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Agenda Item 7

## CLARIFYING LINKAGES BETWEEN LAND DEGRADATION AND THE GEF FOCAL AREAS: AN ACTION PLAN FOR ENHANCING GEF SUPPORT

**Recommended Council Decision**

The Council, having reviewed document GEF/C.14/4, *Clarifying linkages between land degradation and the GEF focal areas: an action plan for enhancing GEF support*, approves the proposed action plan to enhance GEF support for land degradation activities as they relate to the GEF focal areas, subject to the comments made by the Council. The Council requests the Secretariat and the Implementing Agencies to help countries prepare in the GEF focal areas that include land degradation measures, consistent with the action plan.

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## **INTRODUCTION**

1. The New Delhi Statement of the first GEF Assembly in April 1998 requested the GEF, in consultation with the Secretariat of the UN Convention to Combat Desertification (CCD), to better define the linkages between land degradation, particularly desertification and deforestation, and its focal areas in order to help increase GEF support for land degradation activities.<sup>1</sup>
2. At its meeting in May 1999, the Council also requested the Secretariat, in consultation with the Implementing Agencies and the CCD Secretariat, to prepare for Council review at its meeting in December 1999, a paper to define inter-linkages between land degradation and the GEF focal areas and the challenges for addressing land degradation in the context of sustainable development. It was noted that the paper should include an action plan and time table for increasing GEF support for land degradation activities in relation to the GEF focal areas; such support should be geographically broad based.
3. This paper has been prepared by the GEF Secretariat in cooperation with the CCD Secretariat and in consultation with GEF Implementing Agencies in response to the request from the GEF Council. Part I of the paper documents the threats and consequences posed by land degradation to the global environment; clarifies the context and rationale of GEF activities supporting the prevention and control of land degradation; sets out the linkages between land degradation and the GEF focal areas and the scope of GEF interventions; and identifies challenges to the development and implementation of GEF supported activities in land degradation. Part II presents an action plan for addressing the challenges and enhancing GEF support.

## **I – LAND DEGRADATION AND THE GLOBAL ENVIRONMENT**

4. Land degradation is a worldwide phenomenon, leaving no continent unaffected. It has severe environmental, social, and economic impacts, including increasing costs to countries and local populations. UNEP estimates that most countries, including more than 80 developing countries, are affected by land degradation. More than one billion people living in these areas are at risk from the effects of serious declines in productivity and livelihood.<sup>2</sup> In Africa alone, 36 countries are affected by dryland degradation or desertification.
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5. The Global Assessment of Soils Degradation (1994) concluded that 1.97 billion hectares - 23 percent of globally used land - had been, or are in the process of, degradation. Thirty eight percent of all agricultural land worldwide is now wastelands or severely degraded, including some 21% of permanent pasture and 18% of forest and woodland. Water erosion has generated the most degradation, followed by wind erosion, soil nutrient depletion, and salinization resulting from overgrazing, deforestation, and increased agricultural activities.<sup>3</sup> Degradation is also associated with off-site problems of sedimentation, carbon emissions affecting climate change, impaired watershed and waterbody functions, and changes in natural habitats leading to loss of genetic stock and biodiversity. These causes are predominantly associated with land use and development practices in agriculture, forestry and water resources management.

6. The urgency of dealing with land degradation is immediate when viewed in terms of its costs. Estimates of the annual cost of soil erosion range from US \$26 to \$28 billion, about half borne by the developing countries. Plant nutrients lost annually through sediment loss and nitrogen in water runoff alone are valued at \$5 billion, or 0.4% of the annual global value added in agriculture.<sup>4</sup> Substantial resources worldwide will be needed to prevent and control land degradation, and the GEF's incremental cost financing will complement ongoing and planned efforts and not substitute for other financing.

#### A. GEF'S ROLE AND APPROACH TO LAND DEGRADATION PREVENTION AND CONTROL

7. The GEF supports country driven activities aimed at preventing and/or controlling land degradation, particularly through its interface with GEF's focal areas: biodiversity, climate change and international waters. As stated in GEF's *Instrument*: "The agreed incremental costs of activities concerning land degradation, primarily desertification and deforestation, as they relate to the four focal areas shall be eligible for funding."<sup>5</sup> This is consistent with Articles 4.8(c) and 4.8(e) of the UN Framework Convention on Climate Change (UNFCCC), Article 20.7 of the Convention on Biological Diversity (CBD), and Article 20.2(b) of the Convention to Combat Desertification (CCD). In 1995, the GEF Council approved the paper *Scope and Operational Strategy for Land Degradation*, which was later published as a reference document in 1996 entitled *A Framework of GEF Activities Concerning Land Degradation*<sup>6</sup>. These papers presented an overview of the issues, principles, content, and modalities of programming in the interface between land degradation and the GEF focal areas (see Annex A).

8. Because land degradation in developing countries is often linked to poverty, it would be difficult to execute projects where local needs are not met. or when alternative livelihoods are not

sufficiently introduced. Land degradation issues have to be addressed as part of the sustainable development agenda of countries and communities to achieve local or national development goals as well as attain global environmental benefits.

9. GEF's support complements, rather than substitutes, other financing available to control land degradation, specifically, desertification and deforestation. GEF funded projects which have land degradation components in drylands and other areas are listed in Annex B. In addition, during the past year, the GEF Secretariat, in cooperation with the Implementing Agencies and other partners, has developed the following integrated approaches to addressing land degradation: GEF *Land and Water Initiative* which follows recommendations from the *Heads of Agencies Meeting* (March 1999)<sup>7</sup>; GEF *Forestry Initiative*; and Operational Program #12, *Integrated Ecosystems Management*.<sup>8</sup>

10. Projects need to engage the country level operatives through a participatory approach. To be truly owned by the beneficiaries, projects should be designed from the bottom up. The CCD framework at the country level has established national action programs to combat desertification that are in place in all affected countries and that identify key priority areas to which efforts to combat land degradation are to be directed. GEF interventions should take these fully into account, since they identify priorities supported by a broad-based constituency of stakeholders.

#### B. LINKAGES BETWEEN LAND DEGRADATION AND THE GEF FOCAL AREAS AND SCOPE OF GEF SUPPORT

11. The complexity of interactions between ecological and societal processes over time and across space challenges efforts to understand the linkages between land use and land cover changes and the associated implications for land degradation and its interlinkages with biodiversity and hydrological systems and land-atmosphere relationships. The following explores the common ground between land degradation and the GEF's focal areas and specifies some of the activities that GEF could support.

