



**Global Environment Facility**

GEF/C.20/3  
September 17, 2002

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GEF Council  
October 14-15, 2002

Agenda Item 6

**WORK PROGRAM  
SUBMITTED FOR COUNCIL APPROVAL**

## **Recommended Council Decision**

The Council reviewed the proposed Work Program submitted to Council in document GEF/C.20/3 and approves it subject to comments made during the Council meeting and additional comments that may be submitted to the Secretariat by November 1, 2002.

The Council finds that [, with the exception of \_\_\_\_\_,] each project presented to it as part of the Work Program (i) is or would be consistent with the Instrument and GEF policies and procedures and (ii) may be endorsed by the CEO for final approval by the Implementing Agency, provided that the CEO circulates to the Council Members, prior to endorsement, draft final project documents fully incorporating the Council's comments on the work program accompanied by a satisfactory explanation by the CEO of how such comments and comments of the STAP reviewer have been addressed and a confirmation by the CEO that the project continues to be consistent with the Instrument and GEF policies and procedures.

[With respect to \_\_\_\_\_, the Council requests the Secretariat to arrange for Council Members to receive draft final project documents and transmit to the CEO within four weeks any concerns they may have prior to the CEO endorsing a project document for final approval by the Implementing Agency. Such projects may be reviewed at a subsequent Council meeting at the request of at least four Council Members.]

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## SUMMARY OF PROPOSED WORK PROGRAM

### Biological Diversity

- **Regional (Mozambique, Zambia, Zimbabwe):** Integrated Management of Dryland Biodiversity through Land Rehabilitation in the Arid and Semi-Arid Regions of Mozambique, Zambia and Zimbabwe
- **Regional (China, Iran, Kazakhstan, Russian Federation):** Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia
- **Regional (Armenia, Bolivia, Madagascar, Sri Lanka, Uzbekistan):** In-situ Conservation of Crop Wild Relatives through Enhanced Information Management and Field Application
- **Cambodia:** Tonle Sap Conservation Project
- **Cape Verde:** Integrated Participatory Ecosystem Management in and around Protected Areas, Phase 1
- **China:** Biodiversity Management in the Coastal Area of the China's South Sea
- **Jordan:** Conservation of Medicinal and Herbal Plants
- **Maldives:** Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll
- **Nepal:** Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex
- **Peru:** Participatory Management of Protected Areas
- **Russian Federation:** Conservation and Sustainable Use of Wild Salmonid Biological Diversity in Russia's Kamchatka Peninsula, Phase 1
- **Russian Federation:** ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic

### Biodiversity – Biosafety

- **Colombia:** Capacity Building for the Implementation of the Cartagena Protocol

### Climate Change

- **Regional (Czech Republic, Slovak Republic):** Energy Management and Performance Related Energy Savings Scheme (EMPRESS)
- **Regional (West Africa) :** Capacity-building for Improving Greenhouse Gas Inventories (West and Francophone Central Africa)
- **Belarus :** Biomass Energy for Heating and Hot Water Supply
- **China:** End-Use Energy Efficiency
- **Costa Rica:** National Off-grid Electrification Programme Based on Renewable Energy Sources, Phase 1
- **Georgia:** Promoting the Use of Renewable Energy Resources for Local Energy Supply
- **India:** Removal of Barriers to Biomass Power Generation, Part 1
- **Mali:** Household Energy and Universal Rural Access Project
- **Mexico:** Action Plan for Removing Barriers to the Full-scale Implementation of Wind Power

- **Nicaragua:** Off-grid Rural Electrification for Development (PERZA)
- **Russian Federation:** Removing Barriers to Coal Mine Methane Recovery and Utilization
- **Vietnam:** Demand-Side Management and Energy Efficiency Program

#### **International Waters**

- **Slovenia:** National Pollution Reduction Project

#### **Ozone Depletion**

- **Armenia:** Programme for Phasing Out Ozone Depleting Substances

#### **Multiple Focal Areas**

- **Global:** Small Grants Programme (Second Operational Phase) – 5<sup>th</sup> year

#### **Land Degradation – Multiple Focal Area**

- **China:** PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity
- **Brazil:** Demonstrations of Integrated Ecosystem and Watershed Management in the Caatinga, Phase 1
- **Burkina Faso:** Sahel Integrated Lowland Ecosystem Management (SILEM)
- **Kazakhstan:** Dryland Management Project

#### **Persistent Organic Pollutants**

- **Regional (Botswana, Cameroon, Cote d'Ivoire, Ethiopia, Lesotho, Mali, Morocco, Mozambique, Namibia, Niger, Nigeria, South Africa, Swaziland, Tanzania, Tunisia):** African Stockpile Program, Phase 1

## WORK PROGRAM

1. The Chief Executive Officer (CEO), after reviewing the conclusion and recommendations of the project review meetings with the Implementing Agencies, proposes to the Council for its consideration and approval a Work Program consisting of 33 new full-size project proposals with the following GEF allocations (see Annex A for details):

Biodiversity	\$ 68.820 million	(12 projects)
Biodiversity/Biosafety	\$ 1.000 million	(1 project)
Climate Change	\$ 65.439 million	(12 projects)
International Waters	\$ 9.995 million	(1 project)
Ozone Depletion	\$ 2.087 million	(1 project)
Multiple Focal Areas	\$ 26.997 million	(1 project)
Land Degradation/MFA	\$ 22.350 million	(4 projects)
Persistent Organic Pollutants	\$ 25.600 million	(1 project)
<b>Total GEF allocation</b>	<b>\$222.288 million</b>	<b>(33 projects)</b>
<b>Total project cost</b>	<b>\$681.544 million</b>	

2. In August 2002, representatives of 32 governments from developed and developing country reached consensus on a \$2.92 billion replenishment of the GEF (GEF-3) to fund its operations over the next four years, FY03-FY06. Since that time there have been additional voluntary contributions as well. This replenishment will finance activities in the existing focal areas – biodiversity, climate change, international waters, and ozone layer depletion – while providing additional support for the proposed two new focal areas of the GEF, namely persistent organic pollutants and land degradation.

3. This is the first Work Program proposed for the GEF-3 period. Because the Replenishment negotiations had taken longer than originally expected, donors have not yet had time to complete their formal arrangements for the release of funds under that agreement. As a result, this Work Program exceeds the currently available resources. However, the first tranche of GEF-3 is expected to be released by the end of the calendar year. On an exceptional basis, Council is therefore requested to approve this Work Program on the understanding that the CEO will endorse projects only when the resources that have been released are sufficient for the agencies to make their final commitments. Because this Work Program is consistent with the resources projected to be available before the time of CEO endorsement, this is unlikely to introduce any operational delay.

4. The GEF also finances medium sized projects, project preparation grants, and enabling activities under expedited procedures. Expedited approvals by the CEO or Implementing Agencies in the reporting period (April 1, 2002 to August 31, 2002) comprise:

Medium-sized projects	\$10.411 million	12 projects	CEO, Annex B
PDF-A	\$ 0.552 million	23 grants	IAs, Annex C
PDF-B/C	\$ 5.498 million	17 grants	CEO, Annex D
<b>Enabling activities</b>	<b>\$13.690 million</b>	<b>42 projects</b>	<b>CEO, Annex E</b>

Total GEF allocation                      \$ 30.151 million

5. The total project implementation services fees for this Work Program of \$246.389 million (full-size projects, MSPs, and Enabling Activities) in GEF grants amounted to \$21.191 million, representing a fee ratio of 8.6%. This compares against the fee ratio of 12.39% for the May 2002 Work Program, which resulted from (i) a higher incidence of Medium-Sized projects and Expedited Enabling Activities, which typically have high fee ratios because of their relatively small individual project grant values; and (ii) the lower individual project grant values of full-size projects, resulting from the serious funding constraints experienced over the last fiscal year.

### **Standard Format for Executive Summary of Projects**

6. In May 2002, the Council “requested the Secretariat and the Implementing Agencies to take steps towards consistency in the presentation of project proposals. The Council also requested that an Executive Summary be presented for each project proposal, including the presentation of core project data, such as a summary of problem analysis, the aim of the project, a summary of project activities and envisaged results, key indicators for project success, compliance with provisions in operational programs, and strategic priorities of the business plan, financing plan, including incremental cost and co-financing, institutional coordination, policy framework, sustainability and replicability and risk analysis. The GEF Secretariat was requested to report back to the Council on its agreement with the agencies to modify the presentation of project proposals.”<sup>1</sup> The Council further requested “that project proposals include information on baselines, expected outputs, and impact indicators.”<sup>2</sup>

7. Currently, most of this information is made available for each project, but it is not presented in a consistent format or in one place. The purpose of consistent documentation would be to present a clear statement of the eligibility of the proposal for the GEF financing requested in a manner that can be compared across agencies. In the interests of mainstreaming, such documentation would maintain the existing distinction between documents that are required only and specifically for GEF purposes (which should be made standard) and those required for the internal processing of the agency concerned (which could remain agency-specific).

8. The Secretariat consulted with the Implementing Agencies and has prepared a format for the requested GEF Executive Summary. This format, and a demonstration of the use of this format for a project in this Work Program, can be found in an information note (*Format for the Executive Summary of GEF Project Proposals*, GEF/C.20/Inf.4). This format will be used for future Work Programs.

### **Direct Access**

9. Council has before it the *Recommendations agreed as part of the Third Replenishment*. One recommendation concerns direct access for the Asian Development Bank (ADB) and the Inter-American Development Bank (IDB) to GEF resources for the implementation of GEF projects. If this recommendation is accepted, it is proposed the ADB project in this Work Program, *PRC/GEF*

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<sup>1</sup>Joint Summary of the Chairs, para. 47.

<sup>2</sup> *Ibid.* para. 48.

*Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity*, be approved for such direct access. Otherwise, the project will be endorsed by the CEO only when appropriate arrangements with an Implementing Agency have been made under the existing policy on expanded opportunities.

10. Furthermore, if the Council accepts that recommendation, it is proposed that direct access apply retroactively in some cases. Specifically, it is proposed that the concerned Implementing Agencies and Executing Agencies under Expanded Opportunities for those ADB or IDB projects which had been approved earlier but for which executing arrangements under expanded opportunities have not yet become effective, have the option to allow those projects to proceed under direct access as well.

### **Enabling Activities**

11. GEF support for biodiversity Enabling Activities through the reporting period covered 11 countries; 11 new project proposals for additional funding were approved with a total financing of \$2.283 million. All countries have already received GEF support for biodiversity enabling activities.

12. GEF support for climate change Enabling Activities covered 6 countries in addition to a number of regional and global enabling activity projects. During this reporting period, 6 new project proposals were approved for additional or “top-up” funding with a total financing of \$0.590 million.

13. GEF support for POPs Enabling Activities now covers 22 countries. During this reporting period, 22 new POPs Enabling Activities were approved with a total financing of \$10.276 million. For 22 countries, this was the first GEF support for POPs Enabling Activities.

14. Three enabling activities in the multifocal area were approved in order to enable the involved governments to assess their own national capacity needs for global environmental management. A total of \$0.541 million was allocated for the three projects. For the 3 countries, this was the first GEF support for Enabling Activities under the Multiple Focal Area.

### **Ozone Depletion**

15. The *Armenia: Programme for Phasing Out Ozone Depleting Substances* will contribute to the efforts in phasing out ozone depleting substances (ODS) namely CFC. The project is expected to be the last of first generation ODS projects. While the PDF-B included not only Armenia but also Kyrgyzstan, the presented project proposal focuses on Armenia only. Kyrgyzstan has been re-classified as Annex 5 country under the Montreal Protocol and is as such now eligible for funding from the Multilateral Fund. With the support of the GEF, Armenia will meet its national obligations under the Montreal Protocol within a three-year period.

### **Land Degradation**

16. The current Work Program includes several projects under Operational Program #12 addressing land degradation. These are the China, Brazil, Burkina Faso, and Kazakhstan projects. The *China: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity* is particularly innovative, as it adopts a programmatic approach to promote catalytic action, follow-up, and



replication in a learning-based environment. This program, being prepared by the Asian Development Bank, will adopt an holistic approach through a series of related projects that would be implemented by different agencies. It would use a single country programming framework whose ultimate goal is to combat land degradation and introduce a system of land use to balance production and consumption while improving the livelihoods of the local populations.

