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**NOTE ON THE PROPOSED DESIGNATION OF
LAND DEGRADATION AS A GEF FOCAL AREA**

Recommended Council Decision

The Council, having reviewed *Note on the Proposed Designation of Land Degradation as a GEF Focal Area*, GEF/C.18/4, agrees to consider at its next meeting proposed amendments to the Instrument to designate land degradation (desertification and deforestation) as a GEF focal area. In this regard, the Secretariat, in consultation with the Implementing Agencies and the Trustee, is invited to prepare proposed textual amendments to the Instrument for consideration by the Council at its next meeting with a view to the Council recommending approval of such amendments by the Assembly at its meeting in October 2002.

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I. INTRODUCTION

1. Land degradation is defined broadly as any form of deterioration of the natural potential of land that affects ecosystem integrity, specifically reducing its sustainable ecological productivity or native biological richness and resilience¹. It affects about 2 billion hectares (or 22.5%) of agricultural lands, pastures, forests, and woodlands in all continents except Antarctica.

2. Land use and land use change, often exacerbated by climatic factors, are the main causes of land degradation. In the drylands overgrazing, fuelwood harvesting, clearing of land (including marginal areas) for agriculture, and industrial activities such as mining are the main causes of land degradation. In forest areas they are mainly shifting agriculture, land clearing for large-scale commercial agriculture, commercial logging, harvesting of fuelwood and other commercial forest products, and industrial activities.

3. The Global Environment Facility (GEF) has been providing assistance to developing countries to address the issue of land degradation prevention and control in accordance with its Instrument, Operational Strategy and Council decisions. The GEF provides grants and concessional funding to meet "... the agreed incremental costs of activities concerning land degradation, primarily desertification and deforestation, as they relate to the four focal areas..." These focal areas are biological diversity, climate change, international waters, and ozone layer depletion. Co-financing from governments, development agencies, non-governmental organizations (NGOs) and the private sector cover other costs (i.e. baseline costs).

4. To address difficulties that countries have been facing in developing projects with land degradation components for GEF funding, the GEF has taken a number of measures, including the following:

- (a) Council approval in February 1995 of a paper on the Scope and Operational Strategy for Land Degradation² which covers principles and modalities for programming GEF-eligible land degradation activities; and
- (b) Council approval in December 1999 of a paper on Clarifying the Linkages Between Land Degradation and the GEF Focal Areas: An Action Plan for Enhancing GEF Support (GEF/C.14/4) which provides a framework and action plan to enhance GEF support for land degradation prevention and control.

5. Despite these efforts, an independent study reported that countries continue to face a number of constraints in developing projects for GEF funding. For example, because of the need to address land-degradation through a specific focal area, projects have to focus on focal area objectives, resulting in

¹ GEF 1999. Report of the STAP Expert Group Workshop on Land Degradation (GEF/C.14/Inf. 15).

² The report was later published as a reference document entitled *A Framework of GEF Activities Concerning Land Degradation*. GEF, 1996

little or no significant focus on sustainable land management. The study, therefore, recommended a fundamental change in the way land degradation is addressed in the GEF if it is to have a significant impact.³

6. At its meeting in May 2001, the GEF Council considered options presented by the Secretariat to enhance GEF support for the implementation of the UN Convention to Combat Desertification⁴ (UNCCD) and it agreed that "...the designation of land degradation (desertification and deforestation) as a GEF focal area should be pursued as a means of enhancing GEF support for the successful implementation of the UN Convention to Combat Desertification (CCD)". This approach to land degradation prevention and control would enhance the GEF's ability to catalyze more predictable financial resources, including co-financing, for sustainable land management activities that have both global environment and sustainable development benefits.

