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## PROGRAM STUDY ON INTERNATIONAL WATERS

(Prepared by the GEF Office of Monitoring and Evaluation)

# **GEF INTERNATIONAL WATERS PROGRAM STUDY**

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*The study team presents this final main report. It addresses the points raised by the International Waters Task Force following the frank and informative discussions on the earlier versions and includes technical clarifications submitted by project managers. Our appreciation is expressed to the many people who have given valuable assistance to this work and without whom it would not have been possible.*

# Foreword

One of the key tasks of the GEF Office of Monitoring and Evaluation is to review the progress and results of the focal areas of the Global Environment Facility. Independent studies of the Biodiversity, Climate Change and International Waters focal areas were conducted during 2003-2004. These studies provide the GEF stakeholders with an assessment of how the focal areas are performing and recommendations on how to continue their development. Together, these three areas represent more than 1,100 projects with funding of just over 4 billion US\$. Obviously, it is difficult to do full justice to the wealth and depth of such a vast portfolio.

The studies report notable contributions from interventions for global environmental benefits. The present study – on international waters – concludes that GEF support has extended to almost every GEF-eligible large catchments and large marine ecosystems. Impressive achievements can be observed on new legal regimes,; basin and sea agreements, treaties and conventions. The IW Focal Area is also contributing to the enhancement of regional security, another role that can only increase in importance with time.

The studies report weaknesses that are common to the three focal areas. The impact of GEF efforts could be enhanced by refining strategic frameworks and concepts, tools and processes, as well as communicating these better to stakeholders. Furthermore, there is a call for improvements in monitoring, evaluation, indicators and knowledge sharing.

The three studies were undertaken by staff from Office of M & E and independent and external consultants. Mr. Aaron Zazueta managed the study and ably coordinated the many contributions. The support of Professor Laurence Mee, was indispensable both in his function as Team Leader and for specific case studies. Professor John Okedi, Mr. Tim Turner, Ms. Paula Caballero and Dr. Martin Bloxham contributed useful case studies. The study addresses the points raised by the International Waters Task Force following the frank and informative discussions on earlier versions and includes technical clarifications submitted by project managers. Our appreciation is expressed to the many people who have given valuable assistance to this work and without whom it would not have been possible.

The three program studies will serve as inputs the Third Overall Performance Study of the GEF during 2004-05, the GEF Trust Fund replenishment process and the GEF Assembly. The GEF Council will find, in each of the program studies, findings and numerous recommendations ranging from improvements in the definition of GEF policy and mechanisms to maximize impacts and outcomes to recommendations on how to enhance project design, preparation and implementation. The GEF focal area Task Forces have a particularly important role to play in the implementation of the management response to the studies. We also believe that the lessons will be relevant to other international programs in sustainable development, in a collective effort to understand which strategies work best, under which circumstances, in protecting our global environment.

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## Executive Summary

The present study of the Global Environment Facility's (GEF's) International Waters Focal Area is a contribution toward the Third Study of GEF's Overall Performance (OPS3). A team of experienced international specialists conducted this study between February and July 2004 based on a review of previous evaluations (at the project and program level), questionnaires to all current projects, and field visits to four geographical regions and to a number of global demonstration projects. The study regions selected, the Black Sea (and Danube) Basin, the Plata Basin, the African Great Lakes, and part of the East Asian seas, jointly make up more than half of the US\$691.59 million GEF funding invested in the Focal Area to date. An evaluation of the transboundary diagnostic analysis and strategic action program (TDA/SAP) tools used by the foundational projects of the portfolio was also conducted.

The study had three major objectives:

- An assessment of the impacts and results of the International Waters (IW) focal area to the protection of transboundary water ecosystems
- An assessment of the approaches, strategies, and tools by which results were achieved
- Identification of lessons learned and formulation of recommendations to improve GEF IW operations.

Case studies were examined according to seven criteria: coherent, transparent, and practicable design; achievement of global benefits; country ownership and stakeholder involvement; replication and catalysis; cost-effectiveness and leverage; institutional sustainability; and incorporation of monitoring and evaluation procedures. A number of generic lessons were derived from the detailed analysis of the various studies. Four overarching operational recommendations were also made.

The IW portfolio now extends to almost every GEF-eligible large catchment and large marine ecosystem. The study revealed an impressive portfolio of well-managed GEF-IW interventions, and there is increasing success at leveraging collateral funding, including investments. The leveraging ratio is currently 1:2, and the total portfolio exceeds US\$2 billion, evincing the largest effort in history to support sustainable use and protection of transboundary waters. This task has not diminished in its global relevance; on the contrary, water issues have grown in significance in policy statements such as the Millennium Goals, the Johannesburg Declaration, and the targets set by the Commission for Sustainable Development. We present clear evidence that the IW Focal Area is contributing to the enhancement of regional security, another role that can only increase in importance with time.

The GEF IW Focal Area has already generated some impressive achievements, including new policy tools such as the legal regime for avoiding the transfer of opportunistic species in ships' ballast water, the Caspian Sea Convention, the Dnipro Basin Agreement, the Protocol for Sustainable Development of Lake Victoria Basin, the Lake Ohrid Treaty,

and the Pacific Tuna Treaty (the first under the 1995 Fish Stocks Agreement). It provided the practical support necessary for actions such as successfully combating water hyacinth overgrowth of Lake Victoria, the creation of protected areas as part of several integrated management projects, capacity building for hundreds of public officials worldwide, and opportunities for nongovernmental organizations (NGOs) to assume a greater role in resource management. Most of its work is not spectacular, however; it is the vital groundwork behind sustainable development: providing evidence, developing strategies and innovative solutions, improving awareness, promoting stakeholder dialogue, helping to build new institutions, testing new approaches through demonstration projects, and creating opportunities for investment. This is a gradual process of stepwise change toward shared goals, and progress is often difficult to assess. The central paradigm is best summarized with this quotation (Monitoring and Evaluation [M&E] Working Paper 10): “The GEF international waters operational strategy aims at assisting countries to jointly undertake a series of processes with progressive commitments to action and instilling a philosophy of adaptive management. Further, it seeks to simplify complex situations into manageable components for action.”

We paid special regard to examining the overall performance (measured by outputs and outcomes) of projects classified as foundational, demonstration, or SAP implementation. Progress on foundational projects was encouraging, and there have been clear improvements between each iteration of the TDA/SAP (transboundary diagnostic analysis/strategic action program) process. Difficulties sometimes occur when projects make a poor distinction between global and local benefits, do not identify social and economic root causes of transboundary problems, or fail to identify and incorporate stakeholders. A particularly difficult challenge has been the development of sustainable transboundary institutional mechanisms and Interministry Committees at a national level with the high-level participation of all relevant sectors.

Demonstration activities have been very successful in generating local participation and home-grown solutions to problems. The GEF-IW Focal Area has more than 10 years of experience in their development and growing success in replication (indeed, there are now examples of self-financed demonstration projects). The early success of one of the global demonstration projects (GloBallast) to catalyze an international agreement is a particularly noteworthy achievement. There are some limitations with the approach: attempts to upscale demonstration projects have met with difficulties, because each scale requires a different solution and policy framework. We conclude that projects combining demonstration and strategic planning (TDA/SAP) activities are most likely to succeed; they maintain stakeholder confidence while endeavoring to ensure longer-term sustainability of local and global benefits.

Of the SAP implementation projects, we paid special attention to the Black Sea Strategic Partnership, a concerted attempt to integrate the comparative advantages of all Implementing Agencies (IAs) and counterpart donors to prevent the return of devastating eutrophication to the Black Sea during the economic recovery of countries in its basin. The partnership has generated more than US\$110 million in grant funds and leveraged at least three times as much in investment. Its first phase has resulted in a number of very

successful large demonstration projects that are incremental to national development initiatives (for example, agricultural reform). One difficulty that should be corrected at the forthcoming regional stocktaking meeting is that the initial partnership concept underestimated the interagency coordination needs and the measures required to enhance government buy-in to joint institutional arrangements in the Black Sea. This has led to some fragmentation of the overall effort and diminished momentum.

Interagency coordination was examined closely in the current study. There is evidence of steady improvement of Implementing Agency (IA) cooperation within projects (some 20 percent of all new full-sized projects are co-implemented). We noted continued shortcomings in regional cooperation between projects in all case study regions, particularly between IAs and between focal areas. The apparently large differences between IAs in the time taken to develop and negotiate full-sized projects from Project Development Facility - Block B (PDF-B) signature to GEF Chief Executive Officer (CEO) endorsement also merits further study.

A significant number of project staff and stakeholders demonstrated insufficient knowledge of the concepts, processes, and tools that give the GEF IW Focal Area its unique role. Ambiguities remain in the descriptions of Operational Programs (OPs), and the language and terminology used is not readily accessible. We noted criticism that mechanisms for project analysis and approval are insufficiently transparent. Many midterm and final evaluations also commented on overambitious and excessively complex project documents. We consider that most of the above points can be improved with stronger supervision combined with clearer documentation and its use for management training.

Articulation of adaptive management requires robust indicators of environmental and socioeconomic status, stress reduction, and process. Process indicators are particularly important for monitoring and evaluation, but more work is needed to strengthen the current indicators to make them more coherent and objective.

We have examined the implementation of recommendations from the previous study. We estimate that about half of the 15 recommendations have been implemented (most have been at least partially implemented). The pending recommendations (these focus on clarification of procedures, M&E, and supervision) have been rolled into our own recommendations outlined below.

We register our concern that the supervisory capacity of the IAs, Executing Agencies, GEF Secretariat, and International Waters Task Force (IWTF) has not increased in proportion to the magnitude and complexity of the IW Focal Area. We strongly recommend an independent review of this situation, with a view to proposing a revision of the current 9 percent cap on management costs.

To address the issues identified in the study, we have made four overarching recommendations, indicated below and fully detailed in the report. In addition, we identified key lessons learned, and we recommend their analysis by the IWTF.

- **The production and use of an accessible GEF International Waters Focal Area manual** to clarify the concepts, tools, and processes that are giving rise to recurrent difficulties for project design and implementation.
- **Development of a comprehensive M&E system for IW projects** that ensures an integrated system for information gathering and assessment throughout the lifespan of a project.
- **The incorporation of a regional-level coordination mechanism for IW projects** to increase the synergies between IW projects within defined natural boundaries and their focus on global benefits, to enable communication and coordination with relevant projects in other focal areas, to enhance feedback between projects and the IW Task Force, and to facilitate implementation of the M&E strategy at the regional level.
- **The redefinition of the GEF International Waters Task Force** to enhance its role in the definition of technical guidelines and policies, to ensure the optimum use of comparative advantages of the Implementing Agencies within each intervention, and also to examine the selection of Executing Agency in accordance with agreed on criteria.

