

# Global Environment Facility

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## **PROGRAM STATUS REVIEWS FY 1999**

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## INTRODUCTION

1. GEF has two broad types of outcome: the direct global environmental benefits of its programs and the indirect effect of the lessons, replication, and coordination it facilitates. To maximize the first, GEF focuses its activities in Operational Programs, which have been structured as program logical frameworks. Project review criteria are used to ensure the consistency of project proposals with the program, and recently developed indicators will now be used to monitor and report progress of the overall program and its outcomes at various levels. To maximize the second, the GEF monitoring and evaluation team has, with the assistance of the Implementing Agencies, been preparing lesson notes, thematic reviews, the annual Project Implementation Review, and other evaluations.
2. The activities above are now being more systematically integrated:
  - (a) Programmatic indicators recently developed by the M&E team will be used as the basis for reporting progress in the Program Status Reviews, as envisioned originally in the adoption of the logical framework;
  - (b) Lessons drawn from the PIR and other M&E activities will be systematically incorporated into project design, as reflected in current project review criteria (e.g., the checklist used for conservation trust fund design), as well as into the Program Status Reviews;
  - (c) The Project Implementation Review will be timed to feed directly into the Program Status Reviews as a critical input;
  - (d) Issues highlighted in the course of the interagency discussions for the Program Status Reviews will guide specific follow-up activities – the management of the Operational Programs, STAP selective reviews and workshops, evaluations led by the M&E team, and policy initiatives.
3. The Program Status Reviews are prepared annually by the Secretariat with the support of the Implementing Agencies through the Focal Area Task Forces. Their objectives are not limited to assessing the status of the current portfolio against the general guidelines provided by the Operational Strategy and the programming framework and specific objectives of each Operational Program. The review is also an opportunity to identify ways to integrate into GEF

(b) Highlight important and innovative features of projects in the portfolio, overall implementation performance, lessons that can be replicated, and impact; and

(c) Outline emerging operational challenges and issues that have implications for future projects as well as the for GEF's policy and strategic work in focal areas and the work programs of the M&E team and STAP.

4. The GEF has provided nearly \$2.44 billion to support projects under its four focal areas – biological diversity, climate change, international waters, and ozone layer depletion – from the pilot phase (1992-1994) to June 1999. About 40 per cent of this amount (\$960.2 million) went to biodiversity projects compared with 35 per cent (\$884.4 million) for climate change, 14 per cent (\$350.4 million) for international waters, 6 per cent (\$148.4 million) for ozone layer depletion, and 5 per cent (\$101.0 million) for multi-focal projects.

## **I. BIODIVERSITY**

5. The Global Environment Facility (GEF) operates the financial mechanism for the Convention on Biological Diversity, which promotes conservation and sustainable use of biological diversity and equitable sharing of benefits from access to genetic resources. It is helping to implement the convention through its biodiversity focal area, which covers the following ecosystem types: arid and semi-arid; coastal, marine and freshwater; forest; and mountain.

6. From FY1992 to FY1999, the GEF provided \$960.2 million to support 324 biodiversity projects in 119 countries. These projects aimed to promote conservation, sustainable use, and benefit sharing to achieve local, national, and global benefits, with the GEF support being for the incremental costs of achieving the agreed global environmental benefits. GEF has also been able to catalyze an additional \$1.3 billion in co-financing from international donors, national and local governments, project beneficiaries, non-governmental organizations (NGOs), and the private sector.

7. Through these projects, the GEF is assisting countries to implement effective innovations in conservation and sustainable use of biodiversity. The annual Project Implementation Review (PIR) undertaken by the M&E team indicates that about 90 per cent of the projects are highly satisfactory or satisfactory and measures are endeavoring to address constraints that have adversely affecting the implementation of the remaining projects.

## SIZE AND COMPOSITION OF THE BIODIVERSITY PORTFOLIO

### GEF Financing and Co-Financing

9. The GEF financing of \$960.2 million for the biological diversity focal area supports 324 projects in 119 countries. The total project cost of these projects is about \$2.2 billion<sup>1</sup>, indicating that the GEF was able to catalyze more than \$1.3 billion in co-financing, or 135 per cent of its allocation (see Figure 1). The co-financing comes mainly from government counterpart contributions, bilateral donors, and (to some extent) some NGO and local community contributions.

10. Fifty-nine full projects, with a total GEF allocation of \$333.7 million, were approved during the pilot phase. The number of projects has since increased by 78 projects, with an allocation of \$578.5 million during the GEF (restructured phase) period, from February 1995 to June 1999 (see Table 1).

11. The implementation of 33 full projects and 164 enabling activities (including four in the pilot phase) had been completed as of June 1999; implementation has not been completed in any of the medium-sized projects because they were approved by the GEF Council as a financial pathway only in 1997.

Figure 1. GEF Allocation and Co-Financing by Implementing Agency (Pilot Phase-FY 1999)

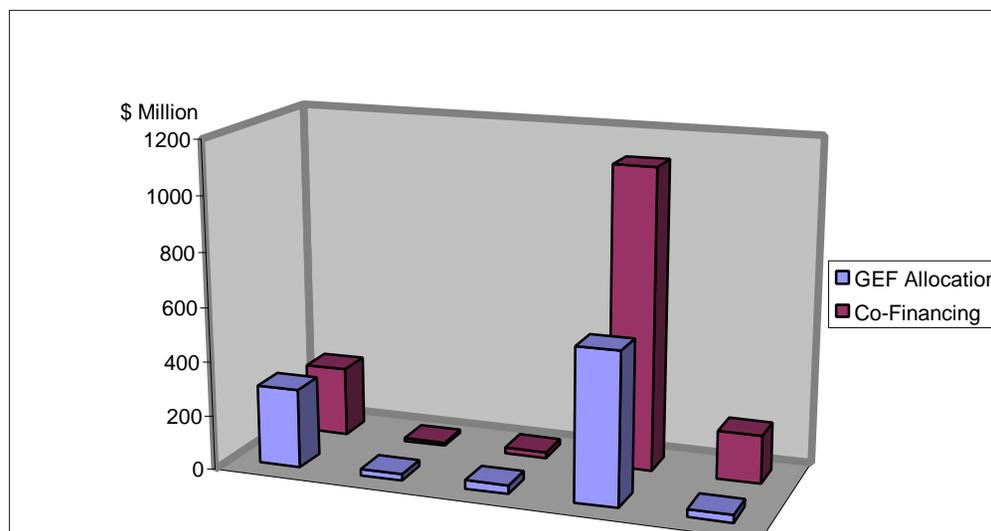


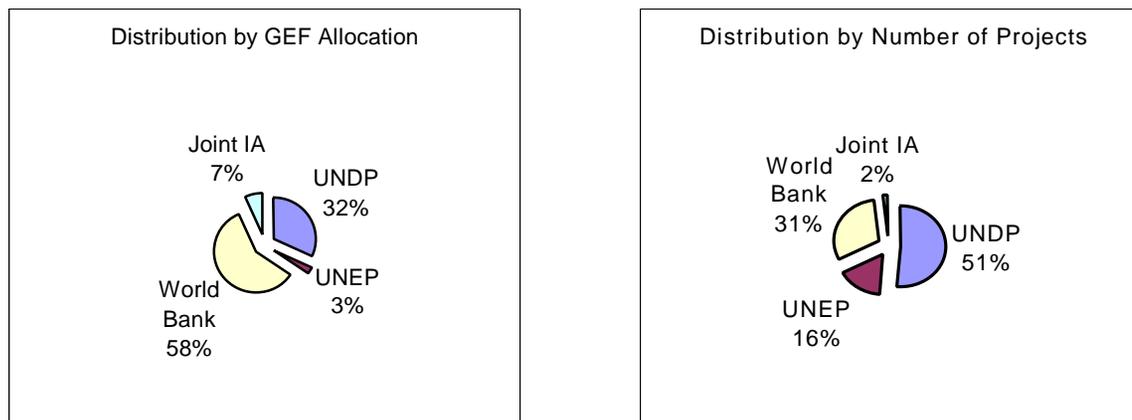
Table 1. GEF Financed Biodiversity Conservation Projects, Pilot Phase-FY 1999

Type of Project	Pilot Phase		GEF (FY1995-FY1999)		Total	
	Number	(\$million)	Number	(\$million)	Number	(\$million)
Full	59	333.7	78	578.5	137	912.2
Medium-Sized	n/a <sup>2</sup>	n/a	23	17.2	23	17.2
Enabling Activities	n/a <sup>3</sup>	n/a	164	30.8	164	30.8
Total	59	333.7	265	626.5	324	960.2

### GEF Allocation and Projects by Implementing Agency

12. Among the GEF's three Implementing Agencies, the World Bank channeled the largest allocation of GEF funds for the biological diversity focal area (58 per cent or \$560.4 million). This was followed by UNDP with 32 per cent (or \$306.6 million), UNEP with 3 per cent (or \$28.1 million), and 7 per cent (\$65.1 million) with jointly implemented projects (UNDP/UNEP and UNDP/World Bank). See Figure 2. In terms of number of projects, UNDP has the highest number, with 165 projects or 51 per cent of the total number of projects. The World Bank has 31 per cent (101 projects), followed by UNEP which has 16 per cent of the projects (52 projects). The remaining 2 per cent (5 projects) are jointly implemented (see Figure 2).

Figure 2. GEF Allocation and Number of Projects By Implementing Agency (Pilot Phase-FY1999)

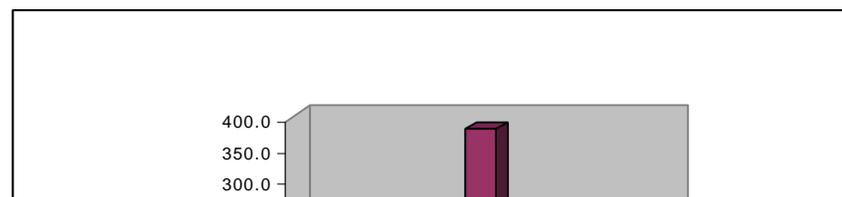


**GEF Allocation by Operational Program**

13. Projects in the biodiversity focal area are classified into four ecosystem-based operational programs for purposes of managing the portfolio. It is recognized that many of the projects, in addition to the primary operational program assigned, cover other ecosystem types. This should be taken into account in interpreting the information presented below on GEF allocation and number of projects by operational programs.

14. The largest operational program, both in terms of number of projects and GEF allocation is in forest ecosystems, with 59 projects (20 projects in pilot phase) and an allocation of \$381.4 million. This is followed by the coastal, marine and freshwater operational program, with 44 projects (14 projects in pilot phase), and an allocation of \$197.6 million. The arid and semi-arid ecosystems and the mountains operational programs consist of 21 projects (7 projects in pilot phase) and \$113.1 million, and 11 projects (4 project in pilot phase) and \$64.2 million, respectively (see Figure 3).

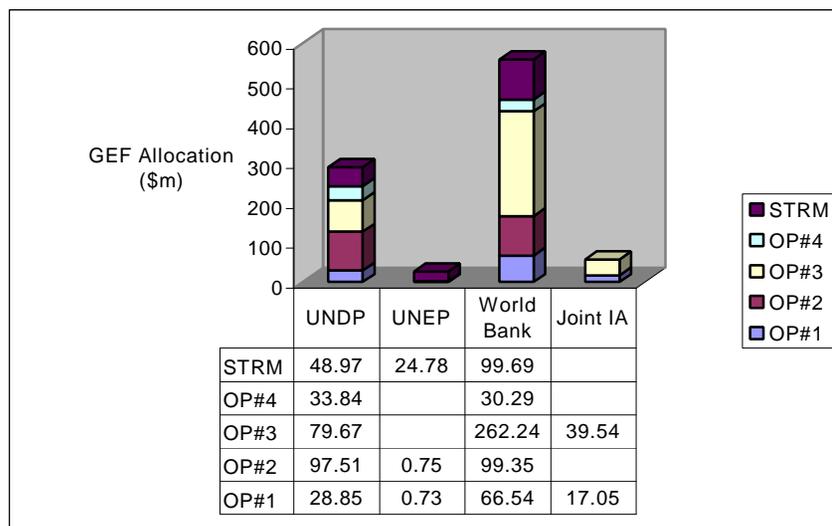
Figure 3. GEF Allocation by Operational Program (Pilot Phase-FY1999)



15. Most of the World Bank’s GEF allocation finances projects in the forest ecosystems operational program. This operational program accounts for 65per cent (or \$262.2 million) of the Bank’s allocation. Nearly three-fourths of UNDP’s allocation supports projects in two operational programs – the forest ecosystems program, which accounts for \$79.6 million or 35per cent of the allocation and the coastal, marine, and freshwater ecosystems program, with \$97.5 million or 38per cent of the allocation (see Figure 4).

16. Nearly all of UNEP’s allocation supports projects with short term response measures. Total GEF allocation for short-term response measures by UNEP is \$24.7 million. There are two other projects in OPs #1, and #2 (see Figure 4).

