



Global Environment Facility

GEF/C.16/7
October 4, 2000

GEF Council
November 1-3, 2000
Agenda Item 9

WORK PROGRAM SUBMITTED FOR COUNCIL APPROVAL

Recommended Council Decision:

The Council reviewed the proposed Work Program submitted to Council in document GEF/C.16/7 and approves it subject to comments made during the Council meeting and additional comments that may be submitted to the Secretariat by November 24, 2000.

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 so that Council Members may 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 future Council meeting at the request of at least four Council Members.]

CONTENTS

I. WORK PROGRAM	2
CUMULATIVE ALLOCATION	2
FEES	3
II. CONFORMITY WITH PROJECT REVIEW CRITERIA	3
APPROPRIATENESS OF <i>GEF</i> FINANCING	3
EVIDENCE OF COUNTRY OWNERSHIP	3
REPLICABILITY	4
SUSTAINABILITY OF PROJECTS	4
CONFORMITY WITH GEF PUBLIC INVOLVEMENT POLICY	5
INDICATORS, MONITORING, AND EVALUATION	6
PRIVATE SECTOR INVOLVEMENT AND INNOVATIVE FINANCING MODALITIES	6
COORDINATION AND COOPERATION	7
LAND DEGRADATION	7
III. STRATEGIC PARTNERSHIPS AND PROGRAMMATIC APPROACHES	8
PROGRESS ON THE PROPOSED STRATEGIC PARTNERSHIP ON NUTRIENT REDUCTION IN THE DANUBE-BLACK SEA BASIN	8
PROPOSED FUEL CELL BUS STRATEGY	8
RENEWABLE ENERGY DEVELOPMENT IN CHINA	9
IV. PROJECT SUMMARIES	10
BIOLOGICAL DIVERSITY	10
CLIMATE CHANGE	13
INTERNATIONAL WATERS	16

ANNEXES

- ANNEX A. PROJECT PROPOSALS SUBMITTED FOR COUNCIL APPROVAL
- ANNEX B. CUMULATIVE WORK PROGRAM BY FOCAL AREA, PILOT PHASE AND GEF
- ANNEX C. APPROVED MEDIUM-SIZED PROJECTS,
APRIL- JUNE 2000
- ANNEX D. PROJECT DEVELOPMENT FACILITY (BLOCK A) FUNDED PROJECTS,
APRIL- JUNE 2000
- ANNEX E. PROJECT DEVELOPMENT FACILITY (BLOCK B) FUNDED PROJECTS,
APRIL- JUNE 2000
- ANNEX F. ENABLING ACTIVITIES UNDER EXPEDITED PROCEDURES,
APRIL- JUNE 2000

I. WORK PROGRAM

1. The Chief Executive Officer (CEO), after reviewing the conclusions 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 14 new project proposals:

Biodiversity	\$78.150 million (5 projects)
Climate Change	\$42.976 million (6 projects)
International Waters	\$32.569 million (3 projects)

2. The proposed work program has \$153.695 million in GEF financing and a total cost of \$461.206 million (see Annex A for details). If approved, the total GEF allocation approved in FY01 -- including fees, the previous Intersessional Work Program, and all PDFs, MSPs, and Enabling Activities approved under expedited procedures -- would be about \$277 million or 48 per cent of the allocation projected for FY01 in the *Corporate Business Plan* FY01-FY03.

3. Work Program resource allocations for projects depend on the level of country-driven demand for GEF-eligible support, the delivery capacity of the GEF system, and the availability of financial resources at the time of Work Program submission. This Work Program, although broadly meeting the planned levels of commitment outlined in the Corporate Business Plan, could have been significantly larger on the basis of proposals that had been technically considered had it not been for the current level of available financial resources.

CUMULATIVE ALLOCATION

4. GEF finances full projects, Medium Sized Projects (MSPs), and Enabling Activities. If the Council approves this Work Program, the cumulative GEF financing for full projects would amount to \$3.1 billion (see Annex B for details). With respect to MSPs approved by the CEO under expedited procedures, eight biodiversity and three climate change were approved for a total allocation of \$6.038 million and \$2.273 million, respectively, during this reporting period of July through September 2000 (see Annex C). These approvals bring to 96 the total number of MSPs approved to date, with a total GEF allocation of \$64.762 million.

5. GEF support for biodiversity enabling activities through to September 2000 covers 128 countries. During this reporting period (July 1 to September 30, 2000), five new requests were made, with total financing of \$0.664 million (see Annex F for details). They include one enabling activity project, two for clearinghouse add-on projects and two for supporting capacity building in priority areas.

6. GEF support for climate change enabling activities through to September 2000 covers 134 countries. Out of 29 non-Annex I countries that had submitted their first national communications under the UN Framework Convention on Climate Change, the GEF provided financial assistance to 27 countries. During this reporting period, seven

new requests were made, with total financing of \$1.772 million (see Annex F for details). They include five for capacity building in priority areas.