**Note regarding the methodology:**

*This report was prepared by an experienced team of consultants drawn from Europe, Africa, and Latin America, appointed following consultation with the GEF International Waters Task Force (IWTF). The IWTF also commented upon the Terms of Reference (TOR) for the study. The team's work comprised the following steps:*

- (1) *Initial briefing from the M&E Unit and agreement on methodology*
- (2) *Desk studies of the overall IW portfolio and the case study regions*
- (3) *Field studies in the Black Sea Basin (Danube, Black Sea, Dnipro, Black Sea Strategic Partnership); the African Great Lakes (L. Victoria, L. Tanganyika, L. Malawi); the Plata Basin and associated maritime areas (Upper Paraguay, Bermejo, Guaraní Aquifer, Plata and its Maritime Front, Patagonia Shelf, Plata Basin Project); the East Asian seas (South China Sea, Mekong River, "Building Partnerships for the Environmental Protection and Management of the East Asian Seas – PEMSEA"); and selected global demonstration projects (GloBallast, Global Mercury) (full project titles may be found in Annex 1*
- (4) *Team meeting to discuss overall results*
- (5) *Drafting of preliminary version of the main report*
- (6) *Meeting of extended IWTF to discuss preliminary report and provide feedback based on their experience and internal consultations (it was previously agreed that all feedback should be channeled through IWTF members)*
- (7) *Further consultations on conclusions with GEFSec representative*
- (8) *Preparation of second draft (incorporating all factual clarifications from the IWTF members, plus information on additional projects requested by them but not included in the original TOR)*
- (9) *Receipt of additional factual clarifications from any projects not involved in step (6), plus final comments of IWTF members*
- (10) *Production of final report.*

*The study team has taken great care to ensure accuracy in factual content of this report and objectivity in the analysis through the use of defined assessment criteria. As with all studies of this kind, however, some elements of the study required the considered judgment of the team. The team recognizes that there may be other viewpoints and sensitivities on some of these issues and that the opinions presented in this document are not necessarily the products of a full consensus with all of the parties involved.*

# 1. INTRODUCTION TO THE STUDY

## 1.1. PURPOSE OF THE STUDY

The present independent study of the Global Environment Facility's (GEF's) International Waters Focal Area (referred to here as the IW Study) is a contribution toward the Third Study of GEF's Overall Performance (OPS3). The purpose of OPS3 is to assess the extent to which the GEF has achieved, or is on its way to achieving, its main objectives. It will contribute to the fourth replenishment and the third Assembly of the GEF. Because the portfolio is fast maturing, OPS3 will focus more than its predecessors on program and project outcomes, the sustainability of those outcomes, and the move toward impact. Specifically, OPS3 will provide an overall assessment of the results achieved through GEF support, from the restructuring in 1994 to June 2004; assess the effectiveness of GEF policies, strategies, and programs in achieving those results; and draw key lessons and provide clear and forward-looking recommendations to the GEF and its partners on how to render GEF support more effective in contributing to global environmental benefits.

The IW Study team comprises a number of expert independent consultants drawn from the European, Asian, Latin American, and African regions, working closely with a GEF Monitoring and Evaluation (M&E) specialist and staff from the GEF Secretariat and consulting with Implementing Agencies (IAs), the Scientific and Technical Advisory Panel (STAP), and other consultants. The IW Study integrates findings and lessons from other GEF M&E studies and reports, such as specially managed project reviews (SMPRs), the program performance report (PPR), review of midterm and terminal evaluations, and the local benefits study currently in progress. The study includes site visits to projects in regions where there has been a high or long-standing investment of GEF funds in IW projects.

## 1.2. BACKGROUND

The GEF operational strategy defines GEF's objective in the International Waters Focal Area as "to contribute primarily as a catalyst in the implementation of a more comprehensive, ecosystem-based approach to managing international waters and their drainage basins as a means to achieve global environmental benefits." According to the operational strategy, the overall strategic thrust of GEF-funded international waters activities is to meet the agreed on incremental costs of:

- "Assisting groups of countries to better understand the environmental concerns of their international waters and work collaboratively to address them
- Building the capacity of existing institutions (or, if appropriate, developing the capacity through new institutional arrangements) to utilize a more comprehensive approach for addressing transboundary water-related environmental concerns
- Implementing measures that address the priority transboundary environmental concern."

The goal of GEF international waters projects is to "assist countries to use the full range of technical, economic, financial, regulatory, and institutional measures needed to operationalize

sustainable development strategies for international waters.”<sup>1</sup> The GEF also seeks to act as a catalytic agent that lays the foundations for investment.

There are three Operational Programs in the IW Focal Area:<sup>2</sup>

- OP8, Water Body-Based Operational Program:  
“Projects in this Operational Program focus mainly on seriously threatened water bodies and the most imminent transboundary threats to their ecosystems as described in the Operational Strategy 1. Consequently, priority is placed on changing sectoral policies and activities responsible for the most serious root causes or needed to solve the top priority transboundary environmental concerns.”
- OP9, Integrated Land and Water Multiple Focal Area OP:  
“Projects . . . are aimed at achieving changes in sectoral policies and activities as well as in leveraging donor and regular Implementing Agency (IA) program participation. These projects focus on integrated approaches to the use of better land and water resource management practices on an area-wide basis.”
- OP10, Contaminant-Based Operational Program  
“This includes projects that help demonstrate ways of overcoming barriers to the adoption of best practices that limit contamination of the International Waters environment.”

We have reviewed the descriptions and guidance information for the OPs in Chapter 2 of this report and in more detail in Annex 2.

### 1.3. CONTEXT AND OBJECTIVES OF THIS STUDY

The study has three objectives.

- An assessment of the impacts and results<sup>3</sup> of the IW Focal Area to the protection of transboundary water ecosystems.
- An assessment of the approaches, strategies, and tools by which results were achieved.<sup>4</sup>

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<sup>1</sup> Duda, A. “Monitoring and Evaluation Indicators for GEF International Waters Projects.” M&E Working Paper 10. GEF, Nov. 2002, p. 2.

<sup>2</sup> Quoted texts are from the GEF OP guidance documents, available on [www.thegef.org](http://www.thegef.org).

<sup>3</sup> This study focuses on the analysis of the impact and results of GEF activities on selected water bodies by conducting in-depth case studies that address GEF-supported activities performance, results, and impacts. By adopting a geographical approach, the study assesses the cumulative impacts and results of multiple GEF IW activities in assisting governments in improving the environmental management of transboundary waters. Demonstration activities are assessed independently in as far as they do not target specific water bodies. Relevant projects in other GEF focal areas are taken into account during each water body assessment.

<sup>4</sup> The study also examines the extent to which current approaches, strategies, and tools respond to the GEF’s IW goals. Special attention is given to the assessment of the quality of project design, the tools and approaches used and promoted by the GEF to identify and address environmental transboundary water issues, and the incorporation of lessons into program operations (that is, the transboundary diagnostic analysis /strategic action program approach). The geographical approach adopted by this review also permits an assessment of the interactions between IW and selected activities from other focal areas, especially biodiversity.

- Identification of lessons learned and formulation of recommendations to improve IW GEF operations.

This study also assesses the global distribution of GEF IW activities among eligible water bodies. This is to determine the water bodies in which the GEF has been involved, issues addressed and types of activities supported by the GEF, patterns of IA participation in GEF projects, and patterns in the allocation of GEF resources across water bodies.

#### 1.4. METHODOLOGY

##### *A. Case Studies*

The study carried out four in-depth case studies that address the results and impacts of GEF activities in four geographical regions, as well as the particular case of the IW global demonstration projects. The four water bodies were:

- The Black Sea Basin (including the Danube and Dniro River Basins)
- The La Plata River Basin (including the adjacent Patagonia Shelf)
- African lakes and their catchments (Tanganyika, Malawi, and Victoria)
- The East Asian seas (including the Gulf of Thailand and the South China Sea).

Following a review of available documentation,<sup>5</sup> site visits to these areas were conducted in the period from March to May 2004. This enabled the following questions to be addressed:

- How effectively have the GEF foundational activities assisted countries or groups of countries to identify root causes of key transboundary environmental issues and to develop agreed on programs and effective approaches to address root causes and other key environmental transboundary water issues? What are the impacts and results?
- How effectively has the GEF assisted countries or groups of countries to develop the policy, legal, and institutional frameworks to address transboundary environmental stresses jointly identified? In selected cases, what are the impacts and results in stress reduction and in environmental status?
- To what extent have GEF IW catalytic actions resulted in the additional non-GEF investments that address the identified environmental stresses in the selected water bodies?

##### *B. Assessment of the Approaches, Strategies, and Tools by Which Results Are Achieved*

Based on the regional studies and responses to a questionnaire prepared with the participation of the GEF International Waters Task Force in accordance with the IW Focal Area Performance Indicators for the GEF International Water Programs,<sup>6</sup> the following questions were examined:

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<sup>5</sup> The study also draws on previous program studies and reviews of midterm and final evaluations and other relevant materials to the GEF.

<sup>6</sup> Program Performance Indicators for International Water Programs, GEF/C.22/Inf.8.

- To what extent have the TDA and SAP approach been adopted by projects since the endorsement of this methodology in OPS2? How effective has the use of GEF-financed transboundary diagnostic analysis (TDA) been to assist countries to discriminate between transboundary and domestic problems and identify root causes of transboundary water problems? Is there clear evidence that the TDAs have been developed with broad stakeholder participation?
- To what extent have SAPs identified a manageable number of interventions that address root causes and identify solutions that are compatible with country capacities? How effective have GEF approaches been to assist riparian countries to develop programs to address transboundary issues? Have the proposed interventions been agreed on by a broad range of stakeholders? What approaches have worked well under different circumstances?
- In the case of projects involving demonstration projects, what evidence exists of their successful replication within or between projects?
- What lessons have GEF activities derived from experience? Have these lessons been systematically used to improve project design and implementation?

#### 1.5. STRUCTURE OF THE PRESENT REPORT

The present report comprises six substantive chapters, including the present one. In Chapter 2, we present an overview of the development of the IW project portfolio, its coverage, finance, and comparative rates of delivery of the three IAs, and we conclude with an analysis of the coherence of the Operational Programs. Chapter 3 presents an in-depth analysis of the case studies and the implications of the findings for the development of the IW Focal Area. Chapter 4 includes a study of the implementation of the transboundary diagnostic analysis/strategic action program (TDA/SAP) approach, based on the questionnaires received and a review of relevant completed TDA/SAPs. In Chapter 5, we list a number of key lessons learned from the preceding chapters. Chapter 6 contains overall conclusions to the study and key recommendations.

The main text of the study is kept as concise as possible, and footnotes are provided to give clarifications and to present substantiating evidence or additional information. Boxes are used to provide in-depth case study information to support the main text or to provide conceptual guidance. A number of annexes are included that detail the current status of the IW Portfolio. Some recommendations are provided throughout the text; Chapter 6 is reserved for the key overarching recommendations.

## 2. COVERAGE

### 2.1. DEVELOPMENT AND CURRENT STATUS OF THE IW FOCAL AREA

The GEF IW Focal Area portfolio currently includes 95 projects at various stages of completion (see Annex 1). This represents a total investment (from the beginning of the GEF) of US\$691.59 million, with declared<sup>7</sup> cofunding of US\$1,466.84 million. The total investment could therefore be as much as US\$2.16 billion, by far the largest sum ever invested in the transboundary aquatic environment, but still miniscule compared with investments in other sectors. In the present section, we shall examine the development of the portfolio since 1991 and the current distribution of GEF IW projects.

Before presenting our analysis however, we will explain the geographical divisions employed for presentation. Data on GEF projects are gathered by the GEF Secretariat according to the political divisions employed by the World Bank (that is, Latin America and the Caribbean – LAC, Africa – AFR, South and East Asia – ASIA, and Europe and Central Asia – ECA), together with global projects (GLO) and interregional projects (REGIONAL). Though this system is convenient from the terrestrial perspective, it has a very coarse scale and can complicate the practical analysis of international waters projects that follow the ecosystem approach (for example, large marine ecosystems) because these employ natural rather than national boundaries. For our current, more detailed analysis, therefore, we have presented information according to the 66 large catchments and associated marine areas (marine areas are identical to LMEs) defined for the Global International Water Assessment (GIWA) project. Some 42 of these cover GEF-eligible countries. We recognize the limitations of this division, but pending further consideration by the Scientific and Technical Advisory Panel (STAP), find it to be the only alternative system currently available that covers both freshwater and marine areas.