Figure 4. Distribution of GEF Allocation By Implementing Agency and Operational Program (Pilot Phase – FY 1999)<sup>4</sup>



### Full Projects

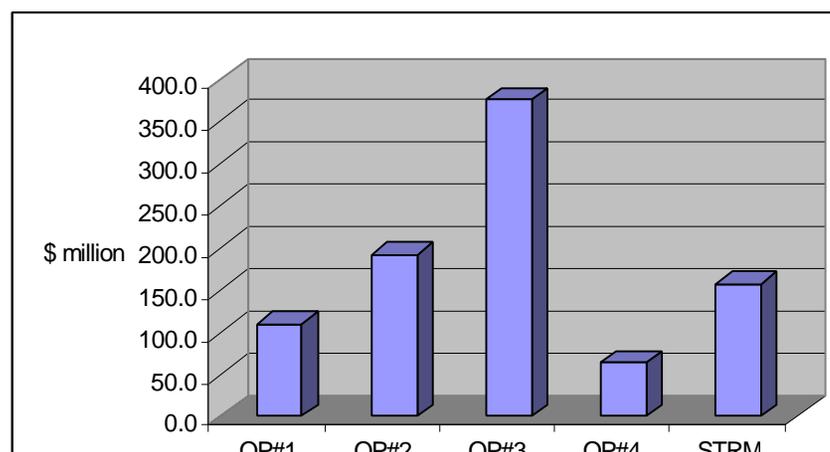
17. *Size and Composition of Full Projects.* The biodiversity portfolio comprises of 131 full projects with a total GEF financing of US\$919.5 million. This represents 95per cent of the total biodiversity portfolio size of \$960.2 million. Fifty-nine full projects, with a GEF financing of US\$333.7 million were approved during the GEF pilot phase (1992-1994) and the remaining 78 projects, with a GEF financing of US\$578.5 million were approved during the restructured GEF phase (1995-June1999). The World Bank has the largest number of GEF full projects, 68

Table 2. Number of Full Projects and GEF Allocation by Implementing Agency  
(Pilot Phase-FY1999)

	Full Projects <sup>5</sup>		Total Allocation <sup>6</sup>	Full Projects to Total	Share of Full Projects to Total Allocation
	Number	\$ Million	\$ Million	Percent	Percent
UNDP	58	289.0	306.6	31.9	94.2
UNEP	11	20.6	28.1	2.9	73.3
World Bank	68	545.5	560.4	58.3	97.3
Joint IAs	4	28.6	65.1	6.9	43.9
Total	131	919.5	960.2	100.0	95.7

18. *Distribution of Full Projects by Operational Programs.* The forest ecosystem operational program is the largest of the four program both in terms of number of full projects and GEF allocation. It is made up of 51 projects, with a total allocation of US\$375.4 million. The distribution of projects in the other operational programs are as follows: coastal, marine, and freshwater ecosystems -- 36 projects with a total GEF financing of US\$191.8 million; arid and semi-arid ecosystems -- 17 projects with a total GEF financing of US\$110.1 million; and mountain ecosystems -- 11 projects with US\$64.1 million from the GEF; and short-term measures -- with 19 projects with a total GEF financing of \$158.2 million (see Figure 5).

Figure 5. GEF Allocation for Full Projects by Operational Program  
(Pilot Phase-FY1999)



19. Under each GEF Operational Program, specific ecosystem types or geographical regions have been identified as areas that may require special attention or emphasis and they are:

- (a) Arid and semi-arid ecosystem – Africa and Mediterranean type climatic zone;
- (b) Coastal, marine, and freshwater ecosystems – tropical island ecosystems;
- (c) Forest ecosystems – tropical and temperate ecosystems; and
- (d) Mountain ecosystems – Mesoamerica, Andes, East Africa, Himalayas, Indochina, and tropical islands.

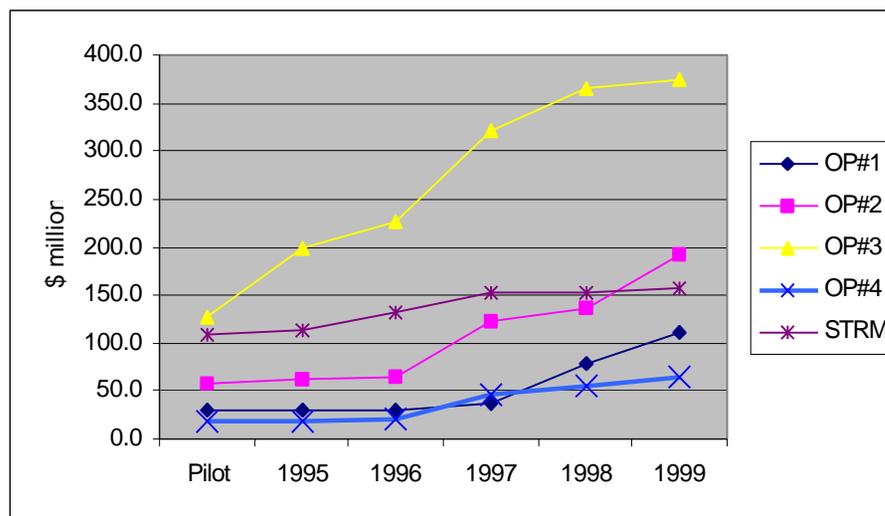
20. In both the arid and semi-arid ecosystems and the mountain ecosystems operational programs, a majority of the projects (80 per cent and 56 per cent of the projects respectively) focus on these special areas. In the case of coastal, marine, and freshwater ecosystems operational program, 27 per cent of the projects focus on the area of special emphasis, and in the forest ecosystems operational program nearly 65 per cent of the focus is on tropical forests.

21. The projects in the biodiversity portfolio can also be grouped into those focusing primarily on conservation and sustainable use issues in protected areas and those dealing largely with the production landscape of biodiversity of conservation importance. Except for the arid and semi-arid operational program, about 75 per cent of the projects in each operational program is made up of protected area management projects and the remaining focus primarily on the production landscape. In the case of the arid and semi-arid operational program, 70 per cent of the projects deal largely with biodiversity conservation and sustainable use in the production landscape and the rest address protected area management issues.

22. *Growth Trends in the Operational Programs.* The biodiversity portfolio has grown significantly since the GEF pilot phase (1992-1994) and the forest ecosystem operational program has the largest cumulative GEF allocation. The cumulative allocation for this program tripled, from less than \$130.0 million during the pilot phase to \$375.4 million by 1998-99 (see Figure 6).

23. For the coastal, marine and freshwater ecosystems operational program, the GEF allocation nearly tripled, from about \$57.0 million during the pilot phase to \$191.8 million in 1998-99. The arid and semi-arid ecosystems operational program increased more than four times, from about \$29.0 million during the pilot phase to \$110.1 million by 1998-99. Finally, the

Figure 6. Cumulative Trend in GEF Allocation For Full Projects By Operational Program (Pilot Phase-FY1999)



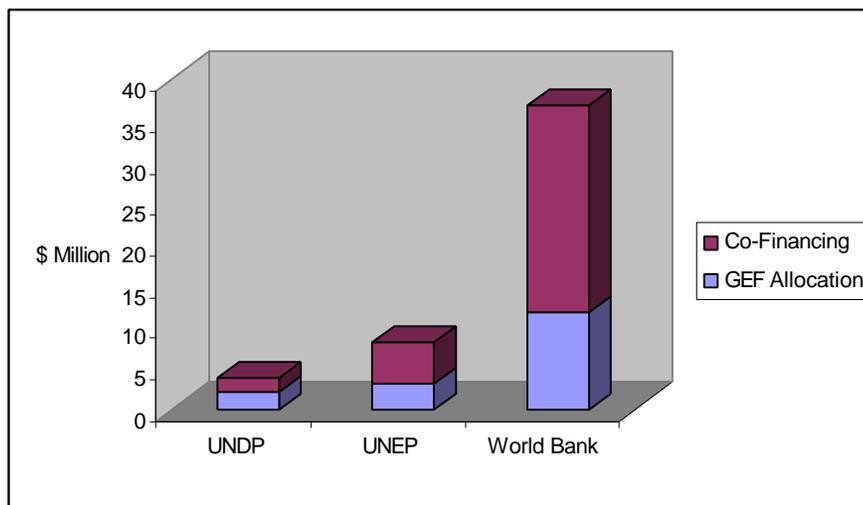
24. *Land Degradation.* For the GEF, as noted earlier, land degradation is not a focal area; it addresses a crosscutting issue. Thus, GEF provides support for land degradation control activities as they relate to the four focal areas. In the biological diversity focal area, there are 39 full projects that have major components addressing land degradation issues and 21 projects with cross-focal components in climate change (biomass renewable energy) and international waters (watersheds, wetlands, etc.) with land degradation activities. In general, these projects are helping to conserve biodiversity such as the habitats of endemic and endangered species of flora and fauna that are under pressure from land use changes that are resulting in the loss of vegetation cover and depletion of soils.

### Medium Sized Projects

25. The GEF Council approved medium-sized projects as one of the pathways for GEF funding in 1997. As of June 1999, there were 23 medium-sized projects in the biodiversity portfolio, with a total GEF financing of \$17.2 million, representing about 70 per cent of GEF financing for medium-sized projects for all focal areas. The total co-financing catalyzed for these biodiversity projects is \$38.3 million, twice the GEF allocation (see Figure 7).

26. The World Bank is the Implementing Agency for 15 projects, with a GEF financing of \$11.8 million. UNDP administers three projects with an allocation of \$2.2 million, and UNEP has

Figure 7. GEF Allocation and Co-Financing in Medium-Sized Projects By Implementing Agency (FY1997-FY1999)



27. The 23 medium-sized projects in the portfolio are distributed across the operational programs as follows: six in arid and semi-arid ecosystems (OP#1); six in coastal, marine and freshwater ecosystems (OP#2); eight in forest ecosystems (OP#3); and three short-term projects. There are no mountain ecosystem projects in the portfolio.

#### HIGHLIGHTS OF THE PORTFOLIO, IMPLEMENTATION PERFORMANCE, AND LESSONS

28. GEF projects are comprehensively reviewed annually by the Implementing Agencies and the Secretariat through the Project Implementation Review (PIR) process.<sup>7</sup> The objectives of the PIR are to provide:

- (a) a comprehensive overview of the GEF portfolio; and
- (b) information on trends in project performance; and (c) to highlight themes or issues that may have implications for the operational programs, project design and management, and scientific and technical issues to be addressed by the GEF, including its STAP.

29. The 1998 PIR covered 57 biodiversity projects, from all three GEF Implementing

30. The unsatisfactory performance was due to one or more of the following reasons -- political instability; high turnover of project personnel; inability of project actors, particularly Government and NGO actors, to reach consensus on implementation modalities and strategies; weak project management capacity; and delays in the procurement of goods and services. The Implementing Agencies have already taken steps to address these implementation issues.

31. Although the PIR indicated that almost 90 per cent of the GEF biodiversity portfolio under the review had ratings of “satisfactory” or “highly satisfactory,” the review showed that sustaining project activities following the completion of GEF funding is proving to be much more difficult than expected. The report identified 5 ingredients as critical for sustainability of projects: policy framework, longer-term funding sources, public awareness and understanding, local ownership, ability of institutions.

32. The PIR also provided important lessons that are critical for project success and these are being incorporated into project design by the Implementing Agencies and in overall quality assurance. The lessons are:

- (a) The need to ensure active and full involvement of local stakeholders in project design, implementation, and monitoring;
- (b) Biodiversity projects need to balance conservation efforts with activities that address more immediate socioeconomic needs of the intended beneficiaries; and
- (c) Project design and implementation should be flexible and phased according to the absorptive capacity of project actors and a project should have a realistic implementation period.

### **Public Involvement**

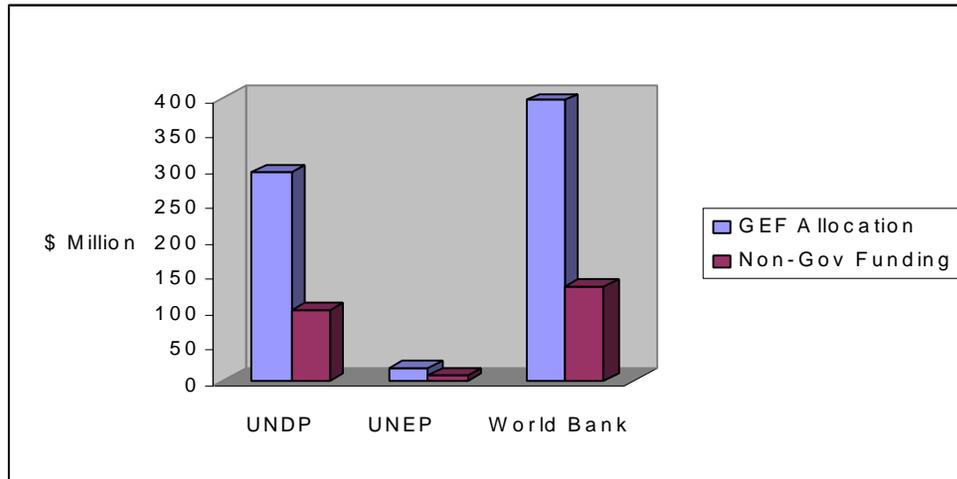
33. Traditional and rural institutions are an important stakeholder group in GEF-financed projects. The social concerns of local communities, often articulated through these leaders, include recognition of indigenous groups, property rights and usufruct rights, women’s role in conservation, resettlement and labor displacement, and sensitivity to the preservation of historical and cultural property.