### **Persistent Organic Pollutants**

17. World Bank, FAO, and WWF in partnership have responded rapidly to the requirements of the new focal area. This Work Program includes the *Regional: African Stockpiles Program*, the first project other than Enabling Activities, under the proposed new focal area of Persistent Organic Pollutants. Earlier POPs related projects had met the criteria under the contaminants Operational Program of the International Waters focal area, and had been submitted on that basis. The first phase of the *Regional: African Stockpiles Program* will address critical POPs issues in 15 African countries.

### **PROJECT HIGHLIGHTS**

18. GEF responsiveness to emerging issues is notable with persistent organic pollutants, land degradation, and mainstreaming conservation issues into sustainable development initiatives.

- (a) The POPs projects, including those submitted under the “Enabling Activities” create a sound foundation for building the new focal area on persistent organic pollutants which is expected to be approved in October 2002.
- (b) Within the biodiversity focal area, the strategic shift from conservation approaches to integrate and mainstream biodiversity conservation into sustainable development by adopting inter-sectoral approaches is increasingly reflected in the biodiversity portfolio in this Work Program.
- (c) The increasing amount of projects submitted under the Multiple Focal Areas focussing on combating land degradation by promoting integrated ecosystem management approaches emphasizes the need for immediate and coordinated action in areas affected by desertification and deforestation. The approval of a new GEF Focal Area on Land Degradation (Desertification and Deforestation) will acknowledge the emerging demands.

19. The Work Program also reflects the emerging strategic priorities for each focal area which are being identified based on an in-depth gap analysis of the program portfolios and intensive discussions with the Implementing Agencies. The future programming according to agreed strategic priorities will maximize the impacts and results from GEF-financed activities in light of convention guidance, country priorities, and available resources while providing greater predictability and transparency to the allocation of resources. The following section highlights how these operational principles, programmatic requirements and emerging strategic priorities have been reflected in project development and how cross-cutting issues have been addressed in project design.

## **Country Ownership**

20. Country ownership is demonstrated by the significant amount of policy support and the cofinance committed by the governments for the projects in this Work Program. In addition, governments increasingly emphasize the link between the proposed projects, their respective national priorities and their commitment to the implementation of international treaties ratified by them. The following three projects in particular involve substantial policy, legal, and institutional support as well as cofinancing from the host countries: *Cambodia: Tonle Sap Conservation Project*; *Nicaragua: Off-grid Rural Electrification for Development (PERZA)*, and *Russian Federation: ECORA: An Integrated Ecosystem Management Approach to conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic*. Implementation of each one of them is based on building an enabling institutional and policy environment at the national, regional, and local level and on the financial support of the government.

21. The *India: Removal of Barriers to Biomass Power Generation, Phase I* project presents another impressive example for strong country ownership. In this project, the government leverages the allocated GEF finances by a ratio of 1:1 whilst a major share of cofinancing comes from the Indian private sector which matches GEF funds by a ratio of about 5:1. The government is committed to widespread the use of biomass power by utilizing technical assistance focused on removing the remaining technical, regulatory and institutional barriers.

22. In this Work Program, with the *China: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity*, China makes a firm commitment and impressive investment to address land degradation by proposing a strategic framework for action over a 10-year period. This programmatic approach will enable China to combat land degradation in an integrated and sustainable way. In addition, it will enhance the impact of the eight planned projects that would be submitted within the framework and promote synergies among the focal areas. Together with the proposal for the strategic framework, the first of the projects is submitted as part of this Work Program.

## **Replicability**

23. Building replicability into project design and preparing plans for subsequent replication is a major project requirement. At the concept stage, the innovative elements, the desired catalytic effect, and the demonstration value of the project proposed are identified. To follow this through, project design includes a number of elements to facilitate future replication, such as: special monitoring, dissemination, outreach and awareness raising for replication target groups, documentation of unique lessons and experience, data collection to assist replication (i.e. possibly beyond the immediate needs of the project itself), regional workshops, provision of training, institutional twinning, technology transfer, development of local expertise to assist neighboring countries, maximizing the demonstration value, pre-feasibility studies, and assessments of replication potential.

24. In projects of this Work Program, the replicability of project lessons and potential transfer of experience elsewhere play an important role, especially in those projects which are part of a more complex initiative. The Work Program includes eight projects which will have more than one phase. The majority of these projects will concentrate in their first phase on demonstration activities which will

be closely monitored and evaluated in order to replicate the lessons and experiences in areas with similar conditions in subsequent phases. However, these subsequent phases will be separately evaluated according to the GEF project review criteria and in the light of the results of the earlier phases.

25. The *China: Biodiversity Management in the Coastal Area of the China's South Sea* project has scope for initial replication at six demonstration sites within five coastal provinces (Guangxi, Hainan, Guangdong, Fujian and Zhejiang) followed by replication in areas with similar conditions in other provinces. The project will test, demonstrate and implement tools, instruments and approaches for addressing root causes of critical threats to marine biodiversity in the South Sea coasts and promote their broader adoption across China's South Sea coastal areas.

26. Similarly, the approach taken in the *Maldives: Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll* project will develop model innovative practices in Baa Atoll which will be later on widely adopted in the area. Through this project, the GEF will contribute to the distribution and maintenance of coral reef biodiversity throughout the Indian Ocean.

27. The first phase of the *Costa Rica: National Off-grid Electrification Programme based on Renewable Energy Sources* will focus on the creation of a systematic approach within the Costa Rican energy sector to rural electrification with renewable energy. This will include the implementation of sixteen pilot projects in rural communities using micro hydroelectric or photovoltaic systems and the development of two demonstration and training facilities near the metropolitan area. The project will encourage the evaluation of the pilot project results and its dissemination by using the demonstration and training facilities or other means.

28. The *Russian Federation: Removing Barriers to Coal Mine Methane Recovery and Utilization* project is a short term measure because of exceptionally low carbon abatement costs. It will help Russia to build project opportunities for carbon finances and uses an innovative replication strategy within Russia. It learns from and builds on previous GEF projects in China and India that were implemented by UNDP (*China: Development of Coalbed Methane Resources*; and *India: Coal Bed Methane Capture and Commercial Utilization*). The project's overall approach to replication is to establish a new Coal Mine Methane Recovery and Utilization Company (CMMRUC) that would enhance the prospects for sustainability of projects through its ongoing business to provide specialized expertise, services and equipment to mines. This company is expected to continue its operation after the formal end of the project. In order for this to occur, the company needs to effectively market its business and services, which may include information dissemination campaigns, seminars, discussion forums, and -- most importantly -- the implementation of several successful demonstration projects that can be used as a reference for the company when marketing their services to mines and mining companies. These efforts are expected to contribute to the replication potential of the project.

### **Sustainability**

29. One of the foundations of the GEF's operational strategy is sustainability of supported initiatives beyond the time period of GEF financing. Therefore, GEF activities focus on support of (for example) national policies that provide adequate incentives for sustainable development, institutional arrangements

that are supportive of global environmental protection, capacity building and human resource development, and communication and awareness creation among stakeholders. The key to sustainability is the involvement and active participation of major stakeholder groups in a project from the earliest stage. Especially at local level, the sustainability of the impact will depend on the degree to which the local population has been involved. Financial sustainability also plays a particularly important role. In this Work Program, several possibilities are being explored to address that issue: establishing a long-term financial mechanism, taxation, user fees, and government commitments.

30. This Work Program includes some notable attempts in the biodiversity focal area to guarantee the financial sustainability of the project impacts and related initiatives. In the *China: Biodiversity Management in the Coastal Area of the China's South Sea* proposal, the financial sustainability is expected from demonstrating a long-term financial mechanism for one of the sites, while the rest is expected to be shared by the government. In *Cambodia: Tonle Sap Conservation Project*, taxation and resource use fees, particularly from fisheries, will be explored and will also consider a revenue-generating mechanism related to fisheries. In the *Regional: Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia* project, measures for sustainability rely substantially on government commitments for the long-term conservation of particular wetlands.

31. Examples in the Climate Change focal area include activities supportive of the institutional, legal and regulatory framework ensuring a long-term enabling environment for initiatives promoting the use of renewable energies and rural energy access. At the same time, local stakeholders are being involved in the project and benefit directly from the GEF intervention. The *Vietnam: Demand-side Management and Energy Efficiency Program* project follows a programmatic approach. It is part of a long-term initiative by the World Bank in Vietnam's energy sector. The project supports private sector participation by supporting project agents (e.g. private business, financial intermediaries) to strengthen their portfolio by including energy efficiency services and products. The *Georgia: Promoting of Renewable Energy Resources for Local Energy Supply* project removes key barriers to the increased utilization of renewable-energy for local energy supply. A pilot fund and credit line to facilitate the financing of the first demonstration projects will encourage the expansion of the initiative after the formal end of the project. In addition, the social and job benefits of such applications are expected to enhance sustainability of the investments and lead to further replication of investments with clearly demonstrated benefits. Similarly, the *Mali: Household Energy and Universal Rural Access Project* also targets the removal of barriers to the promotion, adoption and dissemination of renewable-energy based technologies for household and productive use. The project will work with both local stakeholders and the government. The *Belarus: Biomass Energy for Heating and Hot Water Supply* project will establish a loan fund within the Government of Belarus that is expected to draw additional government resources and be available for similar investments in the long-run.

32. The *Slovenia: National Pollution Reduction* project will achieve long-term sustainability by implementing a new credit facility in Slovenia. The main focus of the facility will be on industries, small and mid-sized municipalities, and large livestock farms to reduce their impact on surface and groundwater. Local commercial banks will channel new investment finance to the private and municipal

sectors in order to implement policies that are based on highest European standards and are harmonized with other basin-wide efforts. The innovative element to ensure long-term sustainability of that project is the design that is based on a partnership between financial intermediaries and private enterprises to disburse financial resources aiming at reducing water pollution.

### **Stakeholder Involvement**

33. Involving stakeholders in the preparation, design, and implementation of project activities is key for commitment and long-run sustainability. The level and type of participation vary and can include direct execution of project components, share in decisions and resources, and information dissemination and consultations. The projects included in this Work Program have engaged in the identification of the full range of stakeholders to be consulted, especially women's groups, indigenous groups and the private sector. The raising of awareness among the stakeholders regarding a specific environmental or development problem, its impact and potential solutions through national and local workshops and other means involving key experts and local leaders play an increasing role in the projects submitted under this Work Program. In the Biodiversity and Multiple Focal Area, a variety of project proposals clearly emphasize the link between project success, stakeholder involvement and property and access rights.

34. All projects submitted under the biodiversity focal area include extensive stakeholder consultation during preparation and will continue during implementation. In the *China: Biodiversity Management in the Coastal Area of the China's South Sea* project, the full range of stakeholders to be consulted will be identified, especially women's groups, indigenous groups, and the private sector. The project will likely include a social feasibility study with a component on conflict resolution if there is a highly diverse population, including socio-economic information of affected people. In the *Cambodia: Tonle Sap Conservation Project*, the component on rehabilitation of "abandoned floating rice areas" and "barren lands," will include some form of social assessment to identify the affected population and attendant property rights. The population issue is serious in the area, with a three million population and an annual growth rate of 4% per year. The use of a community-based natural resources management system approach to address population-related issues is a key approach. However, this will be supplemented with some on-site carrying capacity estimates to determine more fully what types and levels of fishing activities would be deemed "eco-friendly" and how these could be implemented using a participatory and community-based approach. The *Peru: Participatory Management of Protected Areas* project will ensure biodiversity conservation by increasing the involvement of civil society institutions and the private sector in planning and management of five protected areas in Peru. Key stakeholders, such as the private sector, civil society and local stakeholders have been involved in extensive consultations during preparation and will continue to do so during implementation. Institutions and local stakeholders will be actively involved in the improvement of protected area management. A public awareness program will sensitize the local population for the issues related to the use and importance of biodiversity in those areas.

35. The *Brazil: Demonstrations of Integrated Ecosystem and Watershed Management In the Caatinga* project is based on the demonstration of integrated ecosystem management and build multi-sector capacity so that global environmental concerns are mainstreamed into Brazil's development and poverty alleviation programs. The project addresses stakeholders at all levels: national and local

governments as well as relevant institutions and the local population. The process involving local governance and collaborative management agreements are crucial for the success of this project. Similarly, the *Burkina Faso: Sahel Integrated Lowland Ecosystem Management (SILEM)* project focuses on assisting stakeholders to reduce, stop and reverse land degradation and desertification by better conserving and maintaining dryland ecosystems. The establishment of adequate common and private property management regimes to secure adequate access rights to all users of natural resources, the poor in particular, will contribute to the maintenance and strength of social and economic peace.