The development of the GEF IW Focal Area is illustrated in Figure 2.1. Funding for both OP8 and OP9 projects has more than doubled since the approval of the Operational Programs. The average GEF finance for individual OP8 projects is US\$9.07 (range 0.75– 36.8) million, and for OP9, US\$8.55 (range 0.75–21.45) million. The average cofunding is US\$23.09 million for OP8 and US\$19.28 million for OP9. The funding of both OPs is therefore remarkably similar. Figure 2.2 shows the evolution of cofunding during the development of the portfolio. The increase in cofunding in recent years appears to attest to increasing leveraging. This is partly due to World Bank SAP implementation projects that are closely related to loans or other investments.

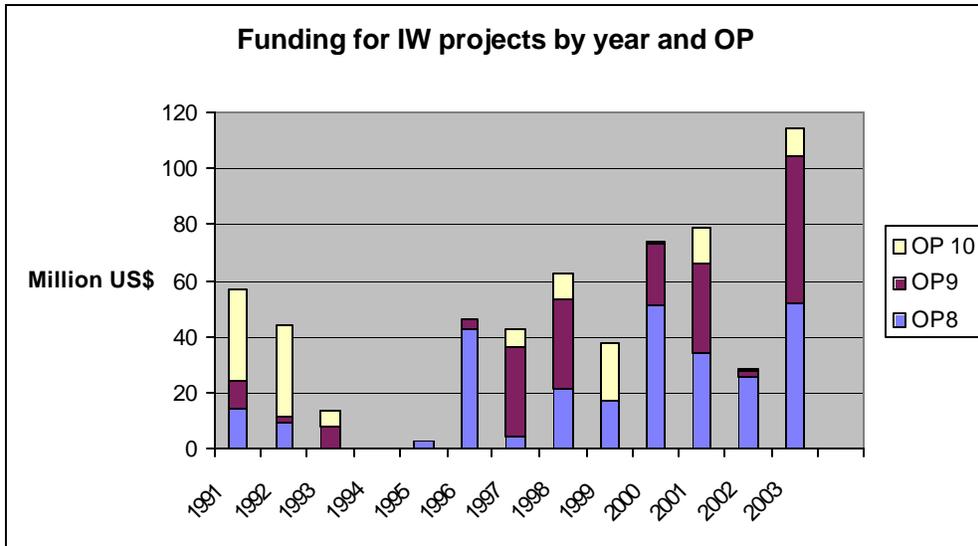
The overall distribution of the portfolio of approved projects is shown in Table 2.1. To date there have been 35 OP8 projects, 26 in OP9, 25 in OP10, and 7 of stated joint OPs. The distribution of these projects among the IAs is World Bank, 34; United Nations Development Programme (UNDP), 38; and United Nations Environment Programme (UNEP), 21. Interestingly, only three projects are declared as being joint with other focal areas, and only one of these is with OP2 (which has a clear focus on the coastal zone).

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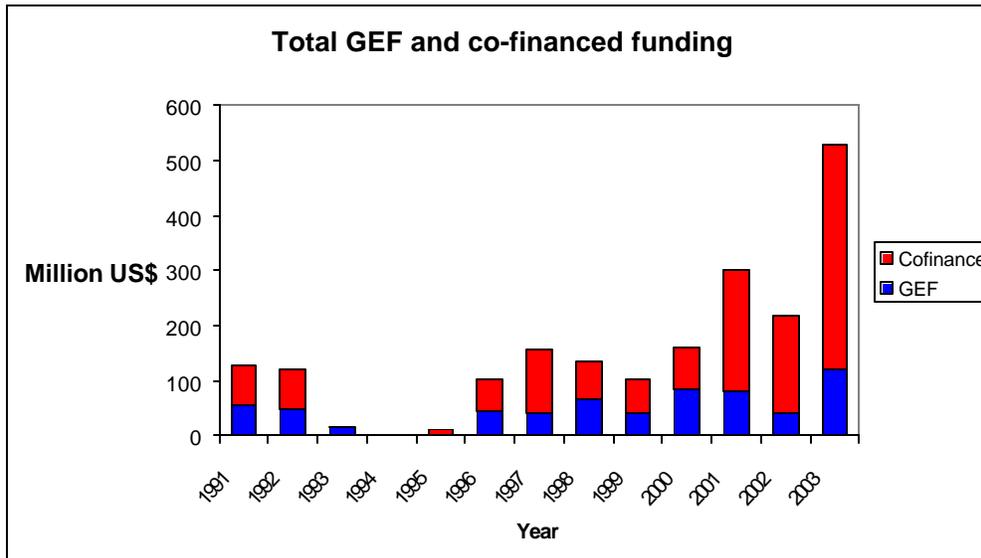
<sup>7</sup> The cofunding amounts are those recorded in project documents. We are aware that these figures have not always been achieved, but lack detailed information on the entire portfolio to explore this issue fully.

**Table 2.1. Distribution of Projects Approved by Council**

Implementing Agency	OP8	OP9	OP10	Joint OPs	
				Number	Type
WB	15	8	10	1	8,6
UNDP	17	11	7	3	8,10; 8,9; 9,2
UNEP	3	7	8	3	10,14; 10,2,9; 9,1
<b>Total</b>	<b>35</b>	<b>26</b>	<b>25</b>	<b>7</b>	



**Figure 2.1. Approval of Finance for IW Projects since 1991**



**Figure 2.2. Comparison of GEF Funding and Cofunding, by Year**

The distribution of project funding by subregion (as defined in paragraph 3) is provided as a map in Figure 2.3 (GEF funding) and Figure 2.4 (declared cofunding—see footnote 7). Note that the gray scales used in the two figures are different because of large differences in the investment levels. Global projects are indicated in a circle in the South Atlantic. The information has been pooled for each of the subregions. Although this should not be taken to imply that all of the subregion is covered by GEF interventions, it shows the approximate distribution of GEF effort in the IW Focal Area on a global scale. Also, the position of the markers in each section does not describe the exact position of each project; it merely signifies a single intervention within the region.

The results of this analysis are self-evident. GEF IW investments have been made in virtually every eligible region, and there are new investments in the pipeline for most of the subregions not presently covered. By far the highest GEF investment has been in the Black Sea Basin (US\$149.12 million, 20 projects). Other regions of high investment include those of Southeast (SE) Asia (including China's river basins and the South China Sea), the Plata Basin, and several African river and lake basins and large marine ecosystems (LMEs), including the Gulf of Guinea and the Mediterranean Sea. The regions of highest cofunding (Figure 2.4) have been the Black Sea and the SE Asian basins and seas.

We have also examined the distribution of projects according to the Operational Program (Figure 2.5) and Implementing Agency (Figure 2.6). The figure clearly shows the high density of OP8 projects in the Black Sea Basin. In most other regions, there is a mixture of OP8 and OP9 projects, though OP9 tends to dominate in Africa (except for the African lakes water body projects and the LME projects). Most of the global projects are in OP10, as are the earlier ship waste projects. Figure 2.6 also illustrates the division of lead agency responsibilities among IAs. The United Nations Development Programme (UNDP) and the World Bank dominate projects in Europe and in Central and East Asia, whereas the United Nations Environment Programme (UNEP) has a greater role in Latin America (largely through the Organization of American States). To some degree, however, all three IAs are responsible for interventions in all geopolitical regions of the world.

Figures 2.4–2.6 also explain our choice of regions for site visits. The study areas were selected in close cooperation with the IW Task Force according to regional representation, the highest density of mature projects, the magnitude of GEF investment, and the use of a wide range of approaches (TDA/SAPs, demonstration projects, and so forth). In this manner, we were able to collect firsthand information from projects that account for more than 50 percent of the total GEF investment to date. In doing so, however, we recognize that we have missed important and innovative interventions, particularly those related to large marine ecosystems (LMEs). At the request of the IW Task Force, we have included information from additional key projects in our detailed analysis in Chapter 3.

## 2.2. COIMPLEMENTATION OF PROJECTS BY IAS

There are clear operational advantages with close cooperation between IAs at the project level. UNDP (working with a number of Executing Agencies and their own network of Country Offices) are particularly adept at managing complex multicountry projects that require many small contracts and procurements. The World Bank's more centralized approach and strict procurement procedures have been a source of considerable frustration to project

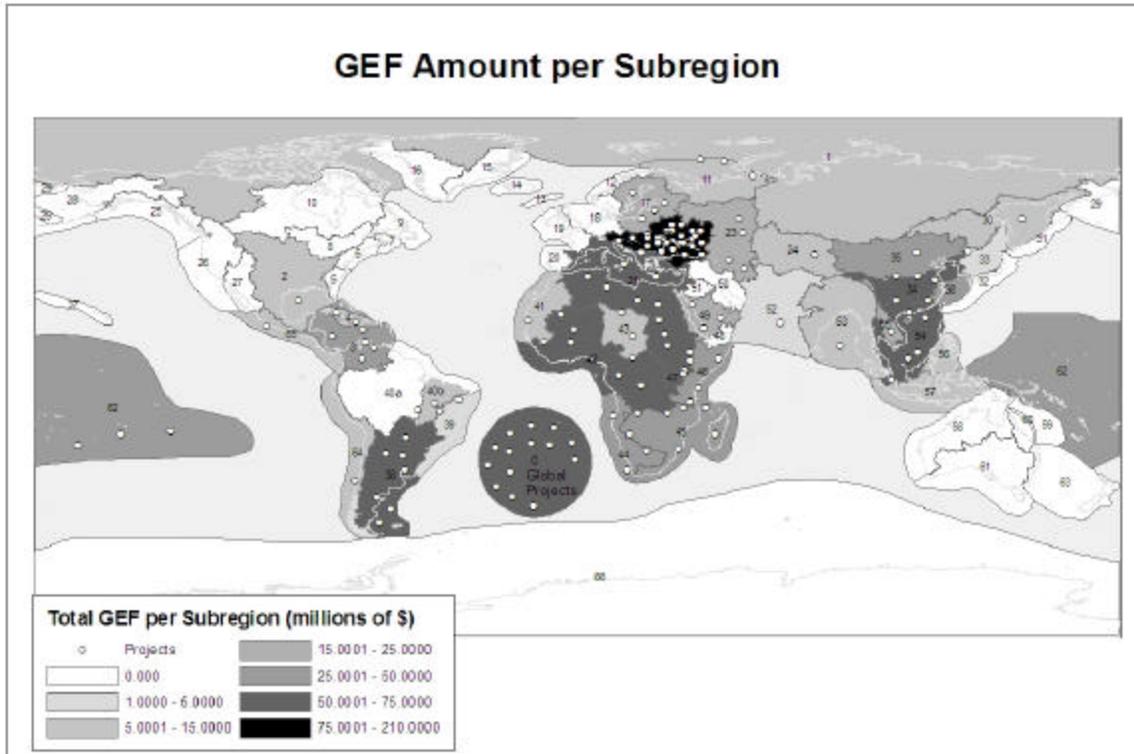


Figure 2.3. GEF Funding per Region (Note: Many of the projects cover only a small part of each region.)