FEES

7. At its May 1999 meeting, the Council approved the introduction and use of a fee-based system to pay for the project implementation costs incurred by the Implementing Agencies in respect of GEF projects¹ and applicable to all projects approved from July 1, 1999. For projects submitted in the current Work Program, the GEF Secretariat negotiated fees with each of the Implementing Agencies in accordance with agreed reference fee levels and project cost variables. The fees applying to the Work Program are listed in Annex A. The MSPs and Enabling Activities approved under expedited procedures since October 1999 are identified in Annex C and Annex F, along with the applicable fees.

II. CONFORMITY WITH PROJECT REVIEW CRITERIA

8. As foreshadowed at the previous Council Meeting and reported in the paper *Driving for Results: Streamlining and Balancing Project Cycle Management* (GEF/C.16/5), the GEF and the Implementing Agencies held a retreat on June 8 and 9, 2000 where they discussed ways to streamline and balance their internal operations. One of the agreed changes was that the Secretariat would base its project review and associated upstream consultations for including proposals in the Work Program on the Implementing Agency's undertakings in a project cover note. Accordingly, project cover notes have been prepared for each project by the respective agency and are included in the documentation for this Work Program. The individual project cover notes either document or cross-reference the conformity of the project proposal with each of the GEF Project Review Criteria. Each Implementing Agency was responsible for the quality of project documentation.

APPROPRIATENESS OF GEF FINANCING

9. This work program has mobilized significant resources from non-GEF and non-Implementing Agency financing sources, including governments, NGOs, and the private sector. In this work program the GEF contribution of \$154 million has leveraged contributions of about \$308 million. Such inputs help to catalyze sustainable development, leverage clear commitments from beneficiaries, strengthen the basis of project ownership and improve the prospects for replication.

EVIDENCE OF COUNTRY OWNERSHIP

10. Evidence of country ownership is demonstrated in variety of ways. Most of the projects will be implemented in partnership with government departments and, in many projects, governments have already committed substantial resources to fund baseline activities.

¹ *Proposal for a Fee-Based System for Funding GEF Project Implementation*, GEF/C.13/11

11. Particular features that are indicative of country ownership and commitment in this Work Program include:

- (a) the orientation of the projects towards strengthening of institutions (*Sri Lanka*);
- (b) mainstreaming and consolidation of biodiversity in protected areas (*Mexico*);
- (c) the reorientation of sustainable development to enhance environmental and biodiversity considerations (*Mexico, Sierra Gorda*).

REPLICABILITY

12. Building replicability into the design of GEF projects responds to an important GEF principle. In this work program, there are several examples of innovative approaches and technologies with potential for replication.

13. The *Mexico: Sierra Gorda* project has replicability built into the project itself by phasing activities: operations would be consolidated gradually across the Reserve's landscape as conservation and sustainable livelihood options are tested and institutional capacities developed. Additionally, this project should have good scope for replication as best practices through the *Mexico SINAP II* to demonstrate how government programs can be reoriented to include environment concerns. The approach being used in the *Mexico Sierra Gorda Biosphere Reserve* project will form part of the *Mexico SINAP II* project's menu of financial regimes available in the country for biodiversity conservation.

14. All international waters projects include demonstration activities with potential for replicability. The project *Reduction of Environmental Impact from Tropical Shrimp Trawling through the Introduction of by-catch Reduction Technologies and Changes in Management* aims to demonstrate fishing technologies and practices. The project *Reversing Environmental Degradation Trends in the South China Sea² and Gulf of Thailand* reflects an important principle of the GEF Operational Strategy in which the process for completing a Strategic Action Program is combined with significant demonstrations on the ground to test the implementation of policy measures.

SUSTAINABILITY OF PROJECTS

15. In biodiversity, provision for financing recurrent costs is essential for sustainability beyond the GEF-financed project. In the climate change area, barrier removal projects continue to address sustainability through support for the creation of financing mechanisms, new institutions and demonstrations.

16. An issue related to sustainability in *Burkina Faso: Natural Ecosystems Management* project, is the phasing of the project over 15 years. This is a very positive move in addressing biodiversity issues since the time frame for five years has been in many cases inadequate. The use of the adaptable program loan (APL) approach by the

² The term "South China Sea" is used in its geographic sense and does not imply recognition of any territorial claims within the area.

World Bank ensures that some specific achievements are made before proceeding to the next step and provides the tool for monitoring progress.

CONFORMITY WITH GEF PUBLIC INVOLVEMENT POLICY

17. The projects included in this Work Program provide a variety of opportunities for different stakeholder groups to contribute towards preparation of the project and in the design and conduct of monitoring and evaluation. For example, social assessments were completed in the biodiversity projects in Sri Lanka, Mexico, and Burkina Faso, as a basis for formulation of community based activities. Extensive social surveys in 192 villages in Sri Lanka, and detailed socio-economic profiles of 123 villages in Burkina Faso.

18. Cross-sector participation, including local communities, NGOs, and government agencies, will be carried out in monitoring and evaluation of the Sri Lanka biodiversity project. In addition, in the Sri Lanka project, an international environmental NGO will be contracted to facilitate the biodiversity participatory community mobilization assessment. There are similar arrangements of multi-stakeholder involvement in the mid-term and final evaluation of the Mexico project.