36. Social issues are addressed in terms of their effects on stakeholder participation. Gender is a key component of the *Jordan: Conservation of Medicinal and Herbal Plants* project where women are in charge of conserving the ecosystem and in identifying curative and preventive healing characteristics of plants. In the *Costa Rica: National Off-grid Electrification Programme Based on Renewable Energy Sources* project, women's groups are vital in the design of domestic solar home systems. Women's groups are also important in biomass energy projects in Belarus, Georgia, India, Mali, and Nicaragua.

37. Human health concerns are highlighted in the *Russian Federation: Removing Barriers to Coal Mine Methane Recovery and Utilization* project and the land degradation projects in China and Kazakhstan. The development of alternative medicines in the *Jordan: Conservation of Medicinal and Herbal Plants* project complements the existing portfolio of GEF activities in this area. The impacts of water pollution on control and prevention of water-borne and water-carried diseases are included in the *Regional: African Stockpiles Program* and the *Slovenia: National Pollution Reduction* projects.

### **Indicators, Monitoring, and Evaluation**

38. Assessment of impact requires the establishment of appropriate process and success indicators and monitoring and evaluation plans specific to each project to measure the global environmental benefits that are achieved as a result of GEF financing. Each of the projects has a monitoring and evaluation component. Particularly noteworthy cases in this Work Program are the *Regional: Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia* project, the *Russian Federation: ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic* project, the *Costa Rica: National Off-grid Electrification Programme Based on Renewable Energy Sources* project and the *Kazakhstan: Dryland Management* project. These projects are promoting demonstration sites and activities which are carefully monitored and their impact is evaluated for further replication in areas with similar conditions.

39. The *Nepal: Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex* project has a monitoring and evaluation plan in place which provides a comprehensive account of the outputs for the activities to be supported towards achieving the objectives of the project. By the time of the CEO endorsement, there will be additional indicators to track also the outcomes and impacts more systematically. Similarly, the *Peru: Participatory Management of Protected Areas* project will have a fully developed M&E plan by CEO endorsement.

## **Financing**

40. Co-financing in GEF-projects plays an increasing role as GEF finances are more and more scarce and the number of project proposals is mounting. This co-financing provides diversification of project risks across several players. It also signals clear commitment from beneficiaries, strengthens the basis of project ownership, and improves prospects for replication. The involved donors and the stakeholders share a common view concerning the identified problem and the proposed solutions. The resulting partnership raises the level of confidence in the project and the involved parties. At the other side, the financial involvement of various donors demands a good capacity in coordination and a transparent information policy during the planning and implementation of the project.

41. In this Work Program, the GEF allocation of \$222.288 million has co-financing of \$459.257 million. The cofinancing ratio is 2.07, which is lower than recently achieved ratios. As the GEF seeks to attract greater amounts of co-financing, issues of leverage, types of co-financing, appropriate co-financing target ratios, how to report uniformly different types of co-financing, etc, must become increasingly important issues. These issues and a proposed policy is set out in a separate document, *Cofinancing*, also for the consideration at the Council Meeting in October 2002.

42. The co-financing ratios for the projects submitted in this Work Program vary widely – from 0.2 to 16. This is in part a reflection on the type of project, and in part a demonstration of the wide range of co-financing arrangements utilized in GEF projects. Many projects have co-financing ratios greater than 1:2 which is similar to the last work program. The *Cambodia: Tonle Sap Conservation Project*, for example, has a significant amount of co-financing, \$15.536 million of co-financing for a GEF commitment of \$3.596 million (ratio of 4.3). Much of this is in the form of ADB loan, but is also significant that some of the co-financing also comes from the government and UNDP.

43. The amount of Government and other stakeholders co-financing raised in other projects such as the *India: Removal of Barriers to Biomass Power Generation* (ratio of 6) or the *Slovenia: National Pollution Reduction Project* (ratio of 4.5) demonstrates strong country commitment and driveness. Other projects that include a respectable level of co-financing include *Brazil: Demonstrations of Integrated Ecosystem and Watershed Management in the Caatinga* (ratio of 5.2) and the *Burkina Faso: Sahel Integrated Lowland Ecosystem Management* project (ratio of 4.2).

## **Coordination and Partnership**

44. Generally the projects in this Work Program show good coordination with the substantive GEF portfolio nationally and regionally and with the non-GEF portfolio in the country and region. In the case of *Cambodia: Tonle Sap Conservation Project*, three sets of activities from UNDP, GEF, and ABD are interwoven in this project which needs a good cooperation strategy. Continued close coordination between the ADB loan, UNDP program and GEF support through UNDP/GEF is expected. The project includes a small component for closer coordination with the International Waters project on the Mekong. In the *Maldives: Atoll Ecosystem -based Conservation of Globally significant Biological Diversity in the Maldives' Baa Atoll* project, lessons from a GEF project in the Indian Ocean and others will be summarized and the project will respond to these as needed. For the *Regional: Development of a Wetland Site and Flyway Network of the Siberian Crane and Other Migratory Waterbirds in Asia* project, extensive consultation with national offices of the IAs and EAs have

occurred, UNEP is committed to liaise with national offices as needed and will maintain informed GEF/IAs coordinating units.

45. Tens of thousand tons of obsolete pesticides, including persistent organic pollutants (POPs), have accumulated throughout the African continent over the last four decades. These chemicals pose a serious threat to the health of both rural and urban populations and contribute to land and water degradation. The *Regional: African Stockpiles Program* implemented by the World Bank is the first phase of a program of interventions which will clean up and safely dispose of all obsolete pesticide stocks from Africa and establish preventive measures to avoid future accumulation. The program, which was spearheaded by the environmental NGO community, was developed by a partnership of intergovernmental organizations and environmental non-governmental organizations, including the African Development Bank, the African Union, the Basel Convention Secretariat, FAO, the UN Economic Commission for Africa, UNEP, UNIDO, Pesticide Action Network UK, Pesticide Action Network Africa, and the World Wildlife Fund.

46. The *China: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity* presents an exemplary partnership based on the programmatic approach which will provide opportunities for coherent planning and predictable financial support that would simply not be possible under an ad hoc project-by-project approach to GEF assistance. It is envisaged that the government will enter a strategic partnership with the GEF and other international partners to develop, test, and scale up more comprehensive resource management approaches that integrate the ecological, economic, and social dimensions of the land degradation problem. Participation by multilateral and bilateral organizations and foundations, especially International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), the World Bank, and bilateral donors has been sought through donor coordination meetings in Beijing and will be intensified and encouraged. The Global Mechanism of the UNCCD has been closely involved.

### **Private Sector Involvement**

47. Private Sector modalities are playing an increasingly important role in projects submitted to the GEF. Most of the private sector participation will be used for emerging market and developing country investments that blend private and public financing, particularly for projects that are innovative or have high developmental impact, and contribute to the global environment. While the private sector is already well established in projects submitted under the climate change focal area, initial private sector experiences are gaining momentum in the biodiversity focal area for eco-tourism, park management, guaranteed purchase agreements for "green" products, and marketing of eco-products such as medicinal and herbal products.

48. In the International Waters focal area, the *Slovenia: National Pollution Reduction* project seeks to test incentives for reducing pollution. For a GEF grant of \$9.995 million it has \$45.842 million of EBRD co-financing. Although the source of the funding is not private sector related, the types of mechanisms it seeks to develop are market oriented. The proceeds of the GEF grant will be used to (i) support loans to local private companies and smaller municipalities to undertake pollution reduction projects before the legislative deadlines and (ii) provide incentives to financial institutions to participate in



this project. The test of successful innovation will lie in the design of the subsidies, new tariff structures, and preparation for potential pollution permit related types of trading schemes following this project in the future.

49. In the climate change focal area, the private sector plays an important role in the implementation process of a variety of projects. The *India: Removal of Barriers to Biomass Power Generation, Part I* project will promote combustion, gasification and cogeneration technologies for electricity generation using different types of captive and distributed biomass resources. Local cooperative sugar mills, agro- processors and biomass producers are actively involved in this project. The *Vietnam: Demand-Side Management and Energy Efficiency Program* will contribute to meeting the substantial electricity demand growth projected over the next decade in Vietnam. Therefore, the Government of Vietnam and World Bank have agreed on a long-term strategy to help meet the power sector's resource requirements. The project will work closely together with project agents (e.g. local private business, financial intermediaries) to enable them to widen their portfolio by including energy saving services and products.

50. The *Mali: Household Energy and Universal Rural Access* project supports local private entrepreneurs to deliver renewable energy products and services to rural households. The project assists the entrepreneurs with information, marketing, financing, and initial-cost subsidies that decline over the life of the project as delivery costs decline with experience and market coverage. The project may also establish regulated "concessions" that provide a specific service territory to individual competitively-bid firms.

### **Mainstreaming of Global Environment Benefits**

51. An important feature of the GEF has been the "mainstreaming" of global environmental issues into regular operations and policy of governments, agencies, and the private sector. Governments emphasize increasingly the link between the proposed projects, their respective national priorities and their commitment to the implementation of international environmental treaties ratified by them. The mainstreaming of global environmental aspects into national sustainable development initiatives plays an important role in the projects submitted under this Work Program.

52. The *Regional: Integrated Management of Dryland Biodiversity through Land Rehabilitation in the Arid and Semi-Arid Regions of Mozambique, Zambia and Zimbabwe* project provides a good example in terms of mainstreaming global environment benefits by integrating biodiversity consideration into regular development programs. The objective of the project is to conserve globally significant ecosystems and arid lands-adapted plants and animals inhabiting the transboundary drylands between Mozambique, Zambia and Zimbabwe through the rehabilitation of degraded drylands and, developing and implementing strategies for sustainable land management. In general, a majority of the projects in this Work Program show evidence of substantial mainstreaming of biodiversity conservation, energy efficiency, and land and water management. These projects include *Cambodia: Tonle Sap Conservation Project*; *Cape Verde: Integrated Participatory Ecosystem Management in and around Protected Areas*, *Maldives: Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll*, *Regional : Capacity-building for Improving Greenhouse Gas Inventories (West and Francophone Central Africa)*, *China: End-*

*Use Energy Efficiency and Brazil: Demonstrations of Integrated Ecosystem and Watershed Management in the Caatinga. The China: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity*, is an outstanding example of mainstreaming global environment imperatives in a development issue because it will assist the Government to establish an effective system of integrated natural resource management by addressing the issue of land degradation in drylands.

53. The *Kazakhstan: Dryland Management* project is exemplary in blending environment management and sustainable development objectives. The overall development objective is the conservation, rehabilitation and sustainable utilization of natural resources in marginal cereal growing areas in the Shetsky Rayon of Karaganda Oblast in Kazakhstan. In support of this objective, the project, with the active participation of local communities, will among other activities assist the Government of Kazakhstan to develop alternate land uses that are economically feasible, socially acceptable and ecologically sustainable, while, at the same time, rehabilitate ecosystems for the conservation of important plant and animal species.

54. The *Burkina Faso: Sahel Integrated Lowland Ecosystem Management (SILEM)* project promotes a landscape and lowland ecosystem approach that will generate multiple and global environmental and sustainable development benefits such as : (i) capacity for sound and sustainable integrated ecosystem management planning and implementation at local, regional and national level; (ii) the reduction, stop and reversion of land degradation and desertification by introducing adequate soil and water management technologies and infrastructures in lowland and surrounding uplands of micro-basins as a means for improving the productivity and sustainability of plant and animal production systems, and for protecting natural habitats of local and global importance; (iii) strengthening the natural resource base by better conserving and maintaining (agro-) biodiversity at ecosystem, species and genetic level, (iv) decrease of vulnerability to climate change (drought and other stress factors), (v) stopping the deterioration of international waters (Volta and Comoe) and (vi) establishment of adequate common and private property management regimes to secure adequate access rights to all users of natural resources, the poor in particular, in order to maintain and strengthen social and economic peace.

55. These projects promote an integrated approach to ecosystem and regional eco-conservation strategies. They focus on sustainable use of natural resources while building the enabling environment at the same time: participatory decision making at the local, regional, and national levels; strengthening of regulatory and monitoring institutions; and fostering of private sector activities to make the strategies financially sustainable in the long-run.

