

**PROJECT INFORMATION DOCUMENT (PID)**  
**CONCEPT STAGE**

Report No.: PIDC635

<b>Project Name</b>	Integrated SLEM Approaches for Reducing Land Degradation and Desertification
<b>Region</b>	SOUTH ASIA
<b>Country</b>	India
<b>Sector(s)</b>	Environment, Agriculture, Climate Change
<b>Lending Instrument</b>	Specific Investment Loan (GEF Grant)
<b>Project ID</b>	
<b>Borrower(s)</b>	Ministry of Environment and Forests, Government of India
<b>Implementing Agency</b>	MoEF
<b>Environmental Category</b>	B-Partial Assessment
<b>Date PID Prepared</b>	Jan 23, 2013
<b>Estimated Date of Appraisal Completion</b>	October 2013
<b>Estimated Date of Board Approval</b>	January 2014
<b>Concept Review Decision</b>	February 2013
<b>Other Decision (as needed)</b>	

## **I. Introduction and Context**

### Country Context

Despite significant increases in contribution of service sector in its Gross Domestic Product (GDP), India remains an agrarian economy with over 60% employment generated in the sector. However, over the last decade, agriculture, which accounts for around a fifth of GDP, grew at only 2.5% per year. Agricultural growth is impacted by good monsoons, greater production of high-value agricultural products (fruits, vegetables, and dairy products), an increase in the minimum support price for grains, and the sudden increase in global prices for agricultural products. During 2005-08, all these factors combined to give a faster growth rate of 4.7% per year. But sustaining this level of performance over the longer term will be difficult without addressing several policy and structural constraints, including a myriad of restrictions, subsidies, support prices, sector governance issues, as well as tiny landholdings and years of underinvestment. The Eleventh Plan established 9% as the target for GDP growth for 2007-2012 and stated that *"the target is not just faster growth but also inclusive growth, i.e. a growth process which yields broad based benefits and ensures equality of opportunity for all"*. The actual growth of GDP was much below the target. While global economic recession contributed to this low growth rate, continuation of policy and structural constraints and underinvestment has also

contributed significantly.

Although India is required to increase land based productivity to ensure food security for its rapidly increasing population, both farm based activities (agriculture) and non-farm but allied activities (livestock) that are dependent on natural resources are suffering because of land degradation and desertification. The scale and impact of land degradation and desertification is severe in the country, affecting about 32% and 25% respectively of India's total land area. Not only it adversely affects the country's ecosystem health and farm productivity, it also leads to fewer job opportunities and local migrations. Marginalized farmers with small land holdings are most affected. Investments are required to maintain and/or increase land based productivity and prevent land degradation and desertification that has not been looked up on holistically at the policy level. Further, it compromises the efforts and investments made by the Government on enhancing agricultural productivity, improve soil and water conservation, and maintain a reasonable forest cover, all of which provide support to maintain an economic stability in the country.

#### Sectoral and Institutional Context

***The problem spills beyond farmlands.*** Land degradation and desertification affect large areas of the country, impacting not only the farming system, but also watersheds, fragile ecosystems, pastures, open forests and seasonal wetlands. Unabated land degradation will be significantly pronounced with anticipated climate change and exert pressure on the already constrained natural resource management approaches having limited institutional support. This is more apparent in dry lands which cover 69.6% (228.3 million hectares (mha)) of India's total land area (328.2 million hectares (mha)). Of this arid area is reported to be 50.8 mha (22.25%), semi-arid 123.4 mha (54.05%) and dry sub-humid 54.1 mha (23.69%). With such an extent of water stressed areas, managing land that is undergoing degradation and desertification becomes a significant context for undertaking measures to counter it.

***Inadequate monitoring of land degradation and desertification.*** There is inadequate scientific monitoring of the trends of land degradation in the country that would allow for timely and well-targeted interventions at the national level and sub-national level, including investments of the Integrated Watershed Management Program (IWMP) in the 12<sup>th</sup> Plan. Monitoring would also help India meet its obligation of reporting on the performance and impact indicators under the United National Convention on Combating Desertification (UNCCD). While the UNCCD Cell housed in the Ministry of Environment and Forest (MoEF) is mandated for national reporting, compiling updated data and accessing information from the sub-national level remain a challenge. At present, there is no streamlined process whereby relevant data is compiled and accessed in a simple but effective way.