7. This note responds to the Council decision of May 2001 meeting requesting "... the Secretariat, in collaboration with the Implementing Agencies, appropriate executing agencies, the Secretariat and the Global Mechanism of the CCD, to prepare a more detailed note elaborating upon the modalities for such designation for consideration at the Council meeting in December 2001. The note should also address the steps necessary for preparing an amendment to the Instrument for approval at the second GEF Assembly in October 2002".

8. This note discusses the global dimension of land degradation, including its impacts on global and regional commons (stability of the global and regional climate system and the structure and function of ecosystems) that are critical for the survival of more than a billion people worldwide. It also discusses the role the GEF could play in a concerted effort by the international community to assist developing countries to implement land degradation prevention and control measures to achieve global environment and sustainable development benefits.

II. GLOBAL DIMENSION OF LAND DEGRADATION

9. Land degradation is an important global environment issue because of its adverse impacts on ecosystems that are critical for the survival of more than one billion people in developing countries as well as future generations. People are an integral part of ecosystems and they depend on interactions with ecosystem processes such as the biogeochemical cycles -- the carbon cycle, hydrological cycle, nutrient cycle -- and the availability of ecosystem products and services for their survival.

10. Hundreds of millions more people face hardships and potential disaster in areas affected by land degradation if preventive and control measures are not taken. Land degradation in these areas has

³ Berry, L. and J. Olson, 2000. GEF Land Degradation Linkage Study. The Study was commissioned by the GEF M&E Unit as part of the Second Study of GEF's Overall Performance.

⁴ Options to Enhance GEF support for the implementation of the United Nations Convention to Combat Desertification GEF/C.17/5.

adversely altered ecological processes and the availability of ecosystem products and services by modifying the global climate system and disturbing the stability of ecosystems structure and function.

Land Degradation and the Global Commons

Global/Regional Climate System

11. The earth mean temperature of about 15°C depends on maintaining an energy balance. This balance can be upset by greenhouse gases such as carbon dioxide, methane, nitrous oxide, and several other compounds that cause the atmosphere to trap more heat at the earth's surface. The resulting rise in mean global temperature is known as the greenhouse effect. The average global surface air temperature is projected to rise by 1.4-5.8°C by 2100 compared with the level in 1990⁵.

12. Carbon dioxide accounts for about 50% of greenhouse gases. It is exchanged naturally between ecosystems and the atmosphere through photosynthesis, respiration, decomposition, and combustion. However, this natural process is being accelerated by human-induced activities. Land degradation can have significant impacts on the climate system, especially at the regional level. Carbon is released into the atmosphere as carbon dioxide (CO₂) through land use and land use change – clearing and burning of forests, woodlands and grasslands. Burning of forest and woodlands alone accounts for about 25% of CO₂ buildup⁶.

13. In addition to altering the mean global temperature, the greenhouse effect also appears to be altering regional climatic conditions. For example, the Sahel, an arid and semi-arid region of Africa severely affected by land degradation, has experienced below average amount and distribution of rainfall since 1950. These climatic changes have significantly affected agriculture productivity, mostly rain fed, and food security. This situation could worsen. In Africa, for example, maize yields could decline by up to 65% and millet yields by up to 79%⁷.

14. Changes in regional climatic conditions due to land degradation and other factors continue to have negative impacts on the flow regime of surface, sub-surface, and groundwater. River discharges in some parts of the Sahel have declined by as much as 43% from 1970-1988 compared with the 1960s⁸.

⁵ McCarthy, J.J., O.F. Canziani, N.A. Leary, D.J. Dokken, and K.S. White. 2001. *Climate Change 2001: Impacts, Adaptation, and Vulnerability*.

⁶ Bolin B, Doos, B, Jager J, and R.A. Warrick (Editors). 1996. *The Greenhouse Effect, Climate Change, and the Ecosystem*. SCOPE 29. Chichester: John Wiley and Sons.

⁷ Bazzaz, F. and W. Sombroek. 1996. *Global Climate Change and Agricultural Production*. Chichester: John Wiley & Sons Ltd.