19. Stakeholder consultations were held among the private sector, academic institutions, and in-country environmental NGOs in the climate change projects. Aside from consultations, some projects created partnerships with non-governmental groups. Two of the largest NGOs in Croatia will be contracted by the project for awareness raising and technical support. Similarly, among the three international waters projects, NGOs and academic institutions are actively involved in the preparation and conduct of technical workshops.

20. The participation of stakeholder groups in the global projects is more difficult to carry out at the field level, especially if the project involves five or more countries. Aside from project coordinating committees, these projects identify in-country counterparts to carry out national activities. The early involvement of policy makers in these projects, such as in biosafety and climate change adaptation, ensures that the results of cross-country initiatives are translated into national programs and policies.

21. There are potential positive impacts of these projects on reducing poverty. The targeted beneficiaries of the global solar and wind and the China wind power development projects, and the energy efficiency projects in Romania and Croatia are largely poor rural households with limited or no access to electricity. Similarly, the affected populations in the Sri Lanka, Mexico, and Burkina Faso biodiversity projects are small farm and subsistence communities, including indigenous populations who are dependent on natural resources for their livelihood. By incorporating co-financing and government counterpart funding to support sustainable livelihoods, these projects conserve biodiversity while addressing local needs. Additionally, women's groups are involved in natural resources management in Burkina Faso and Mexico and youth groups are key partners in awareness raising in the Sri Lanka projects.

INDICATORS, MONITORING, AND EVALUATION

22. The identification of relevant indicators of impact, and the establishment of an appropriate monitoring and evaluation plan at the project level will ensure that global environmental benefits from GEF investments will be achieved. Projects in this work program have been scrutinized for conformity to the GEF monitoring and evaluation guidelines and the inclusion of best practices from previous and ongoing GEF projects. All projects include defined M&E plans, and logical frameworks that include indicators that are measurable and verifiable.

PRIVATE SECTOR INVOLVEMENT AND INNOVATIVE FINANCING MODALITIES

23. Many projects in this work program involve the private sector as providers of technology, goods and services - typically awarded in competitive bidding processes where they respond to requests for proposals or where they co-finance specific components of project activities like tourism.

24. The investment component of the UNDP/ADB *China: Wind Power Development* project incorporates a non-grant financing modality. A GEF-financed contingent loan will be used to address two key barriers for commercial wind investments in China: increased transaction costs for initial investments in specific regions and perceived technology performance risks. A contingency has been introduced to enable sharing of perceived technological risks, specifically wind resource availability and turbine performance. Current feasibility data suggest a sufficient return to enable a fully commercial operation of the wind farms. Therefore it is expected that the GEF loan will be repaid in full along with ADB provided debt. Only if resource and technology performance remain significantly behind feasibility forecasts and cause incremental economic costs would the GEF loan be partially or fully forgiven. Repayment terms would be specified prior to endorsement. The loan would cover additional transaction costs associated with the introduction of wind power in the Xinjiang, Lianing and Heilongjiang regions. Further discussions with the World Bank and Government of China are planned to assure a consistent framework for renewable energy development in China, and to maintain a common approach with the China Renewable Energy Partnership expected to be submitted by the World Bank next year.

25. The solar and wind energy resource assessment presented by UNEP in collaboration with regional resource assessment centers in Brazil and India will deliver a range of innovative assessment services to commercial investors and policy makers. This is to facilitate the integration of renewable energy alternatives in strategic investment planning and energy market restructuring. Private and public sector executives involved in energy market development will gain access to crucial resource data and interpretation services. These decision-making tools will allow comprehensive assessments of the market potentials and viability prospects for renewable energy investments in specific regions. The services of this inter-regional project will enable systematic identification of commercial investment opportunities in wind and solar energy. They will also assist participating governments in determining best ways and means to promote their optimal use.

COORDINATION AND COOPERATION

26. This Work Program contains three projects with executing agencies that have been granted expanded opportunities to work with the GEF. Each of the three Implementing Agencies is also involved and has developed a partnership through their dedicated activity. The projects also cover three different focal areas. They are:

- (a) *Sri Lanka: Protected Areas and Wildlife Management* project (World Bank/ADB Biodiversity);
- (b) *China: Wind Power Development* project (UNDP/ADB, Climate Change); and
- (c) *Global: Reduction of Environmental Impact from Shrimp Trawling* (UNEP/FAO, International Waters).

27. This work program contains projects that exemplify various other forms of collaboration among stakeholders. The Mexico (Sierra Gorda) project will build upon the significant potential of the special relationship between the Sierra Gorda Ecological Group, an NGO, and the State, represented by the National Commission for Protected Areas. In particular, the project will formalize this co-management framework and demonstrate the full potential benefits generated by co-responsibility between an NGO and a state agency in conservation promotion and enforcement.

LAND DEGRADATION

28. In this Work Program, there are projects with activities that also address land degradation. Although these projects approach the issue of land degradation from the point of view of biodiversity and international waters, they help integrate natural resources management and sustainable land management. While seeking to conserve biodiversity, they deal more directly with the issues of improved livelihoods for the local populations who manage the resources.