12. **Land Degradation and Biodiversity.** Ecosystems, in responding to the complexity of multiple interactions, demonstrate resilience and their adaptation through various manifestations. Plant-animal herbivory interactions are increasingly understood to have coevolutionary responses, and these linkages are still being explored. Deforestation and destruction of vegetation, following agricultural expansion, settlement development, pressures of growing demand for fuelwood, or direct extraction can substantially deplete biodiversity and cause land degradation. Measures

13. Unlike forest ecosystems, drylands - constituting the bulk of degraded lands - are better known for their genetic diversity within species, rather than for species variation or “species richness.” Yet, they contain a significant endowment of plant and animal species, including microorganisms. Dryland species exhibit notably restrictive geographical distributions (endemism) and a range of physical and chemical adaptations to their harsh environment which make them globally significant. Many of the most important food crops originated from drylands and their adaptability to environmental stress makes them a vital source of genetic material to improve crop varieties and increase their drought tolerance and disease resistance. Species of drylands are also globally important as sources of commercial and industrial products such as gums, resins, plant based waxes, oils and biocides and provide critical habitats for globally important wildlife and ecosystemic diversity which, when properly managed, offer a source of livelihood to rural communities while helping conserve biodiversity.

14. Activities that prevent or control land degradation and at the same time address biodiversity conservation may include the following:

- (a) Improvement of management practices, institutional arrangements, policies and incentives in sectors of agriculture, pastoralism, agro-forestry, and water use; all of which impact land degradation and through it the global environment;
- (b) In-situ conservation of significant components of biodiversity, particularly indigenous vegetation, in drylands and forests that are affected by land degradation.

15. A new work program on dryland biodiversity will be discussed at the fifth meeting of the Conference of the Parties to the Convention on Biological Diversity at its meeting in May 2000. The program is expected to set out areas and scope for undertaking activities to address dryland biodiversity conservation and its sustainable use, while at the same time pursuing the prevention of land degradation and rehabilitation of degraded land.

Box 1 provides examples of GEF-financed projects with components addressing land degradation within the context of biodiversity conservation.

**Box 1. Examples of GEF-Financed Activities in Projects  
Linking Land Degradation to Biodiversity**

1. Turkey is developing in-situ approaches to protect wild crops (wild wheat, chickpea, lentil, barley), and woody species (pear, apple, walnut, chestnut, olive, pistachio) in the semi-arid region of Eastern Anatolia.
2. In the Fertile Crescent (Lebanon, Jordan, Syria) and in the oases of the Maghreb countries (Morocco, Algeria, Tunisia) project activities focus on conservation of genetic diversity of important food crops.
3. The People, Land Management and Environmental Change (PLEC) project provides lessons in demonstration sites on sustainable agricultural biodiversity, and in some cases, indicates how indigenous technical knowledge can be combined with scientific nutrient and soil management.
4. The Ethiopia farmer-based approach to conserving African plant genetic resources integrates farm-level conservation efforts with national and international gene bank programs.
5. In Southeast Zimbabwe, the project supports transborder management of the Gonarezhou National Park located in the border with Mozambique and South Africa, to stimulate community wildlife management and ecotourism.
6. Wetlands within drylands (e.g., Hadejia-Nguru in Nigeria; El Kala region in Algeria; Cuatro Ciengas in Coahuila, Mexico) serve as indispensable nesting and breeding grounds for migratory species, but they are vulnerable to land degradation. The El-Kala region provides habitat for the white-headed duck, the barbary deer, and migrant water-fowl and sustains the hydrological system critical to the Mediterranean region.
7. In the Baoule National Park and Biosphere Reserve in Mali, the project addresses problems of overgrazing, burning of vegetation by herders and settlers, and poaching.
8. In the high atlas of Morocco, the project provides incentives for the revival of bio-friendly transhumance.

16. **Land Degradation and Climate Change.** The linkage of land degradation with climate change can be seen through its impacts on biomass reduction primarily through deforestation, including fuelwood cutting, burning of grasslands, and loss of potential in carbon storage from crop cultivation and soil erosion. Some of the GEF activities, in addition to conserving biodiversity, have explored the contribution that controlling deforestation can make to mitigating climate change. The UN Framework Convention on Climate Change (UNFCCC) recognizes the role of conservation and sustainable management of forests in carbon sequestration and in reducing carbon emissions. Protection of vegetative cover and reforestation contribute to

other energy sources, CO<sub>2</sub> emissions from firewood, coal and charcoal are anticipated to increase.

18. Activities that may prevent or control land degradation and will at the same time address some climate change issues may include the following:

- (a) Preventing or controlling deforestation and reducing carbon emissions from fuelwood by developing rural energy systems based on efficient use of agricultural waste products and promoting the adoption of renewable energy technologies such as solar and wind energy; and
- (b) Promoting reforestation, afforestation, revegetation, and enhanced forest management practices to improve carbon sequestration and carbon cycling in soils.

Box 2 provides examples of GEF-financed projects addressing land degradation and climate change issues.

**Box 2. Examples of GEF-Financed Activities in Projects Linking  
Land Degradation and Climate Change**

1. **Biomass based energy systems:** efficient use of biomass fuels from the sugar industry through construction of a baseload power plant supplied by bagasse during the crop season and coal in the off season in Mauritius; construction of a globally replicable prototype unit on a commercial scale for the cogeneration of electricity based on the gasification of wood chips or sugar cane bagasse in Brazil; medium- and large-scale biomass production facilities in Tanzania;
2. **Biomethanation technologies:** biomethanation technologies and utilization of biogas to abate methane emissions from industrial, municipal, and agricultural waste in India; demonstration of methane recovery technologies in agricultural sites in China;
3. **Inter-fuel substitution, including firewood:** substitution of kerosene and liquid petroleum gas in rural villages in Senegal.

19. **Land Degradation and International Waters.** River, lake, and ground water basins, which often come under the jurisdiction of more than one country, are critical to the well-being of over one billion people who live in areas at risk from desertification. Land degradation in sub-humid and humid areas also causes loss of productivity and impairment of aquatic ecosystems in international waters. In view of the growing sediment pollution and salt intrusion in rivers, lakes, and aquifers -- caused by deforestation, soil and vegetation loss, over pumping of ground water, and soil salinization -- controlling and preventing land degradation is critical to operational programming in the international waters focal area. Effectively addressing the problem requires international cooperation and the GEF will help catalyze, enhance, and help sustain such

- (a) development of a planning framework that would allow a country, or group of communities, to address pollution and other surface water management problems, including those related to land degradation, in a coordinated and cross-sectoral manner; and
- (b) management of watersheds coming under the jurisdiction of more than one country, to promote afforestation, reforestation, sustainable management of forests, and soil and water conservation, involving cooperation between upstream and downstream users.

Box 3 provides examples of GEF financed projects addressing the interface between land degradation and international waters.