## SUMMARIES OF PROPOSED PROJECTS

### Biological Diversity

*Regional: Integrated Management of Dryland Biodiversity through Land Rehabilitation in the Arid and Semi-Arid Regions of Mozambique, Zambia and Zimbabwe (UNEP/UNDP) ; GEF: \$7.828 million; Total Project Costs: \$13.422 million*

The goal of this project is to conserve globally significant ecosystems and arid lands-adapted plants and animals inhabiting the transboundary drylands between Mozambique, Zambia and Zimbabwe. This project will combine indigenous knowledge of natural resource management and scientific findings and expertise to develop conservation practices and approaches together with local communities. The objectives will be achieved through rehabilitation of degraded drylands and, developing and implementing strategies for sustainable land management; sustainable use and conservation of natural resources, including soil, water and biota; and the promotion of transboundary natural resources conservation management strategies that enhance regional integration and conservation.

#### *Expected Project Outputs:*

1. Increased understanding of the causes of land degradation and the link between land degradation and loss in biodiversity.
2. Approaches to rehabilitation of degraded drylands developed and implemented.
3. Sustainable management systems for drylands developed and implemented
4. Local knowledge and institutions for natural resource management documented
5. Community land use plans implemented.
6. Community strategies for biodiversity management implemented.
7. Enhanced sustainable use of biodiversity through benefit sharing.
8. An inventory and database of renewable natural resources.
9. Enhanced policy and legislative instruments for sustainable dryland management.
10. Common transboundary natural resource conservation and management strategies for drylands developed and promoted.
11. An enhanced institutional framework for regional and transboundary co-operation
12. Information and technology exchange enhanced and promoted.

*Regional: Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia (UNEP); GEF: \$10.350 million; Total Project Costs:\$ 22.708 million*

The objective of the project is to conserve the network of critical wetlands needed for survival of the Siberian Cranes, other threatened cranes, and numerous water birds that form an important resource for local populations. The project focuses on the conservation of the international network of wetlands upon which this species depends, together with a wide range of other wetland biodiversity. Nearly fifty

percent of these wetlands are sites addressed by the Ramsar Convention on Wetlands. The project area covers the flyways used by populations of Siberian Cranes in western Central Asia and in East Asia targeting key wetland sites located in China, Iran, Kazakhstan and Russia. The project includes the following components: (a) measures for conservation of key flyway wetlands; (b) national measures for conservation of flyway wetlands and migratory waterbirds; and (c) international measures for flyway network development. Site level activities expected are legal protection, management plans, stakeholder participation, capacity building, public awareness and education programs, and alternative livelihood projects.

*Expected Project Outputs:*

1. Appropriate legal protection, clear regulation and identified enforcement responsibilities in place at selected project sites.
2. Participatory management plans for the conservation of selected project site developed and implemented.
3. External threats and root causes of biodiversity loss on key sites reduced through effective off-site activities.
4. Implementation of site management plans is supported by application of results of applied field studies.
5. Sustainable, alternative livelihood projects developed with local communities in and around selected project sites.
6. Capacity of staff of relevant agencies strengthened to ensure effective implementation of site management plans.
7. Awareness of wetland biodiversity values raised among stakeholders.
8. Improvements made to national and sectoral legislation, policies, plans, and financial mechanisms in support of the conservation of migratory waterbirds and wetland biodiversity.
9. Wetland biodiversity input to provincial land use planning, water resource management, and coastal zone management through baseline surveys, monitoring, and improved inter-sectoral coordination.
10. Monitoring programs implemented on distribution and movements of the Siberian Cranes and other globally significant migratory waterbird.
11. Measures undertaken at national level to enhance international cooperation.
12. Training programs implemented to enhance national capacity for wetland and waterbird management.
13. Environmental education and public awareness measures undertaken at national level.
14. Regional flyway networks developed in western/central Asia and eastern Asia, and a program of regional activities undertaken within the framework of adopted conservation plans for cranes.
15. Results of project disseminated for the benefit of the global conservation community.

*Regional: In-situ Conservation of Crop Wild Relatives through Enhanced Information Management and Field Application (UNEP); GEF: \$6.162 million; Total Project Costs: \$12.679 million*

The outcomes of this project are the safe and effective conservation of crop wild relatives and their increased availability for crop improvement in Armenia, Bolivia, Madagascar, Sri Lanka and Uzbekistan, together with an international information system that can support crop wild relatives' conservation throughout the world. Within each partner country, information management systems will be created that bring together information on crop wild relatives held by different institutions. The conservation status of crop wild relatives in the participating countries will be determined. Decision-making procedures that allow countries to identify priority conservation actions will be developed and tested and those of the highest priority will be carried out. Benefit sharing issues relevant to crop wild relatives' conservation will be investigated, and programmes undertaken to increase the involvement of country decision makers and the public in conservation of crop wild relatives. Internationally, an information management system will be created and tested by the partner countries and international partners that allows dispersed information, held by individual countries, international agencies and other institutions, to be brought together and used to support conservation decision-making at global level.

*Expected Project Outputs:*

1. International information system on crop wild relatives and their increased availability for crop improvement established.
2. National information systems coordinated and available national information resources brought together.
3. Inter-agency collaboration mechanisms developed in each country.
4. Training programs organized on information management, Red Listing and conservation management.
5. National conservation and sustainable use action plan developed for crop wild relatives in each partner country.
6. A synthesis undertaken of the status, threats, and conservation needs of the identified taxa of crop wild relatives.
7. Information on species distribution with that from eco-geographic surveys and other spatial data linked through GIS analysis.
8. An action plan for at least one protected area per country developed and at least two significant in-situ crop wild relatives conservation demonstration projects implemented in each country and assessed with a view to their application as national (and potentially international) models for sustained conservation action.
9. Public appreciation of the importance of conserving crop wild relatives in each country enhanced.

*Cambodia: Tonle Sap Conservation Project (UNDP) ; GEF: \$3.596 million; Total Project Costs: \$19.132 million*

The Tonle Sap region is key for global biodiversity, its conservation and sustainable use nationally and regionally. It covers approximately 1 million hectares and is connected to the Mekong River through the Tonle Sap River. The wetland is also very important from the socio-economic perspective as it is often described as the heart of the country's culture and economy.

The project would assist Cambodia to strengthen the conservation and management of the Tonle Sap Biosphere Reserve (TSBR) and part of its area of influence by creating understanding and appreciation of its importance. It will also help to develop and appropriate policy and legal framework to protect and sustainable manage the natural resources of the Tonle Sap. The project has three objectives: 1. Strengthening natural resource management coordination and planning for the TSBR; 2. Facilitating community-based natural resource management in the TSBR; 3. Building management capacity for biodiversity conservation in the TSBR.

*Expected Project Outputs:*

1. Coordination framework and dissemination mechanisms established.
2. Land use practices and demarcation in support of biodiversity conservation developed.
3. Policy and plans to support ecologically sustainable community fisheries are developed for the TSBR.
4. Facilitating community-based natural resource management in the TSBR.
5. Coordination framework for community-based natural resource management is developed.
6. Local communities are empowered to manage resources sustainably.
7. Technical packages supporting sustainable livelihoods are demonstrated.
8. Management capacity for biodiversity conservation in the TSBR is established.
9. Capacity for management of biodiversity in the core areas is enhanced.
10. Systems for monitoring and managing biodiversity are developed.
11. Awareness, education and outreach activities on biodiversity conservation and sustainable management of resources in the TSBR are developed and successfully implemented.

*Cape Verde: Integrated Participatory Ecosystem Management In and Around Protected Areas – Phase 1 (UNDP) ; GEF: \$3.932 million; Total Project Costs: \$9.639 million*

The overall objective of the full project is to conserve globally significant biodiversity and ensure sustainable use of natural resources through an integrated approach whereby protected areas and community-based sustainable use activities are woven into a "win-win" package. Through this integrated community biodiversity conservation project and the implementation of the provisions of Cape Verde's National Biodiversity Strategy, long term solutions will be sought for better management of natural resources, land use, and invasive species.

*Expected Project Outputs:*

1. Policy and legal framework in place for conservation of biodiversity and management of protected areas.
2. Institutional framework in place for participatory management of protected areas.
3. Two and later four national parks created and managed in a participatory way by the communities.
4. Strengthened capacity of local actors, and promote sustainable resource management.
5. Local Communities benefiting from alternative livelihood opportunities.
6. National stakeholders aware and supportive of environmental conservation goals.

*China: Biodiversity Management in the Coastal Area of the China's South Sea (UNDP) ; GEF: \$3.515 million; Total Project Costs: \$12.749 million*

This project will ensure the long-term conservation and sustainable use of marine biodiversity in China's South Sea coastal area through an innovative mechanism of demonstrations and cross-learning among multiple sites. The participation and co-operation of, and effective management by, all relevant Governmental, private sector, local community and NGO stakeholders will be critical to the project's success. The project will concentrate activities at six demonstration sites within five coastal provinces. The project has three immediate objectives: (i) Strengthen conservation and sustainable use management capacities at four existing Marine Protected Areas. (ii) Develop, test and demonstrate tools, instruments and approaches for addressing the root causes of critical threats to marine biodiversity in China's South Sea coastal areas, and (iii) Implement appropriate tools for conservation and sustainable use at the six sites and promote their broader adoption across China's South Sea coastal area. The first component will address threats that are directly related to weak conservation capacity of existing marine protected areas (MPAs), and which do not involve significant demonstration aspects. The set of demonstration components will address key issues and develop much needed tools for managers of these MPAs and of the broader seascape area. These demonstrations have been selected in part because of their relevance to the sites themselves but also because of their relevance to the other project MPAs, coastal locations and the larger southern coastal area. During this stage, intensive cross-site learning will also take place, involving stakeholders from relevant project sites. Government-funded threat removal activities informed by the results of the demonstration components will then continue at each project site. The project's final stage will be to disseminate lessons to promote replication at other MPAs within the project area.

*Expected Project Outputs:*

1. Conservation capacities strengthened at 4 MPAs (NINMNR, SNCRNR, SNMR and HNDR).
2. Integrated marine protected area and township planning is demonstrated through a biodiversity conservation-centered approach to planning management and development at Nanji Islands.
3. Integrated pollution control for sustainable development is demonstrated at SNCRNR.
4. Sustainable financing and effective use of economic instruments are demonstrated at SNCRNR.
5. Participatory co-management and sustainable harvesting strategies involving local communities is demonstrated at SNMR.

6. Effective process for establishing a new marine protected area , with international support, is demonstrated at Weizhou Islands.
7. Interprovincial cooperation is demonstrated at Dongshan-Nan'ao migratory channel.
8. Stakeholders at each site have learned from the demonstrated conservation approaches and area ready to apply the newly acquired capacity to their areas.
9. Stakeholders at each site adapt and implement appropriate measures for conservation and sustainable use.
10. Project tools and results are synthesized and disseminated to MPA managers and other relevant stakeholders through the project area and beyond.

*Jordan: Conservation of Medicinal and Herbal Plants (World Bank) ; GEF: \$5.350 million; Total Project Costs: \$12.850 million*

The global environmental objective of this project is to improve conservation and sustainable use of medicinal and herbal plants of global importance at the national and the local levels for the selected areas through achieving the following objectives over and above the Baseline Scenario: (i) establishing a framework for medicinal and herbal plant biodiversity conservation and management, (ii) strengthening institutions and implementing a coordination program, (iii) promoting in-situ conservation and sustainable use of M/H plants in 3 pilot sites, and (iv) designing and implementing a communication strategy.

*Expected Project Outputs:*

1. Capacity established to sustainably manage the wild genetic resource base of medical and herbal plants.
2. Key biodiversity areas are identified and protected.
3. A database, gene pool and monitoring system is established and operational.
4. Active participation of communities in conservation, management, and income generating programs is established.
5. Public awareness, including environmental education of medicinal and herbal plants has improved.

*Maldives: Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll (UNDP) ; GEF: \$2.705 million; Total Project Costs: \$8.627 million*

The project will assist the government of the Maldives to address key issues related to the conservation and sustainable use of marine biodiversity, one of the richest in the world with over 1,100 species of reef fishes and over 250 species of corals. In contrast, the entire Caribbean region has roughly half this number of fish and one-fifth the number of corals. The Maldivian atolls act as a stepping stone for transport of planktonic larvae of reef organisms from both the western and eastern Indian Ocean. Maldivian coral reefs are believed to play a significant role in the distribution and maintenance of coral reef biodiversity throughout the Indian ocean. The project will bring together public and private stakeholders to conserve biological diversity by mainstreaming it into productive sector activities,



applying new alliances to conservation at the local level, and pursuing new livelihood options, thereby reducing pressures on valuable reef resources. Proposed activities will be implemented in five years.

