriorating situation. Expansion of agriculture combined with unsustainable agricultural and natural resource management practices such as over-cultivation, nutrient inputs, poor irrigation practices, deforestation and overgrazing, often induced by population pressure, social conflicts and disruption of social systems, as well as inappropriate government policies and poverty. Poor people affected by a deteriorating resource base often need to draw on their limited assets in order to survive, which accentuates their poverty.
A vicious cycle is thus generated linking deteriorating natural resources to deteriorating livelihoods as people encroach further on fragile soils, sparse vegetation and limited water resources to meet their basic needs for food, shelter and livelihood. In order to generate additional income and employment for the poor and halt and reverse land degradation and biodiversity loss, the role of agriculture is critical. A scenario analysis shows that with the limited scope for area expansion, the main source of agricultural growth combined with control of land degradation and loss of, primarily agricultural biodiversity, will have to come through enhanced productivity. This, already substantial challenge for the agricultural sector, is further aggravated by the additional stress that will be put on agricultural and biological systems as a result of climate change.

2. Objectives

The additional financing from the Global Environmental Facility is to support the development and implementation of innovations in agriculture through collaboration among farmers, private sector, civil society, and public sector organizations. The project is complementary to the parent project: India National Agricultural Innovation Project (NAIP) in that it will focus on promoting approaches and techniques for sustainable management of degraded coastal land and water, on conserving and sustainably using local biodiversity (plant, animal and fish) for agricultural intensification and livelihood security, and on enhancing capacity to respond to climate change and variability in drought and flood prone areas. The GEF support will finance activities that address land degradation, biodiversity and adaptation to climate change. The GEF support will also pilot the local operationalization of adaptation strategies to climate change.

The global objective of the proposed project for additional financing is to strengthen institutional and community capacity on sustainable land and ecosystem management approaches and techniques for restoring and sustaining the natural resource base, including its biodiversity, while taking account of climate variability and change. The project is in the pipeline of the Sustainable Ecosystem and Land Management Country Partnership Program and as such will provide inputs for mainstreaming SLEM in sector policies.

3. Rationale for Bank Involvement

The project is consistent and will contribute to the Bank’s strategic development objectives of the Country Assistance Strategy (CAS) (Report No. 46509-IN). Challenges to sustainable development from the rising demands on already scarce and often degraded natural resources if not addressed would impacts negatively human livelihoods and growth prospects. Most environmental indicators exhibit negative trends, suggesting that growth is having a negative impact upon the country’s natural resources. There is a danger that resources depleted for current growth jeopardize future development prospects. The proposed project activities are aligned with the objective of two of the CAS pillars: (i) achieving rapid inclusive growth and (ii) ensuring development is sustainable. The project is also will contribute to achieving several goals of the 27 national targets under India’s XIth Five Year Plan (2007-2012) in that it will assist in strengthening the agricultural
research and extension system, with efforts to promote demand-driven, decentralized public agricultural research and extension systems, greater public-private partnerships, and closer linkages with various domestic and international sources of technologies and knowledge. The project focus is in line with the increasing Bank support to India focusing on expanding the knowledge base of climate change and variability impacts and adaptation in agriculture.

(g) Enhancing the sustainable development objective of NAIP through promoting sustainable land management was originally included in NAIP. Annex 17 of the PAD: Proposal for Investments by GEF in NAIP is focusing on the global benefits from mainstreaming Sustainable Land Management (SLM) in agriculture innovations. In 2006 the prospects of obtaining GEF-4 financing (blended with IDA) before Board approval had diminished due to GEF institutional changes and procedural delays in project processing. Consequently, the proposed GEF grant financing for NAIP was pursued as a supplemental project under the pipeline of SLEM CPP, for which the PIF for Project have been approved by the GEF Council in November 2007 and included in the work program. The proposed additional financing will help enhance the sustainability of selected NAIP activities focusing on agricultural transformation by bringing in a stronger focus on sustainable land management. The GEF support will finance projects that address land degradation, biodiversity conservation and adaptation to climate change. It will also support improved access to existing technologies that enable application of adaptation strategies to climate change. In this context project initiatives fall under NAIP component 2, 3 and 4 and include preventing land degradation with focus on sustainable land management of degraded coastal areas while enhancing livelihood security of farming communities. The biodiversity initiative aims to harmonize biodiversity conservation and agricultural intensification. The adaptation to climate change is under the GEF strategic pilot initiative to operationalize adaptation to climate change and enhance the adaptive capacity of people in drought and flood prone areas.