**Box 3. Examples of GEF-Financed Activities in Projects  
Linking Land Degradation and International Waters**

1. **Integrated coastal zone management:** community-based and intersectoral approach to management of coastal and marine areas that facilitate linkages with agriculture and watershed management, such as the East Asian Seas Project's two pilot sites in China and the Philippines;
2. **Freshwater management:** In North Africa, the Sahel, and Southwest Asia, international aquifers are exploited beyond their recharging capacity and continue to be heavily polluted. GEF support is aimed at increasing sub-regional cooperation in managing shared aquifers, such as the Senegal and Mauritania project and management of the binational basin of the Bermejo River in Argentina and Bolivia.
3. **Watershed management:** In the Zambezi Action Plan and the East African Regional Seas Action Plan, project activities support agreements to manage transboundary watersheds, mountain areas, coastal sites, and drylands; and the integrated watershed management in the Pantanal and Upper Paraguay River in Brazil;
4. **Regional and transboundary waters:** catalytic action and support for inter-country coordination, including agreements and joint programs, to control land-based pollution and water contamination from agriculture and deforestation.

C. GEF EXPERIENCE IN DEVELOPING LAND DEGRADATION ACTIVITIES

21. The GEF has so far supported 60 projects which have components addressing land degradation (see Annex B). One set of projects (15) lie within forest and mountain ecological systems, whose primary objective is to conserve biodiversity of global importance as well as

Land use changes, and land ownership and tenure issues, due to pressures to shift land uses for purposes other than those for which they are ecologically suited, are root causes of biodiversity loss, and are especially critical in arid and semi-arid lands.

23. A third set of 10 projects cuts across landscapes and several ecosystem types. These would be projects found in what are called “productive landscapes,” which have addressed primarily the problem of loss of globally important biodiversity to agriculture and food security. The design of these types of projects have been accompanied by some relative uncertainty as countries found it difficult to determine which activities constitute the baseline. In some cases, sustainable use and livelihood support schemes are included in the project since they would generate, over the long-term, global environmental benefits.

24. The rest of the portfolio is composed of projects which may be viewed as cross-cutting across focal areas. These would be projects, for example, that reduce carbon emissions in biomass based renewable energy (13 projects), or include waste treatment components of international waters that reduce pollution in land and water bodies (8 projects). Some projects address soil conservation in watersheds and better managed woodfuels for greater carbon sequestration, and degradation of inland waters and wetlands.

25. As we can see, the GEF experience in land degradation is very rich and broad-based (see boxes 1-3, Annex B). It is, however, too early to draw operational conclusions since most of the projects are at the beginning of implementation. The annual Project Implementation Review process will continue to monitor the progress of these activities. Nonetheless, preliminary experience has provided useful insights into focusing GEF support within the possible scope of operations outlined above and consistent with the objectives of the CCD and other global environmental conventions.

26. Aside from these projects, the Implementing Agencies have initiated programs within their own institutions to further mainstream land degradation issues. In fact, all three Implementing Agencies have produced numerous reports and sponsored workshops and conferences with other international agencies to address land degradation. UNDP and UNEP have been collaborating on a joint portfolio of regional land degradation projects since 1997. The World Bank is developing a joint program with International Fund for Agricultural Development (IFAD) to assist dryland countries in controlling land degradation, alleviating rural poverty, and addressing global environmental objectives. There is close collaboration, some involve GEF funding, to help countries in effectively responding to the CCD so that efforts become more cohesive. The GEF’s role in this area will continue to evolve in close coordination with the relevant initiatives and

27. As noted throughout this paper, the GEF has made progress in supporting land degradation prevention and control activities as they relate to the GEF focal areas and is supporting some 60 GEF financed projects in 72 countries. More importantly, during the last year the GEF has developed, in partnership with the Implementing Agencies, and in some cases with NGOs and international institutions, strategic integrated and cross-sectoral programs -- the GEF *Integrated Land and Water Initiative*, following the *Heads of Agencies Meeting* (March 1999), with a focus on Africa region; the GEF *Forestry Initiative* (following presentation to the Scientific Advisors in February 1999); and Operational Program #12, *Integrated Ecosystems Management* - all of which take a proactive role with countries in strengthening programs to address land degradation concerns.

28. **Challenges of Operationalizing the Linkages.** While the uncertainty and difficulties in operationalizing the linkages between land degradation and the GEF's focal areas has posed some unique challenges, especially in distinguishing between local, national, and global benefits, the multiple nature of these benefits calls for more pragmatic approaches in applying the principles of incremental cost analysis to projects, which might could include cost sharing of proposed interventions.

29. Another challenge in this regard arises from the inadequate understanding of the structure and functioning of the socio-economic systems affected by land degradation problems. In many cases, this has led to an over-estimation of the ease with which improvements could be introduced and an under-estimation of the negative consequences of intended improvements. In areas affected by land degradation, potential actions are likely to be dependent on joint action by all or part of the local community and community groups.

30. Because benefits from projects with land degradation components are mutually reinforcing – dealing with land degradation can lead to increased biodiversity conservation, reduced carbon emissions, and/or better water management – designing inter-sectoral and integrated programs and activities would require creative approaches. This is the underlying objective of GEF's new Operational Program #12, *Integrated Ecosystems Management*. However, there is a lack of appropriate expertise and capacity, within countries and within international agencies, to apply project design tools to facilitate integration of land degradation related activities into projects. Further, integration is often hampered by lack of participation and inter-institutional coordination, including across ministries within countries, and between governments and local communities, and even among international agencies, NGOs, and the private sector. To strengthen participation within countries, activities may need to be supplemented with institution building and training and awareness programs.

to be strengthened by engaging partners in creating the sufficient enabling environment (e.g., laws, decentralization, appropriate governance mechanisms, etc). At the same time, the impact of changes in public policy are not easy to predict and are dependent on specific country contexts. The challenge lies in collaborating with in-country partners, including governments, NGOs, academic institutions, and the private sector, in supporting appropriate policies and national program priorities addressing land degradation.

32. **Catalyzing Co-Financing Support for Land Degradation Activities.** Because of the generally short term nature and inadequacy of financial commitments for land degradation activities, there may be a need for more efforts to increase GEF's catalytic role through co-financing of land degradation activities, including local counterpart funding and cost sharing. In this respect, the GEF will enhance its collaboration with other partners, including the Global Mechanism of the CCD, Food and Agriculture Organization (FAO), IFAD and NGOs.

## **II - ACTION PLAN TO ENHANCE GEF SUPPORT IN THE AREA OF LAND DEGRADATION**

33. Various initiatives have amply demonstrated that in a developing country affected by drought and desertification, the issues of biodiversity, climate change and international waters, if effectively addressed, will answer to the concerns of land degradation. This is best achieved through an integrated approach at the local level where a convergence of program objectives is most evident. The proposed action plan is aimed at building upon this reality. The objective of the plan is to meet the challenges of overcoming the impediments to addressing land degradation within the context of GEF's focal areas by introducing sustainable and integrated environmental management approaches. These approaches form the elements of the Action Plan (as outlined in the table) as follows:

- (a) Operationalizing the linkages between land degradation and the GEF's focal areas through on-the-ground activities;
- (b) Strengthening public policy and enabling environment for addressing land degradation including promoting integrated and cross-sectoral approaches to natural resources management; and
- (c) Engaging key stakeholders and mobilizing resources to develop measures to prevent and control land degradation.