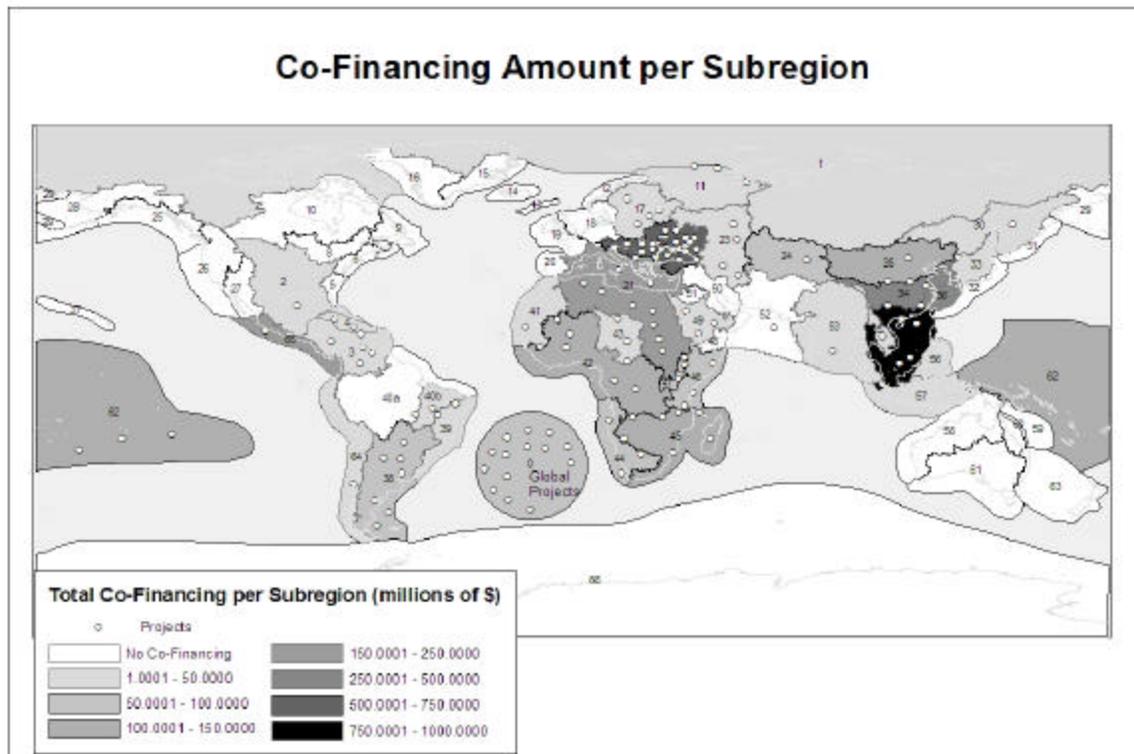
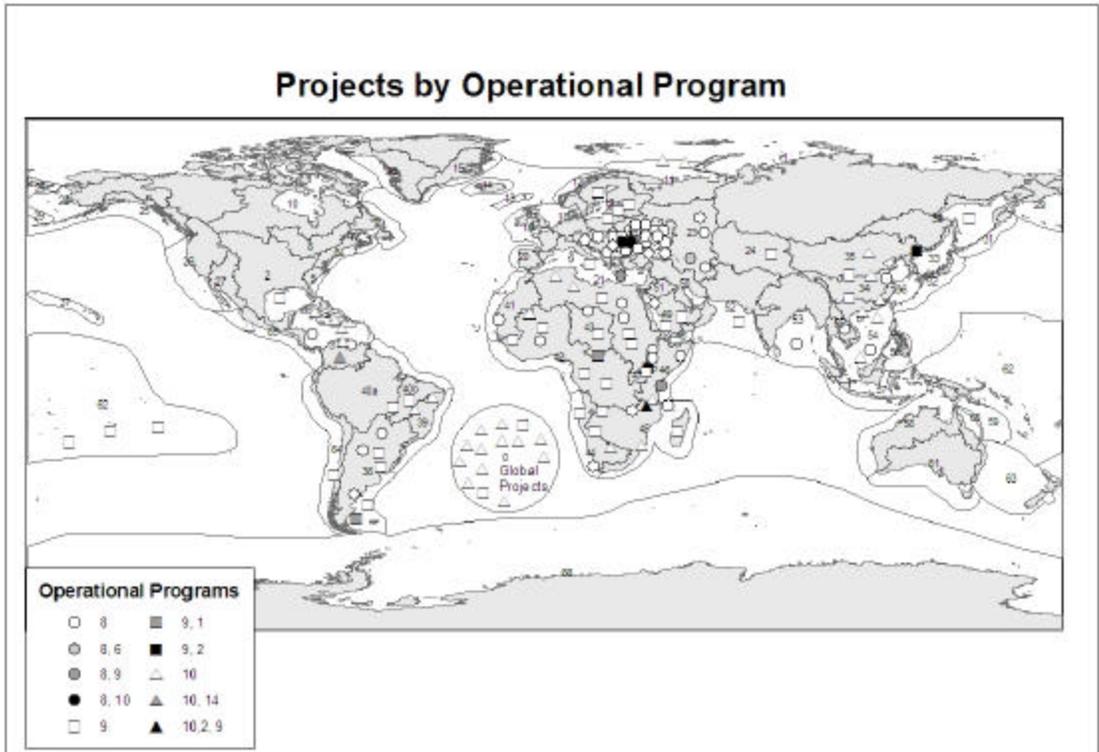
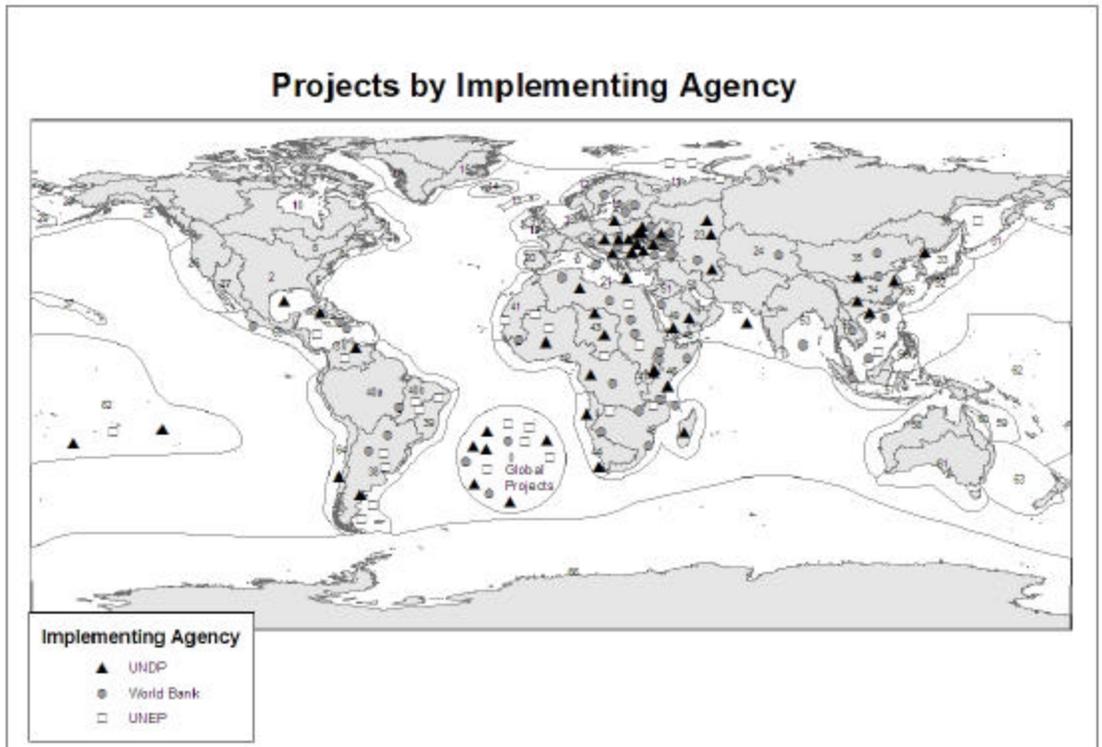


Figure 2.4. GEF Cofunding per Subregion (see footnote 7)

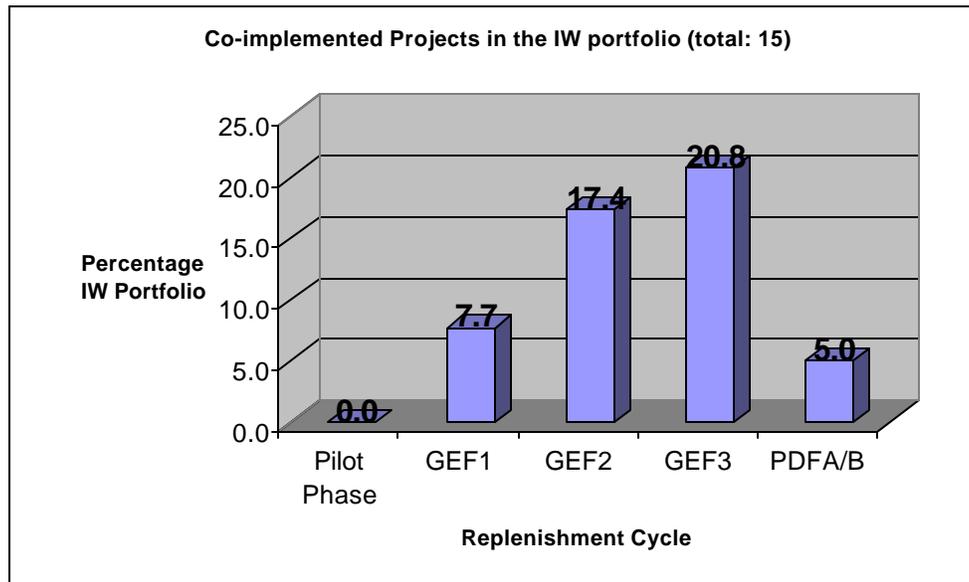


**Figure 2.5.** Distribution of All Approved Projects (1991 to the Present) according to the OPs (see Table 2.1)



**Figure 2.6.** Distribution of Projects (1991 to the Present) by Implementing Agency (see text for details)

managers, but the Bank has excelled at leveraging cofunding and investments. UNEP's approach to information gathering and its relationship with regional conventions and the STAP have given it a comparative advantage in many technical areas. Earlier reviews of the IW Focal Area commented on the deficiencies in operational coordination between IAs. In this context, we examined the development of co-implemented projects within the overall portfolio (Figure 2.7).



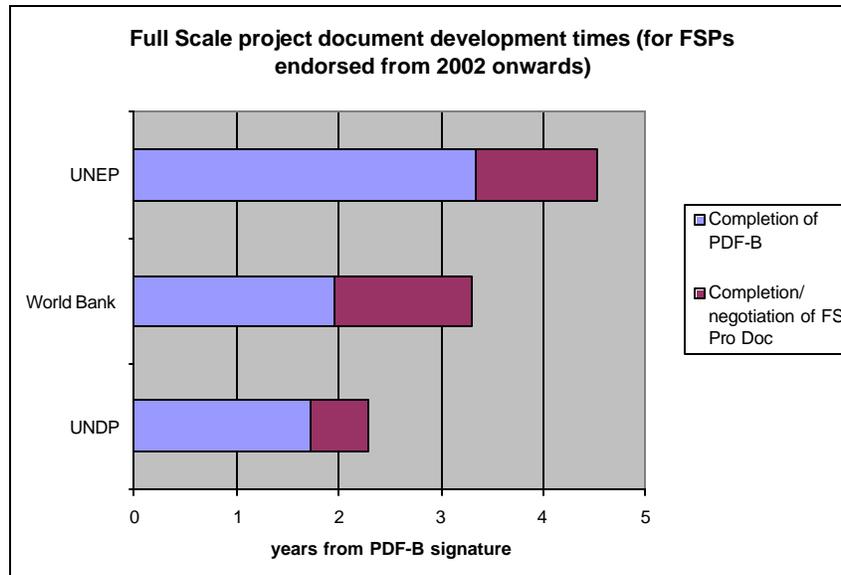
**Figure 2.7.** Development of Co-implemented Projects by GEF Replenishment Cycle

The results of the analysis demonstrate a steady increase in coimplementation. Numbers are still relatively low (one in five of projects approved in the current cycle) and the degree of coimplementation highly variable, but the trend is positive. There is clearly an increasing willingness to cooperate, fuelled by successful experiences such as the Caspian Sea project. Currently however, only one Project Development Facility B (PDF-B) is coimplemented, and this may herald a retreat from the positive trend. Our investigations suggest that this may be a consequence of the 9 percent cap on management costs imposed on IAs by the GEF Council. Successful co-implementation requires the mobilization of appropriate in-house specialists from the IAs to project meetings, and this is difficult to achieve if the limited fees must be shared between agencies, especially where projects are relatively small. A full cost-benefit analysis and review of the management fee system are urgently needed.