29. The *Burkina Faso: Natural Ecosystems Management* project will directly address the issue of land degradation by introducing land management approaches that balance increased human pressure on natural resources against sustainable production. This will be achieved through carefully designed community based interventions in livestock and agricultural land uses that remove pressure from protected areas. Strengthening the pastoral and agricultural economies will increase the capacity of the people to conserve.

30. The Bermejo international waters project represents a good example of addressing transboundary land degradation issues in a multi-country basin. This project initiates the implementation of a Strategic Action Program for addressing transboundary soil erosion problems in the context of sustainable development of the basin. The SAP was produced with full participation of sub-national governments and NGOs in the previous Bermejo international waters project. An important feature is that the Inter-American Development Bank will work with the two countries and the sub-national units to host a donors' conference. This will help ensure that wider sustainable development needs

would be supported in addition to the GEF-funded interventions as part of a package of interventions leveraged by the participatory SAP process.

III. STRATEGIC PARTNERSHIPS AND PROGRAMMATIC APPROACHES

31. As set out in the Work Program for the May 2000 Council Meeting,³ GEF is developing strategic partnerships and programmatic approaches in biodiversity, climate change, and international waters. These go beyond simple stand-alone projects and have broader, more significant impacts over the long term. They achieve this by including project components for replication, monitoring and evaluation, stakeholder involvement in partnership with national government, private sector and other actors.

PROGRESS ON THE PROPOSED STRATEGIC PARTNERSHIP ON NUTRIENT REDUCTION IN THE DANUBE-BLACK SEA BASIN

32. Work is proceeding well on the Danube and Black Sea partnership, with initial GEF commitments expected early next year.⁴ Approval of the GEF components, which collectively will represent a major commitment, would be sequenced over a period of time in line with GEF's overall funding strategy and the plans for resource mobilization for the investment phase.

33. Since 1993, the European Union and the GEF have supported countries of the Danube Basin and those around the Black Sea to understand priority water-related problems they face and to build their capacity under the Danube Convention and the Black Sea Convention to address the priorities jointly. GEF has supported a series of small projects to accomplish this through joint processes of producing a transboundary analysis for setting country-driven priorities and then formulating a Strategic Action Program (SAP) of needed regional and country-specific actions to address the root causes of the transboundary problems.

34. As a consequence of previous GEF-EU sponsored actions, the 17 countries sharing the Black Sea Basin, the GEF and its three IAs, the EU, EBRD, bilateral donors, national and international NGOs, and the private sector, have all agreed to implement the SAPs. These programs aim to restore the health and economic values of the basin's ecosystems. All three Implementing Agencies have helped prepare proposals for this and would collaborate in implementation.

PROPOSED FUEL CELL BUS STRATEGY

35. The October 1999 Work Program included a fuel cell bus project for Brazil. Several Council members requested that a strategic plan be prepared for fuel cell buses prior to the submission of the project for endorsement and before submission of additional projects. In response, an MSP for analysis of stationary and mobile fuel cells was approved with UNEP as the Implementing Agency. This plan will address the need

³ *Work Program Submitted for Council Approval*, GEF/C.15/3

⁴ *Progress Report on the Strategic Partnership on Nutrient Reduction for the Black Sea/Danube Basin*, GEF/C.16/Inf.9

for an appropriate level of private sector contributions, the process of technology transfer to the host countries, and the cumulative progress expected as a result of GEF commitments. As agreed in that MSP, UNDP has taken the lead in developing the strategy for GEF support to mobile applications and the World Bank/IFC is taking the lead in the work on a strategy for stationary applications. There is of course a need for a strategy that reflects the integrated character of fuel cell markets. Over the past six months, two workshops were organized as part of the work on that strategy and considerable attention was devoted to fuel-cell bus strategy during the Transport Sector Workshop held in Paris in May. More than 100 experts from recipient countries, private industry, and environmental agencies--including cities with experience in fuel cell bus development--participated in these workshops. STAP also reviewed the status and rationale for GEF support of fuel cell buses at its meetings in Bangalore and Washington and prepared a short note included as an Annex to the report on the Bangalore meeting.

RENEWABLE ENERGY DEVELOPMENT IN CHINA

36. The UNDP/ADB Windpower Project included in the current Work Program builds on a previous World Bank renewable energy project and anticipates the Renewable Energy Partnership with China now expected to be submitted in May 2001. In order to assure a consistent overall approach, the agencies have agreed to work with the Government of the China to prepare an agreed framework and principles for support of renewable energy. Agreement on this common framework and related principles will be required as a condition for CEO endorsement. This process will establish a basis for the long-term, multi-party support envisioned by the Renewable Energy Partnership. Council welcomed this partnership at the May 1999 Council Meeting,⁵ and invited proposals on a pilot phase basis for country-driven renewable energy programs that build fully on current mainstreaming efforts in the Bank.

⁵ *Strategic Partnerships with GEF Implementing Agencies.* GEF/C.13/9

IV. PROJECT SUMMARIES

BIOLOGICAL DIVERSITY

**Global: Development of National Biosafety Frameworks (UNEP) GEF: \$26.092 m;
Total: \$38.434 m**

In its May 2000 meeting, the Council requested the GEF to prepare an initial strategy for assisting countries to prepare for entry into force of the Cartagena Protocol on Biosafety. The strategy is contained in document GEF/C.16/ 4.