34. **Supporting the Operationalizing of the Linkages.** Operationalizing the linkages within countries will require partnerships with government and groups in civil society to develop

concentrated, in the immediate and short-term, in the Africa region, following recommendations from the *Heads of Agencies Meeting* (March 1999). The activities may be formulated in projects, including small grants and medium sized projects. The implementation of Operational Program #12, *Integrated Ecosystem Management*, will also involve the development of project activities in land degradation that cut across ecological systems and focal areas.

35. It is essential to embrace a coordinated approach in tackling such a cross-cutting issue as land degradation. The proposed action plan is aimed at addressing the issue of land degradation through integrated approaches at the country level. There will be an emphasis on cooperation and coordination of sectoral programs and policies in the following areas: regeneration of forests and grasslands, sustainable use of biomass for energy, soil conservation to improve carbon storage, and integrated land use planning. National coordinating bodies already established for purposes of the CCD should be fully involved at the country level in efforts to coordinate a country's approach to GEF-financed activities.

36. **Strengthening the Enabling Environment.** GEF support to controlling and preventing land degradation will be enhanced if there is an effective policy and enabling environment within countries to carry out strategic programs. GEF activities, together with country and sectoral programs of the Implementing Agencies (and the Regional Development Banks), will facilitate the development of key policies through policy dialogues, strategic evaluations of country experiences with rural development and sustainable development, and lessons learned from carrying out projects on-the-ground. As a start, the following key policy areas are identified as important for land degradation: policies that promote sustainable land management; policies that reduce land and resource tenure insecurities; and policies that encourage decentralization. Regional action plans developed under the framework of the CCD, particularly regional thematic program networks, will also contribute to capacity building through participatory and bottom-up approaches.

37. Through the GEF Working Group on Land Degradation and the Inter-Agency task forces, and in cooperation with governments, NGOs, and the private sector, there would be support to designing and improving tools for project development to promote adoption of integrated and cross-sectoral approaches to addressing land degradation. This may require pragmatic approaches in developing projects. Activities would involve partners in government and civil society through support for consultations and dialogue in order to facilitate integration and cross-sectoral coordination.

38. **Engaging Stakeholders.** An important element of the strategy is to strengthen

39. Information and information exchange would also be supported, including building upon targeted research and previous STAP work to help clarify the linkages between land degradation and the global environment (e.g., STAP Workshop on Land Degradation 1999).

40. Resources would be mobilized more efficiently through support for opportunities wherein countries and groups in civil society can engage donors and interested parties to share costs. The Global Mechanism of the CCD can play a catalytic role in facilitating resource mobilization to support desertification control activities.

## Action Plan for Enhancing GEF Support to Land Degradation

Elements and Objectives	Proposed Activities to be Supported Primarily by GEF	Expected Outcome/Output (Results)	Suggested Timetable
<p><b>Operationalizing the linkages between land degradation and the GEF's focal areas: on-the-ground activities</b></p> <p>1. <i>Objective:</i> to support countries in implementing integrated approaches for sustainable use and protection of livelihoods in areas subjected to land degradation for purposes of conserving biodiversity; reducing climate change (carbon emissions); improving management of transboundary waters;</p>	<ul style="list-style-type: none"> <li>• The GEF <i>Integrated Land and Water Initiative</i> will engage countries, through the Implementing Agencies (including the Regional Development Banks), other development agencies (e.g., bilaterals), international and local NGOs, in promoting integrated ecosystem management and integrating these into national plans and programs (e.g., through support for enabling activities);</li> <li>• Implementing OP #12, <i>Integrated Ecosystems Management</i>, will assist countries in developing within-project support for policy and programs to facilitate integration of land degradation concerns;</li> <li>• Through the GEF <i>Integrated Land and Water Initiative</i>, GEF <i>Forestry Initiative</i>, OP #12, and in collaboration with Implementing Agencies' own programs on desertification and deforestation, provide support for pilot activities for regeneration of forests and grasslands to increase biomass and sustainable fuelwood/timber regimes; secure biodiversity, reduce carbon emissions and improve carbon storage;</li> <li>• Support countries in preparation and implementation of these pilot activities, and in assisting governments (national and local) and communities in the conduct of integrated land use planning, including support consistent with the CCD thematic programme networks and GEF program objectives.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in the number of national plans and strategies integrating land degradation into programs and priorities;</li> <li>• Increase in country commitments to engaging in national programs dealing with land degradation;</li> <li>• Increase in number of project activities to be funded by GEF that address both land degradation and GEF focal area concerns;</li> <li>• Increase in number of GEF financed activities addressing desertification and deforestation;</li> <li>• Increase in number of GEF financed projects with activities dealing with land degradation through integrated land use planning</li> </ul>	<ul style="list-style-type: none"> <li>• Starting January 2000</li> <li>• Starting January 2000</li> </ul>

<p><b>Strengthening Public Policy and Enabling Environment for Addressing Land Degradation</b></p> <ol style="list-style-type: none"> <li>1. <i>Objective:</i> to assist countries in developing an appropriate enabling policy environment for effective implementation of land degradation programs;</li> <li>2. <i>Objective:</i> to support policy development in the areas of sustainable land management, land and resource tenure security, and decentralization;</li> <li>3. <i>Objective:</i> to facilitate cooperation among Implementing Agencies, governments, NGOs, the private sector and other stakeholders in developing programs and projects that make use of integrated and cross-sectoral approaches to addressing land degradation</li> </ol>	<ul style="list-style-type: none"> <li>• Through the GEF <i>Integrated Land and Water Initiative</i> and <i>GEF Forestry Initiative</i>, OP #12 and in collaboration with Implementing Agencies own in-country programs, assist countries in policy and program development to address land degradation issues and problems; and to support countries in developing policies and programs related to sustainable land management, land and resource tenure, and decentralization;</li> <li>• Through the GEF Working Group on Land Degradation and inter-agency task forces, develop and improve application of project design tools to better assist countries and other partners in developing integrated and cross-sectoral project activities addressing land degradation;</li> <li>• Support partners in government and the civil society in developing integrated and cross-sectoral activities within projects that address land degradation, especially through OP #12, Integrated Ecosystems Management;</li> <li>• Facilitate conduct of consultations and dialogue among key partners to support design and implementation of integrated and cross-sectoral programs and activities through the Country Dialogue Workshops.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved policy environment which is responsive to land degradation issues and problems;</li> <li>• Development of policies and programs addressing key land degradation problems: sustainable land management, tenure, and decentralization;</li> <li>• Better designed, and improved application, of project design tools (e.g., incremental cost analysis and logical framework) that specifically address land degradation concerns;</li> <li>• Increased support to partners in government and civil society in development of integrated and cross-sectoral programs and activities in projects to be funded by GEF and other international agencies;</li> <li>• Increased consultations to facilitate design and implementation of integrated and cross-sectoral programs and activities in projects</li> </ul>	<ul style="list-style-type: none"> <li>• On-going</li> <li>• On-going;</li> </ul>
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ANNEX A  
Possible Intervention Strategies and their Implications for the Global Environment \*

