

China

PRC-GEF Partnership to Combat Land Degradation in Drylands

The PRC-GEF Partnership to Combat Land Degradation in Drylands Project, is designed to assist the Government of China in establishing an effective system of integrated natural resource management in the drylands. The overall goal is to reduce land degradation and restore dryland ecosystems in the western region. The Partnership was initiated in 2002 based on GEF Integrated Ecosystem Management (IEM) Program (then known as Operational Program 12 or "OP12"). In order to strengthen efforts

in combating land degradation and desertification in the drylands, the partnership was linked to the Sloping Land Conversion Program (SLCP), a major rural development program ('Grains for Green') financed by the Government. The PRC-GEF Partnership Program was financed with US\$ 32 million of GEF funds and more than US\$ 375 million in co-financing. The Program included eight sub-projects covering nine provinces / autonomous regions.



Ulrich Apel, GEF, with herders in Guansu Province.

GEF Learning Missions

As part of the GEF's Results Based Management (RBM) approach, the GEF has introduced a portfolio monitoring and learning review process to address specific thematic topics within the respective focal areas. Government partners will be the main users of findings coming from the learning review process. Analysis and lessons derived from the learning missions will be used to improve focal area strategies and policies, and inform project design and implementation as well as feed into GEF's knowledge management initiative. In coordination with GEF Agencies and the Scientific and Technical Advisory Panel (STAP), the GEF Secretariat has identified learning objectives for each focal area strategy with the ultimate objective of:

- a. Facilitating learning that is broader than one project;
- b. Testing focal area strategy assumptions; and
- c. Validating GEF policy assumptions

For the Land Degradation focal area in particular, the learning objectives and associated missions examine how effectively the Integrated Ecosystem Management (IEM) approach is being applied to combat land degradation in drylands. The knowledge generated will contribute to further advance the LD focal area strategy and portfolio - integrating linkages to other focal areas such as Biodiversity, International Waters, and Climate Change. It will also increase understanding about how project assumptions and risks associated with IEM are addressed during project implementation.

The Integrated Ecosystem Management (IEM) Approach

The IEM Approach is based on the ecosystem approach adopted by the Convention on Biological Diversity. It aims at integrating land, water and living resources management to promote conservation and sustainable use in an equitable way. The approach (a) applies scientific methodologies focused on levels of biological organization, in which humans, with their cultural diversity, are an integral component of many ecosystems; (b) requires adaptive management to deal with the complex and dynamic nature of ecosystems and the absence of complete knowledge or understanding of their functioning; and (c) does not preclude other management and conservation approaches but could rather integrate several approaches and other methodologies to deal with complex situations.

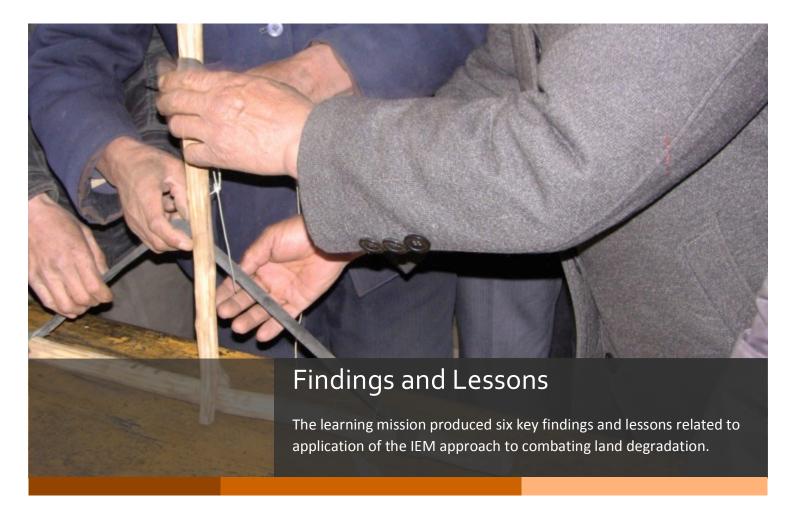
The Learning Objectives

GEF undertook a learning mission in February 2012 to the People's Republic of China to observe and understand the IEM approach in combating land degradation. The mission was focused on the overall PRC-GEF partnership approach but based on experiences from two of the eight subprojects implemented by the Asian Development Bank and the World Bank. The visit included consultations with provincial leaders, project staff, and local stakeholders in three landscapes/watersheds under the program and one reforestation landscape funded by the Central Government.

The consultations were guided by the following questions:

- a) What are the drivers that generate catalytic effect?
- b) How does the GEF's catalytic role influence the choice of activities to GEBs?
- c) How is progress toward targeted IEM outcomes being tracked?
- d) What tools and indicators are being applied for monitoring the IEM approach?





