

GEF/C.9/6

GEF Council
April 30 - May 1, 1997
Agenda Item 9

FOLLOW-UP ACTION TO THE STAP WORKSHOP ON LAND DEGRADATION

Recommended Council Decision

The Council, having reviewed the recommendations contained in report GEF/C.9/6, *Follow-up action to the STAP workshop on land degradation*, agrees with the course of action proposed in the document and requests recipient countries, the Implementing Agencies, and the Secretariat to take appropriate steps consistent with the recommendations to identify, prepare and implement GEF-financed land degradation activities as they relate to biodiversity, climate change and international waters.

BACKGROUND

1. This report presents recommendations aimed at promoting the preparation and implementation of GEF-financed projects concerning land degradation.
2. The process outlined here began in 1994 when GEF developed preliminary papers to serve as a basis for its Operational Strategy. In February 1995, the Council reviewed and endorsed, subject to their comments, *The Scope and Preliminary Operational Strategy for Land Degradation*, GEF/C.3/8. The main conclusions of that report were then incorporated in the GEF Operational Strategy that was adopted by the Council in October 1995.
3. Document GEF/C.3/8 clearly articulates the close synergy between land degradation issues and important program elements in biodiversity, international waters and climate change. Land degradation has been identified as a major cross-cutting theme for these focal areas .
4. In September 1996, STAP organized a workshop on land degradation in Dakar, Senegal. The workshop elaborated upon the basic concepts of *The Scope and Preliminary Operational Strategy for Land Degradation*, and the Operational Program on arid and semi-arid ecosystems that had been prepared as one of the ten operational programs called for in the Operational Strategy.
5. This document reports on further actions taken since the STAP workshop and makes recommendations for further action. It builds both on the workshop report and on earlier operational strategy statements and operational guidelines.

THE STAP WORKSHOP

6. The STAP workshop outlined a set of key issues on land degradation and proposed principles to be followed in project design.

7. The main linkages between land degradation and the GEF focal areas were judged to be:

- (a) enhancement of dryland soils as carbon sinks;
- (b) control of soil radiation, dust and gas emissions through revegetation, reforestation and control of bush fires;
- (c) conservation of drylands, biodiversity (plant and soil organisms) and development of appropriate farming systems/practices;
- (d) utilization of dryland biodiversity to provide alternative livelihoods, for example, the use of medicinal plants, to take pressure off land; and
- (e) reduction of sediment/salt pollution of rivers, lakes, etc. - linkage of land and water management.

8. Land degradation projects can be enhanced by integrating traditional methods and practices with modern technology/knowledge and the adoption of an ecosystem approach to land management. The need to conduct more targeted research, particularly applied research that relies on farmers' indigenous knowledge, was emphasized.

9. The workshop addressed three issues:

- (a) opportunities to make explicit the global benefits of land degradation control measures;
- (b) constraints with regard to capturing these opportunities, and strategies to overcome the constraints; and
- (c) design of projects so as to include land degradation aspects as they relate to the focal areas of biodiversity, climate change, and international waters so as to maximize global benefits.

10. Opportunities for land degradation control measures were explored for forestry ecosystems undergoing degradation; rainfed and irrigation agriculture ecosystems; and rangeland and pastoral ecosystems. Constraints were found to be most frequently associated with: land tenure systems; lack of use of indigenous knowledge; inappropriate policies; and incomplete scientific and technical information.

11. The following set of principles relating to project development was proposed:

- (a) projects need to be participatory and to take into account the objectives and constraints of farmers, pastoralists, forest dwellers, and other stakeholders;
- (b) proposed land degradation control measures must be feasible, and within the long term, should bring rapid and identifiable returns to participants;

- (c) problems associated with land tenure systems need to be addressed;
- (d) distortions introduced by inappropriate policies, including price policies, macroeconomic policies and the legal setting must be addressed;
- (e) data collection, analysis and dissemination must be improved, and monitoring of on-going efforts based on well defined indicators must be improved; and
- (f) institutional coordination at the national and regional level to take care of global benefits of land conservation and transboundary impacts should be strengthened.

Follow-up Actions and Recommendations

12. Consistent with STAP's findings it is recommended that the GEF Secretariat and the Implementing Agencies continue to develop these activities with a view to promoting the preparation and implementation of land degradation activities as they relate to biodiversity, climate change and international waters:

- (a) preparation of eligibility guidelines for the selection of projects dealing with integrated drylands management to address basic biodiversity, ecosystem management;
- (b) identification of project concepts together with preparation of an inventory of projects under preparation, with particular regard to meeting the objectives of the operational program concerning arid and semi-arid ecosystems;
- (c) development of guidelines to encourage goal oriented targeted research; and
- (d) evaluation of land degradation and dryland projects.