34. The NGOs play an active role in project design, particularly in organizing stakeholder consultations and village meetings to ensure that the needs and priorities of the intended beneficiaries and other stakeholders are taken into account in project design. As noted in the

36. Based on the analysis of 135 biodiversity projects (or 42 per cent of the entire portfolio), the total GEF funding going to non-governmental groups is more than \$247.8 million, or 34 per cent of the total GEF allocation of \$719.1 million for these projects. As indicated in Figure 8, the World Bank administers about \$135.0 million of this funding compared with about \$100.0 million for UNDP.

37. Finally, NGOs are becoming an important source of co-financing for GEF projects. Based on information from 13 projects, total contributions from non-governmental sources are about \$33.1 million, (see Figure 8).

Figure 8. GEF Allocation and Amount of GEF Allocation to Non-Governmental Groups (for 135 Projects from the Pilot Phase – FY1999)



### **Private Sector Involvement**

38. The private sector (i.e. private entrepreneurs and firms) is a major stakeholder group in economic development in many developing countries. However, its involvement in conservation has been very limited; governments have traditionally spearheaded conservation. There are only 14 projects out of a total of 160 projects in the biodiversity portfolio (or 8.75 per cent) that have private sector involvement. As developing countries begin to deal with environmental issues within the context of sustainable development, the need for partnership with the private sector, as is being done on economic development issues, is becoming increasingly important.

### **Review of Sustainable Logging and Biodiversity Conservation**

40. The GEF supports programs in conservation and sustainable use of forests, with the exclusion of logging in primary forests. As we expand to work in the production landscape the question of whether the GEF should support sustainable logging in secondary forests, and if so what its role should be, is being explored through the ongoing Forestry Policy Initiative.

41. This initiative is being undertaken in collaboration with GEF's Scientific and Technical Advisory Panel (STAP) and the Centre for International Research in Forestry (CIFOR). The results of this study would form the basis for developing GEF operational guidance on sustainable logging, if necessary.

### **Land Degradation Prevention and Control**

42. As noted earlier, there are 39 projects in the biodiversity portfolio that have major activities addressing land degradation issues. However, because of the wide extent and severity of land degradation, particularly in semi-arid ecosystems and mountain ecosystems, several eligible countries continue to seek clarification about the potential for more GEF and other donor support to address land degradation prevention and control.<sup>8</sup>

### **Integrated Land and Water Management**

43. Under the policy initiative, the GEF would play a catalytic role, in partnership with other organizations, to assist eligible countries to develop and implement integrated and cross-sectoral program of policy reforms and investment to achieve sustainable use and management of land and water resources as well as global environmental benefits. The initiative would be developed using a river basin or sub-basin as the management unit, instead of political or administrative boundaries, to address water quality, quantity, and allocation issues as well as biodiversity conservation issues within the context of a country's sustainable development agenda. The initiative would specifically include

- (a) Reviewing past experiences with river basin management and lessons learned;
- (b) Developing operational guidelines on integrated land and water management based on good practices worldwide;
- (c) Demonstrating an integrated approach to land and water management in pilot basins or sub-basins in Africa based on the operational guidelines; and
- (d) Refining and disseminating lessons from the pilot projects and other projects to

GEF funding is proving to be much more difficult than expected. In response to this the M&E unit together with the Interagency Task Force and external partners is working on a study entitled “Sustainability in Biodiversity Projects”.

**Other Specific Issues**

45. STAP continues to provide critical advice on issues that are operationally challenging. Besides the Forestry Policy Initiative, they convened a special brainstorming workshop on taxonomy and have produced a report providing strategic advice on enhancing operations in this field. They are also undertaking a selective review on the issue of agrobiodiversity projects in the GEF portfolio, including a field visit. Work is ongoing under the leadership of the M&E unit to finalize a set of biodiversity indicators which will allow the impact and progress made in biodiversity conservation to be monitored and evaluated over time.

**II. CLIMATE CHANGE**

SIZE AND COMPOSITION OF THE CLIMATE CHANGE PORTFOLIO

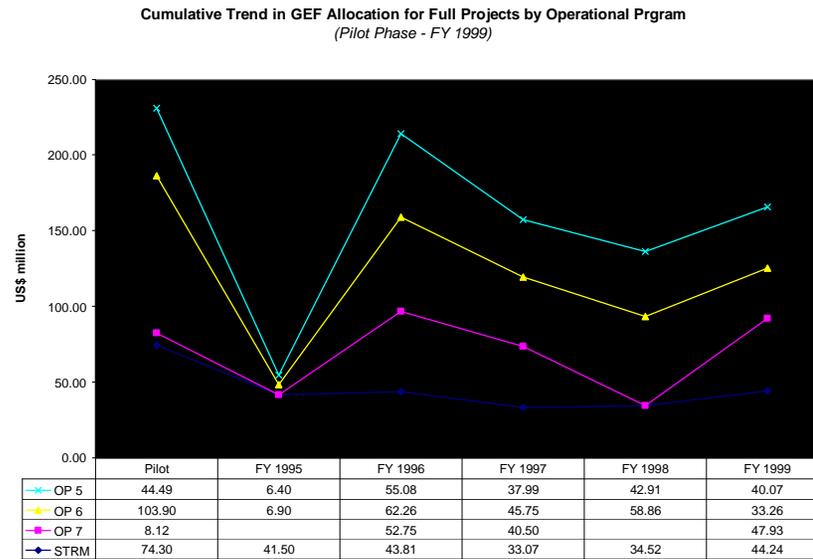
46. The GEF climate portfolio including the pilot phase (1991-94) has a total of 227 projects and a total cumulative commitment of \$884.01 million. However, most of the financial commitments are accounted for by 94 full projects. See Table 3.

Table 3. GEF Financed Climate Change Projects, Pilot Phase-FY 1999

Type of Project	Pilot Phase		GEF (FY 1995-FY1999)		Total	
	Number	(\$million)	Number	(\$million)	Number	(\$million)
Full	32	228.51	62	574.40	94	802.91
Medium –Sized	N/A	N/A	10	7.21	10	7.21
Enabling Activities	7	22.9	116	50.64	123	73.89
<b>Total</b>	<b>39</b>	<b>251.41</b>	<b>188</b>	<b>632.25</b>	<b>227</b>	<b>884.01</b>

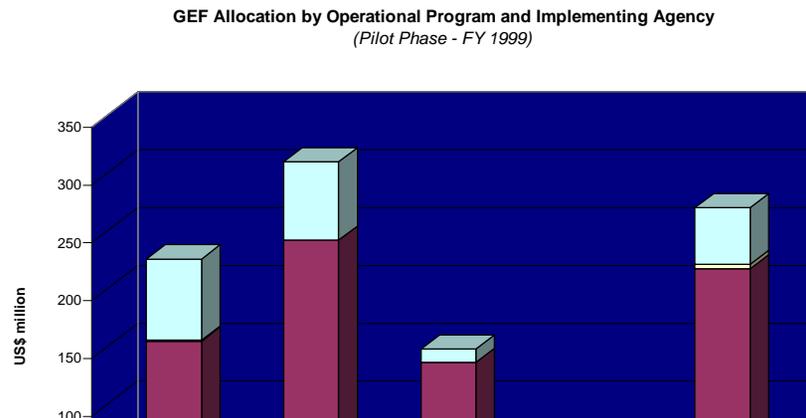
47. The largest portfolio in terms of projects and total commitments has been OP#6, removal of barriers to cost-effective renewable energy technologies. The next largest have been OP#5, removal of barriers to energy efficiency, and OP#7, commercializing new technologies. Many pilot phase projects were classified as short term, a category that has again grown in the past

Figure 9. Cumulative Trend in GEF Allocation for Full Projects by Operational Program (Climate Change)



48. Distribution of projects by Implementing Agency is shown in Figure 10.

Figure 10. GEF Allocation by Operational Program and Implementing Agency



49. The allocation of projects among the Implementing Agencies reveals that UNDP accounts by far the largest number of projects (60 per cent), largely because of its dominant role with respect to enabling activities. See Figure 11. However, the Bank projects tend to be much larger, such that it accounts for more than 70 percent of dollar commitments. See Figure 12.

Figure 11. Number of Climate Projects by Implementing Agency

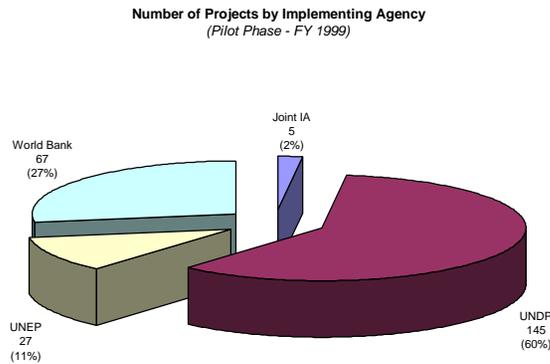
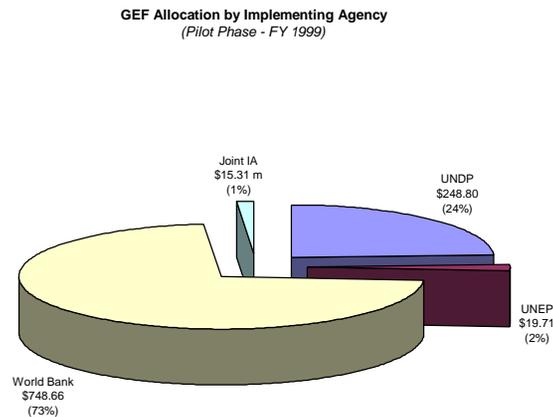
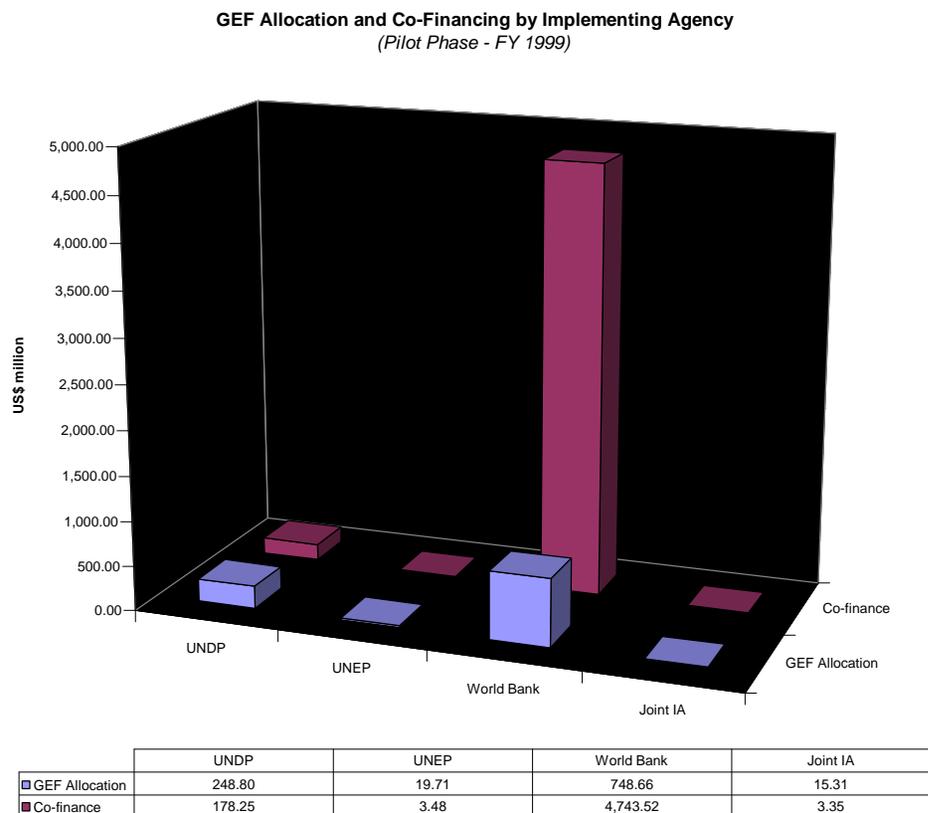


Figure 12. GEF Allocation of Climate Projects by Implementing Agency



of payments for energy services, particularly in projects aimed at removing barriers to energy efficiency and renewable energy technologies that are economically beneficial to the user.

Figure 13. GEF Allocation and Co-Financing for Climate Projects by Implementing Agency



#### HIGHLIGHTS OF THE PORTFOLIO, IMPLEMENTATION PERFORMANCE, AND LESSONS

51. The GEF climate change portfolio comprises 244 projects. This section of the report highlights some of the important features of the portfolio.

#### **OP#5 Removing Barriers to Energy Conservation and Energy Efficiency**

52. The resources allocated within this program continue to fall below the planned \$50

53. Key challenges will be to facilitate replication of successful GEF projects using non-GEF resources, rather than to repeat finance projects that have already been well demonstrated, and to apply the most innovative financing modalities where appropriate. Investment risk barriers should continue to be increasingly addressed by contingent financing (loans, guarantees etc.). The IFC has considerable experience with this model, but the approach is increasingly being incorporated in Bank and UNDP projects.