*Expected Project Outputs:*

1. Biodiversity is mainstreamed into sectoral institutions and policies.
2. Model innovative practices are developed and implemented in Baa atoll.
3. Stakeholders reduce pressure on biodiversity resources by developing ecologically sustainable natural resource management and livelihood development practices.

*Nepal: Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex (UNDP) ; GEF: \$3.550 million; Total Project Costs: \$13.109 million*

The project's focus is on strengthening protected area management and integrating biodiversity conservation criteria with sustainable forest use and agricultural production in the surrounding productive landscape of Western Terai. Within the Western Terai Landscape complexes, project interventions will occur in three sites, including two protected areas, Royal Bardia National Park and Royal Suklaphanta Wildlife Reserve, their respective buffer zones, and priority areas in the intervening productive landscape that are critical for biodiversity conservation. The immediate objective is to establish effective management systems and build capacity for the conservation and sustainable use of Nepal's Western Terai landscape complex. A multisectoral and multistakeholder partnership will be developed in order to effectively address the long-term threats to biodiversity in the Western Terai landscape. The project's landscape approach requires greater attention to stakeholder interaction and collaboration, given the multiple land uses and greater diversity of stakeholders involved as compared to a traditional protected area-focused project. The project will build upon Nepal's rich experience in community-based conservation and natural resource (including agrobiodiversity) management. At the same time, it will reorient Nepal's policy and legal framework and institutional arrangements towards ecosystem management through the landscape-level approach to biodiversity management. Ultimately, the project seeks to establish a landscape-level management model for safeguarding Nepal's biological wealth and vital ecological functions in the long-term which may be replicable in other parts of the country.

*Expected Project Outputs:*

1. The national policy environment and legal framework enable integrated landscape planning in the Western Terai Landscape Complex.
2. The institutional framework for integrated landscape management of biodiversity in the Western Terai Landscape Complex is established.
3. Biodiversity assets in government-managed lands are conserved and sustainably managed.
4. Local communities are empowered to practice sustainable, biodiversity-friendly natural resource and land use management and pursue diversified livelihoods.

*Peru: Participatory Management of Protected Areas (World Bank) ; GEF: \$15.148 million;  
Total Project Costs: \$31.058 million*

The project's development objective is to ensure biodiversity conservation by increasing the involvement of civil society institutions and the private sector in the planning and sustainable management of five protected areas of the Peruvian System of Natural Protected Areas (SINANPE), and one protected area to be created during project implementation.

The project will promote through a sinking fund mechanism, the involvement of the private sector, civil society and local stakeholders in the sustainable management of six protected areas: Tambopata-Candamo National Reserve, Bahuaja-Sonene National Park, Salinas and Aguada Blanca National Reserve, Huascarán National Park, Manglares de Tumbes National Sanctuary, and Abanico de Morona Pastaza. The project will finance: (i) participatory preparation and implementation of protected area master plans, including the management through concession holders; (ii) institutional development of INRENA, PROFONANPE and local stakeholders to improve protected areas management, a public awareness program and a protected areas system Management Information System; and (iii) project administration, monitoring and evaluation and information dissemination.

*Expected Project Outputs:*

1. Management effectiveness in six protected areas increased.
2. Illegal activities threatening biodiversity conservation objectives in the six selected protected areas reduced.
3. Number of non-sustainable development activities in protected areas buffer zones reduced.
4. Indices of biodiversity richness in six protected areas increased.
5. Stakeholder participation in the management of six protected increased.

*Russian Federation: Conservation and Sustainable Use of Wild Salmonid Biological Diversity in Russia's Kamchatka Peninsula - Phase 1 (UNDP) ; GEF: \$3.309 million; Total Project Costs: \$13.815 million*

The Kamchatka peninsula extends 1,500 kilometers south from Russia's Siberian mainland, separating the Sea of Okhotsk from the North Pacific Ocean. Designated a World Wildlife Fund "Global 200" ecoregion, the peninsula and its thousands of pristine rivers support one of the world's most diverse array of salmonid fish species, with tremendous diversity at the species, intra-species (stock), and genetic levels. At least eleven species of salmonids are known to occur in these river systems, more than any other place in the world. Five of these eleven salmonid species are commercially fished; the other six are non-commercial species, one of which is the endangered "steelhead" sea-run rainbow trout.

The objective of this project is the conservation and sustainable use of salmonid biological diversity of global importance to agriculture in four river systems on Russia's Kamchatka Peninsula. Upon successful completion of the project, stakeholders will devise innovative and adaptive ecosystem management practices to mitigate and prevent threats to river ecosystem integrity and apply new partnerships, conservation tools, information, and sustainable livelihoods to conserve salmonid diversity maintained therein.

Phase I of the project will enable stakeholders to make the financial and policy commitments necessary, protect crucial salmonid habitat by establishing protected areas and participatory management regimes, construct a diversity information baseline by conducting field surveys, lay the foundation for long-term financing of salmonid diversity conservation, pilot diversity-friendly commercial fishing practices and sport-fishing ecotourism, forge new partnerships among local and international stakeholders, and strengthen the capacity of civil society institutions.

*Expected Project Outputs:*

1. Salmonid fishery stewards generate and apply new diversity conservation approach in four river sites.
2. Stakeholders maintain salmonid diversity and river ecosystem integrity in four river sites by applying a range of resource management and conservation tools.
3. Information is shared widely, stakeholders build constituencies for salmonid diversity conservation & indigenous people preserve and maintain their knowledge.
4. Stakeholders successfully apply alternative livelihoods in river site areas.
5. Salmonid diversity conservation fund support salmonid diversity conservation in Kamchatka in perpetuity.

*Russian Federation: ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic (UNEP) ; GEF: \$3.375 million; Total Project Costs: \$8.005 million*

The project will contribute to the conservation and sustainable use of biodiversity in the Russian Arctic. The immediate objective of the project is the adoption and initial implementation of integrated ecosystem management strategies and action plans in three model areas representing different ecosystems and anthropogenic pressures: Kolguev Island, Kolyma River Basin, and Beringovsky District. By building on national policies and priorities, the project will begin to demonstrate how integrated ecosystem management can be used to achieve ecological, economic, and social goals for local and global benefits.

Major outcomes of the project will include approved integrated ecosystem management strategies and action plans in three selected Model Areas in the Russian Arctic. In support of these strategies and action plans, the project will implement a number of activities including biodiversity and socio-economic inventories and assessments; targeted training programs; legislative, administrative and institutional capacity building; specific conservation measures; and pilot activities to test integrated ecosystem

management approaches for conserving and sustainably using natural resources. The project will help to secure the integrity of some of the world's last remaining pristine areas and support livelihoods of indigenous and local peoples.

*Expected Project Outputs:*

1. Policy, legal, and regulatory framework in the model areas is enhanced.
2. Capability and capacity of institutions and individuals to participate in integrated ecosystem management is enhanced.
3. Financial sustainability for ECORA beyond the timeframe of the GEF intervention is ensured.
4. Public awareness of biodiversity and other environmental issues, and integrated ecosystem management is enhanced.
5. Knowledge base for planning, implementing and evaluating integrated ecosystem management plans is developed.
6. Integrated ecosystem management plans and strategies in the model areas are developed and in implementation.
7. Pilot projects to test integrated ecosystem management implementation strategies are established.

**Biodiversity – Biosafety**

*Colombia: Capacity Building for the Implementation of the Cartagena Protocol (World Bank) ; GEF: \$1.000 million; Total Project Costs: \$4.478 million*

The project will help consolidate Colombia's national capacity for the implementation of the Cartagena Protocol on Biosafety. The Government of Colombia has placed a high priority on developing a framework as reflected in its National Development Plan by promoting research on biodiversity friendly goods, including supply, demand, barriers and opportunities; and, promoting such goods and coordination of the implementation of the Biosafety Clearing House (BCH).

Specifically, the project will develop national capacities in biosafety required to: (i) strengthen the legislative framework and operational mechanisms for biosafety management in Colombia; (ii) build capacity and establish an operational system for risk assessment and monitoring; (iii) establish the biosafety database system and Biosafety Clearinghouse Mechanism; (iv) support centers of excellence and a network for research, risk assessment, and monitoring; and (v) establish the Project Coordinating Unit (PCU). The development of national capacities in these areas will consolidate the national framework for biosafety management.

Within three years, the country will build sufficient capacity to assess and manage risks associated with the trans-boundary movement of LMOs through the strengthening of the legal and regulatory frameworks, enhanced institutional capacity and effective communication strategies. Knowledge and methodologies on Biosafety will be shared and transferred through the establishment of sub-regional (Andean) training programs based in Colombia.

The project builds on the experience accrued in Colombia on public health, plant and animal health inspection services, biodiversity conservation efforts and promotes cross sector synergies.

*Expected Project Outputs:*

1. Legislative framework and operational mechanisms for Biosafety management in Colombia strengthened.
2. Capacity developed and operational system for risk assessment and monitoring established.
3. Biosafety database system and Biosafety Clearing-House Mechanism in Colombia established.
4. Centers of excellence and network for research, risk assessment and monitoring established.
5. Project Coordinating Unit (PCU) established.

## **Climate Change**

*Regional: Capacity-building for Improving Greenhouse Gas Inventories (West and Francophone Central Africa) (UNDP) ; GEF: \$2.992 million; Total Project Costs: \$3.598 million*

This project will use a regional framework over its three-year lifetime to build national capacity for improving the quality of data inputs to national greenhouse gas inventories. The use of key sources for national greenhouse gas inventories, as defined in the IPCC Good Practice Guidance (GPG), contributes to the project design by allowing countries to systematically prioritise their efforts to improve overall estimates in the most cost-efficient manner. Based on the key source analysis carried out under the PDF phase of this project, the full project will focus on reducing uncertainties and improving activity data and emission factors in the land-use change and forestry (LUCF) sector. Countries will also use GPG to strengthen national arrangements so that, as a result of this project, GHG inventories for future National Communications will be compiled in a sustainable manner and the inventories will be of a higher quality than those prepared for the Initial National Communications. The project will build upon the existing national institutional frameworks established under the enabling activities. The same national institutions from the Initial National Communication will be targeted in this project to create a more permanent infrastructure.

*Expected Project Outputs:*

1. National arrangements for compiling, archiving, updating, and managing greenhouse gas inventories strengthened.
2. Sustainable institutional framework created.
3. Technical capacity for preparing national inventories enhanced.
4. Emission factors and methods improved.

*Regional: Energy Management and Performance Related Energy Savings Scheme (EMPRESS) (UNEP) ; GEF: \$2.360 million; Total Project Costs: \$9.760 million*

The project will promote the concept of Monitoring & Targeting (M&T) as an energy management tool that helps achieve substantial improvements in energy-efficiency and reductions in greenhouse gas emissions basically by improving the operational performance of industries. Required investments are rather low. The project will support activities of the participating governments to promote the use of M&T in each country by providing a technical assistance package that addresses the barriers. It will couple these with ESCO-type financing that brings about additional private sector investment in energy savings equipment and technologies. The target sectors are industry and commercial establishments.

*Expected Project Outputs:*

1. Establishment of commercially viable markets for M&T ESCO activities in Czech Republic, and Slovak Republic.
2. Significant improvements in industrial and commercial end-user energy efficiency.
3. 15 M&T ESCO projects per country over three years with carbon savings of 150000 tCO<sub>2</sub> in three years at \$16.67/tCO<sub>2</sub>.
4. With modest market growth (five additional projects per country per year, the project will avoid 5.4m tonnes of CO<sub>2</sub> over 10 years at \$2.15/tCO<sub>2</sub>.

*Belarus: Biomass Energy for Heating and Hot Water Supply (UNDP) ; GEF: \$3.374 million; Total Project Costs: \$8.936 million*

The goal of this project is to introduce the environmentally friendly option of biomass energy within the context of the current socio-economic system in Belarus. The intention of the project is not to liberalize the economy of Belarus, and therefore the project has concentrated on the willingness of the government to undertake behaviours that will support the rational use of energy. It will focus on the following objectives: 1) strengthening institutional capacity to support biomass energy projects; 2) establishing a track record for investments in sustainable biomass energy projects, including both fuel supply and demand; 3) developing straightforward financial “starter” mechanisms in a challenging investment climate that will allow continued financing for biomass energy projects; and 4) overcoming negative perceptions of biomass energy and provide public and private investors with much-needed market information. First, the project will address lack of biomass project experience by facilitating the investment of USD 2.1 million by the Committee on Energy Efficiency and USD 3.4 million by the private and public sectors by 2006 in biomass energy projects. The project will also address financial barriers by establishing a revolving fund with initial capitalization of USD 1.54 million that will be based in part on the GEF contribution and dedicated to the support of biomass energy.