### 2.3. COMPARISON OF IAS' PROJECT START-UP TIMES

We conducted a survey of the time taken to complete PDF-B phases and generate CEO-endorsed project documents. IAs were requested to supply the dates of PDF-B signature, project brief approval by Council, and CEO endorsement. It was evident that a consolidated database is urgently required; these simple data were not always readily available and often incomplete, and the format varies markedly between agencies.

Figure 2.8 illustrates the results of this survey for projects that have been endorsed by the CEO since early 2002.



**Figure 2.8.** Full-Scale Project (FSP) Development Times . (Notes: “Completion of PDF-B” refers to the average time between signature of the PDF-B and the approval of the project brief for the FSP by Council. “Completion/negotiation of FS Pro Doc” refers to the average time from Council approval of the project brief to the endorsement of the project document by the CEO.)

The figure appears to show striking differences between the IAs, and we tested these statistically (F-test) to determine which of them were highly significant. The times taken for the PDF-B phase in the World Bank and UNDP were indistinguishable and averaged 22 months, whereas that of UNEP averaged 40 months. Completion and negotiation of the full-scale project document took an average of 15 months for the World Bank and UNEP, and significantly shorter (7 months) for UNDP. The average overall start-up process varied from 28 months (UNDP) to 54 months (UNEP), a difference of more than two years. Actual time to FSP start-up was longer because operation does not begin immediately after CEO endorsement. It is easy to explain the difference between project document completion/negotiation between UNDP and the World Bank: UNDP has streamlined its procedures, whereas the World Bank follows strict standard policies and generates comparatively far more detailed project documents. The reason for UNEP’s tardy process is less clear, however, and merits further investigation. The process should not be seen as a race against the clock, however; it may take a considerable time to achieve full buy-in of all stakeholders. (We will discuss the consequences of gaps between PDF-B implementation and FSP start-up in Chapter 3.)

#### 2.4. QUESTIONNAIRE SURVEY

To gather additional information on the IW portfolio, a questionnaire was prepared by the GEF M&E Unit in close consultation with the IW Task Team before the beginning of the current study. The questionnaire was “trialled” in autumn 2003, and a modified version

was distributed through the IAs to 44 ongoing full-sized projects in spring 2004. Much of the questionnaire was designed to examine the experience of projects with the transboundary diagnostic analysis (TDA) and strategic action program (SAP) processes, and this will be discussed in Chapter 4. Some general points are worth reporting at this juncture, however. First, the response to the questionnaires was very poor (see Table 2.2). Of the 44 projects, only 23 responded. There was only one response from Latin America and the Caribbean (WB Guarani project), and none from the UNEP projects in the region. This severely constrained the usefulness of the exercise and suggests that M&E is not taken very seriously in the region. The 23 responses did, however, represent a reasonable sample of the three OPs (7 from OP8, 11 from OP9, and 4 from OP10) and provided valuable information that will be used in later chapters of this report.

**Table 2.2. Response Rates to the Questionnaire**

<b>Geopolitical Region</b>	<b>IW Projects Selected for Study</b>	<b>Submitted Questionnaires IW Projects</b>
E. Europe & Central Asia	13	8
Africa	7	5
Latin America and Caribbean	8	1
Global	5	3
Middle East and North Africa	4	3
East Asia and the Pacific	4	3
<b>Total</b>	<b>44</b>	<b>23</b>

Second, the design of the questionnaire proved inadequate. It was based on the agreed on performance indicators<sup>8</sup> for the IW Focal Area, but in some cases these proved to be ambiguous and insufficiently quantitative to permit their effective use as a monitoring tool. (We shall examine this point in Section 3.8 of the current report.)

Third, the survey, together with examination of annual project implementation reports (PIRs), leads us to question the heavy reliance on self-assessment as a tool for project and program monitoring. There are some surprising inaccuracies in responses, as we shall demonstrate in Chapter 4. An example however, is that 40 percent of the respondents were not sure under which OP their project was financed. This leads us to question general knowledge of the GEF and its IW Focal Area at the project level. Is the information available understandable, up-to-date, and communicated to projects? (We shall explore this further in the next section.)

## 2.5. COHERENCE AND INFORMATION AVAILABILITY FOR THE GEF OPERATIONAL STRATEGY AND OPERATIONAL PROGRAMS IN THE INTERNATIONAL WATERS FOCAL AREA

We examined<sup>9</sup> the guidance documents for the International Waters Operational Programs (OPs) from the perspective of their clarity and to determine whether they clearly differentiate between OPs 8 and 9, and we also examined the operational strategy (OS) to determine whether it provides understandable guidance on the concept of

<sup>8</sup> Program Performance Indicators for International Water Programs, GEF/C.22/Inf.8

<sup>9</sup> A full comparative review was conducted and is available as a separate report.

incremental costs and eligibility for GEF funding. This clarity is important to determine which priorities identified in the TDA/SAP qualify for GEF funding under a SAP implementation project. (The analysis of OP descriptors is presented in tabular form in Annex 2.) Our conclusion is that the OP guidance documents contain much ambiguous wording (resulting from inevitable compromises during their initial negotiations) and their review and updating would be timely, especially given the incorporation of OP15 (land degradation) in the suite of GEF OPs and the wealth of new case studies that could be used to illustrate the IW OPs.

In this context, we noted the publication of M&E Working Paper 10 (see footnote 1), “Monitoring and Evaluation Indicators for GEF International Waters Projects.” This document, written in plain English, provides valuable insights into the objectives and modus operandi of the IW Focal Area and builds upon a decade of lessons learned. Unfortunately, its distribution has been very limited—perhaps the narrow title discourages wider readership. It sets a precedent, however, for providing guides that explain some of the more impenetrable GEF technical documents. We feel that better and more consolidated guidance would improve the transparency and effectiveness of GEF mechanisms.

In addition to examining the descriptors of OPs, we also considered the guidance provided on incremental costs for the IW Focal Area. (The details of our analysis are provided in Annex 2.) We concluded that the operational strategy does provide sufficient guidance regarding the concept of incremental costs. The problem is that much of this is couched in “GEF-speak” (the GEF’s own technical jargon) and there is a need to provide a bridge between this and the practitioners who need to understand and implement the guidance. Such a document could be illustrated by practical examples from the IW portfolio.

## 2.6. CONCLUDING REMARKS

In this chapter, we have demonstrated the impressive growth in scope and scale of the GEF International Waters Focal Area. This has resulted from the gradual geographical extension of enabling actions (such as TDA/SAPs), the development of new global initiatives under OP10, and the emergence of the first SAP implementation activities, particularly those in the Black Sea Basin. The SAP implementation and demonstration site projects are also responsible for much of the increased cofunding of GEF activities shown in Figure 2.2 (see detailed analysis in Chapter 3).

The maps of coverage in Figures 2.3–2.6 must be interpreted carefully; the patchwork quilt of projects is far from complete. In the next chapter, we shall also examine problems of fragmentary and inconsistent coverage at a basin scale, as well as project overlaps.

Questionnaires distributed to key projects through the IAs resulted in a relatively poor level of response. This may reflect fatigue from excessive gathering of information that appears trivial or repetitive, rather than a low level of importance given to M&E activities at the project level. However, there is also a worrying lack of knowledge regarding the GEF-IW Focal Area itself at the project level (this was also corroborated during site visits). We feel that this is partly due to the style and content of documentation available

describing the Operational Programs. Operational Programs also provide insufficient guidance to distinguish between activities that contribute to global benefits (and thus qualify for GEF support) and activities that would be considered as generating national benefits and would not qualify for GEF funding.

We noted major differences between IAs in the time required to complete project preparatory processes. IW projects are fairly evenly distributed between the Implementing Agencies, and there are gradually increasing numbers of multiple IA initiatives such as the Red Sea (completed) and the Caspian (entering the second phase). The costs and benefits of multiple agency implementation merit further study. Explicit multiple focal area interventions remain rare.

In the next chapter, we shall investigate many of these issues in depth, based on field visits and case studies.

### **3. ANALYSIS OF CASE STUDIES**

#### **3.1. INTRODUCTION AND CRITERIA USED**

The study sites visited represent a broadly representative array of ongoing and completed GEF interventions within OPs 8, 9, and 10. The five areas covered (Black Sea Basin, Plata Basin, African lakes, East Asian seas, and the Global Demonstration Projects) represent about half of the GEF IW Focal Area expenditure to date and an even higher proportion of cofinancing. The study team visited almost every ongoing project in the study areas to gather firsthand information from project staff, government officials, and stakeholder representatives. (Summary reports of each of the five studies are included as Annexes 3–7.)

The current section analyzes the results of these studies in relationship to a set of common criteria. The objective is not to conduct a critical evaluation of each project (this is the purpose of the mid- and final-term evaluation process and the independent SMPR), but to illustrate the development of the IW Focal Area, based on strengths and weaknesses of the projects (or elements of the projects) visited. Text boxes and footnotes are used to illustrate particular points or to give greater insight into individual projects. At the request of the International Waters Task Force, some projects are referenced from outside the study regions, including LME projects and IW:Learn (see Box 3.11).

The criteria employed for the evaluation are the following (see footnotes for further explanations):

- Coherent,<sup>10</sup> transparent, and practicable design
- Achievement of global benefits<sup>11</sup>
- Country ownership and stakeholder involvement<sup>12</sup>

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<sup>10</sup> By “coherent,” we refer to coherence with the operational program, with findings of the TDA, and with the institutional capacity in the region.

<sup>11</sup> In the case of IW projects, “global” also refers to transboundary environmental benefits related to the aquatic system.

- Replication and catalysis<sup>13</sup>
- Cost-effectiveness and leverage<sup>14</sup>
- Institutional sustainability<sup>15</sup>
- Incorporation of monitoring and evaluation<sup>16</sup> procedures.

The above criteria are fully compatible with the evaluation criteria employed by the GEF Secretariat and by most of the Implementing Agencies.

### 3.2. CRITERION 1: COHERENT, TRANSPARENT, AND PRACTICABLE DESIGN

#### *Context*

The M&E Working Paper 10 (see footnote 1) gives an elegant statement of what the operational strategy seeks to achieve: “The GEF international waters operational strategy aims at assisting countries to jointly undertake a series of processes with progressive commitments to action and instilling a philosophy of adaptive management. Further, it seeks to simplify complex situations into manageable components for action.”

In most cases, there was a high level of coherence between PDF-B and subsequent phases of the project cycle. With some exceptions, transboundary diagnostic analyses (TDAs) led to strategic action programs (SAPs) that provided a firm basis for subsequent actions. (We will review the TDA/SAP process in Chapter 4.)

As the IW portfolio develops, project design has improved, and innovations have gradually been incorporated. As we shall demonstrate in Section 3.5, there is a move toward projects that combine strategic planning with demonstration projects to maintain stakeholder interest and articulate the adaptive management process. Our comments are provided within this context of a focal area that is moving forward, but requires continual critical review to assist its progress.

#### *Analysis*

Gaps between PDF-B completion and the start-up of the full-sized project (see Section 2.4) often cause difficulties for the overall efficiency of project implementation. In the case of the South China Sea project, for example, the TDA was already four years old when project implementation began. The implementation phase of the Black Sea

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<sup>12</sup> We recognize that country ownership and stakeholder involvement are not the same; however, we consider that these two elements of “ownership” should coexist in any effective IW project.