***The difficulty of scaling up SLEM best practices.*** There have been a number of pilot projects and some traditional practices that have shown promise in arresting land degradation and desertification at farm level. However they have not been widely adopted by farmers practicing dry land agriculture. Such practices only last as long as supported by projects. As a result, water induced soil erosion, reducing soil productivity, lowering of groundwater levels and degradation of common lands in the sub-watersheds has become more severe. In this context and given small farmlands, production cost (inputs and labor) does not commensurate with returns (low yields and income), making the current practices unsustainable. This collectively reduces the drought preparedness and increases the vulnerability of farmers to climate change.

***Socio-economic challenge of land degradation.*** Small landholders, marginal farmers and landless people are the most affected by land degradation. The average landholding in India is about 1.63 ha (2005-06), which has plummeted from 3.20 ha (1970-71). Out of the total 7.6 million operational holdings, marginal (48%) and small (27%) farmer together account for 75% but operate only 36.5% of

the total operated area. The subsistence livelihood of landless people is linked to livestock which is highly dependent on meager naturally occurring fodder/grazing opportunities. Thus, a large part of the affected population is socio-economically poor having limited skills and opportunities for adopting and practicing SLEM best practices.

***Multiple institutional arrangements with fragmented mandates.*** The agricultural departments provide extension services on farm related approaches and best practices, whereas issues relating to land management and watershed treatments are dealt by the Department of Land Resources (DoLR) housed in the Ministry of Rural Development. Issues and obligations under the UNCCD are housed within the Ministry of Environment and Forests (MoEF) with a specific UNCCD Cell. Parts of the lands belonging to Village Panchayats fall under the overall jurisdiction of the Panchayati Raj Institutions (PRI). At the same time, various categories of forestlands, including severely degraded ones, are managed by the forest departments. Such an institutional complexity within a contiguous landscape having lands undergoing various degrees of degradation poses a challenge to implement measures to arrest or reverse land degradation, given that land treatment often require a physical continuum. A streamlining approach is required that helps to converge the products and support from multiple institutions to address the issues of land degradation and desertification.

#### Relationship to CAS

The proposed project is aligned with the second pillar of the Country Strategy and would support India to better manage its natural resources based agricultural production systems help increase the resilience of farmers practicing dry land agriculture. The activity also aligns with the forthcoming Country Strategy, as environmental sustainability is a crosscutting theme across the strategy. The proposed activity, therefore, would lend support to implement measures that would lead to sustaining growth through field investments; information technology based monitoring systems and building people's awareness through networking.

## II. Proposed Development Objective(s) (Display Only - Pulled from PCN)

#### Proposed Development Objective(s) (From PCN)

To scale up sustainable land and ecosystem management practices in selected semi-arid areas and to improve the monitoring of land degradation and desertification.

#### Key Results (From PCN)

- Land area where sustainable land management practices have been adopted as a result of the project (ha) (Core)
- Land users adopting sustainable land management practices as a result of the project (#) (Core)
- Streamlining of reporting on national indicators on land use/land use change. At least five States start using the online database/MIS built through project
- Establishing a national knowledge exchange platform (community of practice) with at least 10 SLEM best practices disseminated using the knowledge platform

## III. Preliminary Description

#### Concept Description

The proposed project essentially addresses the key sectoral challenges identified earlier. Its strategy directly addresses the scaling up and monitoring constraints and its co-financing would leverage provisions to address socio-economic and natural resource management. Given the limited GEF resources, the project would focus on these challenges only in select semiarid areas. On institutional aspects, it would strengthen monitoring and reporting capacities at the national and sub national level. Part of the strategy for the project is to align its investments with the ongoing Karnataka Watershed Project (II) (KWP-II) and the Maharashtra Agricultural Competitiveness Project (MACP) that would leverage institutional resources and mainstreaming of convergence approach by way of their working with relevant line agencies in the project areas. A co-financing of approximately US\$ 18 million is envisaged to complement project's proposed investments from the two baseline projects (KWS-II \$12 million and MACP \$6 million). It may be noted that while KWP-II has shown good interest in this project, their primary focus is currently to implement their own project effectively. However, by the time the GEF operation is ready for implementation, KWP-II would also have established the agreed institutional arrangements as well as made early investments as per its design. This would allow for limited convergence and would also provide an opportunity to monitor land degradation and desertification in an integrated manner. The project proposes the following three components:

**Component 1: Scaling-up of SLEM best practices (US\$ 3.0 million)**

This component would support implementation of integrated approaches that would improve soil fertility, water management, agro-forestry, and at the same time prevent land degradation and desertification. Such integrated natural resource management practices would also be scaled-up in crop-livestock systems, especially for smallholder farmers with limited options for improving farm inputs (e.g. fertilizers, seeds, tools). Conservation and climate smart agriculture would help overcome the twin challenges of arresting land degradation and meeting food security targets. This component would support application and scaling up of the existing and tested SLEM best practices on the farmlands in the selected watersheds. The best practices would be screened for suitability to the respective agro-climatic zones. This component would closely align with the baseline projects (KWP-II and MACP) to use the convergence and interdepartmental coordination approaches of the baseline projects in ensuring timely provisioning of inputs, regularizing extension services and investing in dissemination of best practices protocols. It would help build farmers' knowledge for increased resilience against anticipated climate change impacts. This component would be implemented in the 8 districts of KWS-II in Karnataka and a similar number of MACP districts in Maharashtra (refer Annex III for map showing geographic coverage).

**Component 2: Building national capacity and knowledge network for monitoring SLEM outcomes (US\$ 1.36 million)**

This component would support enabling activities related to the obligations of the Parties to the UNCCD in the context of wider capacity development for SLM. It would support adaptive management by aiding in national monitoring and reporting to UNCCD in the context of supporting the national and regional SLEM agenda and the development of new tools and methods for effective monitoring and assessment of land degradation and desertification status.

***Sub-component 2.1: Development and Implementation of a National Monitoring System (US\$ 0.5 million)***

This sub-component would help increase national capacity for monitoring the status of land degradation and desertification and SLEM outcomes. It would also facilitate reporting on key indicators under the UNCCD. Current capacity to prepare National Reports (NR) to report back to the

Conference of Parties (COP) on the National Action Plans (NAPs), is limited. This sub-component would help develop and implement a web based national MIS that would allow capturing trends and status of key impact and process indicators on land degradation and desertification. The data input would be collected at the sub-national and local level and would be consolidated at the national level. This would improve the timeliness and quality of the NR to UNCCD. Development of this national level MIS would also help monitor the results of UNCCD action programs at the country level.

***Sub-component 2.2: Development and Implementation of a National Knowledge Network (US\$ 0.86 million)***

This sub-component would help develop an interactive web-based platform with direct access and use at the farm level. It would promote and mainstream synergies and NRM best practices through a network of excellence, including and using the extension services network. The platform would provide links and virtual access to repositories of best practices and analytical reports. It would also develop a community of practice by connecting stakeholders with common interests in adopting and expanding SLEM approaches. The platform would also organize learning events at the farm level.

**Component 3: Project Management (US\$ 0.2 million)**

A modest project management unit would be established to coordinate and monitor project implementation and progress towards the envisaged development objective.

**IV. Safeguard Policies that Might Apply**

<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
Environmental Assessment OP/BP 4.01	<b>X</b>		
Natural Habitats OP/BP 4.04		<b>X</b>	
Forests OP/BP 4.36		<b>X</b>	
Pest Management OP 4.09	<b>X</b>		
Physical Cultural Resources OP/BP 4.11		<b>X</b>	
Indigenous Peoples OP/BP 4.10			<b>X</b>
Involuntary Resettlement OP/BP 4.12		<b>X</b>	
Safety of Dams OP/BP 4.37		<b>X</b>	
Projects on International Waterways OP/BP 7.50		<b>X</b>	
Projects in Disputed Areas OP/BP 7.60		<b>X</b>	

**V. Tentative financing**

<b>Financing Source</b>	<b>Amount</b>
BORROWER/RECIPIENT	00.00
Global Environment Facility	4.56
Total	4.56

## **VI. Contact point**

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