4. Description

(h) In line with the planned outcome of the parent project NAIP, the “Sustainable Rural Livelihoods Security through Innovations in Land and Ecosystem Management” through the additional grant financing from GEF will support the development and implementation of innovations in agriculture through collaboration among farmers, private sector, civil society, and public sector organizations. The GEF financing will support activities that address land degradation, biodiversity and adaptation to climate change. As one of the program projects of the Sustainable Ecosystems and Land Management Country Partnership Program (SLEM-CPP) its outcomes will provide inputs contributing to the overall objective the partnership.

(i) The additional financing follows the same project implementation structure as in the parent project NAIP. No major design changes have been proposed. The GEF additional financing will strengthen the Indian Council of Agricultural Research (ICAR) in its role as a catalyst for change in the national agricultural system and integration of sustainable land management, biodiversity conservation in productive landscapes and reducing agricultural
vulnerability through adaptation of farming practices to climate variability. Three blocks of activities will be implemented and supported by the GEF grant, which are as follows:

(1) **Land degradation**: Strategies for sustainable management of degraded coastal land and water for enhancing livelihood security of farming communities. The objectives of this component are: (i) Sustainable enhancement of the productivity of degraded land and water resources of the coastal region through integrated approaches; (ii) enhancement of livelihood security and employment generation for the poor farming communities of the coastal region; and (iii) empowerment through capacity building and skill development of stakeholders including men and women farmers.

(2) **Biodiversity**: Harmonizing biodiversity conservation and agricultural intensification through integration of plant animal and fish genetic resources for livelihood security in fragile ecosystems. The objectives of this component are: (i) Assessment, documentation and valuation of on-farm biodiversity for livelihood and foods security; (ii) assessment of economic potential of target species vis-a-vis cost and effect of conservation; (iii) development of an information management system to facilitate planned interventions for conservation, sustainable utilization of target species/populations and enhanced market access; (iv) adding value to target species/populations through technological interventions for enhanced rural livelihood security; and (v) capacity building of local farmers in agro-biodiversity management for livelihood security.

(3) **Adaptation to climate change**: Enhancing adaptive capacity to climate change and variability in drought and flood prone areas. The objectives of this component are: (i) Identification of current and future risks to livelihoods due to climatic variability and change; (ii) development of drought indices to facilitate early warning system (EWS) for drought & promoting it’s use in adaptation by farmers and other stakeholders; (iii) develop community based sustainable rural livelihood strategies to minimize adverse climatic impact in drought as well as flood prone vulnerable districts; and (iv) capacity building of on strategies for alternate livelihood strategies to cope with climate variability and change.

(4) **Policy mainstreaming** is a cross cutting theme of the project supported by a number of capacity building, knowledge dissemination and outreach activities based on lesson derived from field operations. Sustainable land and ecosystem management approaches and techniques will be mainstreamed into guidelines and policies of public and private institutions for which the SLEM CPP would provide the enabling environment at national level. The objectives of this component are to ensure that public and private organizations apply SLEM practices and policies to combat land degradation, increase utilization of indigenous biodiversity and adapt to climate variability and change.

5. **Financing**

<table>
<thead>
<tr>
<th>Source:</th>
<th>($m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>60.0</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>25.0</td>
</tr>
<tr>
<td>Global Environment Facility (GEF)</td>
<td>7.34</td>
</tr>
</tbody>
</table>
6. Implementation

(j) The implementation arrangements for the project will follow the procedures that have been put in place for the umbrella project, the National Agricultural Innovation Program (NAIP) which is implemented by the Indian Council for Agricultural Research (ICAR). The implementation arrangements are based on a decentralized model where each block of activities will be implemented by consortia that have been selected on a competitive basis. Each consortium will be responsible for timely implementation of field activities in compliance with the Bank requirements and overall NAIP governance structure. This structure will ensure closer integration of GEF project by using the NAIP oversight and reporting framework and thus ensuring smooth and effective implementation and compliance to safeguards and fiduciary provisions.