Enhancing the catalytic effect of GEF through identifying, up-scaling, and replicating best practices

Drivers that Generate a Catalytic Effect

The drivers of GEF catalytic effect on the IEM Approach are manifested at regional, national, and local levels, mainly in the context of linking policy and on-the-ground actions. The IEM approach has been institutionalized at provincial level through mainstreaming in strategies and action plans. In Qinghai and Gansu provinces, targeted investments for IEM activities were included in five-year provincial development plans. This mainstreaming illustrates how GEF can drive innovations in environment and development beyond the financing provided for generating GEBs. Mainstreaming is possible because the PRC government has essentially embraced IEM as the approach to combating land degradation and desertification in

drylands, and for which the government is channeling major investments as part of the country's development strategy in the affected provinces and autonomous regions.

Developing a Framework for IEM implementation

The Framework for IEM Approach implementation allows ownership at all levels but is hindered by coordination difficulties. The framework for implementing IEM extends from the Central Project Management Office, to the Provincial Project Management Office, to Village Committees of pilot sites, and then individual farmers and land users, taking into consideration the needs of all stakeholders. As a result, there is strong ownership of the overall project approach manifested at all levels. However, the emphasis on integration of environment, agriculture, and rural development through the IEM approach presents inherent difficulties for coordination within the partnership. This was exemplified by the expressed wish for improved information sharing and coordination.

Enhancing Global Environment Benefits through improved understanding of social impacts

Generating GEBs through Synergy

The IEM Approach generates GEBs through links between land and water management, poverty alleviation, climate change, and some biodiversity conservation. The IEM approach fosters a focus on linking land management options with national rural development programs such as the Sloping Land Conversion Program, climate change mitigation, and adaptation for improved livelihoods. At the provincial/field level, sectoral integration is evident through the range of agriculture and development innovations being applied. It is difficult, however, to understand how crosssector links were factored into the design of pilot sites, including the need to manage tradeoffs between ecosystem services and development needs. The lack of cross-sector links presents new challenges for up-scaling the IEM approach beyond the pilot sites, especially in provinces facing increased pressure from livestock grazing and irrigation demands. The potential for integration or mainstreaming biodiversity conservation is high in all provinces and could be important for enhancing resilience of the dryland ecosystems.

Monitoring GEBs presents challenges

GEBs are being generated in the pilot sites but are not adequately monitored and measured. Currently land degradation is assessed through training and capacity development for application of tools and methods. At the same time, IEM activities contribute to SLM with potential GEBs through improvements in hydrological flows, vegetation cover, carbon sequestration, and biodiversity conservation. Successful monitoring of environment and development impacts was noted in the World Bank/GEF Gansu-Xinjiang Pastoral project in the Xiangguan Township where biodiversity benefits from grazing land management during the four-year project implementation period (2004-2008). However, it was discovered that indicators and tools for monitoring GEBs are only just being developed under the various projects. Since most projects under the PRC-GEF partnership are either just starting or in their early stages of implementation, there are opportunities for selecting appropriate indicators of GEBs and establishing baselines for monitoring. The indicators and monitoring tools could be streamlined and standardized across all projects to more effectively demonstrate benefits from the overall partnership approach.



Enhancing the Sustainability of Outcomes from IEM Implementation

Delivering tangible results

Progress with the IEM Approach is being tracked through tangible results for reducing and reversing land degradation, income generation, and improving livelihoods in pilot sites. Participatory planning enables villages to streamline livelihood and productivity needs into land management options across landscapes and watersheds. Consequently, a range of production and development options are being introduced in an integrated manner to help improve quality and sustainability of ecosystem services. The IEM Approach is enabling villages to work collectively on SLM activities and resolve resource conflicts across watersheds.

For example, in the Hudan catchment pilot site in Qinghai province, conflict resolution between upstream and downstream communities has improved quality and quantity of hydrological flow for irrigation. In this regard, the payment for ecosystem services (PES) mechanism is being evaluated as a possible incentive, and cost-benefit analyses are being conducted to demonstrate the value-added of land degradation control based on land use options being introduced.

Model for Up-Scaling and Replication

The IEM Approach has the potential for replication and SLM up-scaling if it is developed into a stepwise process tailored to the PRC-GEF projects. Innovations such as use of methane tanks for biogas and solar cookers introduced in the pilot areas are economical, but also important for contributing GEBs in the form of reduced pressure on vegetation, improved carbon storage, and reduced risk of pollution or degradation of water resources. Thus, the generic IEM model should be developed into a stepwise process and clarify how the approach has been adapted to elements of capacity building, policy and legislation, science, institutional development, and investments in micro-level projects. Establishing how these components fit together in the IEM framework could facilitate up-scaling beyond the pilot demonstration sites and increase the prospects for generating significant GEBs.





"Encourage SLM approach on a larger scales and across multiple focal areas"

There is considerable potential for generating GEBs in the context of development priorities for all land degradation affected provinces in the country. It is therefore prudent for the next phase to emphasize investments in SLM across larger scales in the affected provinces. Such investments could also leverage GEF resources across multiple focal areas. The hope is that observations from the learning mission will further strengthen the existing partnership between the GEF and the Government of PRC during GEF-5 and beyond.

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