Intervention Strategies	Type of Intervention (Activities)	Global Benefits		
		Biodiversity	Climate Change	International Waters
Energy Related Strategies	<ul style="list-style-type: none"> <li>• Improvements of efficiency of woodburning stoves/fuel substitution</li> <li>• Biomass production as a substitute for fossil fuels</li> <li>• Solar as an alternative to biomass consumption</li> <li>• Other locally appropriate measures i.e. wind power</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancement of biodiversity conservation areas</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon sink enhancement/reduction of GHG emissions.</li> <li>• Reduction of GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>• watershed protection</li> </ul>
Vegetation/Forest Management; Revegetation; Indigenous Vegetation Maintenance and Management (production technology)	<ul style="list-style-type: none"> <li>• Agro forestry initiatives</li> <li>• Rehabilitation/revegetation of degraded lands</li> <li>• Protection of riparian forest and ecosystems</li> <li>• Protection/conservation of indigenous species</li> </ul>	<ul style="list-style-type: none"> <li>• provision of ecological services - pollination, maintenance of soil fertility cycling of carbon and other nutrients</li> <li>• conservation of biodiversity, genetic diversity etc</li> <li>• conserve/protection of gene pool</li> <li>• Increase resilience of ecosystem to environmental stresses</li> <li>• Improvement of ecosystem functioning following maintenance of biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Agroforestry types offer potential for carbon sink enhancement</li> <li>• Reduction of GHG emissions to atmosphere</li> <li>• Carbon sink enhancement</li> </ul>	<ul style="list-style-type: none"> <li>• Increase water holding capacity of soils - reduce impact of extreme events (flooding)</li> <li>• Reduction of sedimentation</li> <li>• Improve regular of water flows/quality of water</li> <li>• Improvement in coastal and main ecosystems</li> </ul>
Sustainable Agricultural Practices/Management including agro-biodiversity strategies (Conservation technology)	<ul style="list-style-type: none"> <li>• Adopt erosion control measures e.g. terraces, low impact clearing techniques etc.</li> <li>• Improve tillage methods</li> <li>• Diversified rotation with forage crops</li> <li>• Improve the complexity (genetic, species etc) of agro-ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancement of below and above ground biodiversity</li> <li>• Improvement in soil fertility</li> <li>• Improvement in genetically diverse crops</li> <li>• Protection of important centres of domestication of plants and crop diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance of soil organic carbon (soil)</li> <li>• reduction of GHG emissions to the atmosphere</li> <li>• agricultural sink</li> </ul>	<ul style="list-style-type: none"> <li>• Improved water quality in aquatic marine ecosystems</li> <li>• Water holding capacity of soils improved reduction in erosion Improved water quality and quantity</li> </ul>

\* Results of STAP Workshops, 1999.

	<ul style="list-style-type: none"> <li>• Use of Integrated Pest Management (IPM) technology</li> <li>• Utilization of diversified practices including those associated with traditional systems (polyculture, old management methods in Central Ghana, S.E. Asia)</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancement of ecosystem integrity</li> </ul>	<ul style="list-style-type: none"> <li>• increase storage in soil</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
Sustainable Rangeland/grassland management (production technology)	<ul style="list-style-type: none"> <li>• Mixed wildlife/pastoral systems</li> <li>• Rotational grazing</li> <li>• Rehabilitation of degraded areas</li> <li>• Reseeding using suitable/Indigenous perennial grasses</li> <li>• Incentives to invest in rehabilitation, maintenance etc.</li> <li>• Improve management of ruminant animals</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancement of herbaceous species biodiversity</li> <li>• Above and below ground biodiversity maintained and enhanced</li> <li>• Ecosystem ecological services improved</li> <li>• Improvement of stakeholders' capacity to manage biodiversity sustainably/alternative livelihood</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon sink enhancement</li> <li>• Reduction of GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Protection of wetland and coastal ecosystem</li> <li>• Improved water quality run off from watershed</li> <li>• Reduction of extreme events (floods etc)</li> <li>• Improvement in coast and marine ecosystem (wetlands, coastal lagoon mangroves)</li> <li>• Improvement in the hydrological regulation and functioning of soil</li> </ul>
Integrated Catchment/Watershed Management/Sustainable Land and Water Management	<ul style="list-style-type: none"> <li>• Reduce sediment load through improved conservation and production technologies</li> <li>• maintenance of stream flow and reduction of flow variability</li> <li>• Regulation of water flow</li> <li>• Habitat modification</li> <li>• Maintain aquifer recharge (i.e. protection of aquifers and aquatic ecosystems)</li> <li>• optimising irrigation</li> <li>• Minimise pollution (i.e. reduction in use of agro-chemicals)</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement of ecosystem functioning favoring maintenance of biodiversity</li> <li>• protection of wetlands and coastal ecosystems/habitats</li> <li>• Protection of endemic species/ecological corridors</li> <li>• protection of habitats for diverse group of species</li> <li>• Aquatic and marine ecosystems enhanced</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in GHG emissions</li> <li>• Rin GHG emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Improved water quality</li> <li>• Improvement in marine and aquatic ecosystems</li> <li>• Enhancement of ecosystem services</li> <li>• Optimize infiltration</li> <li>• Minimise aquifer extraction</li> <li>• Maximize soil water storage</li> <li>• Minimise pesticides</li> <li>• Increased nutrient efficiency</li> <li>• Improved water quality</li> <li>• Improvement in marine and aquatic ecosystems</li> <li>• enhancement of ecosystem services</li> </ul>
Establishment of Transboundary Mechanisms for Management of shared resources	<ul style="list-style-type: none"> <li>• Co-ordinated land-use plan</li> <li>• Establishment of user-rights</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a framework for ensuring protection and/or conservation of biological resources</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a framework within which climate benefit can be delivered</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitates more rational utilization of water resources</li> </ul>

N.B: Entries in the boxes are meant to be illustrative and not exhaustive. Though the intervention strategies listed above are primarily “land-centered”. Each intervention should be designed with its socio-economic context. As a consequence, the socio-economic drivers as illustrated in Table 2 should also join an integral part of the overall intervention strategy.

## ANNEX B

### GEF PROJECTS WHICH CONTAIN COMPONENTS THAT ADDRESS LAND DEGRADATION

The projects listed below have land degradation components\* as a critical part of project design in an effort to secure the global environmental benefits. The list includes projects across the three focal areas (biodiversity, climate change and international waters) and projects that target both desertification and deforestation as critical elements of land degradation.