One critical step in the initial strategy is GEF support to eligible countries to develop national frameworks on biosafety. Based on its experience as the Implementing Agency for GEF's Pilot Project on Biosafety, approved in November 1997 and implemented successfully in 18 representative countries, UNEP has prepared an umbrella project for extending similar support to other eligible countries. The project has a component providing for regional workshops, and common services to be extended to all countries as well as a component for national, country - specific activities to be implemented in signatories to the Cartagena Protocol. Assistance will be provided at the national level to identify biotechnological activity within a country and the extent of coverage of already existing laws and regulations. It will provide the necessary assistance to ensure that stakeholders are consulted in drawing up guidelines, regulations or laws to achieve the stated aims.

Of the total project cost of \$39.66 million, the GEF component is \$26.092 million. While Council is requested to approve the total envelope, it is proposed that the CEO be authorized to approve the release of funds in tranches, on the basis of requests for support received by the Implementing Agency as countries become signatories to the Protocol. The level of financing in the first tranche will be determined at the time of CEO endorsement of the final project document.

Expected Project Outputs: (a) strengthened national capacity to implement biosafety procedures and maximize the potential for the safe use of biotechnology; (b) biosafety procedures to enhance environmental management; (c) biosafety guidelines under the Convention and the Protocol and in response to decisions of the Inter-governmental Committee for the Cartagena Protocol on Biosafety (ICCP) taking into account the UNEP International Technical Guidelines for Safety in Biotechnology; (d) harmonized regional and sub-regional legal instruments to simplify the process of applying and conforming to regulations; (e) public awareness of the issues involved in release of living modified organisms, and their products, to promote informed debate and to ensure that where any use of biotechnology is permitted, it is done in an open and transparent way; (f) all stakeholders with an opportunity to be involved in the design and implementation of a national framework for biosafety; (g) assessment of technological capacity, its effect on implementation of national biosafety frameworks and means to improve it; and, (h) increased overall safety of biotechnology so those citizens may reap the benefits with

minimum adverse effects on health and environment where it is decided to allow the use to proceed.

Burkina Faso: Natural Ecosystems Management (WB) GEF: \$18.675 m; Total: \$43.500 m

The Program's Operational objectives are to: (1) plan and implement PRONAGEN at the ecosystem and transboundary levels; (2) empower communities for the management of wildland as part of decentralized rural development, (3) reinforce local and national capacity; (4) provide funds, tools and techniques for communities, Government and the private operators to manage natural habitats and wildlife.

The program targets global biodiversity conservation in 4 areas of Burkina Faso by: i) increasing the ecological security of flora and fauna rare or threatened on a regional and global scale including the northernmost population of the African Elephant; ii) restoration and preservation of representative areas of the West African Sudano-Sahelian Ecosystems; iii) preservation of genetic diversity within ecologically, economically and culturally important species in natural populations within their historical range; and iv) integration of sound ecological management principles of natural resources, livestock, and agricultural practices in relation to wildland conservation.

The program's 15-year goal is "to set up a national decentralized system for participatory management of natural resources and ecological systems that will yield sustainable returns for communities, private sector and the state". It is a building block of a national Decentralized Rural Development Program financed by IDA and other donors. Phase 1 development objective is "to establish and test in four geographical locations a decentralized system of participatory management of natural ecosystems".

Expected project outputs: (i) reduction of agriculture encroachment in Conservation area (as measured by satellite images); (ii) recovery of large mammals in Conservation areas (as measured with line transect surveys); (iii) improvement of a set of bio-indicators whose data would be collected as part as participatory ecological monitoring (as measured using a systematic "grap-like" method); (iv) improved awareness and knowledge of communities about the benefits of the natural ecosystem (as measured by perception survey but mostly decisions taken); and (v) diminution of wildlife/farmer conflicts (as monitored in the forestry conflict registration ledger).

Mexico: Consolidation of the Protected Areas Program--SINAP II (WB) GEF: \$16.45 m; Total: \$76.75 m

The project is the first phase of assistance to Mexico to consolidate the conservation of globally important biodiversity in its protected area system. It will strengthen in-situ conservation of biodiversity in four protected areas in the country through supporting four major project components, namely: the protected area conservation program, the central coordination program, institutional strengthening, and mainstreaming conservation and sustainable use policies. It will also provide a specific "bottom-up" mechanism to influence inter-agency coordination at the national level so that key

stakeholders such as NGOs and local and indigenous groups can receive information on public programs and long-term plans for in-situ conservation of the protected areas included in the program. Endowment funds will be channeled through the Mexican Conservation Nature Fund (FMCN), a private non-profit organization that includes government representation on its Board and which currently administers GEF funds from the Pilot Phase project. This Fund has been recently evaluated and received highly positive comments in both its mid-term review and from the GEF evaluation (see *GEF Evaluation of Experience with Conservation Trust Funds*, 1998).