*Expected Project Outputs:*

1. Project management unit established and capacity development provided to the Government and other potential investors on an ongoing basis.
2. National wood energy plan developed based on least-cost planning principles are developed.
3. Findings from the investment projects, study tours and developed planning tools are internalized and the implications for policy assessed.
4. Training conducted to strengthen capacity of in-country experts.
5. Plan for sustaining/replicating project results developed and launched.
6. Demand-side investment projects implemented.
7. Wood supply investment project organized and implemented.
8. Pipeline of biomass investment projects developed.
9. Revolving fund for biomass energy established.
10. Relevant decision-makers at ministerial, oblast, and regional level are fully informed of the potential for wood energy as part of a modern fuel system.

Direct fossil fuel savings as a result of this programme represent approximately 1.08 million tonnes of CO<sub>2</sub> reduction over a 15-year period. With a GEF contribution of USD 3.129 million, the cost per tonne of CO<sub>2</sub> reduced is USD 2.9. Indirect emission reduction impacts due to replication of the project are estimated at an additional amount of 895,000 tonnes of CO<sub>2</sub> per year by 2015.

*China: End-Use Energy Efficiency (UNDP); GEF: \$17.375 million; Total Project Costs: \$ 80.375 million*

The Chinese government is embarking upon a long-term program to support energy efficiency in the industrial and building sectors. This project supports the first phase (3 years) of that program. The project's purpose is the removal of barriers to the widespread application and practice of energy conservation and energy efficiency in the major energy consuming sectors (buildings and industrial) in China. The project fosters a strategic approach to developing, implementing and enforcing a comprehensive and effective energy conservation policy and regulatory system consistent with the objectives of the Energy Conservation Law of 1998. Activities in industry will include energy efficiency codes and standards, equipment labeling, voluntary agreements, and energy management programs. Activities in the buildings sector will include compiling information on building energy use, developing and implementing energy performance standards and policies, and information dissemination. Cross-cutting activities will include strengthening existing energy conservation centers and policy development, including assistance with implementing the 1998 Energy Conservation Law. A separate transport-sector project is planned to be submitted in a future GEF work program. This transport project will also promote end-use energy efficiency and will have links to the policy and institutional elements of this project.

The project will play a catalytic role in promoting energy efficiency improvement and market development in China. The Chinese government attaches great importance to the project and intends for it to be the overarching framework for international cooperation on end-use energy efficiency. This will

enable activities of other donors to be integrated under the overall framework of the EUEEP thereby mobilizing far greater national and international resources for energy conservation than the GEF can fund.

*Expected Project Outputs:*

1. Reduced energy consumption in the industrial and building sectors by nearly 19 million tons coal equivalent (tce) through investments in industry and improved building materials and practices.
2. A comprehensive and effective energy conservation policy and regulatory system consistent with the objectives of the Energy Conservation Law of 1998.
3. Guidelines and reduced market risks for energy efficient technology and equipment suppliers and manufacturers, energy conservation service companies, investors and financial institutions.
4. Strengthened and enhanced capacity of energy conservation policy decision makers to make informed decisions, energy conservation centers and associations to effectively enforce the standards and codes and perform other important functions, those responsible for designing and developing energy consuming technologies and facilities to optimally comply with energy conservation standards and codes, enterprises to make informed decisions regarding energy efficiency activities, and data managers to establish, improve and more effectively manage energy consumption statistics and data gathering activities.

*Costa Rica: National Off-grid Electrification Programme Based on Renewable Energy Sources - Phase I (UNDP) ; GEF: \$1.148 million; Total Project Costs: \$2.054 million*

The overall objective of the project is to reduce Greenhouse Gas Emissions (GHG) by promoting the use of decentralized renewable energy systems in areas isolated from the National Interconnected System (SNI) of Costa Rica. The project will help remove existing barriers that prevent the utilization of renewable energy sources in remote rural areas that are inaccessible through conventional grid extensions. This will be achieved in two phases. Phase I will focus on the creation of a systematic approach within the Costa Rican energy sector to rural electrification with renewable energy. This will include the creation of an institutional, financial, and regulatory environment supportive of renewable energy. Phase II will focus on the implementation of this approach by including renewable energy projects within the national initiative to reach all Costa Rican households with modern sources of electricity. As a result, it is expected that 329 communities will receive electricity through either micro-hydro or photovoltaic systems, reducing CO<sub>2</sub> emissions by estimated 210 thousand tons over the project lifetime.

*Expected Project Outputs:*



1. An established normative and legal framework that allows development of small-scale renewable energy systems is approved and implemented.
2. National norms and standards for renewable energy are developed, implemented, and disseminated.
3. Fiscal incentives for the development of renewable energy projects are in place.
4. A National Rural Electrification Program that incorporates the use of decentralized renewable energy systems into national energy planning is established.
5. Professionals and technicians are trained in renewable energy technology.
6. The National Energy Information System is strengthened, incorporating renewable energy data.
7. The national population is informed and aware of the benefits of decentralized renewable energy systems.
8. National bidding processes are adapted to facilitate small scale renewable energy projects.
9. A set of possible financial mechanisms is developed and validated.
10. Raised awareness and involvement of financial sector in Renewable Energy.
11. Sixteen pilot projects in rural communities using micro hydroelectric or photovoltaic systems and two demonstration and training facilities near the metropolitan area are developed.
12. Pilot project results are evaluated and disseminated.
13. An updated portfolio of sites that confirm the overall potential use of decentralized renewable energy systems in Costa Rica is developed.
14. A full evaluation of the Phase I results is conducted.
15. Funds for Phase II are secured.

*Georgia: Promoting the Use of Renewable Energy Resources for Local Energy Supply (UNDP); GEF: \$4.712 million; Total Project Costs: \$13.442 million*

The objective of the project is to remove the key barriers to the increased utilization of renewable energy for local energy supply. The project is expected to achieve this goal i) by addressing the legal and regulatory barriers in order to provide fair and competitive access to the market for renewable energy producers, to ensure the collection of payments and to encourage otherwise the investments into renewable energy; ii) by introducing and leveraging financing for a pilot renewable energy fund/credit line so as to overcome the key financial barriers in Georgia, and iii) by addressing the existing public awareness and capacity barriers so as to provide a basis for the general development and implementation of renewable energy projects in Georgia. The initial focus of the project will be in promoting the use of geothermal resources for heating and hot water supply and the use of small hydro power for local power generation. After successful implementation of the first demonstration projects in these sectors also other renewable energy sources can be considered. The overall greenhouse gas (GHG) reduction potential of the suggested demo projects has been estimated at 0.5 Mt of CO<sub>2</sub> over the next 20 years, while the overall GHG reduction potential in Georgia by improving the utilization of country's renewable energy resources can be estimated at several millions of tons of CO<sub>2</sub> annually.

*Expected Project Outputs:*

1. Supportive institutional, legal and regulatory framework for the long term development of Georgia's renewable energy resources developed.
2. Public awareness on the possibilities for commercial development of the local renewable energy resources in Georgia raised.
3. Capacity of the local entrepreneurs to develop "bankable" investment proposals enhanced.
4. Financing for the projects and the implementation secured.
5. Implementation of the first demonstration projects facilitated.
6. Pilot Renewable Energy Fund and credit line to facilitate the financing of the first pilot/demonstration projects established.
7. Capacity of the local financing institution(s) to properly manage the Fund and to expand its operations after the formal end of the project developed.
8. Overall project implementation and its results monitored and evaluated.

*India: Removal of Barriers to Biomass Power Generation - Part I (UNDP) ; GEF: \$5.650 million; Total Project Costs: \$39.150 million*

The project aims to increase the use of biomass energy sources for generating electricity for own consumption and export to the grid. It will promote combustion, gasification and cogeneration technologies using different types of captive and distributed biomass resources for electricity generation. Further, the project will induce investments in the three identified major biomass power sectors: cooperative sugar mills, agro- processors and biomass producers, and distributed or decentralized biomass. The project strategy seeks to utilize technical assistance and investment risk mitigation support to remove the identified barriers and promote investments in biomass power generation. It will focus investment activities on select States with appropriate regulatory framework and RE policy. TA activities will reach out to a wider set of States to improve the investment environment in these States.

Part I of the two-part project will focus on providing technical assistance to remove the identified barriers and implementing 7 model investment projects to demonstrate the use of biomass in those applications with the greatest potential for replication. Part II will focus on providing support for risk mitigation to stimulate further replication investments across the targeted sectors and States.

*Expected Project Outputs (Part I):*

1. Technology improvement and upgrade needs identified.
2. Capability of Indian technology and equipment suppliers assessed objectively.
3. The technology performance and evaluation benchmarks made available.
4. Techno-commercial viability of energy plantation to power generation technologies established.
5. Long-term perspective for energy plantation on wasteland, for power generation established.
6. Capability of stakeholders and project promoters improved.
7. Confidence level of the major stakeholders improved.
8. Coordination between policy makers and project developers improved.
9. Long-term institutional framework established.

10. Master plan for creation of dynamic and sustainable institutional framework prepared.
11. Defined milestones within the project life achieved.
12. Seven MIP models and selection criteria for optimum number of MIP models established.

Over both phases, a total capacity of 40 MW, carbon savings of 0.14 mt CO<sub>2</sub> p.a., or 2.1mt CO<sub>2</sub> over 15 years operation will be achieved.

*Mali: Household Energy and Universal Rural Access Project (World Bank/UNDP) ; GEF: \$5.611 million; Total Project Costs: \$16.411 million*

The project is a joint effort of the World Bank and UNDP. Both agencies have been requested by the Government of Mali to assist in removing barriers to the promotion, adoption, and dissemination of renewable energy technologies for household and productive uses. Barriers to be addressed include institutional, information, know-how, perceived risk, financing, and other obstacles. The project will assist local stakeholders in building the capacity and infrastructure to promote, install, and service PV and other renewable energy systems. It will work with Government to establish a favorable regulatory framework, and will facilitate the establishment of financing mechanisms to assist equipment and service suppliers, community organizations, and other end users. The project will identify private sector mechanisms for rural energy development, including enhanced management and use of wood-fuels, sustainable supply of electricity services in rural and peri-urban communities, and increased efficiency in electricity end use. The mechanisms will be identified in a socially, technically, and financially sustainable manner with the view of alleviating poverty and stimulating economic development, developing appropriate regulatory and monitoring systems. This project is expected to provide the foundation for replication strategies through cooperation with other international agencies and future large-scale follow-on projects. On this basis, a joint framework of collaboration between UNDP and the Bank has been developed and agreed upon.

The framework takes into account efforts of both UNDP and the Bank in addressing removal of barriers for the widespread use of renewable energy technologies in Mali. This supports the long term development objective of improvement of the quality of life of people in rural and peri-urban areas through improved access to modern energy as well as the modern goods and services which cannot be provided without electricity. The activities will set a basis for promoting strategic partnerships between local communities, government agencies and the private sector for rural energy development. The activities will be undertaken in sites of Mopti, Timbuktu, and Bamako. Each site with an average of 30,000 households in 300 villages would consist of several communities with a mix of end-use applications (households, public centers and productive uses) and of a total size sufficient to develop a business for energy provision. Up to 400 villages, 300 in operation and 100 in preparation as productive users would benefit. The delivery mechanism would be private sector led and financed by a combination of subsidies, user payments, and private risk capital. GEF support would be targeted to barrier removal efforts within the OP 6 in particular, focusing on: information barriers for potential private participants and consumers, and lack of institutional capacity to design, implement and regulate

new public/private mechanisms for electricity service delivery in remote areas. The GEF support will contribute towards mitigating 448,000 tons of CO<sub>2</sub> projected in a 15-year time frame.

*Expected Project Outputs:*

1. Large-scale sustained application of PV energy technologies.
2. Expanded and financially healthy renewable energy industry supplying products, equipment services, and energy services to unelectrified communities, businesses, NGOs, households, and others.
3. Increasing substitution of wood and charcoal by agricultural residue briquettes.
4. Improved quality of life and economic productivity due to increased and widespread availability of affordable and reliable electricity services.
5. Increase of off-grid PV installations from about 5,000 systems in year 2000 to at least 30,000 systems by the year 2015.