Country	Project Name	GEF IA	GEF Allocation (\$ m)	Total Project Cost (\$ m)	Description
Argentina and Bolivia	A Strategic Action Programme for the Binational Basin of the Bermejo River	UNEP	3.2	5.9	The project addresses transboundary problems using a watershed based approach. It also covers control of soil erosion. The land tenure survey component looks at ways to address encroachments into the watershed and thus reduce pressures leading to land degradation.
Benin	National Parks Conservation and Management	World Bank	6.2	23.3	The project will support national parks and participatory, community based land and wildlife management in and around (buffers) areas in northern Benin, and design sustainable financing of parks. It addresses root causes of land degradation and habitat destruction by looking at livelihood and tenure systems.
Brazil	Integrated Watershed Management Program for the Pantanal and Upper Paraguay River Basin	UNDP	6.6	16.4	This project will develop a detailed watershed management program for the Pantanal and Upper Paraguay River Basin and provide protection to endemic species within the wetlands. The World Bank-UNDP PRODEAGRO program finances the sub-basin baseline activities dealing with the root causes of degradation. It will also look at the causes of water pollution leading to degradation of the river basin from excessive agriculture, soil erosion, and some industrial wastes. It will conduct an assessment of the extent of land degradation in the basin.
Brazil	Biomass Power Generation: Sugar Cane Bagasse and Trash	UNDP	3.8	6.5	This project addresses land degradation by integrating co-generation systems based on sugar cane bagasse and trash and sugar mills, biomass gasification and gas turbines. It lowers carbon emissions and has beneficial effects on reducing land degradation and organic pollution.

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\* Selection criteria for including projects with land degradation components include the following: (a) presence of project activities included in the project's budget dealing with land degradation; (b) projects located in areas currently or have undergone land degradation; and (c) projects that deal with removal of barriers or reduction of threats affecting land degradation, including rural poverty.

Brazil	Integrated Gasification/Gas Turbine	UNDP	8.0	8.0	This project establishes a globally replicable prototype unit on a commercial scale for the cogeneration of electricity based on the gasification of wood chips or sugar cane bagasse. It is expected to improve carbon sequestration and control land degradation through reforestation.
Brazil	Biomass Power Commercial Demonstration	World Bank	40.0	122.0	This project demonstrates the commercial viability of using wood as a feedstock for power generation using the Biomass Integrated Gasification/Gas Turbine (BIG/GT) concept. It will construct a 30 MW biomass gasification plant in northeastern Brazil. It is expected to improve carbon sequestration and control land degradation through reforestation.
Burkina Faso	Optimizing Biological Diversity within Wildlife Ranching Systems: Pilot Demonstration in the Semi-Arid Zone	UNDP	2.5	3.5	This project develops methods for optimizing conservation in game ranching systems in West Africa. It will involve populations in Nazinga Game Ranch and other regional ranching projects. The project will address the causes of land degradation and habitat destruction due to over hunting.
Central African Rep	A Highly Decentralized Approach to Biodiversity Protection and Use: The Bangassou Dense Forest	UNDP	2.5	3.5	The project uses a participatory and decentralized approach to management of the Bangassou Dense Forest in southern Central African Republic. It is an area of high species and ecosystem diversity but threatened by over-hunting, fire, land use changes, and soil degradation.
Chile	Reduction of Greenhouse Gases	UNDP	1.7	1.7	This project will demonstrate power generation from biomass gasification and assist small and medium industries in the Santiago area to improve energy efficiency. It has a beneficial impact on land degradation control by reducing water pollution (from biomass waste) in urban areas.
China	Development of Coal-Bed Methane Resources	UNDP	10.0	10.0	This project will install methane recovery technologies in three sites to reduce atmospheric methane emissions. It is expected to reduce land degradation through improved soil and plant management, and through the project sponsored experts conference, discuss with engineers better integration with agricultural land systems.
China	Renewable Energy Promotion	World Bank	36.0	408.0	This project will install 190 MW of wind farm and 200,000 solar home systems through private entrepreneurs. It is expected to reduce woodfuels in rural areas and lower deforestation, thus reducing land degradation.
Colombia	Conservation of Biodiversity in the Choco Region	UNDP	6.0	9.0	This project will conserve biodiversity along the pacific coast of Colombia, Panama and Ecuador. It will support legislation, scientific information, and land use planning, including alternative livelihoods to prevent further degradation of lands along the coast.
Comoros	Island Biodiversity and Participatory Conservation in the Federal Islamic Republic of Comoros	UNDP	2.4	3.2	The project will assist in establishing legal, financial, and institutional frameworks for collaborative biodiversity management. One component is to rehabilitate lands due to degradation and recover two plant species.
Congo	Rehabilitation of Protected Areas in the Democratic Rep of the Congo	UNDP	6.3	19.9	This project will support policy, legislative, financial, institutional and social environment for protected areas. It will also look at the root causes of land degradation as these are affected by tenure policies and migration programs.

Congo	Wildlands Protection and Management	World Bank	10.0	16.8	This project develops five tropical forest ecosystems in the Congo with varying degrees of land degradation, ecological diversity and wealth. There will be inventories, site planning, training, and studies on the impact of indigenous communities in controlling land degradation.
Cote d'Ivoire	Control of Aquatic Weeds to Enhance/Restore Biodiversity in the Water Bodies of Cote d'Ivoire	UNDP	3.0	4.9	The project will engage in biological monitoring to reduce spread of infestation and foundation for integrated watershed management. It addresses the root causes of land degradation and water nutrification.
Egypt	Lake Manzala Engineered Wetlands	UNDP	4.5	4.5	This project focuses on controlling water pollution caused by soil erosion and pollutants from municipal, industrial, and agricultural sources. The pollution affects millions of people along the Mediterranean, aside from severely degrading surrounding wetlands.
Ethiopia	A Dynamic Farmer-Based Approach to the Conservation of African Plant Genetic Resources	UNDP	2.5	6.8	This project demonstrates how local plant landraces can be conserved and utilized by small-scale farmers on their own land through community gene banks and integrated into national and international gene banks. One component of the project is to arrest soil erosion and reduce sedimentation. Another component focuses on reducing land degradation within agricultural lands of key landraces.
Ghana	Natural Resources Management	World Bank	8.9	53.6	The project will help implement the National Forest Protection Strategy through increased protection of special sites and explore ecotourism, extraction of non-timber products, and restoration of degraded lands through commercial plantations. There are components dealing with community involvement in woodland management in the Savannah zone and improved wildlife management. It addresses land degradation by ensuring habitat restoration and improving monitoring of hunting and extraction of forest products.
Ghana	Renewable Energy Based Electricity for Rural, Social, and Economic Development	UNDP	2.5	3.0	The project promotes renewable energy using off-grid electricity to households, communities and industries in the Volta River Authority and Northern Electricity District. The project aims to reduce fuelwood cutting and deforestation, thus, controlling land degradation.
Global	People, Land Management, and Environmental Change	UNEP	6.3	11.0	This project has demonstration sites in five countries in semi-arid, mountain, forest, and wetland ecosystems. It uses a participatory approach to bringing together farmers' indigenous knowledge and scientific approaches to address issues related to agricultural degradation and agricultural biodiversity.
Global	Alternatives to Slash and Burn Agriculture II	UNDP	3.0	6.3	This is primarily a research and demonstration project to identify land use practices that reduce land degradation in shifting cultivation and agricultural lands.
Guatemala	Integrated Biodiversity Protection in the Sarstun-Motagua Region	UNDP	4.0	9.7	The project promotes conservation and sustainable use in the Sarstun-Motagua region to reduce pressures causing land degradation in some sites. It provides livelihood options to reduce land degradation pressures.
India	Optimizing Development of Small Hydel Resources in the Hilly Regions of India	UNDP	7.5	15.0	The project makes use of demonstration systems in the Himalayan and sub-Himalayan regions using 20 commercially viable small hydel projects. It will be located in rural communities to reduce fuelwood dependence and deforestation in this eco-fragile region.