54. Annual OP#5 allocations should be at least maintained in view of diverse opportunities for cost-effective, market transforming projects. A wider range of strategies should be tested. Market pull modalities, such as cooperative technology procurement (CTP), are one of several alternative approaches that may merit greater consideration. This approach, widely used in the industrialized countries, relies on “pulling” markets for efficient technologies through competitive demand aggregation

#### **OP #6 Promoting Renewable Energy**

55. This program has promoted a wide variety of renewable energy technologies ranging from low-temperature solar thermal; biomass; geothermal; wind, hydro, and photovoltaic power for rural electricity supply; and grid-connected wind farms and photovoltaics. Annual allocations have always been below the initially projected amount of \$ 100 million to \$150 million. Commitments in FY99 declined to \$28 million, whereas the business plan had projected \$40 million.

56. The Renewable Energy Partnership is the most promising basis for promoting OP# 6 activities. The other short-term source of new projects is the involvement of the regional development banks, which have already proposed several renewable energy projects. The planned review of solar projects may also provide recommendations on strategies to increase responsiveness to country needs.

57. Rural photovoltaic (PV) projects continue to dominate the portfolio. About 50 per cent of all PV projects are exclusively focused on off-grid applications. Another 20 per cent are generic barrier removal approaches primarily focussing of regulatory and capacity constraints for renewable energy at the governmental level. The remaining portfolio is split into solar water, wind, biomass, geothermal, methane recovery and geothermal projects. The emphasis on PV has even been amplified in FY 99. Seven out of eight projects that have been added to portfolio are focussing on rural PV applications. The relatively high costs and risks of rural PV barrier removal interventions, and their marginal impact on fossil emissions, demand a more thorough comparison of these projects with alternative programming options. This is being pursued with a

assessment criterion, because the potential of different technology applications to generate global benefits seems to vary tremendously.

### **OP#7 Reducing the Long-Run Costs of Low GHG-Emitting Technologies**

59. The allocations to OP#7 in FY 99 are between \$37.0 and \$55.3 million (the variance is entirely due to uncertainty in the estimated incremental costs in the Morocco Solar Thermal Project), substantially below previous Corporate Business Plan (CBP) projections. The last CBP projected that the Implementing Agency pipelines will grow to average \$67 million annually during the next three years. Besides the approved PDFs, the Implementing Agency pipelines do not indicate any OP#7 projects.<sup>9</sup>

60. Projects have been approved for three technology-applications in this program -- distributed grid-connected PV power, biomass gasification, and solar-thermal power generation. Several technologies identified as promising in the program remain unaddressed, including: advanced biomass to liquid fuels, large-scale grid-connected wind power, fuel cells for distributed combined heat and power (CHP) applications, and advanced fossil-fuel gasification and power technologies.

61. With the exception of solar thermal, which seems to have an adequate pipeline, this program continues to suffer from inadequate numbers of projects to achieve programmatic objectives. Based on existing projects, there is evidence of considerable potential for more projects in biomass gasification and in grid-connected distributed PV generation. Projects for advanced conversion of biomass to liquid fuels would move to OP#11. That would essentially leave bulk PV and wind power and fuel cells for distributed applications that would remain unsubscribed.

62. Two workshops were held at the World Bank on March 11-12, 1999 to review the strategy of support for solar thermal trough and grid-connected distributed PV technologies. These workshops were attended by GEF Implementing Agencies, STAP, research laboratories, NGOs, representatives of the private sector and the GEF Secretariat. A conclusion of the workshop was that full commercialization of both solar thermal power and grid-connected PV would each require several billions of dollars in investments. It was clear to the workshop participants that GEF could not carry the entire burden alone. The workshop recommended that GEF should commit to fund the full incremental costs of the first three or four projects, evaluate the experience and then look for other partners to share the burden.

63. The time for appraisal of OP#7 projects, i.e., the interval between work program

64. Operational Program #7 aims to reduce the long-term costs of low GHG-emitting technologies. For this approach to succeed, the costs of the technology must decline for future users, as a result of learning. Ideally, the lessons and data generated by each plant would be used as inputs for the design of subsequent ones. This has not proved to be easy. For example, there are four approved or planned solar thermal power plants with incremental costs in the order of \$50 million each. Although submitted at different times, implementation delays have resulted in a bunching of implementation that will prevent optimal learning. Greater emphasis needs to be given in working with the Implementing Agencies to allow for more effective sequencing of projects.

65. Several issues have come up this year regarding possible support for integrated coal-gasification combined cycle technology for power generation under this program. Thus far GEF has neither been formally presented with a project concept, a PDF or a full proposal for support. However, GEF has been asked about its willingness to consider such a project in several experts meetings. The first issue is that the technology is *currently* of only equal or lower efficiency than commercial "super-critical" coal-fired Rankine cycle plants. So, projects at this time would not have incremental global environmental benefits when compared to the best available coal technologies. Second, in some instances, the projects are commercial and need only contingent risk financing, more appropriate for funding under OP# 5. Thirdly, since we would have to support several such projects to achieve programmatic cost reduction objectives, GEF would be reinforcing a lock-in of unsustainable fossil technologies.

66. Advances in supercritical coal combustion reduce the emission of GHGs in the short term through energy efficiency. But in the longer term they may make it more difficult for renewable energy technologies to compete by causing the fossil fuel baseline to be more cost-effective than it would have been otherwise.

### **Short-Term Response Measures**

67. The pipeline for 1999 indicates increased demand for funding for these projects. There may be a need, consistent with the Operational Strategy, to reiterate the importance of the operational programs relative to short-term response measures projects in the climate change focal area. The World Bank's *Prototype Carbon Fund* may be an alternative source of funding for such projects.

68. One challenge has been to demonstrate, consistent with the requirements of the Operational Strategy, that proposals were the country's "highest priority for funding," in the absence of a National Communication to the FCCC. Now that some such reports have been

Most eligible countries have now received financial assistance to prepare their first national communications to the climate change convention, and GEF is also working, through UNDP and UNEP, to provide the necessary technical support by means of its national communications support project.

70. During fiscal 1999, the Council authorized an additional \$100,000 per country to help maintain and enhance climate reporting for several Convention approved objectives. These objectives include: capacity building for assessing technology needs; improving local emission factors; capacity building for access to systematic observational networks; preparing a national program to address climate change; conducting national activities for public awareness; designing, evaluating, and managing projects; and facilitating access to information. The broader context for capacity building activities related to protecting the global environment will be the subject of the Capacity Development Initiative, to be undertaken as a Strategic Partnership with UNDP.

71. The GEF is beginning a comprehensive review of its support to initial national communications from Non-Annex I Parties to UNFCCC, and expects to complete this by COP 6, in November 2000. The purpose is to take stock of experiences and extract lessons for future support. The study will take into account the views of parties to the Convention and will examine:

- (a) The effectiveness of this modality of support;
- (b) The effectiveness and efficiency of GEF's operational procedures;
- (c) The influence of the support on broader capacity building and/or planning; and
- (d) Best practice from country experience.

#### **New Operational Programs.**

72. The GEF Council has approved elements of two new operational programs: one on transport and the other on integrated ecosystem management. The final version of the operational program on transport was published in October 1999, and projects are now being included in the pipeline. The GEF Council approved elements for the operational program on integrated ecosystem management in May 1999, a consultative meeting was held in September 1999 to obtain input from experts, and a draft operational program has been published for comments.<sup>10</sup>

and the World Bank Group have been developing a progressive strategic partnership to help achieve their shared programmatic objectives. The partnership would aim to commit \$200 million in GEF resources for incremental cost support for specific country programs while seeking \$600 million in World Bank commitments (not necessarily World Bank loans). The Bank has identified Uganda as the initial proposed partner under this initiative, which is intended to respond effectively to countries prepared to make long-term commitments to promote RETs.

### **Private Sector Involvement**

74. In May, the Secretariat submitted to the Council *Engaging the Private Sector in GEF Activities* (GEF/C.13/Inf.5), which describes how GEF plans to pursue greater collaboration with the private sector, particularly in climate change projects. The paper describes several barriers to more effective private sector participation in GEF activities, most notably a general lack of awareness about GEF in the business community and the perception that the project cycle is incompatible with private sector needs. The Council encouraged the Secretariat and Implementing Agencies to incorporate in project preparation the approaches described in the document including alternative feasibility studies, contingent financing, and a range of non-grant modalities.

75. These issues will be further explored in the context of an ongoing review of the portfolio of 20 solar home system projects. As a primary aim of these projects is typically to develop sustainable markets for the technology, the nature and impact of cooperation with private enterprise will be a central issue. To inform the review, the GEF M&E team is visiting selected projects, and a workshop will be held in Morocco with support from the Swiss government in March 2000.

76. The need for increasing awareness of GEF in the private sector in developing countries is one objective of the Country Dialogue Workshops. Additional targeted outreach efforts, including presentations to business, engineering, and technical societies, are also being planned for this purpose in cooperation with STAP.

### **Promotion of Technology Transfer and Capacity Building**

77. GEF's efforts to promote technology transfer and market development to enable greater access to energy-efficient and renewable energy technologies are described in a technical paper presented during the May/June 1999 SBSTA meeting in Bonn. The paper can be found among the documents presented at SBSTA's tenth session<sup>11</sup> and presented in an expanded form at COP 5.<sup>12</sup> This review indicates that technology transfer and capacity building are central elements of GEF climate projects and include a wide range of approaches commensurate with the diversity of

## **Implementation Performance and Lessons**

78. The Implementing Agencies and the Secretariat GEF selectively review projects through the annual Project Implementation Review (PIR) process. The objectives of the PIR are to provide:

- (a) A comprehensive overview of the GEF portfolio; and
- (b) Information on trends in project performance and to highlight themes or issues that may have implications for the operational programs, project design and management, and scientific and technical issues to be addressed by the GEF, including its Scientific and Technical Advisory Panel (STAP).

79. The 1998 PIR covered 119 projects, including 42 in the area of climate change, from all three GEF Implementing Agencies. Twenty-eight percent of the projects reviewed were rated “highly satisfactory” by the Implementing Agencies, 59 percent were rated “satisfactory,” and 13 percent were rated “unsatisfactory.” Fifteen projects had improved ratings in comparison to their ratings in 1997, while 11 projects had lower ratings.

80. The principal causes of unsatisfactory performance reported by Agencies were lower than expected implementation capacity in executing agencies; participatory approaches taking more time than expected; changes in market conditions, especially related to climate change projects; reductions in government counterpart and other contributions; lack of government commitment to project activities; and procurement delays

81. A consistent conclusion from previous reviews of the climate change portfolio—the importance of a favorable policy framework and incentives for the adoption of alternate energy and more energy-efficient products and technologies—was again the topic of substantial discussion in the 1998 PIR reports. Several projects positively influenced policies and regulations that have led to greater private sector participation and investments.

82. The Project Implementation Review also highlighted three cross-cutting issues selected for special attention in the 1998 review—sustainability, leveraging and capacity building.

- (a) *Sustainability*: It is proving more difficult than expected to sustain the results achieved and activities supported by GEF funding. Five ingredients for sustainability emerged from the project reports and discussions during the implementation review. They were: a policy framework that provides appropriate incentives; long-term funding

(b) *Leveraging*: GEF should adopt a definition of leveraging for its programs and projects that reflects financial resources and actions catalyzed by the GEF activities.

(c) *Capacity building*: The review concluded that more emphasis should be placed on identifying specific capacity-building needs, so project design and implementation can be tailored to address key constraints and institutions. Considerably more attention is needed on defining the results and qualitative impacts of GEF's capacity building efforts and will be a focus of the Strategic Partnership with UNDP, the Capacity Development Initiative.

#### OPERATIONAL CHALLENGES AND EMERGING ISSUES

##### **Overall Demand**

83. A major operational issue is the maturation of existing portfolios. GEF pioneers innovative approaches and will facilitate replication, so the demand for direct financing is expected to decline for the particular approaches that have been well demonstrated. Certain energy efficiency and landfill projects are now in this category. Overall demand for financing may however increase due to

(a) New operational programs (Operational Program #11, Promoting Sustainable Transport, and OP#12, Integrated Ecosystem Management); and

(b) Technical assessments (such as for wind and photovoltaics), that would help define new areas of assistance. UNEP is both mandated and well placed to undertake these assessments. The assessments and the application methodologies developed would be fed into the clearinghouse mechanism established under the UNEP-GEF Strategic Partnership for the use of the agencies undertaking the follow up country based work.

84. Other factors influencing the development of the portfolio might be:

(a) The influence of other mechanisms for climate change support, such as the Clean Development Mechanism and the World Bank Prototype Carbon Fund;

(b) The expanded use of contingent financing and other alternatives to grants to encourage economically attractive energy conservation, energy efficiency, and renewable energy projects;

- (e) Convention guidance mandating support for second national communications, including Stage II adaptation measures.

### **Overall Delivery Capacity**

85. Another major overall issue in the climate change focal area continues to be overall delivery capacity. The highly variable investment program in this focal area is characterized by a small number of very costly investments in new technology. Although the World Bank has been engaged in discussions with the GEF on a Renewable Energy Strategic Partnership, it has announced targets for delivery of GEF climate projects in future years below levels of recent years in a Board-approved strategy paper, *Fuel for Thought*. The IFC may become the primary agent in the Bank Group for energy projects, and the performance of IFC approaches, particularly funds, may therefore assume greater importance in the Bank's climate portfolio. A further issue for development of Bank climate projects will be the mesh between the objectives of the climate programs and the World Bank's increasing focus on poverty alleviation. This may imply a greater focus on rural energy projects as opposed to urban or industrial energy efficiency.