It is anticipated that there would be a future additional request for \$15 million in GEF funds to match expected further 1:1 cofinancing of the endowment, and this will provide assistance for another 8 protected areas. This additional assistance would be made without additional fee to the World Bank as Implementing Agency.

Expected Project Outputs: (i) the protected area conservation program expanded and consolidated; (ii) central coordination program established; (iii) institutional strengthening mechanisms in place; and (iv) mainstreaming conservation and sustainable use policies formulated.

**Mexico: Biodiversity Conservation in the Sierra Gorda Biosphere Reserve (UNDP)
GEF \$6.733 m; Total: \$20.655 m**

The Sierra Gorda Biosphere Reserve (RBSG) is a priority conservation area; and is currently under pressure from the surrounding population and development activities planned around the reserve. The Reserve harbors a total of 14 vegetation types, several of global importance, with high levels of species endemism, presence of charismatic species and the unique representation of a transition zone between two bio-geographic regions. The project seeks to harmonize the development programs with conservation by working with the three levels of government (Federal State and Municipal) and the local communities through reorientation of regular programs, and some focused additional activities. Specifically, the project will take a bioregional approach to conservation, demonstrating and formalizing alternative conservation schemes for private lands and community-owned lands (ejidos) that build upon existing use traditions and community involvement. Special attention will be given to the promotion of sustained conservation awareness throughout the Reserve and its immediate surroundings, including the creation of public-private partnerships that would fundamentally change the land use on the predominantly privately owned land in the Reserve. Operations would be consolidated gradually across the Reserve's landscape as conservation and sustainable livelihood options are tested and institutional capacities developed. This project will promote shared responsibilities between the Sierra Gorda Ecological Group, an NGO, and the State, represented by the National Commission for Protected Areas.

Expected Project Outputs: (i) reserve management infrastructure strengthened; (ii) policy, ecological and socio-economic baseline assessments undertaken; (iii) implementation of adaptive and participatory Reserve management; (iv) financial sustainability of Reserve management assured; (v) biodiversity-friendly and sustainable alternative livelihood options developed and demonstrated; and (vi) environmental education and public awareness campaign undertaken. 7 years.

**Sri Lanka: Protected Areas and Wildlife Management (WB/ADB) GEF \$10.2 m;
Total \$34.7 m**

The project will assist the Government of Sri Lanka to conserve the nation's resources and preserve its wildlife. More specifically, by addressing institutional and legal deficiencies in protected area management, and pilot-testing participatory conservation activities in selected protected areas, the project will contribute to the protection of the country's fauna and flora, stimulate nature based tourism and promote the development of a sustainable protected area management and wildlife conservation system for Sri Lanka. The project will also assist in the establishment of a sustainable financing mechanism for wildlife conservation.

Expected Project Outputs: (i) restructured DWLC including the identification of a capacity building program recommended; (ii) institutional, policy and legal framework for wildlife biodiversity conservation and protected area management including the refinement of a strategy for addressing the overall framework analyzed; (iii) a social analysis of the communities living in the vicinity of the Project areas including a strategy and implementation arrangements for their participation in wildlife conservation; (iv) detailed structure and implementation arrangements for the Wildlife Preservation Fund; and (v) biodiversity assessment and monitoring arrangements prepared.

CLIMATE CHANGE

Global: Assessments of Impacts of and Adaptation to Climate Change in Multiple Regions and Sectors (UNEP) GEF: \$7.850 m; Total \$12.460 m

This project will target assessment of climate change impacts and adaptation options for the most vulnerable regions and sectors in developing countries through an open process based on scientific merit. It will fund a number of studies assessing the impacts of climate change on a range of socio-economic sectors and ecological systems at the regional and national scale and the development of a range of adaptation response options. Forty to fifty such individual research activities are expected to be funded through this project. Moreover, science capacity building is a primary aspect of the project. The targeted regions and sectors represent gaps in the current assessments. This project will develop capacity to address these gaps through training, technology transfer, and interaction with international assessment teams.

This project will enhance the comprehensiveness of impact and adaptation assessments using a consistent methodological approach by supporting regionally focussed research to be undertaken by developing country experts, often in partnership with developed country experts. This will enhance regional scientific capacity and provide expertise available to governments, the private sector, and other entities who are developing national and sub-national, sectoral and multi-sectoral policies and adaptation plans. The results will include expanded socioeconomic and other data, training and methodologies

adapted to developing country regions. These results will then serve as reference impact scenarios and model adaptation strategies in the United Nations Framework Convention on Climate Change (UNFCCC) national communications. Countries can further expand or differentiate nationally focussed impact and adaptation effort using these reference cases and the methodologies developed in further regional/national Stage II adaptation studies.

Expected project outputs: (a) appropriate range of climate change scenarios including regional high resolution scenarios will be developed; (b) comprehensive sectoral/ regional impact assessments conducted, and effectiveness of adaptation strategies analyzed; (c) training provided through various workshops; and (d) national/regional science capacity in climate change improved to perform assessments that will relate well to international assessments and demonstrate sustainable capability.