Indonesia	Solar Home Systems	World Bank	4.0	141.0	The project will install about 200,000 solar home systems through local entrepreneurs to support the government's decentralized rural electrification. It is expected to reduce woodfuels and deforestation significantly and thus reduce land degradation.
Jordan	Conservation of the Dana and Azraq Protected Areas	UNDP	6.3	6.3	This project supports two protected areas and enables an NGO, RSCN, to carry out environmental education and outreach. It controls land degradation processes through habitat restoration and community based monitoring of agricultural land uses.
Jordan	Final Consolidation and Conservation of Azraq Wetlands and Dana Wildlands by RSCN to Address New Pressures	UNDP	1.9	3.3	This project addresses new threats brought about by political and social changes in the Dana and Mujib Reserves, which are strategic nodes in the Rift Valley ecosystem and the Azraq Wetland Reserves. Land degradation is controlled through improved wetlands management
Jordan	Reduction of Methane Emissions and Utilization of Municipal Waste for Energy in Amman	UNDP	2.9	5.3	The project substitutes bioenergy (methane) from anaerobic digestion of industrial and municipal waste for fossil fuels. It recycles disposed organic waste and organic fertilizer which, in turn, reduces land degradation as these are used in a biogas plant.
Kenya	Tana River National Primate Reserve	World Bank	6.2	7.1	The project will manage the Tana River National Primate Reserve which consists of the last remaining contiguous area of indigenous riverine forest along the Tana River. It contains two endangered species, the Red Colobus and Crested Mangabey Monkeys. It addresses land degradation through extensive habitat restoration.
Lebanon	Strengthening of National Capacity and Grassroots In-Situ Conservation for Sustainable Biodiversity Protection	UNDP	2.5	3.2	This project will have three demonstration sites to be managed jointly by government and NGOs and scientific institutions. In one site, scientists will look at the causes of soil erosion and land degradation, specifically as these safeguard endemic and endangered species of flora and fauna.
Lao PDR	S. Provinces Renewable Energy Pilot	World Bank	0.7	2.1	This project will install 20 solar battery charging demonstration stations and hydro mini-grids using several village electricity associations. It is projected to reduce fuelwood consumption and deforestation significantly, and thus, reduce land degradation.
Madagascar	Environment Program Support	World Bank/ UNDP	21.3	156.5	This project addresses root causes of land degradation due to deforestation and other unsustainable uses. It offers capacity building, in-situ conservation, and training services to national and local officials and encourages decentralized management.
Mali	Household Energy	World Bank	2.5	11.1	This project promotes popular participation in household energy activities and improves household fuels use. It mobilizes popular participation in the management of natural forests and restructures the fuelwood trade. Land degradation is controlled through better forest management and more manageable fuelwood cutting.
Mauritius	Restoration of Highly Degraded and Threatened Native Forests	World Bank	0.2	0.2	The project will restore a plot of highly degraded native forest in the Black River Gorges National Park through control of exotic weeds. It will also document and restore biological diversity. One of the project components is to prevent land degradation through better agricultural land use practices.
Mauritius	Sugar Bio-energy Technology	World Bank	3.3	55.0	This project will construct a baseload power plant using bagasse during the crop season and coal in the off season. It is expected to efficiently use crop residues and thus reduce land degradation through better soil and organic management.

Mongolia	Biodiversity Conservation and Sustainable Livelihood Options in the Grasslands of Eastern Mongolia	UNDP	5.2	12.0	This project supports the Ministry for Nature and Environment by strengthening capacities to manage the grasslands in Eastern Mongolia which are threatened by overgrazing and agriculture leading to land degradation.
Morocco	Solar Based Thermal Power Plant	World Bank	43.0	114.0	The project will construct a 150 MW hybrid power plant using solar thermal trough arrays integrated with natural gas in Morocco's rural areas. It is expected to reduce fuelwood cutting and deforestation in these areas and thus reduce land degradation.
Panama	Biodiversity Conservation in the Darien Region through Community Sustainable Development	UNDP	3.0	3.0	The project will reduce threats caused by land degradation processes that affect the Darien National Park and surrounding sites. It will make use of a participatory approach and offer alternatives to unsustainable use of resources.
Regional	(Lebanon, Jordan, Syria): Conservation and Sustainable Use of Dryland Agrobiodiversity of the Fertile Crescent	UNDP	8.2	18.5	The project will ensure the continuous availability of agrobiodiversity in the Fertile Crescent essential for sustainable development of agriculture in the region, but also for food security and production by addressing degradation of agricultural lands and loss of genetic diversity.
Regional	(Algeria, Morocco, Tunisia) Participatory Management of Plant Genetic Resources in the Oases of the Maghreb	UNEP/ UNDP	3.1	6.6	The project will remove barriers to genetic erosion of date palm in the Maghreb region through (i) replacement from national programs, in-situ genetic resources that are multiplying and distributing only a few varieties of trees, and (ii) market forces that are encouraging growth of a few high value varieties of date palm. Activities include in-situ pre-screening; multiplying date palm varieties; development of alternative markets; capacity building; and replication. These activities reduce agricultural land degradation through improved crop management.
Regional	(Burkina Faso, Cote D'Ivoire) West Africa Pilot Community Based Natural Resource and Wildlife Management	World Bank	7.0	13.1	This project focuses on community based wildlands and wildlife rehabilitation, utilization, and conservation programs based on gestion de terroirs approach. It covers 4,800 sq kms in the Comoe ecosystem in southwestern Burkina Faso and northern Cote D'Ivoire. It includes land use planning, community land management, capacity building, habitat improvement and animal herd reconstruction, and sustainable subsistence and commercial use of wildlife. Land degradation will be controlled through habitat restoration and community based management of lands within the sites, and control of commercial hunting. It will also engage in land use planning.
Regional	(Kenya, Botswana, Mali) Management of Indigenous Vegetation for the Rehabilitation of Degraded Rangelands in the Arid and Semi-Arid Zone of Africa	UNEP/ UNDP	9.1	13.3	This is a demonstration project to conserve and rehabilitate globally significant biodiversity in African drylands. Activities include indigenous management systems support; establishment of regional arid zone database; rehabilitation of indigenous vegetation and degraded lands; and improved livestock and alternative livelihoods, and targeted research. One component looks at systems for maintaining indigenous vegetation.