⁸ Sircoulon 1991. *Climate, Water, and Development*. In *Climate Change: Science, Impacts and Policy* (J. Jager and H.L. Ferguson, Editors). Cambridge: Cambridge University Press.

Similar drier conditions have been reported from observations in the humid forests of the Amazonian basin⁹.

Stability of Ecosystems

15. Land degradation has a negative impact on the stability of ecosystem structure and function which is critical for human survival, particularly national and transboundary ecosystems. These impacts include habitat alteration or fragmentation, loss of biodiversity (species richness, genetic diversity.), and the loss of ecosystem resilience.

16. Land degradation also has negative impacts on biogeochemical cycles such as the hydrological cycle. It causes modifications in stream flow and water quality in national and international waterbodies, and loss of biodiversity because of changes in sediment transport, some of which are polluted, and runoff from degraded watersheds.

17. The loss of ecosystem structure and function in areas experiencing land degradation can lead to water scarcity and steep declines in food production, including grains and livestock. During the most recent Sahelian drought (1980-1984), thousands of people died and several more displaced because of increased vulnerability to drought. Many of these victims became more vulnerable to drought because of a breakdown of traditional land use systems, based on harmonious interactions between people and the ecosystem, that for generations had helped them to adapt to extreme climate events.

III. LAND DEGRADATION PREVENTION AND CONTROL MEASURES

18. The global extent, the significant negative on-and offsite impacts of land degradation on the atmosphere, terrestrial and aquatic ecosystems, food security, continuing degradation of ecosystems, and the high human toll due to land degradation require a concerted effort by the international community to prevent and control it. Well-meaning efforts in the past to address this issue were not very effective mainly because they were based on a sector-by-sector approach that had the unintended effect of fragmentation of policies, institutions, and sustainable land management measures. Therefore, a holistic and integrated approach to land degradation prevention and control, covering both ecosystem and socioeconomic dimensions, is needed.

19. Designating land degradation as a GEF focal area is consistent with the objective of the United Nations Convention to Combat Desertification (UNCCD “... *to combat desertification and mitigate the effects of drought in countries experiencing serious drought and /or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable*

⁹ Varejao-Silva, M.A., Franchito, S.H. and Rao, V.B., 1998: A Coupled Biosphere-Atmosphere Climate Model Suitable for Studies of Climate Change due to Land Surface Alterations. *Journal of Climate*, 11, 1749-1767.

development in affected areas". Such designation should significantly enhance the implementation of the Convention.

20. A holistic and integrated approach would also help to promote synergies in the implementation of the three major global environment conventions – Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), and UNCCD because it would provide a common framework to address issues related to interactions between people and ecosystems, issues central to all three conventions.

21. The package of interventions, with both global environment and sustainable development benefits, -- policies, regulations, institutions, incentives, investments,-- to address land degradation prevention and control may include sustainable land use measures to:

- (a) stabilize the global climate and regional system by reducing carbon emissions and increasing carbon sequestration;
- (b) promote conservation and sustainable use of diverse ecosystem products (including biodiversity);
- (c) maintain the stability of ecological processes such as the hydrological cycle and nutrient cycle; and
- (d) improve the economic and social well being of people in areas experiencing land degradation or areas vulnerable to land degradation.

Possible GEF Interventions

22. **Types of Interventions:** The GEF's assistance to countries to address the issue of land degradation prevention and control would focus on two broad types of interventions – (a) incremental measures to address the root causes of land degradation; and (b) activities that address issues related to the interface between the structure and function of ecosystems, biodiversity, climate change and international waters.

23. **Incremental Cost Principle:** An important principle in GEF assistance is incremental cost. The GEF would cover the incremental costs of land degradation prevention and control activities that have global environment benefits. The incremental cost principle would be applied operationally within the context of cost sharing. This means that the GEF's incremental financing would have to be complemented with co-financing.