(k) The project additional financing is expected to become effective by the fourth quarter of calendar year 2009, and will complement the ongoing NAIP project that is scheduled for completion in December 31, 2012.

7. Sustainability and Replicability

(l) This project is part of the GEF financed Country Partnership Program on Sustainable Land and Ecosystem Management (CPP SLEM). Through this partnership it is linked into the larger partnership effort through a bottom up approach that builds on a number of operations promoting SLEM to trigger policy improvements. At the partnership program level the GEF project will liaise with the Indian Council for Forestry Research and Education which on behalf of the Ministry of Environment and Forest has the specific task of synthesizing and packaging, for a number of different target groups (public as well as civil society organizations), the lessons learned from the individual partnership projects and translate them into policy advice and operational guidelines for application at national level.

8. Lessons Learned from Past Operations in the Country/Sector

This additional financing is fully integrated into the on-going World Bank supported National Agriculture Innovation Project.

9. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment (OP/BP 4.01)</td>
<td>[X]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
<td>[X]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Pest Management (OP 4.09)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Physical Cultural Resources (OP/BP 4.11)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Involuntary Resettlement (OP/BP 4.12)</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
(m) The safeguard policies triggered indicated in this table are rather indicative and based upon the ISDS of the parent project (NAIP). The applicability of these and other policies to each of the sub-projects under this additional financing will be determined during the first three months of grant effectiveness as per the agreed systems and procedures laid out in NAIP.

(n) The borrower has followed the environmental assessment and institutional measures described below under the parent project NAIP which are also applicable to the sub-projects that are supported by additional financing under GEF. The sub-project specific measures will be determined during the implementation of the sub-projects during the first three months of grant effectiveness.

(o) Environmental and Social Management Framework for parent project: The ESMF of the parent project NAIP describes (i) the relevant legal and regulatory set up in India for managing relevant issues, (ii) an exhaustive list of potential impacts along with a menu of required mitigation measures; and (iii) the institutional arrangements for implementation and mainstreaming the required environmental and social management measures, including monitoring and evaluation requirements. In addition to the ESMF, ICAR has also developed a comprehensive Integrated Pest and Nutrient Management (IPNM) which provides guidance on the safe use of pesticides and other agro-chemicals, and the use of other pest management techniques.

(p) Environmental and Social Safeguards Management Note for sub-projects: Given that the sub-projects (and the interventions) are identified over time and as and when they are approved (and become effective), NAIP has planned for a pro-active safeguard measure which includes: (i) Environmental and Social Management Framework (ESMF) for the sub-projects; and (ii) Checklist of Impacts likely to occur. These will guide in ensuring that each sub-project proposal complies with safeguard requirements. Further, safeguards issues are not viewed in isolation, but integrated with the overall project implementation which also paves way for offering substantial opportunities to further environmental and social development objectives.

(q) ESMF and checklists provides guidance to the prospective consortium applicants as how to prepare an Environmental and Social Safeguard Management note, similar to the Bank’s ISDS, as a part of the overall proposal. The selection of all sub-projects will be subject to satisfactory safeguard compliance. During the NAIP implementation, the PMU and Bank have had extensive deliberations and steps were taken to simplify the instrument into a simple Safeguards Management Note. The same forms an integral part of the sub-project proposal.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas
10. List of Factual Technical Documents
11. Contact point
Contact: Adriana Damianova
Title: Lead Environment Spec.
Tel: (202) 4732159
Fax: (202) 522-1664
Email: adamianova@worldbank.org
Location: Washington DC

12. For more information contact:
   The InfoShop
   The World Bank
   1818 H Street, NW
   Washington, D.C. 20433
   Telephone: (202) 458-4500
   Fax: (202) 522-1500
   Email: pic@worldbank.org
   Web: http://www.worldbank.org/infoshop