(a) Projects in Land Degradation: Guidelines for project eligibility

13. Article 3 of the Instrument for the Establishment of the Restructured GEF states:

"the agreed incremental costs of activities concerning land degradation primarily desertification and deforestation, as they relate to the focal areas, shall be eligible for funding"

14. To be eligible for GEF funding, projects should address global environmental objectives related to biodiversity, climate change or international waters and in so doing, may also address land degradation issues as they relate to the focal area concerned. As land degradation is an interface area with the international waters, biodiversity and climate change focal areas, close coordination with the operational programs in those areas (see paragraphs 16 to 23 below) will be important. As land degradation is a multi-dimensional activity it may be that GEF activities in this area will help achieve global environmental objectives in more than one focal area.

(b) Project Priorities

15. There is a wide range of possible project ideas concerning land degradation which might be put forward in the GEF focal areas of biodiversity, climate change and international waters. It is proposed that initial attention be given to project activities in arid, semi-arid and dry sub-humid areas which address one or more of the following:

(a) the problems of biodiversity in the context of human patterns of land use and conservation related to integrated ecosystem management;

(b) an integrated resource management approach to the preservation and enhancement of biodiversity, management of carbon sequestration and/or water resources in dryland areas, especially rangelands occupied by pastoralists and agro-pastoralists;

(c) activities which address the problems of international use of surface or sub-surface water resources in the context of land degradation in the drylands, like the Nubian Sandstone aquifers in the Sudan and Lake Chad Basin;

(d) activities which provide basic decision support information for climate change, biodiversity and international waters in areas such as land capability, GIS databases, in relation to integrated land, water and biodiversity use in areas affected by land degradation; and

(e) activities which address technologies, especially for climate change, which can assist local peoples in developing sustainable use of drylands, e.g. fuelwood use efficiency and fuel substitution, (e.g. solar power) and soil stabilization for seed growth.

Operational Programs

16. GEF has prepared a number of operational programs in which land degradation is an important component. These include:

1. Operational program 1 - arid and semi arid ecosystems;
2. Operational program 2 - coastal, marine and freshwater ecosystems;
3. Operational program 3 - forest ecosystems;
4. Operational program 4 - mountain ecosystems;
5. Operational program 8 - waterbody-based operational program; and
6. Operational program 9 - integrated land and water multiple focal area.

17. Within these Operational Programs the following features relate most directly to land degradation.

18. Operational Program 1 - Arid and semi-arid ecosystems. The Operational Program for arid and semi-arid ecosystems sets out to establish or strengthen systems of sustainable use of biological resources of the arid and semi-arid zone while conserving their biodiversity.

The program covers five main biomes:

1. Tropical Grassland and Savannah/Woodland Savannah;

2. Warm Desert and Semi Desert;
3. Temperate Grasslands;
4. Tundra Communities; and
5. Cold Desert.

This program calls for activities concerning:

1. soil conservation and restoration of degraded areas to conserve biodiversity;
2. natural resources management emphasizing integrated resource use with conservation and development, such as use of water resources and its distribution in order to spread out grazing pressure and prevent vegetation deterioration; and
3. energy conservation emphasizing conservation of trees and alternative energy sources to conserve the natural vegetation.

19. Operational Program 2 - Coastal, marine, and freshwater ecosystems. Coastal, marine, and freshwater ecosystems are affected, directly or indirectly, by land degradation. The GEF support activities that demonstrate how to control land degradation effects on these ecosystems.

20. Operational Program 3 - Forest ecosystems. The GEF will fund activities that prevent deforestation and promote sustainable use and sustainable management of forests and forested areas in order to conserve their biodiversity. Rehabilitation and restoration activities will be supported on tropical and temperate forest ecosystems in areas at risk.

21. Operational Program 4 - Mountain ecosystems. Projects for the conservation of mountain ecosystems and integrated land use will also serve to alleviate problems of land degradation. There will also be areas that have been degraded to the extent that they will require projects for rehabilitation and management.

22. Operational Program 8 - Waterbody-based program. This program includes best management practices for non-point source control of land-based pollution in degraded watersheds.

23. Operational Program 9 - Integrated land and water multiple focal area. A special relationship exists between land degradation in dryland areas and management of both surface and groundwater resources in transboundary drainage basins. Rehabilitation of damaged catchments, adoption of sustainable land use systems, and integration of water resources management and land management practices are priorities for both transboundary basins and ecologically important multiple country dryland settings. Improved watershed and catchment management, sustainable land-use and conservation systems, as well as sound sectoral development and economic policies are essential to addressing transboundary water concerns related to land degradation. Support for preparation of water resources management strategies by riparian countries is a common characteristic of these projects, providing a basis for harmonization of sectoral water use among basin countries in an environmentally sustainable manner.