24. Specific incremental actions that the GEF would finance, as part of a package of interventions aimed at achieving on-the-ground results, may include the following categories of land management activities that can contribute positively to the stability of the global and regional climate system and the maintenance or restoration of ecosystem structure and function:

- (a) development of participatory sustainable land management planning processes;
- (b) assessment of land resources and land use practices as the basis for management measures;
- (c) development of information management systems for decision-making on sustainable land management as part of broader management activities;
- (d) on-the-ground measures on land management activities to conserve and rehabilitate biological resources; and
- (e) development of policies, regulations, incentives, institutions, and on-the-ground investments, to ensure that good practices in sustainable land management are viable and sustainable under local conditions.

25. **Examples of GEF Eligible Activities:** GEF funding would cover two categories of activities – capacity building and on-the-ground investments (see specific examples in Table 1).

26. **Capacity building:** GEF assistance would focus on the integration of various planning frameworks developed in a country, including National Action Program and Sub-regional Action Programs for UNCCD, Biodiversity Strategy and Action Plan for the CBD, national communication for UNFCCC. into an integrated medium term action program of priority measures framework for land management and sustainable development.

27. GEF would also finance activities to facilitate the synthesis and dissemination of information on sustainable land management and country-driven training programs to build local capacity on viable policies, regulations, institutional arrangements, incentive structures, management practices and technologies for sustainable land management. Such training could include participatory workshops involving key government and non-government stakeholders on measures needed for sustainable land management program that addresses, in a holistic and integrated manner, global environment and sustainable development issues.

28. **On-the-ground investments:** These would involve packages of holistic and integrated sustainable land use management activities to prevent and/or remedy land degradation to achieve both global environment benefits as well as national sustainable development goals.

29. The GEF would place greater focus on pilot or demonstration projects, with emphasis on the use of its medium-sized project funding pathway (with GEF grant financing of up to \$1 million per project), to highlight the advantages of a holistic, integrated, and participatory approaches to land degradation prevention and control. Specific examples of incremental on-the-ground activities as well as complementary sustainable development activities are listed in Table 1.

IV. FINANCING LAND DEGRADATION PREVENTION AND CONTROL: ROLE OF THE GEF AND OTHER ORGANIZATIONS

Role of the GEF

30. The GEF can play a catalytic role in assisting developing countries to mobilize innovative financial packages for sustainable land management measures that enhance the global environment as well as promote sustainable development. The GEF's initial assistance would focus more on Africa, a region recognized by the UNCCD as most severely affected by land degradation.

31. Financing land degradation prevention and control in a holistic and integrated way would require a variety of sources of funding because the GEF can only fund incremental activities that benefit the global environment. The following potential sources of financing and co-financing have been identified.

Sources of Financing

32. **GEF Trust Fund:** During GEF2, financing for land degradation activities linked to biodiversity, climate change and international waters amounted to US\$278 million. It has been proposed in the programming paper under consideration within the negotiations for the Third Replenishment of the GEF Trust Fund that are expected to conclude in February 2002 that US\$250 million in new and additional funds be programmed to finance activities under a new focal area of land degradation during GEF3 (FY2003-2006).

33. **Funding from GEF Agencies:** The GEF Implementing Agencies and Executing Agencies play an important role in mobilizing co-financing for GEF-supported projects from their own resources, governments, private sector, and non-governmental organizations. As with other focal areas, these agencies would help to leverage co-financing to complement GEF incremental financing for land degradation prevention and control.

34. **Development Financing:** The Global Mechanism of the UNCCD was established under the convention to "... promote actions leading to the mobilization and channeling of substantial financial resources, including the transfer of technology, on a grant basis, and/or concessional or other terms, to affected developing country parties ...". With the GEF covering only the incremental costs of activities associated with the global environment, development assistance will be an important source of funding for baseline activities. This situation provides a unique opportunity for the Global Mechanism to assist developing countries to mobilize funding from bilateral and multilateral non-GEF development agencies for development components of a sustainable land management project.