**Global: Solar and Wind Energy Resource Assessment (UNEP) GEF: \$6.812 m;
Total: \$9.020 m**

This project will provide solar and wind resource data and assessment tools to public and private sector officials involved in energy market development. It will demonstrate the use of these instruments and the information they provide for evaluating investments, informing policies, and building local capacities for solar and wind energy utilization. During this pilot project, tools for analysis and use of resource information will be developed, a global archive and review mechanism will be initiated, regional/national solar and wind resource maps generated, and national assessments demonstrated. These capacities will enable participating developing countries to assess the technical, economic and environmental potential for large-scale investments in solar and wind energy technologies. Partners include leading technical institutes from Brazil, Denmark, Germany, India, and the United States.

Expected Project Outputs: (a) global resource data compiled, (b) data archives established and on-line access enabled, (c) assessment tools developed demonstrated and offered to key public and private sector partners, (d) regional data interpretation capacities built and assessment services offered

**China: Targeted Research Related to Climate Change (UNDP) GEF: \$1.724 m;
Total: \$3.414 m**

This climate change targeted research project focuses on capacity building and estimation of emission factors critical to the improvement of future GHG inventories in China. It is to be funded by the GEF and the Government of China, implemented by the UNDP, and executed by the Chinese State Development Planning Commission. The principal aim of the project is to enable China to strengthen and develop capacity in research areas of relevance to compliance with the United Nations Framework Convention on Climate Change (UNFCCC) and to generate research results that may provide wider benefit to the development and application of emission factors for the improvement of national GHG inventories.

Expected Project Outputs: (a) capacity to estimate GHG emissions from China's road transport sector developed and strengthened; (b) capacity to improve estimates of GHG emissions and sinks from land use change and the forestry sector developed and strengthened; and (c) capacity to improve estimates of GHG emissions from the agricultural sector developed and strengthened.

China: Wind Power Development (UNDP/ADB) GEF: \$12.00 m; Total: \$98.70 m

Building on the renewable energy experience gained so far in China and complementing ongoing World Bank and UNDP activities in this area this GEF intervention aims to accelerate market development for large scale wind applications. Specifically the project will introduce commercial wind-power to the Xinjiang, Liaoning and Heilongjiang provinces and promote rapid replication. The capacity building component of the project will facilitate the removal of key policy, institutional and information barriers. It will introduce innovative power tariff benchmarking instruments and competitive institutional models for market based wind power development. A modest \$ 6 million GEF loan contribution to the investment component will address transaction cost and perceived risk barriers thus leveraging \$ 93 Million in mainstream financing from domestic and international partners. The project supports the objectives of the renewable energy partnership between the GEF and the government of China, currently under preparation under WB leadership.

Expected Project Outputs: (a) 78 MW of wind power installed; (b) power tariff structure improved, (c) competitive institutional models for wind power development established; and (d) market oriented wind power policy introduced.

Croatia: Removing Barriers to Improving Energy Efficiency of the Residential and Services Sectors (UNDP) GEF \$4.59 m; Total \$13.25 m

The project removes the key barriers to the implementation of selected, economically feasible energy efficiency technologies and measures in the residential and the service sectors in Croatia. Targeted applications are efficient lighting and appliances and solar heating in the residential sector, and heat and power in commercial buildings (both supply and demand-side efficiency improvements). The project establishes a partial guarantee mechanism to share the risks with preparation and implement of energy efficiency projects in the services sector and to leverage additional financing for energy efficiency investments from the private sector. The initial focus of the project will be on the counties of Istria and Rijeka, after which the activities are sought to be replicated in other parts of the country. The project will coordinate with a planned World Bank project, which is expected to support the establishment of the first Energy Service Company in Croatia.

Expected Project Outputs: (a) capacity of the regional authorities to initiate, design and implement different measures and activities promoting energy efficiency enhanced; (b) public awareness on the available energy efficient technologies and measures and their

benefits to the consumers increased; (c) pilot marketing campaign to promote the purchase of the CFLs conducted; (d) deferred payment modalities for the purchase of the CFLs facilitated; (e) marketing campaigns to other regions and technologies expanded; (f) awareness of the owners of the public and commercial buildings on the available energy efficient technologies and measures increased; (g) Strategic partnerships between the key local stakeholders to initiate and support the implementation of energy efficiency measures in the service sector forged; (h) guidelines and incentives for energy audits and bankable feasibility studies prepared; and (i) a partial guarantee facility to leverage financing for the energy efficiency investments established.

Romania: Energy Efficiency (WB) GEF \$10 m; Total \$50 m

This project develops a self-sustaining, market-based mechanism that will support the development and implementation of commercially viable energy efficiency investments. Specifically, the project will create a self-sustaining, market-based energy efficiency project development and financing facility (“EEFF”) that will reduce the perceived high risk and high transaction costs of initial investments. A GEF contingent grant of US\$9 million will supply the seed capital for the EEFF which will be supplemented by commercial cofinancing; a GEF technical assistance grant of US\$ 1 million will provide support for capacity building and project development. This project is an example of contingent financing for energy efficiency that provides high leverage for GEF resources. Financing is provided for energy efficiency subprojects from a revolving loan fund seeded by the GEF that operates on a commercial basis and should recover its costs on a sustainable and commercial basis.