<sup>13</sup> “Replication” refers to a project or project element that can be repeated at another place and time; “catalysis” refers to the ability of a project to galvanize effective actions at a larger scale than the GEF intervention itself.

<sup>14</sup> We recognize that cost-effectiveness is not the same as leverage—an intervention does not necessarily have to leverage cofunding to be cost-effective.

<sup>15</sup> This aspect of GEF interventions is considered to be critically important. (Our interpretation of a strategy for institutional sustainability is explained in Box 3.10.)

<sup>16</sup> “Monitoring and evaluation” is used in the broad sense, not only from the perspective of the formal GEF M&E criteria. Monitoring is a key element in an adaptive management strategy.

project—the Black Sea Ecosystem Recovery Project (BSERP)—began six years after TDA completion. Though there were no gaps in interventions in the case of the Black Sea, the small bridging project and patchwork of funding used to keep the Project Implementation Unit alive during the five years between SAP completion and BSERP resulted in a considerable loss of momentum and credibility.<sup>17</sup> In the case of the Lake Malawi/Nyasa and Lake Tanganyika projects, the five-year discontinuity in funding continues, and many technical outcomes of the projects have remained underutilized. In both cases, however, other donors have continued some level of support and, in the case of Tanganyika, a Convention and Lake Authority have now emerged. Long gaps generally lead to difficulties in applying an adaptive management approach because of lost momentum and the limited shelf life of technical documents produced in earlier interventions.

From these examples, it would also appear that some interventions were conceived without an adequate exit strategy or a big picture of the scale and scope of the overall GEF contribution. This does not imply a failure of the SAP approach, however, because many of the projects cited were originally developed in the pilot phase of the GEF itself.

There was a problem of regional coherence, however, between projects in the Plata Basin. For pragmatic political reasons, the early projects in the region—Bermejo, Upper Paraguay, Plata, and its Maritime Front (FREPLATA)—were established with little or no interrelation and without a full understanding of the Plata as an integral transboundary system. This made it difficult to maximize the global benefits of interventions (see Box 3.1), a problem that has been recognized and will be addressed through a new regionwide Plata Basin project. There is also a chronic problem of poor coordination between the GEF Focal Areas in most of the regions studied.

Inadequate project design has been a problem cited in a number of project midterm and final evaluations. Part of the problem is in the way some project documents are written and negotiated following Council approval of the project brief. The logical framework matrix should provide an overall vision of the project design, though we found little evidence of its regular use in project implementation. The most detailed and carefully prepared project documents are undoubtedly those of the World Bank, which take an almost turnkey approach. Some project coordinators<sup>18</sup> claimed that this left them with limited flexibility to adapt to small unforeseen changes,<sup>19</sup> but others<sup>20</sup> have suggested that their task managers<sup>21</sup> have helped them overcome procedural issues. At the other

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<sup>17</sup> The problem was compounded by the need to keep the coordination unit alive as a first priority, leaving very limited funding for in-country activities. This irony is common in international projects; the struggle to maintain institutions and institutional memory leads to a loss of credibility, given that the stakeholders see few on-the-ground benefits.

<sup>18</sup> We refer to “project coordinator” as the person in the field with immediate responsibility for implementation (“CTA” in UNDP terminology).

<sup>19</sup> The Patagonia Shelf project was an example of this.

<sup>20</sup> Such as the Guarani Aquifer and Mekong Water Utilization Project.

<sup>21</sup> It has been suggested that task managers often have large portfolios to manage, including projects that are considerably larger than those of the GEF, and it may be difficult to allocate sufficient time to respond quickly to all requests from the field.

### **Box 3.1. Altered Sediment Fluxes as a Global Issue in the Plata Basin? A Question of Setting Appropriate Scales**

In virtually every sub-basin of the Plata system, the alteration of sediment fluxes by human activity has been singled out as a problem of particular concern. There is plenty of evidence to illustrate the problem and its impacts. In the upper Paraguay Basin in Brazil, for example, huge changes in land use due to the rapid development of agriculture (mostly soy beans) and cattle grazing since the early 1970s have accelerated land erosion. There are some 23 million cattle in the State of Mato Grosso do Sul alone (10 for every human resident). The sediments washed into rivers are deposited downstream. In the case of the Taquari River that flows through the Pantanal wetlands, the buildup of sediments has caused it to break its banks and permanently flood vast areas of wetland. The ecology of the Pantanal relies on seasonal drying of the system, and the flooding is lowering its productivity, threatening biodiversity and causing a loss of employment.

Further south, in the basin of the Bermejo River that flows from Bolivia through Argentina to join the main Parana, there is also evidence of huge natural erosion exacerbated by land use changes that began during the earliest period of colonization of the region, four centuries ago. The Bermejo is now the main source of sediments to the Parana.

To what degree are these problems transboundary? There is evidence of large natural sediment loads in the system (though an order of magnitude less than the Amazon). The Pantanal, for example, is a natural sediment trap that is full of relict riverbeds and oxbow lakes, and there are plenty of historical accounts of the turbid waters of the Plata estuary itself. There are two main issues at stake, however:

- Impediment of the use of the system for navigation. It has long been an essential trade route into the heart of the continent, but increasing vessel size requires deeper waters and expensive constant dredging in the Parana.
- The concern that the current rate of change of sedimentation is leading to alterations in habitat that are occurring too quickly for adaptation by the natural ecosystem.

It can be argued that the navigation issue is exclusively a domestic one within the region because the dredging costs reflect the costs of adapting the river for a singular local and regional economic benefit as a waterway and that the high maintenance costs are externalities from inappropriate land use practices inland (channeling the river also creates new externalities). The same argument does not apply to the loss of habitat, however. The region contains unique habitats such as the Pantanal wetlands or those of the Parana River, and the maintenance of these systems and the ecological corridors of the rivers are of immense global value.

One note of caution is needed. As a result of damming, sediment fluxes are not always increasing. Decreased loads can cause the downstream river to cut more deeply into its bed, drying out adjoining wetlands. It can also result in insufficient sediment supply to coasts and beaches downstream, resulting in serious erosion. Sediments are currently trapped by large dams such as the Itaipu on the Parana or the Salto Grande on the Uruguay River. The Itaipu reservoir, one of the largest in the world, traps almost all of the sediments passing from the upper Parana. According to a report submitted to the World Commission on Dams, sediment supply to the lower Parana is currently balanced by recent increases in loads from the Bermejo River that join downstream from the dam. These increases are thought to be related to recent increases in rainfall in the Bermejo Basin.

Understanding sediment balances requires complex studies and models and must be tackled on a system wide basis. A piecemeal approach cannot work, and strategic assessment of the transboundary and global implications of changing sediment loads will require measurements and models as part of a coordinated basin wide approach.

extreme, the midterm evaluators of the UNDP FREPLATA project commented that the descriptions of implementation mechanisms in the project document were insufficient to guide the project coordinator in his duties. The Dnipro River Basin project document appears to have achieved a balance between the two extremes, giving just enough flexibility for the project coordinator to deal with the problems of political change that arose in the region but also clear descriptions of the roles of each of the collateral partners.

From a practical perspective, project documents are often too bulky for careful analysis (for example, by Council members) and have executive summaries that are uninformative. In some cases of non-U.N.-language countries, neither the project briefs nor project documents have been translated into national languages, hampering transparency from the outset.

Another problem with project design, frequently cited in midterm and final evaluations, is excessive ambition and complexity.<sup>22</sup> This seems to accrue during project negotiations as each partner (including the Executing and Implementing Agencies and the GEF Secretariat themselves) demands changes<sup>23</sup> to meet its various needs and constraints. Activities are added, but rarely dropped. The reason for this is that it is difficult to remove some of the original activities (given that they were proposed by governments) and easier to add the new ones that help the proposal to meet the demands of the OPs. Perhaps it would be useful to prioritize activities from the outset, enabling some to be removed if the IA detects excessive complexity.

In some cases, project start-up was considerably delayed by the need to negotiate memoranda of understanding or similar arrangements with the various entities involved in project delivery. One GEF Focal Point suggested that this could be avoided or minimized by making the completion of such agreements (at least at a framework level) a prerequisite to project approval. He suggested that adequate institutional arrangements were sometimes not properly negotiated at the time of approval of project briefs to gain time. Examples of problems that develop at this stage are assignment of roles that are outside the jurisdiction or competence of the coordinating institution,<sup>24</sup> over-concentration of effort on one ministry or sector,<sup>25</sup> misjudgment of existing capacity,<sup>26</sup>

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<sup>22</sup> This also applies to projects beyond the study area (for example, Red Sea, IW:Learn, Pacific SIDS)

<sup>23</sup> This often happens during a period of frenzied activity following the bilateral review of projects between the IA and the GEFSec and before its submission in time for the next GEF Council meeting.

<sup>24</sup> The MTE for FREPLATA, for example, demonstrated that the host Commissions (for the Plata and for its Maritime Front) had no jurisdiction over the coastal zones from where much of the pollution entering the system was arriving.

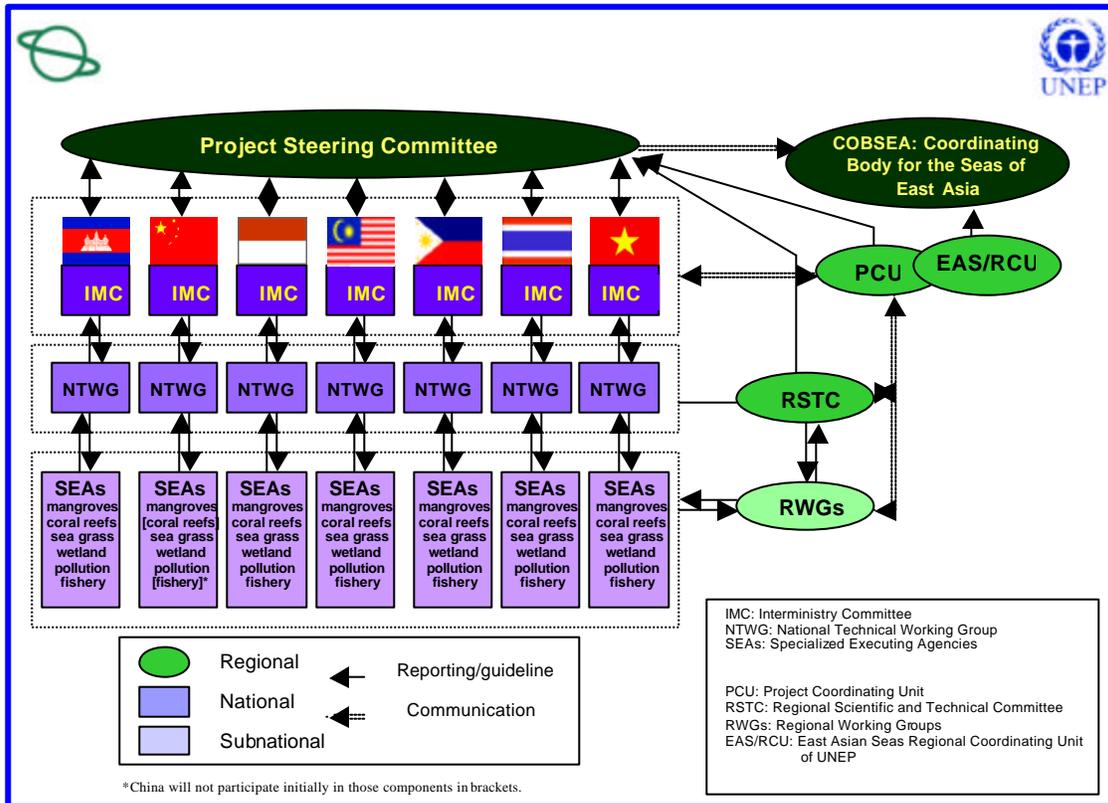
<sup>25</sup> The Black Sea interventions, for example, have focused mainly on the environment sector, despite evidence of very poor interministry coordination.