86. The expanded opportunities for regional development banks may expand delivery capacity, because these institutions maintain an active project focus in their energy programs.

### **Indicators for climate change projects**

87. The GEF is developing performance indicators for its climate change activities. Specific sets of indicators are being identified for the three initial Operational Programs in the climate change focal area. Program-level indicators are being developed to measure and communicate progress toward strategic organizational objectives; a draft was presented to STAP at its July 1999 meeting and is now being revised. The objective is to set in place monitoring and evaluation systems that can describe the cumulative impact of GEF projects on markets and technologies. Adding up performance measures from the individual projects provides relevant information, but additional measures of broader scope are also needed.

88. Initial project results as reflected in the PIR and several mid-term evaluations required in selected projects are also beginning to show the impact of GEF climate projects. For example, the utility that participated in the Mexico Ilumex project has committed to install 6.5 million efficient light bulbs using its own funds after the experience gained installing 1.7 million bulbs with GEF support. More extensive monitoring was done in the Poland Efficient Lighting Project implemented by the IFC and indicates a lasting reduction in bulb prices of more than one-third and acceleration of the market's growth by three years based partly on comparisons with

increasingly be examined for strategic fit and identification of national priorities. There is a further question of country ownership in the context of IFC projects that use funds or a global approach; in these projects ownership requires an endorsement at the time a specific investment is identified.

### **Leveraging and Replication**

90. Leverage is expected to be the driver of program impact in view of the relatively modest level of GEF interventions compared with mainstream energy investment decisions in recipient countries. However, as noted in the GEF Overall Performance study, assessing leverage remains an ambiguous concept. The development of a common framework for leverage assessments would be commendable to enable internal oversight and relevant performance comparisons in future PSRs. Pragmatic indicators of leverage are the projected annual levels of investment triggered in the target market by the project over the ten or twenty years following its implementation and the initial level of project co-financing.

91. Measuring GEF mainstreaming through dissemination and replication beyond the scope of the immediate GEF intervention remains a particular challenge in absence of clearly defined frameworks for such assessments. Mainstreaming assessments could be presented in the following two ways:

- (a) Number of replications within the system boundary (the market segment addressed by the actual GEF intervention); and
- (b) Number of replications elsewhere (in other markets without GEF assistance).

## **III. INTERNATIONAL WATERS**

### SIZE AND COMPOSITION OF THE INTERNATIONAL WATERS PORTFOLIO

#### **The Pilot Phase**

92. In this review, the Pilot Phase projects are analyzed separately, without attempting to regroup them according to the presently adopted Operational Programs. The adoption of the strategy for international waters in fact represents a major discontinuity with respect to the Pilot Phase, with the introduction of overall guidelines and priority concerns, the definition of general eligibility criteria for projects, and a first attempt to promote a programmatic approach. While the strategy already incorporates the overall experience of the Pilot Phase, lessons can however

(\$18 million) and Europe (\$17.8 million). By far the main issue addressed by Pilot Phase projects was ship related contamination (oil spills and other wastes) with emphasis on remediation measures and contingency planning (\$66 million), the result of opportunities offered by the World Bank regular investment programs in this sector. All other projects (UNDP) represented attempts to address marine and freshwater pollution with a variety of approaches. These ranged from a focus on science and technology (Gulf of Guinea), to integrated coastal management techniques (East Asian Seas), to testing ways to reduce/prevent impacts on biodiversity in ecosystems of global significance (Lake Tanganyika and Yemen), to specific on the ground interventions (Egypt).

94. The experience gained with the two projects for the environmental management of the Black Sea and the Danube was of particular importance in shaping the conceptual framework of the Operational Strategy. Here GEF supported and enhanced the efforts of the international community to facilitate a multi-country coordinated response to the dramatic degradation of water quality throughout the Black Sea Basin. The clear adoption of a watershed approach and the recognition of the interrelations between the watershed and the coastal-marine environments, allowed the two projects to operate within correct system boundaries and hence to produce an effective analysis of causes of degradation and to discriminate between local and transboundary degradation factors.

95. The imperative, and the challenge, of achieving multi-country collaboration was evidenced by these two as well as by other Pilot Phase projects (Gulf of Guinea, Lake Tanganyika). The need to operate within the framework of existing regional intergovernmental agreements and to facilitate the establishment of new ones, where none exist, clearly emerged as a priority in project design, thus opening the way for the effective participation of UNEP to the international waters programs of the restructured GEF.

96. Overall, the main lesson that can be drawn from the Pilot Phase experience relates to the involvement in project design and the participation during implementation of recipient countries, of local institutions, and of the many stakeholders that manage, and depend on, water resources. Lack of effective country ownership, in its widest meaning, in several GEF Pilot Phase projects can be identified as the main cause of some of the failures that have been recorded by the Project Implementation Review of Pilot Phase projects. Finally, the need for collaboration among different Implementing Agencies leading to more comprehensive approaches became evident on the basis of experience with these early projects.

#### **Overall Portfolio GEF1 (1995-1999)**

international waters projects. This growth trend reflects, on the one hand, the long “response time” to the new strategy required by GEF Implementing Agencies and recipient countries and, on the other hand, an actual increase in the number of such projects requested. Present forecasts for FY00 are for further growth. Preparation of 15 full project proposals is under way.

99. The World Bank portfolio includes nine projects (\$80 million), most of them approved during FY99. Block-B preparation funds for two World Bank projects are presently active. UNDP is implementing ten full projects (\$81.7 million), with five under preparation (PDF-B). Finally UNEP has six projects (\$21.9 million) and eight more are being prepared with Block B funds. Two additional projects (\$27.3 million) are being implemented through co-implementation arrangements among the three Implementing Agencies. Note that during FY99, two World Bank projects that entered the Work Program were prepared with non-GEF preparation funds.

100. Africa has had the largest share of funds allocation (\$63.4 million for four projects), followed by Asia with an allocation of \$52.8 million (five projects), Latin America and Caribbean States (\$38.6 million and six projects), Eastern Europe (\$22.3 million and six projects), Small Island Developing States (\$12.3 million, one project). Finally \$20.9 million have been allocated to global projects. Presently active PDF-B grants would indicate that the focus on Africa will be maintained during the next year, as five projects are under preparation.

101. The large majority of full projects and PDF-Bs are regional, multi-country efforts (28); only five are single country. Over 118 GEF recipient countries are involved in international waters projects. Only two Medium-Size Projects (including a targeted research) have been approved so far in the international waters focal area.

### **The Length of the Project Cycle**

102. Analysis of the current portfolio permits some preliminary conclusions with respect to the duration of the Project Cycle. The following data emerge from the experience gained so far:

(a) From PDF-B approval to Work Program inclusion the average time is over 2 years.

(b) From Work Program inclusion to final CEO endorsement, the average time is around 1.2 years.

103. Assuming one additional year for concept development (PDF-A) and for the time necessary to reach the effective implementation of projects, the resulting average overall duration

104. Notwithstanding the general trend noted in the last year towards reduction in the time from concept to project execution, the excessive duration of the Project Cycle in the international waters focal area remains a major concern. The limit of \$350,000 for Block-B preparatory funding may be constraining timely development and implementation of projects in this focal area.

#### HIGHLIGHTS OF THE PORTFOLIO, IMPLEMENTATION PERFORMANCE, AND LESSONS

##### **OP#8 Waterbody Based**

105. This program consists of measures addressing highest priority transboundary environmental problems that seriously threaten waterbodies: discharge of pollutants, loss of wetland habitats, over-exploitation of fisheries, excessive withdrawals of water. The main morphological units and Ecosystems are transboundary freshwater basins and aquifers and large marine ecosystems (LMEs). The long-term goals are to achieve changes in sectoral policies, activities and investments so that transboundary problems will be resolved and the decline of badly damaged waterbodies and their living resources (including fisheries) will be reversed. Because of the immensity of the task, this program has an experimental learning approach.

106. The short-term objectives are

- (a) To address various transboundary concerns in different types of waterbodies and geographical settings (one project for freshwater bodies and one for LMEs in each of the five developing regions); and
- (b) To develop fully in one degraded LME a GEF strategic approach so that significant investments are leveraged and regular programs of Implementing Agencies are harnessed to address priority transboundary environmental concerns.

107. Projects endeavor

- (a) To clarify the nature of transboundary problems affecting a specific waterbody;
- (b) To assess priorities to define sectoral activities and policies of countries causing priority problems;
- (b) To assist countries to establish cooperation and reach informed consensus on key

that only three projects are currently under implementation or completed, while nine are in the appraisal phase. The total allocation is of \$97.9 million. The first main objective calls for projects addressing different transboundary concerns in different types of waterbodies and geographical settings. The portfolio contains projects addressing a variety of issues, intended to fulfill this objective.

(a) *Depletion of Transboundary Fisheries.* Several OP#8 projects and preparation grants address the issue of sustainable fishing as a component of the overall management of a specific degraded water-body (Lake Victoria, Mediterranean Sea, Patagonia Shelf, Caspian Sea, Bay of Bengal, Benguela and Canary Currents, South China Sea). Actions addressing directly fisheries involve assessments of present conditions, the enforcement of international agreements and codes of conduct, changes in policy and legislation, and, to a minor extent, changes in the behavior of fishing communities and commercial enterprises. Other projects address the issue indirectly. In fact by targeting land-based sources of transboundary water pollution and/or excessive water abstraction they tend to remove some of the causes of fisheries stress. The overall allocation for actions and project components directed to fisheries protection is relatively small. The current portfolio does not include any single project exclusively dedicated to fisheries.

(b) *Transboundary Pollution.* As a consequence of the results achieved with the Pilot Phase projects in the Black Sea Basin, which identified excessive *discharges of nutrients* causing eutrophication as the major transboundary problem, two investment projects in the portfolio address this global problem. These are in the Black Sea Basin (Georgia) and Baltic Sea (Poland). Actions are aimed at reducing nutrient runoff through changes in agricultural practices. Among the project concepts, a number relate to this specific issue and, if developed in full projects, will provide opportunities for effective demonstrations dealing with agricultural reforms, wetland rehabilitation (Danube countries), and urban waste treatment for nutrient removal (Moldova). The focus on Eastern Europe reflects the “follow up” character of these interventions with respect to Pilot Phase projects. Eutrophication control, an emerging global issue, will however be part of other projects too (Plata estuary, South China and Yellow Seas). The total allocation for nutrient reduction investments is so far very small (\$5.5 million). A substantial increase is foreseen for the next few years.

(c) *Land-Based Sources of Pollution.* Several regional projects address the general issue of land based sources of fresh-water/marine pollution (Mediterranean Sea, Patagonia Shelf, Caspian Sea, Plata Estuary, Yellow Sea; Dnieper Basin, Lake Ohrid).

precision. This amount will however increase, as implementation of the results of priority setting projects becomes more common.

(d) *Water Abstraction and Scarcity.* Only one project (Mekong Basin – \$11.1M)) deals primarily with the management of water allocation and utilization, which is the primary transboundary issue in the basin.

(e) *Loss of Wetland Habitat.* No project in the portfolio addresses this issue exclusively. Wetland loss is considered within the framework of the several diagnostic LME/Freshwater Basin regional projects. Should this issue emerge from these diagnostic projects as one of major transboundary significance, projects dealing with wetland restoration will be object of future requests (South China Sea).

(f) *The Black Sea Basin Ecosystem.* In the Black Sea Basin GEF action has advanced further than in other water-bodies. Having completed the diagnosis of the causes of the serious degradation (transboundary nutrient pollution), and the establishment of permanent regional multi-country management bodies, littoral/riparian countries are now in the process of identifying and agreeing upon the policy/institutional reforms and investments necessary to reverse degradation trends. Incremental GEF financing will be sought to strengthen the regional framework and to facilitate demonstrative actions throughout the Basin or LME in the fields of agricultural practices, wetland restoration, industrial/domestic effluents tertiary treatment for nutrient removal. The first goal has also been defined (maintaining 1997 nutrient levels). Finally, the interrelations existing among river basins, coastal and marine environments, have been fully understood, accepted and translated into a Black Sea Basin-wide approach, with complementary actions being designed in the Danube Basin, in the Black Sea itself, in the Dnieper Basin. The total allocation has been \$5.7 million (GEF1, two projects - Pilot Phase \$17.8 million, two projects).

109. Factors in these remarkable achievements have been the high level of coordination and collaboration reached among development assistance agencies and donors, and the commitment of the environmental sectors, including governmental institutions, in the countries. GEF incremental funding focused over an extended period of time on combating transboundary degradation causes, has been the effective catalyst of collective action.

110. Many difficulties have however emerged. The strategic approach encouraged by the GEF Operational Strategy has not so far been completely implemented and efforts of the

bodies. The private sector still needs to be fully involved. Collaboration among GEF Implementing Agencies has not yet effectively occurred.

### ***Different Approaches in Project Design***

111. The above review was aimed at assessing GEF actions under this program with respect to the main global issues and concerns and to short term program objectives. It may be useful to analyze the OP#8 portfolio under a different perspective, dividing approved full projects into two main categories reflecting different design approaches:

(a) *Diagnostic-priority setting projects.* These apply the TDA/SAP methodology recommended in the GEF Operational Strategy, to entire LMEs and watersheds; seven full projects (\$37.4 million) and five PDF-Bs were conceived. These were conceived as strategic or preparatory for on-the-ground remediation demonstrations, and may result in a number of “implementation phase” projects of the following category. The present portfolio includes projects in all development regions, with emphasis on LMEs.