Expected Project Outputs: (a) Energy efficiency financing facility (EEFF) established; (b) proven, sustainable track record of commercially profitable energy efficiency projects; and (c) Increased capacity to identify and deliver energy efficiency projects

INTERNATIONAL WATERS

Global (Nigeria, Cameroon, Iran, Venezuela, Costa Rica, Cuba, Trinidad and Tobago, Colombia, Mexico, Indonesia and Philippines): Reduction of environmental impact from tropical shrimp trawling through the introduction of by-catch reduction technologies and change of management(UNEP/FAO): GEF: \$4.780 m; Total: \$9.220 m

Shrimp exploitation by tropical trawl fisheries generates significant amounts of non-shrimp by-catch. In some countries, by-catch has become an important source of income and contributes to food supply. In others, by-catch of fish, particularly small-sized, is discarded at sea. The capture of juveniles of valuable food fish constitutes a threat to the sustainable production of fish from an area. Extensive removal of non-target fish is also a threat to the biodiversity in a fishing area. If the introduction of fishing technologies and practices that reduce the capture of juveniles is successful in a few selected countries in various regions, it can be assumed that such technology and practices would be adopted by other shrimp fishing countries also experiencing problems with by-catch. In addition to the expected increased fish production and conservation of biodiversity as a result of

project intervention, shrimp trawling will earn an improved reputation and so continue to produce needed export income for several poor developing countries.

Expected project outputs: (a) adoption by several of the participating countries of fishing technologies and practices that are environmentally friendly so that their shrimp trawling fisheries will be enhanced in terms of their environmental performance and reduction of biological impacts and be regarded as more sustainable in the future; (b) reduction in number of juveniles caught by trawlers using BRDs compared to trawlers not using such devices; (c) increased number of trawlers using BRDs in each fishery at the end of the project period; and (d) improvement in national capacities for the sound management of the shrimp-trawler fisheries and increased co-operation required among countries at the regional and global levels.

Regional (Cambodia, China, Indonesia, Malaysia, Philippines, Thailand & Vietnam): Reversing Environmental Degradation Trends in the South China Sea⁶ and Gulf of Thailand (UNEP) GEF: \$16.749m; Total: \$31.683

Major outcomes will include an approved Strategic Action Programme including, a targeted and costed programme of action and a recommended framework for improved regional co-operation in the management of the environment of the South China Sea; a series of national and regional management plans for specific habitats and issues; 9 demonstration management activities at sites of regional and global significance; a regional management plan for maintenance of transboundary⁷ fish stocks in the Gulf of Thailand; pilot activities relating to alternative remedial actions to address priority transboundary pollutants and adopted water quality objectives and standards. Activities include national level analyses and reviews and management of demonstration activities and regional harmonisation and co-ordination of national level actions.

Expected project Outputs: (a) component 1 will provide solutions to problems related to habitat degradation and loss with four sub-components addressing the four priority habitats in the region. (b) component 2 will resolve fishery issues in the Gulf of Thailand with all activities subject to the approval of the Project Steering Committee; c) component 3 addresses the major problem of land-based pollution through an initial review of national standards and controls, and an examination of actions required; and (d) component 4 will provide Project Co-ordination and Management and concerned with regional co-ordination of the project and related activities, and management of the project implementation

Regional (Argentina/Bolivia): Implementation of the Strategic Action Program for the Bermejo River Binational Basin: Phase II (UNEP) GEF \$11.040 m; Total: \$19.770 m

This project catalyzes the implementation of the Strategic Action Program for the Bermejo River Binational Basin. The project will implement specific strategic activities, identified in the GEF-financed strategic action program (SAP), that address the principal root causes

⁶ The term "South China Sea" is used in its geographic sense and does not imply recognition of any territorial claims within the area.

⁷ In the context of GEF, the term "transboundary" refers to the causes of environmental degradation that operate at a distance from the site of impact. For example, the globalization of trade and world price of shrimp are important causes of loss of mangroves in the South China Sea and the Gulf of Thailand.

of soil degradation as set forth in the transboundary diagnostic analysis (TDA) and, in doing so, will provide the necessary institutional, legal, and informational basis to enhance and restore the environmental functioning of the system, and provide protection to endemic species within the five component ecosystems—montane, humid forest, arid Chaco/savanna, sub-humid Chaco, and humid Chaco. These actions, with incremental costs, will complement Basin-scale interventions by the Binational Commission, and the governments of Argentina and Bolivia, financed in part from national and provincial/prefectural sources and by international loan funding, many of which address expected baseline activities. Strengthening of Basin institutions, building of agency and organizational capacity, and integration of environmental concerns into economic development activities on a sustainable basis, and the promotion of the public awareness and participation are key elements of this project.

Expected project Outcomes: (a) strengthened legal basis for regulation, planning, and environmental and social evaluation; (b) specific prevention and control measures for soil management and sediment–transport control implemented; c) alternative production modes that will minimize environmental degradation, with focus on land degradation and soil erosion implemented; (d) identified and coordinated organizations with economic and/or institutional responsibilities in the basin, including the agricultural and industrial private sectors.