35. **UNFCCC Funds:** At the resumed sixth session of the Conference of the Parties to the UN Framework Convention on Climate Change, Parties agreed in principle to the establishment of three new funds to be managed by the GEF. The first, a special climate change fund, is to finance activities complementary to those funded by the GEF climate change focal area in four areas: adaptation to climate change; transfer of technologies; measures related to several defined sectors including agriculture and forestry; and steps to diversify economies in developing country Parties under Article 4, paragraph 8(h). The second fund is a least developed countries fund, also proposed to operate on the basis of

modalities to be decided by the COP. A specifically identified role for this fund is the support of national adaptation programs of action. The third fund, the adaptation fund, will receive revenues from a share of the proceeds from clean development mechanism projects under the Kyoto Protocol and will finance “concrete adaptation projects and programs.”

36. As indicated above, sustainable land management activities can contribute positively to the stability of the global climate system, and in particular, in addressing adaptation activities, the Parties have recognized that adaptation and related environmental management cuts across many sectors and will require activities in specialized fields such as soil and water conservation, soil restoration and preventive measures, and planning for droughts and floods in areas prone to extreme weather events.. Therefore, financing activities under the three special funds could be another source contributing to activities to address land degradation prevention and control.

V. MODALITIES TO OPERATIONALIZE A FOCAL AREA ON LAND DEGRADATION

Amendment of the GEF Instrument

37. Paragraph 34 of the *Instrument for the Establishment of the Restructured Global Environment Facility* provides for amendment of the Instrument as follows:

“Amendment or termination of the present Instrument may be approved by consensus by the Assembly upon the recommendation of the Council, after taking into account the views of the Implementing Agencies and the Trustee, and shall become effective after adoption by the Implementing Agencies and the Trustee in accordance with their respective rules and procedural requirements.”

38. Should the Council agree to proceed with designation of land degradation as a GEF Focal area, the Secretariat will, in consultation with the Implementing Agencies and the Trustee, prepare for review by the Council at its next meeting, specific textual amendments to the Instrument. Any recommendations of the Council for amending the Instrument will be forwarded to GEF Participants for consensus approval by the Assembly at its second meeting in October 2002. Thereafter, the approved amendments will be submitted to the Implementing Agencies and the Trustee for their adoption in accordance with their respective rules and procedural requirements.

Updating the GEF Operational Programs

39. Each GEF focal area has a number of operational programs (OPs) through which its objectives are operationalized (i.e. development and implementation of projects). Should the GEF Assembly approve land degradation as a focal area, it is expected that the existing OPs would provide the initial vehicle to operationalize its objectives. Other OPs on sustainable land management may be developed as needed.

40. The three categories of incremental actions as part of a package of interventions to address land degradation were identified above – conservation and sustainable use of biodiversity, stabilization of the global climate system, and maintenance and/or restoration of ecosystem processes.

41. For biodiversity conservation in protected areas, the four operational programs under the biodiversity focal area – arid and semi-arid, coastal, marine and freshwater, forest, and mountain ecosystems -- would be used to operationalize sustainable land management activities.

42. Other activities -- conservation and sustainable use of biodiversity outside protected areas (i.e. in the broader landscape); stabilization of the global climate system, and maintenance of ecological processes such as the hydrological cycle -- are more complex, reflecting the greater complexity of the interactions between people and ecosystems including associated policy, regulatory, institutional issues. Therefore, such activities would require greater need for integration of both ecosystem and socioeconomic aspects.

43. Two GEF operational programs can provide the operational vehicle for such an integrated approach. First, the OP on Integrated Ecosystem Management (OP#12), which represents a paradigm shift from a single-sector approach to natural resource management to a more integrated and cross-sectoral approach to achieve both sustainable development goals and global environment benefits. This approach makes this OP suitable for sustainable land management activities in the broader landscape.