*Mexico: Action Plan for Removing Barriers to the Full-scale Implementation of Wind Power (UNDP); GEF: \$4.736 million; Total Project Costs: \$11.812 million*

The objective of the project is to reduce identified wind energy barriers to facilitate the installation and operation of the 3 first commercial scale wind energy plants in Mexico with central grid connection. The project aims to reduce annual carbon emissions in Mexico through the installation and operation of commercial wind power plants in Mexico on a massive scale, delivering electricity to certain market niches or directly to the central grid under revised national wind energy contracts. To reach the sought objectives of this project, a phased approach is proposed.

In Phase 1 the project will include activities aimed at promoting capacity building, detailed wind measurements at promising sites and wind energy mapping, technology assessment, adoption of international standards and best practices, development of appropriate contracting and bidding procedures, to obtain the fundamental elements needed for subsequent commercial deployment of wind power in Mexico. The design and implementation of awareness campaigns among the main actors in the energy sector in Mexico will be key to the success of this pre-commercial development stage. A wind facility will also be constructed and put into operation in the region of “La Ventosa” in the state of Oaxaca.

Phase 2 of the project will be contingent on the success of Phase 1 and will have a duration of 3 years. It will utilize a competitive bidding process for commercial wind power development to pilot commercial wind IPP projects. The goal would be to install three 20MW wind power projects.

*Expected Project Outputs (Phase 1 and 2):*

1. Institutional, legal, and regulatory frameworks for commercial wind power development improved.
2. Technical capacity to support initiation and progress of wind power development built.
3. Wind energy resource at the most promising areas (with a progressive approach) assessed.

4. Wind power technical feasibility studies conducted.
5. Three 20 MW business-demonstration wind power projects in three Mexican States developed and constructed.
6. Appropriate financial mechanisms for commercial wind power development introduced.
7. Significant development of wind power on the basis of tested institutional and financial mechanisms promoted.

*Nicaragua: Off-grid Rural Electrification for Development (PERZA) (World Bank, UNDP); GEF: \$8.465 million; Total Project Costs: \$35.665 million*

About 89% of Nicaragua's rural populations have no access to electricity, one of the lowest electrification levels in all of Latin America. The National Energy Commission (CNE) is developing a national rural electrification strategy. However, the strategy in its present form is heavily focused on line extensions and isolated diesel systems, with little attention paid to dispersed off-grid areas. To address this gap, the project will pilot new sustainable delivery mechanisms and a variety of decentralized energy systems, many based on renewable energy technologies (RET). These would provide electricity services to over 32,000 households, public centers and more than 3000 productive users in 19-23 selected pilot sites remote from the grid. A revolving financial facility will be created and tested in the early stages of the project so as to validate this option and draw lessons in a broader perspective. In addition to electrification, the project has a component that would identify new productive applications and opportunities to expand existing businesses or create new ones, as a consequence of electrification. The component would design business development services (BDS) appropriate for each pilot site and, where feasible, improve access of remote populations to microfinance. Project sustainability is further completed by a set of activities to reduce vulnerability to climatic events. Through future replication of the pilots in a redesigned national strategy, the ultimate development objective is to improve the quality of life of Nicaraguans in remote rural areas.

The project's global environmental objective is to achieve greenhouse gas (GHG) reductions through the reduction of barriers associated with policy, information, institutional capacity and financing that currently hinder RET dissemination and market development internationally, consistent with GEF Operational Program 6. While the absolute magnitude of GHG reduction would not be high in the context of this pilot project in a small country like Nicaragua, the methodologies developed for reducing market barriers to the use of RETs in off-grid electrification through innovative public/private partnerships could provide an important contribution to efforts of this nature in other countries of the Central America region and elsewhere. The World Bank and UNDP have combined their efforts to support Nicaragua in the design and implementation of a rational and efficient rural electrification strategy. While the World Bank will bring experience, knowledge and support in the broad context of rural electrification with an emphasis on Renewable Energy Technologies, UNDP will focus on the testing and implementation of a sub-component specifically related to Micro hydro plants aimed at productive uses. Complementarity of activities and timing will enable the project to benefit from strong synergies built on implementing agency specificities.

### *Expected Project Outputs:*

#### **World Bank Component:**

1. Integration of off-grid solutions/renewables into national RE strategy.
2. Off-grid Pilot Projects Phase 1 and Phase 2:
  - A. Minihydro & Hybrid Minigrids
  - B. Solar Battery Charging Stations (SBC)
  - C. Solar PV Market Development ProgramUp to 2.83 MW total capacity installed, up to 16,000 new users (households, microbusinesses, institutions) served.
3. Micro-finance loan portfolio of approx. \$600,000 for micro/small businesses in the sites and surrounding areas and grants to participating MFIs (No GEF grant money will be used.)
4. Provision of appropriate BDS to assist small and micro enterprises in pilot sites and surrounding areas (No GEF grant money will be used.)

#### **UNDP Component:**

5. Adjust the existing Regulatory Framework for the promotion and development of Renewable Energy, especially small-scale hydroelectricity in isolated systems for productive uses.
6. Strengthen the capacities of the CNE and other public institutions, private companies and NGOs in the national sphere to promote the development of small-scale hydroelectricity for productive uses in the rural sector.
7. Strengthen local technical and administrative capacities to implement SHP projects and other uses of small-scale hydroelectricity that can develop the protective potential in rural zones.
8. Demonstrate the validity of the SHP geared to productive uses as a sustainable rural electrification option.
9. Strengthen local capacities in risk management and sustainable management of the 7 micro-watersheds.
10. Implement a monitoring and evaluation plan and promote replication of the project at a national and international level.

*Russian Federation: Removing Barriers to Coal Mine Methane Recovery and Utilization (UNDP); GEF: \$3.300 million; Total Project Costs: \$8.410 million*

The project will mitigate greenhouse gas (GHG) emissions by removing barriers to the implementation and financing of coal mine methane (CMM) recovery and utilization projects in Russia. In order to reach this goal, the project will strengthen the institutional and financial framework for the promotion of CMM projects and facilitate the implementation of selected demonstration projects so as to provide a basis for the wide scale replication of similar projects in the future. As one of the key mechanisms in that regard, the project will support the establishment of a specialized “Coal Mine Methane Recovery and Utilization Company”, which after the initial support for the start-up phase is expected to continue its operations as a self-sustaining entity. The initial focus of the project will be on the Kuzbass region, with further replication potential in other coal producing areas in Russia and elsewhere. This project is presented as

a Short Term Response Measure and the GHG emission abatement costs of the project have been estimated at less than USD 2 per tons of carbon equivalent reduced.

*Expected Project Outputs:*

1. Awareness of the management of the mining companies on the advantages of and possibilities for improved mine degasification and methane utilisation raised.
2. Specialized “Coal Mine Methane Recovery and Utilisation Company” (CMMRUC) to support the mines in developing, financing and implementing CMM recovery and utilisation projects established.
3. Selected demonstration projects implemented so as to gain experience for their wide scale replication and to demonstrate their technical, economic and financial feasibility to the key stakeholders, including the management of the mines, the national and international financing organizations, public authorities and others.
4. As applicable, capacity of the operating personnel of mines as well as other relevant stakeholders developed to install, operate and maintain the new technologies;
5. Existing legal and regulatory framework reviewed and recommendations made for its improvement so as to make it more supportive for CMM recovery and utilization projects and for leveraging financing for them.
6. Local capacity built to monitor, report and verify the actual GHG reductions achieved.

*Vietnam: Demand-Side Management and Energy Efficiency Program (World Bank); GEF: \$5.716 million; Total Project Costs: \$19.436 million*

This Demand-Side Management (DSM) and Energy Efficiency (EE) operation is associated with the IDA System Efficiency Improvement, Equitization and Renewables Project (SEIER) and is part of a long-term World Bank power sector assistance strategy for Vietnam. The project consists of two components: (i) the second phase of a DSM program, to be executed by Electricity of Vietnam (EVN); and (ii) a pilot commercial EE program to be executed by the Ministry of Industry (MoI) to support an emerging Energy Service Industry. The EVN component consists of four large DSM programs and supporting activities, which aim to achieve major reductions in peak load, improve system load factors, transform select lighting markets, and assist customers with ongoing tariff reforms. The MoI component seeks to test and develop business models and mechanisms to support commercial EE services and investments in industrial and commercial facilities.

*Expected Project Outputs:*

1. Energy savings and corresponding reductions in carbon dioxide emissions resulting from the DSM and EE investments catalyzed under the project.
2. Peak demand reductions resulting from utility load management and energy efficiency programs.
3. Accelerated commercial activity and investments for Vietnam’s energy service industry.

Total estimated impacts include over 120 MW of peak load reduction and more than 3,000 GWh in electric energy savings over 10 years, representing a reduction in carbon dioxide equivalent emissions of 3.6 million tons at a cost of \$1.52/tCO<sub>2</sub>.

## **International Waters**

*Slovenia: National Pollution Reduction Project (World Bank/EBRD); GEF: \$9.995 million;  
Total Project Costs: \$55.837 million*

Within the framework of the International Commission for the Protection of the Danube River (ICPDR) and the GEF Strategic Partnership on the Danube/Black Sea Basin, the European Bank for Reconstruction and Development (EBRD), in co-operation with the Global Environment Facility (GEF), is proposing the creation of a new Credit Facility in Slovenia. The primary objective of the Facility will be the reduction of nutrient load in the Danube river basin but it will also finance reductions in other water pollutants, primarily toxic substances. The main focus will be on industries, small and mid-sized municipalities, and large livestock farms to reduce their impact on surface and groundwater. The Facility will build on the work of the Slovenian government to meet the highest European environmental standards, and on the basin-wide efforts of ICPDR and other GEF projects. It will contribute to the implementation of these policies by bringing in new investment financing, channelled by local commercial banks to the private and municipal sectors, and softened with GEF grant funding. The implementation of the Credit Facility will be facilitated by a Technical Assistance component. Within the GEF International Waters Focal Area, the innovative element of the project is a design that is based on a partnership between financial intermediaries and private enterprises to disburse financial resources aiming at reducing water pollution. The project will focus on Slovenia but aims at creating a replicable model that could subsequently be implemented in other Danube basin countries. A US\$ 9 million GEF grant will be blended with a US\$ 45 million EBRD loan to support the Credit Facility which will be on-lent to commercial banks who will in turn channel loans in response to client demand. An additional US\$ 0.907 million of GEF funding, supported by US\$ 0.842 million of co-financing, will be used to support technical assistance activities.

### *Expected Project Outputs:*

1. Pollution loading from industrial, municipal, and agricultural sources of nutrients and persistent toxic substances to the Danube basin tributaries in Slovenia is reduced.
2. As part of a pilot, use of local financial intermediaries in the IW focal area as part of a Credit Facility is tested the first time.
3. Credit Facility plays catalytic role in transboundary pollution reduction.

## **Ozone Depletion**



*Armenia: Programme for Phasing Out Ozone Depleting Substances (UNDP, UNEP); GEF: \$2.087 million; Total Project Costs: \$2.087 million*

This project will assist Armenia in meeting its phase-out obligations under the Montreal Protocol within a realistic time frame and ensure the availability of technical assistance to expedite the implementation of the country program. The project targets priority ozone depleting substances (ODS) phase-out activities in the refrigeration and aerosol sectors and proposes technical assistance at the institutional and enterprise levels to facilitate implementation of the country program. The project is formulated as a framework project comprising one of Recovery and Recycling of Refrigerants, Elimination of CFC11 and CFC-12 from a Commercial Manufacturing Facility and the Elimination of CFC-11/12 from an Aerosol Manufacturing Facility sub-projects. Four technical assistance and training components are also included.

*Expected project outcomes:*

1. Armenia meets its national obligations under the Montreal Protocol within a three-year period.
2. A comprehensive National Programme for Recovery and Recycling of refrigerants in the refrigeration and air-conditioning industry is implemented.
3. An awareness creation and incentive programme at national level is launched.
4. A program, *Training of Trainers to Customs Officers in monitoring and controlling of ODS*, is developed and implemented.
5. The use of 56.23 ODP MT of ODS annually is eliminated.
6. A monitoring system for the implementation of the National Refrigerant Management Plan is established.
7. The national institutional structure and the capacity of the Ministry of Nature Resources and Environmental Protection to monitor the ODS phase-out activities is strengthened.