Regional	(Kenya, Tanzania, Uganda) Lake Victoria Environmental Management	World Bank/ UNEP	35.0	77.6	The project addresses threats to the Lake Victoria ecosystem from overfishing, eutrophication and algae levels, pollution, and invasive exotic species like the water hyacinth. Actions include regional cooperation, pollution regulation and enforcement, waste water management, monitoring of wetlands, control of hyacinths, and soil conservation and afforestation. Land degradation will be addressed through management of wastelands and better water pollution control.
Regional	(Kenya, Tanzania, Uganda) Reducing Biodiversity Loss at Cross-Border Sites in East Africa	UNDP	12.8	18.4	This project addresses root causes of land degradation and biodiversity loss by looking at tenure and value systems, incentives, regulatory and policy instruments. It focuses on participatory learning and sharing of information across sites to deal more effectively with species loss and soil erosion problems.
Regional	(Bosnia and Herzegovina, Bulgaria, Croatia, Czech Rep, Hungary, Moldova, Romania, Slovakia, Slovenia, Ukraine, Yugoslavia) Developing the Danube River Basin Pollution Reduction Programme	UNDP	3.9	3.9	The project prepares pollution prevention and reduction activities to restore the Danube River Basin and to protect the Black Sea environment from land degradation and industrial pollution. There will be a strategic policy framework to guide the programs. The regional cooperation for controlling pollution of waters is also supported.
Regional	(Tanzania, Congo, Burundi, Zambia) Pollution Control and Other Measures to Protect Biodiversity in Lake Tanganyika	UNDP	10.0	10.0	The project will control water pollution affecting diversity in Lake Tanganyika which were caused by soil erosion and sedimentation. A participatory approach will be used, including the private sector through ecotourism and control of industrial pollution.
Regional	(Benin, Cameroon, Cote D'Ivoire, Ghana, Nigeria) Industrial Water Pollution Control in the Gulf of Guinea Large Marine Ecosystem	UNDP	6.0	6.0	The project controls water degradation arising from pollution of the Gulf of Guinea. It will engage in water quality assessments and ecological monitoring, including setting up of demonstration sites. The root causes associated with land degradation will be reviewed.
Regional	(Cambodia, China, Indonesia, Korea DPR, Malaysia, Philippines, Thailand, Vietnam) Prevention and Management of Marine Pollution in the East Asian Seas	UNDP	8.0	11.4	This project addresses land and water degradation caused by marine pollution and land and sea based sources by upgrading institutions and establishing appropriate financial mechanisms. It will make use of an information network and pilot sites for controlling land and water degradation.
Senegal	Sustainable and Participatory Energy Management	World Bank	4.7	19.9	The project promotes inter-fuel substitution options for kerosene, liquid petroleum gas for charcoal. Private sector and NGOs are involved in delivery of services. It is expected to also reduce fuelwood use in households in the targeted urban centers where woodfuels are highly priced.
Senegal and Mauritania	Biological Diversity Conservation through Participatory Rehabilitation of the Degraded Lands of the Arid and Semi-Arid Transboundary Areas	UNEP/ UNDP	8.0	12.4	This project addresses root causes of biodiversity loss from land degradation in upland and floodplains over 60,000 sq kms in size in the transborder areas of the Senegal River Valley. It uses a participatory approach to resource management, fire prevention to decrease pressures on the forest and rangelands and reduce land degradation.

Slovenia	Removing Barriers to the Increased Use of Biomass as Energy Source	UNDP	4.4	12.3	This project promotes the market for biomass technologies for district heating and cogeneration in Slovenia. It controls and reduces land degradation by promoting biomass generation through reforestation and increased vegetation within the national long-term biomass supply agreements with plantations and communities.
Sri Lanka	Energy Services Delivery	World Bank	6.0	55.0	The project will finance private sectors, cooperatives, and NGOs to construct renewable energy projects using wind farms and village hydros in off-grid systems. It is expected to reduce fuelwood cutting and deforestation substantially, thus reducing land degradation.
Sudan	Conservation and Management of Habitats and Species and Sustainable Community use of Biodiversity in Dinder National Park	UNDP	0.7	1.7	This medium-sized project is designed to create a perpetual reservoir of gene pool and species diversity in the Dinder National Park, which is threatened by drought and land degradation from large-scale development schemes and resource misuse.
Sudan	Community Based Rangeland Rehabilitation for Carbon Sequestration	UNDP	1.5	1.5	The project improves community based land use and range management to address problems of land degradation caused by droughts and overgrazing. Activities include revegetation and rehabilitation of rangelands.
Tanzania	Electricity, Fuel, and Fertilizer From Municipal and Industrial Wastes	UNDP	2.5	4.0	This project will set up medium to large scale biomass production facilities in Tanzania, and a biogas plant to process industrial wastes in Dar es Salaam. It is expected to reduce land degradation through better soil and organic management, and reduce water degradation from industrial pollution.
Turkey	In-situ Conservation of Genetic Biodiversity	World Bank	5.1	5.7	This project will protect genetic resources and wild relatives of important crops and forest tree species, including conservation of genetic resources in cereals, horticultural crops, medicinal plants, forest trees, pasture grasses, and legumes using an integrated approach. Activities include establishment of gene management zones and in-situ conservation, both of which control land degradation and biodiversity loss.
Uganda	Protected Areas Management and Sustainable Use	World Bank	10.2	107.0	The project assists the Uganda Wildlife Authority in rehabilitation and promoting ecotourism and capacity building. It addresses root causes of land degradation by looking at alternatives to collection of forest products in buffer zones.
Uganda	Bwindi Impenetrable National Park and Mgahinga Gorilla National Park Conservation	World Bank	4.0	6.3	The project establishes sustainable financing (trust fund) to provide long-term support to management of the Bwindi Impenetrable Forest and Mgahinga Gorilla National Park. It uses local communities, NGOs and government officials in its management structure. The activities address land degradation by offering alternative livelihoods to communities to reduce pressures on resources.
Uruguay	Consolidation of the Banados del Este Biosphere Reserve	UNDP	2.5	4.0	This projects supports implementation of the Land Use Plan and Hydrological Plan to address land degradation caused by inappropriate land use practices. It will build capacities, promote awareness, and provide alternative livelihoods to reduce pressures.

Zimbabwe	Biodiversity Conservation in Southeast Zimbabwe	World Bank	4.8	55.0	The project will design and implement a natural resource management plan for the Gonarezou National Park on the Mozambique transfrontier conservation area. It will address land degradation problems through rehabilitation and community wildlife management and introduce alternative livelihoods to reduce pressures on resources (e.g., ecotourism).
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