44. Second, the OP on the Conservation and Sustainable Use of Biological Diversity Important to Agriculture (OP#13) which is aimed at supporting activities to sustain the functions of biological diversity in agricultural ecosystems, thereby maintaining or enhancing goods such as agricultural production, and services such as clean water, erosion control, and moderation of climatic effects calls for sustainable land management activities in the agricultural landscape.

ANNEX A: TABLE 1(A). EXAMPLES OF GEF-ELIGIBLE INTERVENTIONS IN DRYLANDS

Global Issue	Sustainable Land Management Activities		Sustainable Development Benefits	Global Environment Benefits
	Sustainable development-related activities	Global environment-related activities		
Stability of the global/regional climate system	Herds management of livestock, waterpoint enhancement, provision of marketing and veterinary services	Rangeland rehabilitation- e.g. seeding and tree planting Fire control measures	Improved sustainable livelihood Economic growth	Reduction of carbon emissions Improved sequestration of carbon
Stability of the hydrological cycle	Small – medium scale garden watering / irrigation projects	Vegetative measures such as reforestation to stabilize watersheds Planting of windbreaks to maintain land cover during crop growth Sediment control measures	Sustainable production of crops and livestock Marketable products Improved economy	Prevention and/or reduction of sedimentation and/or sand transport that can adversely affect stream flows in waterbodies, frequency and intensity of floods, and biodiversity conservation.

<p>Maintaining/restoring the stability of ecosystems structure and function</p>	<p>Rehabilitation of degraded agricultural land</p> <p>Changes in patterns of land use</p>	<p>Land/water resources use planning to ensure conservation and sustainable use of ecosystems</p> <p>Development of policies, regulations, institutional arrangements, incentives, etc. to protect ecosystems</p> <p>Measures to prevent and/or control sediment and pollution flow</p>	<p>Restored & enhanced livelihoods in area. New crops, products. Greater marketing possibilities</p>	<p>Prevention of massive land degradation, resulting in a change on the integrity, function and diversity of an ecosystem</p> <p>Prevention and/or reduction in sediment and/or pollution flows that threaten ecosystems</p>
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ANNEX B: TABLE 1(B). EXAMPLES OF GEF-ELIGIBLE INTERVENTIONS IN FOREST LANDS

Global Issue	Sustainable Land Management Activities		Sustainable Development Benefits	Global Environment Benefits
	Sustainable development activities	Global environment activities		
Stability of the global climate system	Promotion of production and marketing services associated with sustainable humid tropic farming systems	Developing humid tropic farming systems, including tree crops, that are alternatives to shifting cultivation	Improved local & regional economies and livelihoods	Reduction of carbon emissions Improved sequestration of carbon
Stability of the hydrological cycle	Development of small holder tea/coffee, flowers	Vegetative measures such as reforestation to stabilize watersheds Planting of windbreaks to maintain land cover during crop growth Sediment control measures	Development of sustainable smallholder market-oriented farming	Improved carbon sequestration Reduction in carbon loss Prevention and/or reduction of sedimentation that can adversely affect stream flows in waterbodies as well as the frequency and intensity of floods.

<p>Maintaining/restoring the stability of ecosystems structure and function</p>	<p>Forest products marketing, selective extraction and marketing of timber and non-timber products</p> <p>Sustainable fishing around coral reefs or in streams and lakes</p>	<p>Land/water resources use planning to ensure conservation and sustainable use of ecosystems</p> <p>Development of policies, regulations, institutional arrangements, incentives, etc. to protect ecosystems</p> <p>Measures to prevent and/or control sediment and pollution flow</p>	<p>Improvement of local economy</p> <p>Increased income while maintaining sustainable activity</p>	<p>Prevention of massive land degradation, resulting in a change on the integrity, function and diversity of an ecosystem</p> <p>Prevention and/or reduction in sediment and/or pollution flows that threaten ecosystems</p>
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