(b) *Action-Oriented Projects.* These include remediation investments and projects addressing at an LME or watershed level the already identified priority transboundary issues – four full projects resulted for a total allocation of \$25.3 million (Poland, Georgia, Mekong Basin, Patagonia Shelf). Six project concepts are in an advanced phase of preparation.

112. The trend that emerges as new project concepts are being developed shows a shift from the first to the second category. This is due to the growing “maturity” of the portfolio, and to an ongoing process of follow up to the strategic projects. All OP#8 projects can be assigned to one of the two categories with one notable exception, the Lake Victoria Environment Management project (\$35million). This major initiative takes a somewhat intermediate approach. It in fact addresses in an action oriented manner all perceived environmental problems of the lake, without clear transboundary prioritization.

### ***Observations and Gap Analysis***

113. With only two projects having been completed, one under implementation, and nine under appraisal, very few points can be made.

(a) Remarkable advances have been made towards achieving the program’s short term objectives, as far as geographic distribution, diversity of issues been addressed, testing of strategic approaches are concerned.

management. GEF actions have raised the level of awareness on these fundamental issues, at a global, regional and local level.

(d) Countries sharing a pilot degraded water-body (Black Sea) have been successfully assisted in identifying the causes of transboundary degradation and the priority remediation actions, following the comprehensive and participatory approach proposed by the GEF Strategy.

(e) Efforts have been made to foster sustainability of multi-country management arrangements (river basin commissions, regional conventions, and multilateral agreements) through enhanced country ownership of, and participation to, regional coordinated initiatives.

(f) Two investment projects of agricultural reform aimed at nutrient reduction with a high replicability potential and involving the private sector have been approved. More of these demonstrations, targeted to major transboundary issues of specific water-bodies, are in the pipeline. It is expected that this type of demonstrative replicable actions will grow and become prevalent in the GEF portfolio as the numerous already approved diagnostic water-body wide projects near conclusion.

114. Some gaps remain as far as issues and geographic distribution, as well as deficiencies in the ways projects are being designed and implemented.

(a) Underground waters are not yet addressed by any project. Implementing Agencies have not been able to raise the interest of recipient countries in considering actions to restore the quality of these water resources of critical importance. This might also be due to the lack of focus of GEF Strategy and program guidelines, which do not take into consideration the specificity of this type of resources. Leveraging actions under OP#8, aimed at remediation, presents however objective obstacles. The quality of underground waters in fact, once degraded, can only be restored through very long-term commitments, and only in certain cases.

(b) While all development regions are represented in GEF OP#8 portfolio and many of the most degraded water ecosystems are being or will be addressed, outstanding critical gaps can be observed from a global perspective. Reference is made to the huge freshwater basins of Asia, some of them highly degraded. GEF facilitated actions are being taken by many Asian littoral countries to rehabilitate the coastal and marine

traditional execution schemes, although sometimes justified, may hinder the development of the GEF potential and novelty. Innovative solutions in this field, involving the private sector, are however present in OP#8 portfolio (Poland, Georgia, and Danube countries).

116. The impacts of the actions so far developed by the GEF under OP#8 for restoring water ecosystems health, can only be assessed at this early stage relative to the number, strategic distribution, and effectiveness of the processes that have been set in motion, aimed at reversing degradation trends. As far as number and distribution (with the notable gaps cited above) the impact has been outstanding. Effectiveness is being tested in one case, the Black Sea Basin. Hence the importance that this multi-country, multi-project long term initiative has for the future evolution of this program.

117. Another relevant criterion in the evaluation of the overall Program Status, is the degree of replicability of the projects in the portfolio. Replicability is essential to the GEF strategy: funded demonstrative actions will in fact enhance their effectiveness through replications. Most of the portfolio consists of preparatory, or enabling, waterbody-wide priority setting projects, aimed at initiating processes to reverse negative trends and hence not “replicable”, except some pilot demonstrations components. Two full projects under OP#8 have instead been specifically designed as replicable demonstrations (Poland, Georgia), building on regular World Bank investments. The next challenge will be the creation of regional frameworks that will facilitate a self-sustained process of replication, also through mainstreaming in regular country-based programs of the Implementing Agencies.

#### **OP#9: Integrated Land and Water Multiple Focal Area**

118. This program consists of preventive measures to minimize transboundary environmental degradation and/or further damage to biodiversity-rich ecosystems. It is intended to help countries adopt relevant sustainable development strategies for shared water resources and their basins. The main morphological units and ecosystems are transboundary freshwater basins and aquifers, oceanic islands (small island developing states, or SIDS), and large marine ecosystems (LMEs). The long term goals are to assist countries in changing from sectoral to integrated management of land and water resources and in projects addressing multiple focal areas toward the objective of sustainable development.

119. The short term objectives are:

- (a) To address land degradation in different development regions with a focus on

(d) To assess the usefulness of multi-country programming of strategic actions as a tool to gather governments and other stakeholders consensus on sustainable development strategies for shared resources.

120. Projects endeavor:

(a) To address land degradation through management of both surface and underground waters in transboundary basins as a mean to reach sustainable land and water resources use;

(b) To help SIDs address their special needs with focus on integrated freshwater and coastal areas and fisheries and other living resources management.

(c) To address important transboundary wetlands, coastal and marine ecosystems and issues linked with climate change focal area.

121. Seven projects have been so far approved by Council, including six under implementation, for a total allocation of \$74.8 million. The number of preparatory funds that have been granted (9), is an indication of the growing response to this program. A sharp increase in allocation is in fact foreseen for the next three years.

122. The diversified short-term objectives of this program have a common emphasis on the prevention of further degradation of the aquatic environment and its biological diversity. There is a strong focus on prevention measures for important ecosystems that are still functional, although threatened. All of these projects arise from already identified transboundary priority concerns and attempt to reverse degradation trends through further diagnostics, establishment and/or strengthening of multi-country management mechanisms, policy reforms, setting of transboundary and national priorities for future actions. In general, GEF preventive action under this program will aim at promoting changes from sectoral to integrated management of land and water resources.

123. Two main global cross cutting threats are also being addressed, from the water perspective, by this program:

(a) *Land degradation* - as it relates to water scarcity, conflicting water uses, and excessive sediment loads due to accelerated soil erosion; and

### ***Integrated Management of Important Water Ecosystems***

125. Eight projects and preparatory funds are essentially targeting this ambitious objective in a variety of geographic and development conditions. The total allocation for approved full projects is of \$59.3 million

(a) The Red Sea-Gulf of Aden, the East Asian Seas, the Pantanal Wetlands in the Upper Paraguay Basin, the South Pacific, the Tumen River (full projects); and

(b) The Western Indian Ocean, the San Juan River Basin in Central America, the Baltic Sea (PDF-Bs).

126. Although all of them share the focus on sustainable management, these projects include a variety of actions and approaches. In some cases the projects fulfill the need to prioritize and implement preventive actions and to establish/strengthen multi-country mechanisms of cooperation (Red Sea, South Pacific, Baltic Sea, Western Indian Ocean); the sustainable management of fisheries and of marine habitats is an important component of these projects. Others address primarily coastal management and pollution prevention (East Asian Seas), protection of wetlands from degradation agents such as sedimentation, over-fishing, land reclamation, pollution (Brazil: Pantanal Wetlands), biodiversity protection (Tumen River), multi-country watershed management (San Juan Basin).

### ***Addressing Land Degradation***

127. Two full projects, both under implementation, and five preparatory funds, address from the water perspective this major issue. While ongoing projects include actions in Central Asia (Aral Sea) and South America (Bermejo Basin), future focus will be on Africa as the five projects under preparation will enter the GEF Work Program (Lake Chad Basin, Okavango Basin, Niger Basin, Senegal Basin, Volta Basin). The total allocation is still modest: \$15.2 million, but is expected to increase as projects in preparation begin implementation.

128. The Bermejo River project is of particular importance. It is the first phase, presently nearing completion, of a two phased effort fully adopting the strategic approach supported by the GEF Strategy. The identification of the main transboundary threat (accelerated erosion) and the agreement on priority preventive actions, including on the ground pilot experiments, institutional changes and investments, have been the object of the first phase. Future actions will concentrate on facilitating policy reforms and investments demonstrating sustainable ways and agricultural behaviors to reverse degradation trends.

More efforts will be needed in order to raise the awareness of the riparian upstream countries and identify/implement alternative agricultural solutions.

### ***Focus on Africa***

130. A unique opportunity to combat land degradation and promote integrated land and water management is emerging in Africa under OP#9. Requests for GEF assistance have been received from many countries sharing critical watersheds. Five preparatory funds have been granted and project preparation is actively ongoing. New concepts are being elaborated and will soon enter the GEF pipeline. It is expected that within the next two years, all the arid and semi-arid regions of Africa will be covered by GEF OP#9 support:

- (a) PDF-B: Lake Chad Basin, Okavango Basin, Niger River Basin, Senegal River Basin;
- (b) PDF-A: Volta Basin; and
- (c) Concepts: Nile River Basin, Lake Abbe – Awash Basin.

131. A related initiative is being elaborated for a Regional Drought Management Programme in the Southern African region (SADC). Taking also into consideration the Pilot Phase Lake Tanganyika Project, and the OP#8 Lake Victoria Project, the achievement appears outstanding and the opportunity certainly unique.

132. How to effectively respond to African countries and to assist them to integrate the protection of the uniquely valuable African ecosystems with the imperative of social-economic development, is the challenge now facing the GEF and its Implementing Agencies. Innovative project design enhancing country ownership, an enhanced catalytic role of GEF incremental funds, the mainstreaming of global/transboundary environmental concerns in the Implementing Agencies regular programs, and close cooperation among Biodiversity and international waters projects, will be the key factors of success.

### ***Adaptation to Climate Change***

133. This objective, although not specifically spelled out in OP#9 guidelines, is implicit in its overall objectives. Protection of water resources and habitats in Small Island States and littoral regions, including coral reefs, the assessment of the strategic uses of underground waters, the protection of watersheds from extreme climatic events through integrated land/water management, are all adaptation measures that can be implemented under OP#9 guidelines.

134. Components of several OP#9 projects already address this emerging issue: freshwater

### *Observations and Gap Analysis*

135. The relatively small number of approved full projects precludes a more in depth analysis on relevant aspects such as impacts and project design issues (methodologies/approaches, replicability, sustainability, etc.). Emphasis in this review has hence been placed on its implications for future priorities and integration across focal areas, rather than on the present achievements, however notable, of this program.

136. One general conclusion emerges from the portfolio analysis. The wide-ranging programmatic objective of OP#9, characterized by flexibility in approach, multiple global benefits aim, and focus on most vulnerable ecosystems and human populations, makes this GEF Program a particularly effective tool in addressing many critical aspects of the global issue of water in the developing nations. This program has the potential to evolve, as the present portfolio already demonstrates, and adapt to emerging issues and trends. Water-body wide OP#9 projects (Niger, Volta) may in fact evolve into the indispensable initial steps of a long-term commitment of the GEF to a specific region. If properly designed as first building blocks of an overall GEF regional program, these projects will set the institutional framework for cooperation among countries and donors, and identify the opportunities/projects for responding to pressing regional and local needs while securing global multiple focal area benefits.

136. *Underground Waters.* Projects addressing underground waters are not overtly present in OP#9 portfolio. It has to be mentioned however that awareness is rising among Implementing Agencies and recipient countries on this issue. Dialogue has been established on the formulation of concepts dealing with the protection of transboundary subsurface water resources. They are:

- (a) Underground Waters and Drought Management in the SADC Region;
- (b) Management of the Guarani Aquifer (Brazil, Paraguay, Uruguay);
- (c) Strategic Management of the Nubian Aquifer.
- (d) Assessment of the Renewable Aquifers of the Eastern Desert - MSP (Egypt).

137. In the first three cases, GEF is being called to address resources of global significance. The interest of the Medium Size Project transcends the obvious local impact because of its potential replicability to flood recharged aquifers in arid areas. This major gap in the international waters portfolio of the GEF may therefore be filled through these developments.

affecting the coastal-marine environment and issues of general relevance to the focal area with the aim of spreading future use of environmentally benign practices. Projects will be limited to a representative number.

139. The short-term objectives are:

- (a) To conduct one demonstration project on land based activities (Global Plan of Action, or GPA) in each of the five development regions;
- (b) To harness regular programs of UN specialized agencies in addressing ship related concerns and global contaminants; and
- (c) To develop a learning culture in the focal area by examining lessons learned and disseminating results.

140. Projects endeavor:

- (a) To demonstrate activities that can minimize contamination of marine water from **land-based activities** as well as other negative impacts (flow alterations, loss of habitat) included in the GPA;
- (b) To demonstrate activities to reduce **global contaminants**;
- (c) To demonstrate and apply new technologies minimizing damage from **ship related contaminants**, fishing, spreading of non-indigenous species, release of POPs and other globally pervasive contaminants (e.g., nitrogen and its role in coastal eutrophication); and
- (d) To provide global or regional **technical support** the focal area through increased awareness, dissemination of lessons, and identification of priorities for action.