<sup>26</sup> Assignment of responsibility to some institutions as activity centers in the Black Sea did not match their capacity nor national plans for capacity development. Many of these centers are still struggling, despite more than a decade of support.

**Box. 3.2. An Innovative Management Framework for the Project “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand” (SCS)**

The SCS project has successfully gathered objective information that has enabled the participant countries to select demonstration sites for the sustainable use of mangroves, sea grass beds, non-oceanic coral reefs, and wetlands. It is also working on the fisheries of the Gulf of Thailand and the control of land-based pollution in the study area and will complete a revised SAP. In developing its management framework, the project had to consider a

number of needs, such as to engage the best available regional expertise while recognizing the special role of government agencies, to enable efficient information transfer, to enable specialists to work together on transboundary issues (including those that are common to two or more countries), and to balance sectoral interests at a national level and national interests at a regional level.



The framework devised comprises compatible national structures, regional working groups, and a management body (the Steering Committee), advised by a Regional Scientific and Technical Committee. Each of the national structures (Cambodia, China, Indonesia, Malaysia, Thailand, and the Philippines) features an Interministry Committee interacting with a National Technical Working Group, the forum through which the components' interests are reconciled nationally. It includes representatives of Specialized Executing Agencies (SEAs), one for each of the thematic areas of the project. These SEAs are contracted on merit (in some cases, they are NGOs) and the focal points from each SEA constitute the majority (or core) of the members of the regional working groups. There is also provision for three additional recognized regional specialists in these RWGs, reducing the risk of creating tight exclusive networks. The RWG chairpersons

sit on the RSTC, together with two specialist Regional Task Force chairs, NTWG chairs (the National Technical Focal Points), four experts from the region, and the Project Director. The 20-person RSTC thus reconciles the sectoral (scientific) component interests, as well as the national scientific and technical interests.

The advantage of this structure is that it provides a balance of political and technical inputs to the Steering Group, hopefully avoiding the sectoral capture that affects many other projects. The study (and the midterm evaluation) found that most of the IMCs are working well and succeeding in engaging high-level representatives. It was possible to meet with a specially convened four-person executive committee of the RSTC and confirm their effectiveness and strong commitment to the project.

and equivocal expectations of institutional reform.<sup>27</sup> An additional problem that has arisen is the creation of multiple demands on existing capacity through overlap of projects funded by different donors.<sup>28</sup>

With regard to transparency, this can be greatly enhanced by clarity in description of the role of the GEF in achievement of global benefits (see next section); frank discussion of the aspirational gap that often exists between local and regional needs and the funding limitations of the GEF; the provision of guidelines and descriptions that are less riddled with jargonistic GEF-speak and confusing cross-references to documents that may not be familiar to the reader; and revision of the roles of the different GEF entities with a view to clarifying responsibilities to improve efficiency, quality control, and accountability in the system. Minimization of the use of international consultants also helps foster transparency; there is a clear difference between the negotiated use of such consultants to bridge the current capacity gap (and to create new capacity) and the imposition of consultants as a donor requisite (this certainly occurs with some bilateral donors). The innovative management structure for the South China Sea project is an interesting experiment in how to achieve a transparent mechanism that balances the skills and interests of technical experts and political representatives (see Box 3.2). It demands considerable project staff time for the management of some 40 separate contracts with specialized Executing Agencies and requires considerable dedication from the staff of the PCU.

### 3.3. CRITERION 2: ACHIEVEMENT OF GLOBAL BENEFITS

#### *Context*

The ability to address transboundary water-related environmental concerns is generally regarded as a proxy for global benefits in the IW Focal Area. Because the aquatic environment is usually a continuum from land to sea and there are intrinsic difficulties to separate local and global issues, this remains a convenient operational definition, but one that may be difficult to interpret in some contexts. Most of the projects examined are clearly focused on transboundary concerns. The problem of huge overgrowth of water hyacinths in Lake Victoria, for example, could not have been resolved unilaterally because it was truly transboundary in nature and had serious implications for biological diversity and sustainable use of the aquatic resources. It also had important local dimensions for poverty alleviation and a reduction in health risk.

The selection of appropriate project boundaries followed by careful problem identification is the key to ensuring a clear focus on global benefits. In this context, OP8 projects addressing large marine ecosystems are easier to design than those under OP9, particularly single-country initiatives. Even in the case of LME projects such as the

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<sup>27</sup> Though outside the case studies of the current evaluation, it is clear that this issue was a major factor contributing to the limited success of the Aral Sea project.

<sup>28</sup> A typical case was the choice of identical demonstration project sites in the East Asian seas region by more than one donor. They are all country-driven, however, and were independently negotiated; it is difficult for donors and agencies to be continually coordinated regarding each other's plans for ODA funding.

Benguela Current (FSP under OP8) or the Humboldt (PDF-B in OP8), representing the two most productive marine ecosystems in the world, there was a difficult initial debate with stakeholders regarding the balance between local benefits (largely fisheries interests) and global ones (such as conserving biological diversity or maintaining system resilience in the face of global change).

There are important additional benefits for regional and global security from some IW interventions. Interventions such as those in the Dnipro, Caspian Sea, Lake Victoria, Lake Tanganyika, Lake Peipsi, and the Mekong, to name just a few, have promoted a productive dialogue between countries that has avoided conflicts over resource use. This additional benefit has generated greater ownership by the countries involved and has attracted additional donors that are particularly concerned with resource-use security issues. To our knowledge, the IW Focal Area is unique in its capability to achieve such benefits and leverage. It is therefore making an important contribution to the U.N.'s Millennium Development Goals and the Johannesburg Declaration of the World Summit on Sustainable Development (WSSD).

### *Analysis*

Largely as a result of choice of geographical scales, there are some projects where the water-related global benefits are small compared with the benefits to terrestrial biodiversity or those that accrue at a local scale. The well-managed Upper Paraguay project, for example, is focused on the protection of a major part of the Pantanal, the world's largest wetland, a habitat of immense global importance. Transboundary water-related benefits are unclear, however; the project is situated entirely within Brazil and has demonstrated that the system does not significantly contribute to downstream contaminant (including sediment) flux or alterations in hydraulic cycles. Nevertheless, the project clearly revealed the precarious state of the Pantanal itself, particularly as a consequence of huge sediment loadings from erosion caused by land conversion for upland agriculture. The sediment has deposited in the rivers within the wetland, causing them to overflow their banks and permanently flood areas that depend upon seasonal drying to maintain productivity and biological diversity. This demonstrates a paradox: the Pantanal is a huge natural reserve that possesses uniqueness as a system, despite having no endemic species. Strictly speaking, however, it would be ineligible for further actions within the IW Focal Area unless the project boundaries were redefined to include the neighboring countries (Bolivia and Paraguay) that share the basin.<sup>29</sup> The valuable and important work conducted by the project showed that any remedial actions to preserve the Pantanal must address land degradation, the primary cause of its destruction. This may pave the way to an intervention under OP15 (land degradation), rather than further actions under the IW Focal Area.

In the case of the SAP implementation project for the Bermejo River (also very well managed), the project brief is rather weak in its definition of global benefits, presenting a mixture of local and global benefits with no distinction between the two. This has

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<sup>29</sup> This comment was also raised during the SMPR study on the project; there is only one small element of the project dealing with a transboundary subsystem.

subsequently led to considerable questioning and analysis of the balance between the two kinds of benefits (the recent GEF Local Benefits study of the project has provoked an ongoing debate on this issue). The argument that decreased sediment flux in the river represents a global benefit is certainly questionable, given that the increased load carried by the Bermejo may well only just compensate the decreased load of the upper Parana following damming (see Box. 3.1) and that the project can only lead to a very marginal decrease in sediment load in the system.<sup>30</sup> Without a comprehensive study of the Plata system as a whole, there are too many uncertainties to justify the project as generating a net global benefit by sediment control. Indeed, the lack of monitoring systems in place makes it particularly difficult to assess any impact (this issue will be taken up in more detail in Section 3.8). The arguments regarding the restoration of a biological corridor are much stronger, however, as are the considerable local and conceivably global benefits from preventing the loss of productive land through soil degradation. On balance, it could be concluded that the short- and medium-term transboundary benefits for the project are likely to accrue through terrestrial conservation of biological diversity, rather than through improvements in international waters. In the longer term, the development of a sustainable institutional structure for the system could represent a valuable piece in the jigsaw puzzle of managing the overall Plata Basin, especially if the conservation of its ecological role were fully recognized as a priority in the region. However, this was not the stated purpose of the Bermejo intervention. The entire debate may merely reflect the difficulty of accommodating land degradation projects in the GEF's portfolio before the adoption of OP15.

The Bermejo and Upper Paraguay projects illustrate the problem of a jigsaw approach to river basin management without an overall system analysis and coherent strategy. The three initial projects in the Plata Basin were selected primarily for pragmatic reasons:

- They included key attributes of the overall system (the Plata and its Maritime Front, South America's largest estuarine system; the Bermejo, the major source of riverine sediment; and the Upper Paraguay for the Pantanal).
- Some of the countries in the basin did not wish for a wider intervention, owing to a number of international issues that were unresolved at that time.

Fortunately, the basin countries have recognized the limitations of a fragmentary approach and a PDF-B project<sup>31</sup> has been approved that will enable a mega-TDA to be completed for the overall basin. This may well reveal priorities and global benefits that are distinct from those of the previously cited initiatives. Setting appropriate scales is vital for achieving global benefits.

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<sup>30</sup> Part of the problem is that much of the degraded areas that contribute to the sediment load were deforested in the early colonial period, making restoration a colossal task.

<sup>31</sup> A Framework for Sustainable Water Resources Management in the la Plata Basin, with Respect to the Hydrological Effects of Climatic Variability and Change, OP9, UNEP

### Box 3.3. Complex Realities for Achieving Global Benefits: The Mekong Water Utilization Project (WUP)

Though the 4,200-kilometer Mekong is the 12<sup>th</sup> longest river in the world, it is only navigable until a short distance above Phnom Penh. Its 800,000-square-kilometer (population 70 million) basin covers a vast area of Cambodia, China, Laos, Thailand, and Vietnam, as well as part of Myanmar. Its ecosystem includes a very large number of endemic species and supports a fishery of more than 2 million tons annually (representing 80 percent of the protein supply in Cambodia, for example). It also has enormous importance as a source of water for irrigation and power generation. One of its unusual features is the Tonle Sap subsystem, which has a reverse flow during the rainy season (see inset below) and has great significance for more than 1 million (mostly poor) people that depend directly on its resources.

Unfortunately, some of the uses of the Mekong are incompatible with one another for reasons that are not immediately obvious. There are evident potential conflicts that would arise from excessive withdrawal of water for irrigation by upstream countries. The 16 million people in the Mekong Delta, for example, might suffer from saline intrusion, damaging rice crops (though this also facilitates a lucrative pond culture of shrimps). The use of water for power generation, on the one hand, could actually help to reduce the seasonality of river flow by releasing water for power production during the dry season. On the other hand, many fish migrate and spawn in harmony with the seasonal changes; dams would cut migratory routes and change basic seasonal spawning patterns. Seasonal change in river flow enables sediments to be mobilized and floodplain habitats to be preserved and promotes diversity of resilient species. The use of the river for a clean energy supply could have serious transboundary ecological, social, and economic impacts.