Project Pipeline

24. The following project concepts, which are related to the above operational programs, are currently under development by the Implementing Agencies:

25. UNDP

1. Biodiversity and Livelihood Strategies in Ethiopia;
2. Critical Wildlife Corridors;
3. Dryland Biosphere Reserves - UNDP / UNESCO;
4. Dryland Germplasm project: Strengthening of the Dryland Genetic Base (Egypt, Israel, Palestine, Jordan, Turkey);
5. Integrated Development of Lake Chad;
6. Integrated Management of the Niger Basin;
7. Integrated Management of the Okavanyo Basin;
8. Lake Tanganyika: Pollution Control;
9. Nile Basin River Project;
10. Nubian Sandstone Aquifer;
11. Plant Genetic Research in the Magreb (Algeria, Mauritania, Tunisia);
12. Reducing Biodiversity Loss (Kenya, Uganda, Tanzania);
13. Regional Conservation and Sustainable Use of Drylands Agro-Biodiversity of the Fertile Crescent; and
14. Village Based Carbon-sequestration Activity (Follow-up to Sudan/Benin work);

26. UNEP

1. Indigenous Vegetation Management for Rehabilitation of Degraded Rangelands in Africa;
2. Land Rehabilitation in the border region of Senegal and Mauritania;
3. Management Strategies to contain Land Degradation and ensure food security in the Semi-arid areas of Southern Africa (South Africa, Namibia, Botswana and Zimbabwe);
4. People, Land Management and Environmental Change (PLEC);
5. Rehabilitation of Degraded areas in South-Western and North-Eastern Uganda and North-Western Kenya; and
6. Rehabilitation of Degraded lands in the Semi-Arid Areas of Angola, Namibia and Botswana;

27. World Bank

1. Burkina Faso-Mali: GEF Park Project to Develop International Conservation and Land Management Project;
2. Burkina Faso: Developing a National Strategy for Sustainable Dryland Natural Resources Management during Drought;
3. Community-based Wildlife Management. Expansion of pilot project;
4. Curriculum Development for Sustainable Dryland Management for Secondary Schools;
5. Mali-Burkina Faso: Conservation of Sahelian Biodiversity including African Elephant; and
6. Togo Biodiversity: An Integrated Biodiversity Program.

28. In addition the International Fund for Agriculture and Development (IFAD), in co-operation with World Bank, is currently developing 10 project concepts.

(c) Guidelines for Targeted Research

29. The STAP workshop identified the need to conduct more targeted research "particularly applied research that relies on farmers indigenous knowledge." The workshop also identified a number of gaps in our understanding of dryland ecosystems, for example:

"the need for a better understanding of the role of vegetation as the provider of organic matter for soil improvement and a canopy to intercept rain."

"the scarcity and unreliability of needed scientific and technical information, particularly that related to global environmental benefits."

30. There is obviously a great need for a better understanding of many scientific, technical and human issues to do with dryland degradation. But the GEF role has to be limited and focused and within the Council-approved principles for targeted research.

Recommended targeted research priorities concerning land degradation are:

1. research which addresses particular problems of integrated ecosystem management;
2. research that integrates the knowledge of local natural resource managers with scientific or technological knowledge; and
3. research which focuses on the dynamics of the interaction between people and the natural resource base.

31. All research activities will be geared to enhance local and regional capacity either through direct funding or by coordinated activities with non-local institutions.

(d) Evaluation Criteria and Processes for Land Degradation and Drylands Projects

32. It is clear from past activities in arid and semi-arid lands and particularly with biodiversity resource use and degradation projects that short term assessments of results are often inconclusive and sometimes misleading. This is in part due to the nature of the ecosystems involved and the year to year variation in rainfall and other parameters. On the other hand normal assessment processes cannot wait for many years or decades for at least some answer. One approach to this real dilemma is to develop indicators and evaluation criteria within the monitoring and evaluation framework of the GEF which take into account the special characteristics of activities designed to address land degradation. Useful indicators might include: survey of trends in vegetation cover and composition; measures of plant vigor, age and diversity; status and trends in soil, water and biotic resources production and marketing; and measures of agricultural and natural biodiversity.

33. Another approach is to develop comparative assessments; examining the project ecosystem in relation to similar ecosystems in nearby environments. The "control ecosystem" will in these

circumstances need to be carefully analyzed for comparability in the key elements to be measured.

34. It is recommended that both of these approaches be used.

CONCLUSIONS

35. Addressing land degradation calls for a concerted and coordinated effort in the affected countries, among donors and between donors and the countries affected. At present, the GEF is developing a pipeline of project activities that address land degradation issues as they relate to biodiversity, climate change and international waters. A significant commitment on the part of the governments involved is required to ensure sustainability for the benefit of both the national and global community. Many of the tools are in place -- national commitment and plans, traditional wisdom of local users, appropriate technologies-- and it is expected that the operational programs will serve to bring GEF efforts together into coherent long term actions that will contribute to the control land degradation.