141. Only \$38.1 million have been so far allocated under OP#10, for six full projects and two MSPs. All these projects have been included in the Work Program during the period 1998-1999. Preparation funds (Block B) for five additional projects have also been granted, mostly during the same period. Concepts will soon develop into PDF-B requests. A certain growth of allocations can be expected during the next year. The first three components above have a common focus on contaminants; the third one is intended for general technical support.

related issues in the upstream section (water allocations, dams releases management, land tenure, discharges) in an attempt to reduce stresses to the coastal environment and rehabilitate the diked estuarine wetlands. The Russian Arctic project will analyze hot spots of transboundary land based pollution affecting the fragile Arctic marine environment and its living resources, identify policy/investment, remediation measures, and develop financial/technical implementation packages. This variety of approaches conforms with the demonstration nature of this component.

143. OP#10 allows for one demonstration project in each development region: requests for eligible cases for sub-Saharan Africa, North Africa and Middle East, and Asia have not yet been received.

#### ***Global Contaminants***

144. Under this component GEF funds the incremental costs of actions addressing the phasing out of persistent toxic substances as they relate to aquatic environments. These substances include pesticides (including DDT), industrial accidental by-products (furans, dioxins), PCBs, heavy metals (Hg). The recently established international negotiations for the phasing out of twelve persistent organic pollutants (POPs) have greatly increased the potential of this component of OP#10.

145. During FY 99 a series of assessments and demonstration project concepts/PDF-Bs have been developed according to a deliberate strategic portfolio growth:

- (a) Regionally Based Assessment of Persistent Toxic Substances (PDF-B);
- (b) Reducing Pesticide Runoff to the Caribbean (PDF-B);
- (c) Alternatives to DDT for vector control in Mexico and Central America (concept);
- (d) Persistent Toxic Substances - Country Case Studies (concept);
- (e) Persistent Organic Pollutants, Food Security, and Indigenous Peoples in Arctic Russia (MSP concept).

146. It is expected that the three concepts will develop into PDF-B or MSP grants in 1999. These initial projects will represent an effective contribution to the ongoing global effort to reduce the perverse effects of persistent chemicals on human life and the environment. They will also provide general guidelines and priorities, thus enabling the GEF to respond rapidly and

148. Resources allocations to this component will most likely increase and be at the high end of the existing during the next few years.

***Ship Related Contaminants***

149. Oil spill response/contingency planning, and other remediation measures to address oil and garbage releases from ships, have been financed by GEF during the pilot phase, for a total of \$66M, the largest allocation so far for any single international waters issue. With the adoption of the Operational Strategy focus has been shifted to preventive measures. Under this component of OP#10, the GEF would fund the incremental costs of

- (a) Demonstrations to prevent transfer of non indigenous species in ship ballast water;
- (b) Demonstrations of new information technologies and management systems to reduce risks of collisions along busy routes, and to prevent unauthorized releases of contaminants. Only one additional project (\$3.1 million) specifically addressing oils spills has been approved after the adoption of the Strategy. Its purpose is to strengthen the capacity of the Western Indian Ocean SIDS to deal with the risks/effects of oil spills near globally valuable ecosystems (Aldabra atoll).

150. The issue of alien species introduction is being addressed by a project recently approved (\$7.6 million). This project will demonstrate in five major ports worldwide (India, China, Brazil, Iran, South Africa) a range of technical measures to minimize the risks related to ballast water discharges.

151. Ship-related contamination will be prevented. During the implementation of the East Asian Seas pilot phase project, a project concept has been developed for the demonstration along the Malacca Straits of the new technology of “precision navigation”, based on electronic charts and transponders on ships: the Marine Electronic Highway. This first demonstration would involve the three littoral countries (Malaysia, Indonesia and Singapore), IMO and the private sector. The demonstration, in addition to safety, would enhance environmental protection through additional features such as electronic mapping of sensitive ecosystems, and monitoring of discharges of bilge and ballast waters. Dialogue among the World Bank, IFC, IMO and the private sector to follow up on the concept and prepare a PDF-B request, has so far encountered serious obstacles. Given the global environmental relevance of demonstrating cost-effective ways to introduce environmental protection into the navigation systems of the future, a more proactive

### ***Regional and Global Technical Support***

152. Two full projects (\$11.9 million), two MSPs and one PDF-B grant have been approved (1998) under this component. These actions are intended to support the GEF and the international community in the following fields:

- (a) Assessment of the state of the international waters globally, and establish priorities and guidelines (Global international waters Assessment)
- (b) Establish a framework for an Internet based system of distant learning, information management and sharing of experiences among international waters GEF projects. A component will convene the first two GEF biannual international waters conferences (2000 – 2002), with the participation of all GEF international waters project managers, recipient country officials and scientists, development agencies (IW LEARN).
- (c) Investigate the role of the oceans in the carbon cycle (MSP).
- (d) Assessment of the available technologies to reduce the devastating environmental damages caused by current shrimp trawling practices in tropical regions (PDF-B). Dialogue is ongoing for a concept for a global evaluation of the causes of degradation of coral reefs.

### ***Observations and Gap Analysis***

153. The portfolio review of OP#10 shows that for one of the four components (Ship-Related Contaminants) the objectives initially established are now within reach. On the other hand, the component dealing with Global Contaminants is still at a very initial stage of development, with PDF-Bs only. The Technical Support component will continue to operate, with modest allocations, as new issues will emerge that need testing and assessments.

154. While funds allocations for the other components will maintain present levels for the next one or two years, a progressive rapid growth of requests is foreseen in the area of water related activities to reduce the impact of global contaminants. Once the Persistent Organic Pollutants (POPs) Convention -- presently being negotiated -- is in effect, the phasing of persistent toxic substances may become a major area of GEF support. Incremental funding might then be needed for country case studies, and for systematic actions on the transmission through air of persistent toxic substances (PTSs), soil contamination, stockpile disposal, industrial processes, incineration technology. None is related to international waters issues. Should the GEF be given expanded responsibilities, this sector has the potential to develop into a new and specific Operational

techniques, pesticides, are being or will be tested. All projects include components, or execution schemes (e.g., through the secretariats of relevant regional conventions), that would favor the dissemination of the demonstrations results. There is however the need to ensure that the “new ways” promoted by the GEF will reach a much wider audience and global exposure, targeting also the private sector.

#### OPERATIONAL CHALLENGES AND EMERGING ISSUES

156. This section of the review identifies the future trends of the international waters portfolio, as they emerge from the analysis of the pipeline of preparatory funds and concepts as well as opportunities for impact and synergies among international waters projects and among focal areas. As a result of geographic clusters that are developing as well as the analysis gaps with respect to stated initial objectives, program management actions are being identified in order to increase the overall impact of GEF resources in the international waters Focal Area.

#### **Future Trends of the International Waters Portfolio**

157. Comparing the number of full projects with those of preparatory funds and concepts (see diagram), one can have an idea of the evolution of the portfolio. Future focus will be on projects related to:

- (a) Land and water management in arid and semi arid environments, particularly in Africa, and with relevance to land degradation and to adaptation to climate change (OP#9);
- (b) Global contaminants (OP#10); and
- (c) Pollution remediation measures (OP#8 - projects “action oriented”).

158. The number of diagnostic, priority-setting, ecosystem-wide projects -- now making up the bulk of the portfolio -- will decrease progressively as the portfolio matures.

#### **Linkages with other Focal Areas**

159. Obvious linkages exist with the program dealing with aquatic biodiversity (OP#2). But ample opportunities also exist in relation with actions aimed at protecting and expanding forested areas (OP#3, OP#12), and at conserving biodiversity in arid lands (OP#2). The introduction of renewable energies (solar, geothermal, biomass – OP#6) as alternatives to wood and hydropower

### **Heads of GEF Agencies Land and Water Initiative for Africa**

161. Related to opportunities for building on synergies among different focal area projects, for encouraging cost effective and integrated responses to the different global environment conventions, and in meeting priority country needs, the Heads of Agencies Initiative is very significant. GEF as a corporate entity will provide support to the initiative in terms of developing lessons learned, case studies, and resource materials for use by recipient countries, Implementing Agencies, and partners as they develop integrated responses to land and water resource issues.

### **Opportunities for Programmatic Approaches**

162. The geographical distribution of international waters projects clearly shows that approximately half the full projects, including the pilot phase and preparatory funds and concepts cluster within certain regions. This indicates both a particular country-driven interest of the littoral or riparian countries of the specific region, and a particular need for action. This has provided an opportunity identified by the International Waters Task Force to focus attention on these geographic areas so that gaps may be identified and additional support provided to facilitate early impact -- perhaps some within five years. So far the following clusters have emerged:

- (a) Black Sea Basin, including the Black Sea LME, its coastal areas, and all watersheds draining into it;
- (b) Parana-Plata Basin and Patagonian Shelf LME, including the Rio de la Plata Estuary;
- (c) East Asian Seas, coastal areas and drainage basins;
- (d) African Rift Valley Great Lakes;
- (e) Western Africa, including watersheds and LMEs.

163. All these regions correspond to homogeneous environmental systems, with well defined boundaries, within which regional causes of degradation and remediation/preventive measures can be more effectively identified and implemented. Program management should encourage this trend if impacts are to be achieved. The opportunity for the GEF is even greater if one considers actions being undertaken within these regions by the other GEF Focal Areas, in particular biodiversity, and by the Implementing Agencies under their regular programs. The challenge is to

African Great Lakes Approaches would be a priority for FY01 and the other two would follow in the attempt to focus on activities in a strategic manner to accelerate impact.

165. The following are examples of priority gaps in each geographic area with respect to the present pipeline and ongoing initiatives.

- (a) For the Black Sea Basin, the remaining gaps involve the need for single country biodiversity actions for priority wetlands and the prevention ship-related pollution along the Bosphorus Straits. The application of the Marine Electronic Highway system could address this major problem and serve as a source of “user pays” finance to sustain the Black Sea initiative once GEF completes its work.
- (b) For the Plata basin-Patagonia Shelf, gaps include the need to extend to the Uruguay marine environment the work being done in Argentina (WB), the need to integrate activities of the three ongoing international waters projects within a Parana-Plata basin-wide framework, and to address transboundary pollution from Buenos Aires.
- (c) Five international waters projects in West Africa are under preparation. Fragmentation and lack of synergy is a possibility and a programmatic approach has become a high priority for the next fiscal year.
- (d) The clustering of three GEF projects for Lake Malawi, Lake Victoria, and Lake Tanganyika developed as a result of pilot phase activities. All three have a history of less than satisfactory ratings in the PIR process. Longer term approaches based on programmatic support, full country ownership, and opportunities for a collective response to conventions as part of the Heads of Agencies’ Land and Water Initiative are needed and are a priority to develop for FY01 as the pilot phase initial projects end.
- (e) The fifth cluster involves a series of Biodiversity and International Waters projects around the South China Sea Large Marine Ecosystem and basins (like Mekong) draining to it. Additional biodiversity projects for reefs and mangroves, a pollution reduction demonstrations (under GPA), and implementation of the Malacca Straits Marine Electronic Highway are gaps to be filled. Progress seems slow in the World Bank on the Marine Electronic Highway, which holds back the potential for sustainable finance from “user pays” fees for follow-up work.

over-enrichment of coastal seas is now a global problem and GEF actions to address this issue is consistent also with Chapter 17 of Agenda 21, and the Global Program of Action (GPA) adopted in 1995 that addresses framework issues of UNCLOS.

(b) *Land and Water Resources Management*. This relates to freshwater deliberations of the CSD as a follow-up to Chapter 18 of Agenda 21 and the global initiative of the World Commission on Water and its Global Inter-ministerial Meeting on Water in March 2000. The GEF priority on land and water as part of the “collective response” to global environment conventions, relates to both biodiversity and international waters focal areas, and is embodied in the integrated GEF approach of “land and water resource management basin by basin”. The Heads of GEF Agencies’ Land and Water Initiative as well as the large increase in OP#9 projects in FY01-FY03 reflects this focus.

(c) *Persistent Toxic Substances, including POPs*. This degree of possible GEF support will need to be considered following adoption of the POPs convention.

(d) *Depletion of Fish Stocks*. The issue is of growing global concern. Consistently with Chapter 17 of Agenda 21 and the UN Convention on Law of the Sea (UNCLOS), fisheries, both artisanal and high seas commercial fishing, are among the issues identified for GEF action in several operational programs in the international waters and biodiversity focal areas. While biodiversity concerns relate to the protection of the diversity of species (OP#2), the focus of the three international waters programs is on sustainable management of fisheries, enforcement of international agreements, and removal of barriers to the introduction of environmentally benign technologies. Several projects and preparation grants have components dealing with fisheries as part LMEs and freshwater ecosystem diagnostic-priority setting projects. In addition to these numerous preparatory projects, there is a need for a rapid response through single country, regional, and global projects devoted to fisheries. So far however the GEF resources allocated to this global environmental issue have been limited and the impact to be expected only local in scale.

### **Project Preparation**

167. It will be a priority in FY01-FY03 to address two major GEF impediments to successful international waters projects. One is that the Block B limit of \$350,000 is not sufficient for effective preparation. The proposal for overcoming this impediment is to prepare Block C funding requests for multi-country international waters projects involving policy and legal reforms or significant investments, and to thoroughly document the implementation costs of the

multi-layered implementation set-up, ranging from regional coordination bodies, inter-ministerial national counterparts, and to some extent, locally affected communities. The private sector groups represent the shipping industry, service providers to port and harbor authorities, tourism agencies, large-scale fishing fleets, etc.