## **Multiple Focal Areas**

*Global: Small Grants Programme (Second Operational Phase) – 5<sup>th</sup> year (UNDP); GEF: \$26.997 million; Total Project Costs: \$53.997 million*

SGP was launched in 1992, and after a successful pilot phase, and first operational phase it was subject to an independent evaluation. The favorable evaluation was instrumental to the approval of SGP's **Second Operational Phase** in 1998. The transition to the second phase was marked by several positive changes for SGP implementation. The GEF Council agreed to adopt a subsequent, annual, "rolling" financial modality to ensure programme continuity. As a GEF corporate program and part of the GEF business plan, SGP which is administered by UNDP-GEF now reports annually to the GEF Council as a basis for consideration of its next-year replenishment. Programme performance is assessed based on specific benchmarks and a 2-year work plan. Through February 2003, replenishments to SGP have brought the second operational phase total to \$74.7 million.

SGP balances global criteria and goals with programme implementation that is appropriate to each country. The global programme has developed a Strategic Framework that clearly outlines for country programmes the SGP approach, the GEF criteria – focal areas, operational programmes, and eligible SGP interventions – in addition to providing guidance about operations, resource mobilization, monitoring and evaluation, and communications. The project portfolio since the inception of the programme is approximately 3,150 projects, of which over 1,700 have been approved during the second operational phase. In mid-2002, SGP had over 1,078 ongoing projects, totaling \$25.5 million.

The SGP's structure provides for maximum country- and community-level ownership and initiative, and its decentralized and flexible approach is balanced against the need for country programme consistency and accountability to achieve GEF's global environmental objectives and the SGP's particular goals. Indeed, the SGP in individual countries have helped to capacitate and familiarize grassroot as well as other capacity (e.g. through the National Steering Committees) to the issues of the global environment, provided links to larger projects in the GEF portfolio, and tapped co-financing from a variety of sources; and has potential as a further tool for assessing country performance.

It is important, however, that as a core part of the GEF Corporate Program, the SGP continues to reflect the strategic priorities of the institution, while also remaining responsive to the clearly defined niche of the SGP in working with communities at smaller scales when dealing with global environmental issues. The success of the SGP has resulted in calls, as was evidenced at the recent meeting of the Conference of the Parties of the CBD, for the program to be expanded to all eligible countries. It is critical to continue to align the SGP with the GEF's strategic priorities, the special demands and challenges of the program, as well as to reflect the outcomes of the ongoing Independent evaluation of the SGP for the continued success of the program

GEF Council approval is now being sought for the fifth operational year (Feb. 2003-2004) for \$ 27 million, with a co-financing match of \$27 million of which at least half is cash. The GEF Secretariat and UNDP will review the management and strategy of SGP in the light of the evaluation of the SGP, and for conformity with the Council-approved strategic priorities in May 2003, and the make any adjustments to the management, strategy, and work program that may then be necessary.

### **Land Degradation/Multiple Focal Areas**

*Brazil: Demonstrations of Integrated Ecosystem and Watershed Management in the Caatinga - Phase 1 (UNDP); GEF: \$4.100 million; Total Project Costs: \$26.363 million*

The goal of the proposed project is to demonstrate the integrated ecosystem management of the Caatinga Forest and build multi-sector capacity so that development and poverty alleviation programmes for the semi-arid region contribute to the capture of global benefits in Biodiversity, Climate Change, Land Degradation, and Integrated Watershed Management. This project proposal differs from the line of action currently being adopted by public administrations and the civil society alike because it will expand the limited view of problems and solutions from a local (or even at most, the State level)

perspective to a bioregional and global scale (depending on the matter at hand). The choice is to demonstrate integrated and global-environment friendly development in selected watersheds as landscape planning and intervention units, to ensure involvement of all relevant institutions (governmental, non-governmental, academic, research, productive, religious groups, local unions, associations). Also, appropriate actions will be consorted aiming at creating alternatives for activities that reduce emissions of GHGs, enhance capture of carbon via re-afforestation with native species and reduce desertification. Furthermore, proposed activities, with a primary focus on ensuring global benefits from the protection to the local fauna and flora, also pervades the interests of local stakeholders because these measures guarantee soil and water quality thus contributing to the maintenance of the productive and human carrying capacity of the Brazilian semi-arid.

*Expected project outcomes:*

1. Integrated Natural Resources Management Options Demonstrated and Adapted for the Different Socio-environmental Scenarios of the Caatinga biome.
2. Techniques and practices for increasing the efficiency of wood transformation demonstrated and adopted by the charcoal, brick, tile and plaster industries in four PIAs with the aim of reducing carbon emissions and increasing the sustainability of the region's energy matrix.
3. Three ecological corridors with a mosaic of protected areas of different categories and sustainable land-uses created as a strategy for conservation of biodiversity at the landscape level.
4. Incentives for integrated ecosystem management of the Caatinga created and tested at the Biome Level.
5. Multi-sectoral capacity developed for integrated ecosystem management.
6. Knowledge base developed to enhance the adoption of integrated ecosystem management of the Caatinga at the Biome level and to determine the national and global benefits that could be derived from this.

*Burkina Faso: Sahel Integrated Lowland Ecosystem Management (SILEM) (World Bank) ; GEF: \$4.840 million; Total Project Costs: \$25.360 million*

The global environment objectives of the program SILEM, based on the promotion of a landscape and lowland ecosystem approach, would be to generate multiple and interconnected global environmental benefits such as : (a) to build capacity for sound and sustainable integrated ecosystem management planning and implementation at local, regional and national level; (b) to reduce, stop and reverse land degradation and desertification with adequate soil and water management technologies and infrastructures in lowland and surrounding uplands of micro-basins as a means for improving the productivity and sustainability of plant and animal production systems, and for protecting natural habitats of local and global importance; (c) strengthen the natural resource base by better conserving and maintaining (agro-) biodiversity at ecosystem, species and genetic level, (d) decrease of vulnerability to climate change (drought and other stress factors), (e) stop and reverse to some extent the deterioration of international waters (Volta and Comoe) and (f) establish adequate common and private property

management regimes to secure adequate access rights to all users of natural resources, the poor in particular, so as to maintain and strengthen social and economic peace.

*Expected project outcomes:*

1. Increase in average rural income and particularly in the income of the rural poor and decline in inter-annual rural income variation.
2. Increase in average crop and livestock yields per hectare and per day of work.
3. Increase in land surface with improved soil and water management infrastructure and sustainable agricultural practices as adopted by rural communities.
4. Proportion of rural communities with integrated ecosystem management plans under implementation.
5. Decrease in land conflicts (crop growers versus pastoralists, landlords via tenants).
6. Positive changes in biological diversity indicators at ecosystem, species and genetic level.
7. Decrease in vulnerability to climate change factors (drought) and increase in use of suitable adaptation measures.
8. Positive changes in soil restoration parameters (declining erosion/soil loss, acidification, salinity, etc.).
9. Improved quality of international waters and protection of their shared basins.
10. Strengthened policy and legal framework for integrated ecosystem management.

*China: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems: Project I on Strengthening the Enabling Environment and Building Institutional Capacity (ADB); GEF: \$8.050 million; Total Project Costs: \$15.350 million*

The proposed PRC/GEF Partnership is a ten year program consisting of a series of activities to (a) address the enabling environment and build capacity for integrated ecosystem management approaches to combat land degradation; and (b) demonstrate viable integrated management models for wide replication. China is considering to propose a contribution of \$ 150 million from the GEF for the partnership, to complement co-financing of \$1.3 billion from the government and other sources over a ten year period.

This project is the first of eight related projects within a coordinated programmatic framework to alleviate the problem of land degradation in Western China. The goal of this four year project is to assist the government to establish an effective system of integrated ecosystem management to generate both global benefits from enhanced biodiversity conservation and carbon capture, as well as sustainable use and equitable benefit-sharing to reduce poverty. The purpose of the project is to strengthen the enabling environment and build institutional capacity to achieve the project goal through the following activities: (i) establishing the policy, legal and regulatory framework; (ii) strengthening national and provincial institutional coordination; (iii) improving operational arrangements at provincial and country level; (iv) improving institutional capacity; (v) operationalizing a monitoring and evaluation system; and

(vi) putting in place project implementation arrangements. The focus of the project will be at provincial level and will aim at overcoming the barriers to an integrated approach to combating land degradation.

*Expected project outcomes:*

1. The 11<sup>th</sup> Five Year Development Plan will reflect a more integrated approach to combating land degradation, including greater harmonization of sectoral plans and realized government expenditures.
2. Improved coordination between government agencies, national and provincial governments, donors and other stakeholders in land degradation.
3. A more coherent, logical, flexible and responsive framework of policies, legislation and regulations will be in place, including improved incentives for investments in combating land degradation.
4. Local level strategic plans for combating land degradation will be operational in six provinces, including improved institutional arrangements, increased budgets and participatory process.
5. Greater awareness, acceptance and practice of integrated ecosystem management among stakeholders, including the developing of tools, best practice and research programs.
6. An effective and harmonized system of land and ecosystem monitoring and evaluation system in place.

*Kazakhstan: Drylands Management Project (World Bank); GEF: \$5.360 million; Total Project Costs: \$10.630 million*

The overall development objective is the conservation, rehabilitation and sustainable utilization of natural resources in marginal cereal growing areas in the Shetsky Rayon of Karaganda Oblast in Kazakhstan. In support of this objective, the project, with the active participation of local communities, will assist the Government of Kazakhstan to: (i) develop alternate land uses that are economically feasible, socially acceptable and ecologically sustainable, while, at the same time, rehabilitate ecosystems for the conservation of important plant and animal species; (ii) develop a coherent framework and national capacity to quantify and monitor carbon sequestration under different land use systems; and (iii) build institutional capacity, promote public awareness and develop a replication strategy so that project activities could serve as a model and be replicated in similar areas of Kazakhstan and the Central Asian Region. These activities are directly linked to the priority topics of OP12 cited above, through reversing land degradation, improving carbon sequestration, enhancing biodiversity and increasing agricultural production. The project's holistic approach on combining good pastoral/arable practices with ecologically sustainable land use management is the first of its kind: it is envisaged that it will serve as a model for the GEF OP-12.

*Expected project outcomes:*

1. Alternative land uses that are economically feasible, socially acceptable and ecologically sound, while, at the same time, rehabilitating ecosystems for conservation of improved plant and animal biodiversity are developed.
2. Abandoned land is revegetated.
3. On-farm trials and demonstrations for the adaptation and transfer of improved technologies conducted and monitored.
4. Shrubs, bushes and trees to improve biodiversity and carbon sequestration planted.
5. Producer groups assisted in improving the marketing of products.
6. Carbon sequestration in different land-use systems assessed and monitored.
7. Public awareness raised on ecosystem management issues.
8. Capacity building strategy developed and implemented.
9. Strategy for the replication of best practices developed.
10. Project Management Unit established.

### **Persistent Organic Pollutants**

*Regional: African Stockpiles Program. First Tranche (World Bank/FAO); GEF: \$25.600 million; Total Project Costs: \$60.600 million*

The project as presented is the first phase of a 15 year program with the objective to clean-up Africa from stockpiles of obsolete pesticides, including POPs, and introduce preventive measures that would ensure sustainability of the operation by preventing the creation of new stockpiles. This would be achieved through 4 overlapping phases (projects). Subsequent phases would be subject to assessment of progress and program performance during the previous phase, as well as availability of co-financing. In this first phase, the project would target 15 countries, including 7 countries for full clean-up, and 8 countries for preparatory activities leading to clean-up. The project would be overseen by a partnership including a large number of intergovernmental and non-governmental organisations. The main international partners with direct role in project execution are the WB, FAO and WWF.

#### *Expected Project Outputs:*

At work program inclusion, the proposal instead is to achieve elimination of stockpiles in 47 countries. Whilst it is clear that obstacles may arise, it is felt by the GEF Secretariat that the overall goal should remain the elimination of stockpiles from the whole African continent.

The output of the 1st phase will include:

1. Clean up and disposal of stockpiles of obsolete pesticides in up to seven countries.
2. Preparation of an additional eight countries for undertaking clean up and disposal operations under the second phase of the project.
3. Strengthening, or establishment where necessary, of prevention programs in those 15 countries to help ensure that the problem does not recur.
4. Assessment of a number of technical issues in support of the program (e.g., disposal technology options, transportation of wastes, harmonization of pesticide policies).

5. Continent-wide awareness raising.

At the end of the program, all stockpiles of obsolete pesticides, including POPs, will be eliminated from 53 African countries, and the capacity to prevent new accumulations will be in place in all countries.