169. There are three indicators of effectiveness of public involvement which are measured using available information from 29 projects. These are:

- (a) The percentage of project budgets committed to public involvement activities, including funding going to non-governmental groups;
- (b) The provision of mechanisms for building into the project's set-up increased non-governmental participation; and
- (c) The extent to which consideration of social issues affecting coastal and marine communities are integrated into project design.

170. *Financing public involvement activities.* There are 29 projects, with a total GEF allocation of \$245.75 million. They provide 16 per cent (or \$39.99 million) funding for public involvement to NGOs, the private sector, and other groups. The amount may be larger but there is no budgetary breakdown in the most proposals. For example, the Brazil Sao Francisco Basin project provides only \$0.52 million of funding to NGOs, as noted in the project brief. The project will form sub-committees that will be headed by NGOs to address the various components of the project, but the funding for these activities is not given in the proposal. Additionally, it was noted in the proposal that consultations covered 270 persons, representing more than 100 institutions, and which produced 125 project concepts, but again, the proposal does not give the costs associated with such consultations.

171. *Mechanisms for stakeholder participation.* There are examples of institutional mechanisms that facilitate participation of non-governmental stakeholders. The most ambitious, and largely successful, of these mechanisms is the NGO Danube Forum, which is composed of over 100 regional and national NGOs, and coordinated by three international organizations (IUCN, WWF, and REC). An initial grant of \$0.20 million was given to the Forum, which includes awarding of sub-grants to qualified NGOs in the region. So far, data submitted to the GEF indicate that some 50 local environmental groups have received grants.

Table 4. Promising Institutional Mechanisms

Classification of international waters projects	No. of projects	Institutional Mechanisms for Promoting Non-Governmental Participation in the Project	Examples
Water-Body Based	15	<ul style="list-style-type: none"> <li>▪ Regional NGO Forum organized with 80-100 regional organizations participating in project advisory services and grant making;</li> <li>▪ Multi-level project execution set-up, including international and regional NGOs;</li> <li>▪ Joint management set-up with representation of NGOs;</li> </ul>	<p>Danube; Black Sea;</p> <p>Mediterranean Sea; Caribbean; Lake Ohrid</p>
Integrated Land and Water	9	<ul style="list-style-type: none"> <li>▪ Regional body for project management includes scientific and academic institutions;</li> <li>▪ Local Implementation Teams formed composed of farmers and NGOs to carry out project outreach;</li> <li>▪ Institutionalized periodic consultations through public meetings and feedback to project steering committee involving civil and corporate groups;</li> <li>▪ Organization of multi-sectoral project coordination committees in pilot sites, including agreements with end-users and communities;</li> <li>▪ Creation of multi-sectoral Environmental Working Group, involving scientists and NGOs;</li> </ul>	<p>Aral Sea;</p> <p>Poland;</p> <p>Brazil Pantanal; Argentina;</p> <p>East Asian Seas; SIDS;</p> <p>Tumen River;</p>
Contaminant-Based	10	<ul style="list-style-type: none"> <li>• Creation of Advisory Panel that represents NGOs, academic institutions, governments, and the private sector;</li> <li>• Local committee composed of port authorities, fishery operators, shipping companies, etc;</li> <li>• Inter-country project steering committee including NGOs.</li> </ul>	<p>Global Knowledge Sharing;</p> <p>China Ship Waste;</p> <p>Wider Caribbean; Southwest Mediterranean;</p>

173. The needs of affected coastal communities are recognized in some projects through the conduct of social assessment in pilot or target villages. For example, the Argentina project allocated separate funding for socio-economic surveys and conducted municipal level consultations that also included private firms. In the Aral Sea Basin project, local NGOs, which were organized into Working Groups, engaged in socio-economic surveys to get a profile of the affected population before setting up the Water Users Associations in twelve affected communities. The Mekong River Basin Water Utilization Project intends to complete a social assessment to assist the commission in devising a Participation Plan.

174. Other projects provide funding for participatory approaches. The SIDs project in the Pacific allocated \$1.25 million, to be managed by IUCN, for development of community participation demonstration sub-projects and a communications workshop. The East Asian Seas project made use of participatory rural appraisals and a community-based coastal management approach in their two pilot sites in China and the Philippines.

175. The level of stakeholder participation in transboundary projects would depend on the complexity of coordination arrangements set up prior to project execution. In some cases, regional agreements facilitate carrying out basin-wide, or waterbody-wide programs, such as those found in the Mediterranean, Caribbean, Aral Sea, etc. The mandate from these agreements serves as one of the strongest indications of country “buy-in” for the project and assures commitment to follow through with project activities. In a few projects, in fact, aside from the agreement, there are regional bodies set up to implement or oversee compliance with the provisions of the agreement, but these bodies often needed capacity strengthening to be effective.

176. The role of non-governmental stakeholders has often been defined in, and around, the regional agreements, but in general, their involvement has been at the periphery. But this pattern has changed in the more recent projects, especially with the active role, for example, of groups like IUCN and WWF, in support of regional bodies. The GEF allocation that goes towards promoting such support from non-governmental technical and social inputs, including the private sector, is sometimes multiplied as the support is generally in the form of training, awareness raising, and community outreach.

177. However, there is a need to go further than institutional support and to focus also on the affected communities. Because the transboundary concerns are largely at the regional and national levels, very little attention is given to the problems of affected populations. The key social issues may cover indigenous communities residing in and around identified coastal,

- (a) Inconsistent documentation of public involvement across projects, including lack of information on consultations and stakeholder participation;
- (b) Lack of information on budgetary allocations to support public involvement activities; and
- (c) Insufficient consideration of key social issues in project design, specifically those concerning affected coastal communities.

#### **IV. OZONE DEPLETION**

179. The ozone depletion (ODS phase-out) focal area was added to the GEF mandate as a short term response area in 1994 when it became apparent that Countries with Economies in Transition (CEiT) would not be able to meet Montreal Protocol ODS control schedules in absence of international assistance. CEiT countries operating under Art. 2 of the Montreal Protocol were required to phase out ODS listed in Protocol Annex A by 1996.

180. Programming in this focal area emphasized incremental cost financing, complementarity to the Multilateral Fund, and consistency with the legal ambit of the Montreal Protocol, as adjusted and amended. The objective was to enable compliance of eligible countries with agreed control measures and other commitments under the Montreal Protocol, such as data reporting, at least costs. Taking into account current economic and institutional constraints in these countries it was the GEF goal to enable compliance with the Montreal Protocol in CEiT by the end of the year 2000. While project implementation may continue beyond that year, it is expected that the compliance goal will be met in most countries.

#### **SIZE AND COMPOSITION OF THE OZONE DEPLETION PORTFOLIO**

181. The GEF has allocated \$148.44 Million to cover incremental costs of ODS phase out in 14 CEiT countries. These interventions have leveraged local private sector and government co-financing of more than \$180 Million. A summary table providing an overview on the ozone portfolio status is provided in Table 14.<sup>13</sup> Addressing newly emerging news arising out of Montreal Protocol Amendments, GEF Council has recently approved two regional medium-sized projects. These are to enable implementation of ODS Trade Control provisions and methyl bromide phase-out schedules recently adjusted by the Montreal Protocol Parties.

182. The following countries are still in the GEF pipeline:

(b) Kazakhstan: Project submission is planned inter-sessionally in January 2000, the GEF resource allocation would be approximately US\$ 3 million),

(c) Estonia: Submission of a medium sized project of approximately US\$ 500,000 is expected early next year.

183. Three countries that received GEF project preparation assistance in the past have meanwhile been reclassified to Art. 5 (recipient) countries under the Montreal Protocol. Assistance for the implementation of their ODS phase programs is being granted by the Multilateral Fund. The countries are Moldova, Georgia, and Cyprus.

#### HIGHLIGHTS OF THE PORTFOLIO, IMPLEMENTATION PERFORMANCE, LESSONS, AND IMPACT

184. The 14 CEiT receiving GEF ODS phase out assistance represent more than 95 per cent of the remaining ODS consumption in the CEiT region. By assisting these countries in the implementation of their national programs, the GEF is helping to eliminate an annual consumption of more than 60,000 tonnes of ODP (1990-95 baseline consumption). This indicates an overall cost effectiveness better than \$3 per kg ODS phased out. ODS phase out directly sponsored at the enterprise level amounts to 18,6000 tons of ODP.

185. Support for each enterprise level subproject is granted in accordance with cost-effectiveness thresholds approved by the Multilateral Fund, maximizing GEF impact at least costs. Monitoring and verifying project cost effectiveness and sustainability are integral to GEF operations in the ozone focal area.

186. Although the implementation of projects included in the GEF ozone portfolio is progressing slower than originally expected –mainly because of viability problems in receiving enterprises- most subject projects will be nearing completion over the next year.

#### OPERATIONAL CHALLENGES AND EMERGING ISSUES

187. There appears to be no need to allocate GEF resources for the additional ODS phase out-projects beyond FY 2000.

188. The GEF experience in the ozone depletion focal area should be evaluated thoroughly as many project design features and institutional arrangements supported by the GEF may provide

189. Attention should be paid to opportunities to achieve ODS phase-out synergy in the planning and implementation of GEF projects in other focal areas. Particularly the climate change and the biodiversity focal areas offer good opportunities. Energy efficiency programs in the refrigeration sector should normally be combined with ODS phase out. The introduction of state-of-the-art, non-ODS technologies normally enables energy savings, which may help to recover incremental capital costs over the economic life cycle of the investment. Grant assistance can be replaced by incremental risk guarantees and other innovative financing modalities in these cases. Programs to promote agrobiodiversity offer scope to phase out methyl bromide if integrated or organic pest management techniques are being introduced. Relevant activities should be co-financed by the Multilateral Fund as appropriate.

190. Other emerging lessons are:

- (a) Providing support to the implementation of coherently planned, country wide ozone programs has proven to be the most effective way to enable ODS phase out at least cost.
- (b) Flexible country, and sector wide approaches are needed to enable timely responses to changing needs and circumstances; to ensure cost effectiveness and sustainability of ODS phase out. If linked to clearly defined phase out commitments and milestones these concepts allow the application results and performance oriented financing.
- (c) Support for the implementation of trade control measures appears to be as important as ODS phase-out assistance itself. Continuous monitoring, verification and independent auditing of ODS phase out and trade compliance are prerequisites for reliable results.

Table 14: Summary and Status of GEF Projects in CEiTs

Country	Base year consumption* (ODP tons) [base year]	Appraised ODS phase-out (ODP tons)	Initial GEF Allocation (US\$)	Total cost (US\$)	GEF Commitment (% of total)	Start of implementation	Time lag between finalization of CP and start of implementation***	Completion (projected) of implementation	Implementing Agency
Azerbaijan	960.6 (1996)	307.4	6.867	8.98	6.75 (75.2%)	2/1999	1 year	2002	UNDP/UNEP
Belarus	1,005.8 (1994)	619.7	6.900	15.72	6.89 (43.8%)	8/1997	2 years	2000	World Bank
Bulgaria	1,360.0 (1992)	334.4	10.500	13.27	10.55 (79.6%)	5/1996	2 years	1999	World Bank
Czech Republic	2,466.1 (1991)	390.0	2.300	4.12	2.41 (58.5%)	12/1994	2 ½ years	3/1998 (compl.)	World Bank
Hungary	1,854.1 (1993)	1,156.4	6.900	8.21	6.50 (79.2%)	End 1995	1 year	end 1998 (compl.)	World Bank
Latvia	711.3 (1995)	223.6	1.350	1.86	1.66 (88.9%)	Early 1999	2 years	2002	UNDP/UNEP
Lithuania	371.5 (1995)	387.0	4.420	8.04	4.46 (55.5%)	5/1998	1 year	2002	UNDP/UNEP
Poland	4,147.8 (1994)	1,054.0	6.214	20.17	6.21 (30.8%)	Early 1997	2 year	2000	World Bank
Russian Federation	48,662.6 (1992)	11,842.0	65.90	71.97**	59.96 (83.3%)	mid 1996	½ year	2003	World Bank
Slovakia	832.2 (1991)	283.0	3.500	5.95	3.50 (58.8%)	1996	3 years	end 1999	World Bank
Slovenia	1,205.9 (1992)	338.2	6.200	8.84	5.88 (66.6%)	End 1995	1 ½ year	6/1998 (compl.)	World Bank
Turkmenistan	29.6 (1996)	14.1	0.515	.38	.36 (94%)	2/1999	½ year	2001	UNDP/UNEP
Ukraine	2,460.5 (1994)	1,299.8	22.858	32.74	23.27 (71.1%)	3/1999	3 ½ year (2 ½ from gov't.. approval)	2001	World Bank
Uzbekistan	272.2 (1996)	142.0	3.320	3.36	3.20 (95%)	Early 1999	½ year	2001	UNDP/UNEP
<b>Regional</b>			0.694						
<b>Total</b>	66,340.2	18,391.6	148.438	203.61	138.41 (68.0%)		Ø 1 ½ year		

Source of ODS consumption data: Official data reports to the Ozone Secretariat in Nairobi. \* Base year as given in the respective country program

\*\* Total cost incomplete\*\*\* Finalisation of CP denotes completion of the CP document (prior to government approval)

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