The Mekong Commission includes Cambodia, Laos, Thailand, and Vietnam, but China currently remains outside by its own decision. China, however, has caused consternation among its neighbors by damming the Mekong in two places and is soon to open the massive Xiaowan Dam, with a 300-meter-high wall and a reservoir 105 miles long. This comes at a time of record low flow in the river and plummeting fish harvests. China claims benefits, however, by releasing water during the dry season, permitting greater navigation.

China is not alone in building dams. The \$1.1 billion Nam Theun 2 dam in Laos on a tributary to the Mekong



is expected to deliver 1,000 megawatts of power, but has yet to win the backing of the World Bank, which is completing environmental and social assessments.

The Bank also implements the GEF Mekong Water Utilization Project (WUP), executed by the Mekong Commission. The project is providing the technical support to help the commission to set rules for minimum water flow in the river. The GEF project has focused on the hydrological modeling of the system and has made major advances in modeling. Parallel funding by donors has enabled other aspects of the system to be studied (for example, ecological health, habitats, water quality, and fisheries). Ultimately, the rules will depend on the vision of use of the river that should be agreed on by the countries and all of the stakeholders in the region.

This vision however, requires all countries to participate (including China) and a clear understanding of the implications of alternative regimes of river use. Currently, the information is fragmentary. The migratory patterns of fish are poorly understood, as is the sediment dynamics. A holistic approach is urgently needed, perhaps based on an adaptive management TDA/SAP process. Until this happens, ecosystem health and regional food security could be in jeopardy.

Providing that the geographical scales are carefully assigned and all stakeholders are included, the TDA/SAP process helps to keep an overall focus on global benefits without losing the local ones. Box 3.3 illustrates what happens when only partial solutions are considered. Though successful and well managed, the Mekong Water Utilization Project focuses on part of the problem of sustainable water management in the system. The development of a global vision for the system in the face of huge developmental pressure will require difficult tradeoffs in the very near future. The absence of a TDA/SAP for the entire system may limit the global benefits of the GEF intervention. Even where there is a clear vision of global benefits, fragmentation of an overall strategy into manageable pieces carries the risk of loss of the transboundary vision, especially where the individual interventions are nationally based and there are no clearly defined National Action Programs (NAPs).

To direct the concerted attention of all IAs on global benefits at a transboundary basin or sea level, an innovative Strategic Partnership approach has been devised and is currently being tested in the Black Sea Basin (see Box 3.4). The Black Sea Strategic Partnership sets out to control transboundary nutrient discharges to the Danube River and Black Sea. This approach may provide a framework for the major investments and reforms needed to tackle large-scale transboundary problems in other regions. It has already demonstrated a major catalytic impact in the World Bank through its leverage of investments. Our regional study suggests that an increased effort will be required to maintain coherence between the various components of the Black Sea Strategic Partnership; matching the approaches of IAs at an operational level requires enhanced coordination mechanisms. In addition, the component dealing with overall coordination in the Black Sea (the Black Sea Environmental Program/Black Sea Ecosystem Recovery Project) has not yet succeeded in engaging with local concerns and maintaining public attention on shared environmental issues. Projects must maintain a balance between local and global benefits if the engagement of stakeholders is to be sustained.

The Plata Basin case study serves to highlight the very fuzzy conceptual boundary between many IW and biodiversity projects, especially—but not exclusively—those in OP2. This is particularly evident in the case of the three projects covering the marine environment of Patagonia.<sup>32</sup> Though the project executants have developed ad hoc means to communicate with each other, we found little evidence of regular communication between the two IAs involved to seek synergies between the projects. This creates an artificial obstacle to the development of an ecosystem approach. A similar situation exists of virtually nonexistent communication between both the Danube or Black Sea projects and the Danube Delta OP2 projects. In every region visited, we encountered this issue; almost all IW projects claim benefits to biodiversity, and many OP2 projects appear to create benefits to international waters (either directly or through replicability), but the dialogue between projects in the two focal areas remains limited.

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<sup>32</sup> Patagonia Coastal Zone Management Plan (OP2, US\$2.8 million, UNDP), Consolidation and Implementation of the Patagonia Coastal Zone Management Programme for Biodiversity Conservation (OP2, US\$5.2 million, UNDP), and Coastal Contamination Prevention and Sustainable Fisheries Management (OP8, US\$8.7 million, World Bank).

### Box 3.4. The Project Implementation Phase: Achieving Global Benefits through Strategic Partnerships

The innovative approach of a strategic partnership was initiated by a paper to the GEF Council “Streamlining the Project Cycle” in 1998, which alerted the Council to the opportunity to create a strategic partnership between the GEF Implementing Agencies within a region to expedite programmatic objectives. In other words, to be able to forge a new mechanism of implementation of GEF programs, which could overcome many of the operational constraints encountered between agencies and operate at appropriate regional scales. The idea was to deploy all the comparative advantages of the Implementing Agencies, together with bilateral funders and development agencies, to tackle the issues identified through the TDA/SAP process. This should enable investments to be leveraged above and below the baseline (through the World Bank and bilateral donors), improve environmental monitoring and assessment and coordination with multilateral environmental agreements (for example, by UNEP and its partners), and improve capacity building and technical coordination (for example, through UNDP and its partners).

The first test of this approach was the Black Sea Basin, which included the two most mature GEF interventions—for the Black Sea and the Danube—plus a more recent intervention for the Dnipro River and a number of biodiversity projects. Together, these included a land area of 2 million square kilometers and 160 million people living in 17 countries, most of which were in transition from centrally planned to free market economies. The main purpose of this combined effort was to ensure that the Black Sea recovers from the catastrophic eutrophication<sup>33</sup> that occurred in the latter part of the Soviet era and does not return to the same state as a consequence of economic recovery in the region.

Before developing the Partnership, the commissions responsible for the Danube River and Black Sea had jointly agreed on goals and targets for limiting nutrient discharge to the Black Sea (particularly from the Danube, historically the major source of nutrients). Following two years in development, the Strategic Partnership was launched at a stocktaking meeting in June 2000 and was mainstreamed into the workplans of the two commissions and programs of the GEF Implementing Agencies.

<sup>33</sup> Eutrophication is a phenomenon that results from excessive loads of nitrogen and phosphorus compounds (nutrients) to a water body, eventually causing massive algal blooms, the depletion of vital dissolved oxygen, and the death of marine animals, including fish.

The Strategic Partnership comprises three separate main project elements:

- Control of eutrophication, hazardous substances, and related measures for rehabilitating the Black Sea ecosystem—implemented by UNDP (GEF US\$10 million)
- Strengthening the implementation capacities for nutrient reduction and transboundary cooperation in the Danube River Basin—implemented by UNDP (GEF US\$18 million)
- World Bank/GEF Partnership Investment Facility for Nutrient Reduction—implemented by WB (GEF US\$70 million).

There are a number of challenges and opportunities for the Partnership. The first is that 9 of the 13 countries in the Danube Basin are now members or prospective members of the European Union. Future Danube policy will be dominated by the EU's Water Framework Directive, which may impose stronger regulations achieving good water quality. On the other hand, they will also be subject to the EU's Common Agricultural Policy, which may result in increased fertilizer use in the region, and fertilizers are a primary source of nutrients. The European Commission is aware of this conundrum; the results of well-managed demonstration projects, such as those undertaken through the partnership, can have a major influence on its future policy in the region.

The second challenge comes from within the Partnership itself. The constituent projects have proceeded in their initial phases, some very successfully, but with little cohesion. Insufficient attention had been paid to this matter in the initial design, and there is an urgent need to reintegrate the various components and promote the Partnership as a whole. IA cooperation at the operational level remains inadequate in the region, and the Black Sea component in particular has faced major problems of poor management and country support. The upcoming second stocktaking meeting (November 2004) will provide an opportunity to revitalize the process through a revision of the implementation mechanisms, more clearly articulated goals, and a simplified mutually agreeable means of interproject coordination. The outcomes will be observed closely, because there are many issues at stake for the region and for the IW Focal Area.

### 3.4. CRITERION 3: COUNTRY OWNERSHIP AND STAKEHOLDER INVOLVEMENT

#### *Context*

We contend that a successful intervention should achieve ownership at the country and stakeholder levels. In this section, we will explore ownership from both perspectives. Two main factors potentially militate against ownership: donor drivenness and sectoral capture (the disproportionate control of a project or its benefits by a particular sector, interest group, or level of hierarchy). The TDA/SAP process is designed to achieve high levels of ownership, though there are alternative tools with similar objectives (for example, replication of local-level demonstration projects).

We have seen convincing evidence of good ownership by governments and stakeholders, as well as areas where more attention is required. The Lake Tanganyika project, for example, owes its success to a high level of ownership at all levels, enabling it to overcome very difficult challenges due to armed conflict, burgeoning HIV-AIDS levels, and severe poverty. We noted high levels of country ownership of all three projects visited in SE Asia and excellent examples of stakeholder engagement in the PEMSEA demonstration sites. Similarly, in the Plata Basin, there was clear evidence of stakeholder engagement in the Upper Paraguay and Bermejo projects. Our analysis is made in the context of lessons learned from these success stories.

#### *Analysis*

In principle, the existing mechanism for approval of GEF projects, involving the GEF Council at the project brief and project document approval stages, should ensure that projects are not donor-driven. It provides checks and balances such that a GEF Focal Point always has a voice to question any perceived irregularities. Though we found no evidence of manipulation of the process by agencies or donors, we noted that on some occasions the enthusiasm of the GEF Secretariat and IAs for particular projects or programs helped with their progression at times when their continuity might have been more seriously challenged. The Black Sea Strategic Partnership and related projects, for example, were approved despite the lack of financial contribution of several of the countries to the joint implementation arrangements for the 1992 Bucharest Convention (the Convention that remains the only legal agreement between the six Black Sea coastal countries). This situation endangers the sustainability of the joint institutional arrangements (JIAs) (see 3.5), but also weakens ownership of the project. The reverse situation is also true: a negative response by IAs can lead to dejection by countries, despite a high level of ownership. There is much regional confusion, for example, regarding the decision not to proceed with the Lake Malawi/Nyasa full-sized project, despite a very successful preparatory project.<sup>34</sup>

During project implementation, the project Steering Committee has a key role in asserting overall country ownership. In the projects we examined, great care has been

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<sup>34</sup> Apparently, the decision was taken because of the unwillingness of the Government of Malawi to assign high priority to the IDA loan that would have enabled counterpart funding.

taken in the design of these committees to ensure that they are fully controlled by the participant countries. The project coordinator is generally present as an observer, and in some cases (but not all), donor and NGO representatives are also given observer status.<sup>35</sup> The chosen formula depends on political and cultural realities; in the extreme case of projects such as the South China Sea and FREPLATA, the Steering Committees exclude all observers, except for the project coordinator.<sup>36</sup> The role of the project coordinator is often a difficult one—he or she may be the only person empowered to engage in a dialogue with the national representatives regarding the purpose and nature of GEF support, the limitations of project flexibility, and the operational mechanisms of the IA. Our discussion with the project coordinators suggests that, though most have performed commendably, many were poorly trained for this function before taking up their posts and faced a steep initial learning curve.

In our view, the most difficult aspect of country ownership has been to ensure adequate stakeholder involvement. Strong country ownership through the Steering Committee does not by itself avoid capture of the project by a single sector. This is why stakeholder analysis and the development of national Interministry Committees (IMCs), public participation programs, and National Programs of Action are a critical component of the TDA/SAP process. Unfortunately, we found a general lack of objective stakeholder analysis in many of the projects reviewed. Indeed, the lack of formal stakeholder analysis in the Black Sea region was one of the factors that led to weak or absent cross-sectoral participation,<sup>37</sup> further compounded by the lack of Interministry Committees and National Programs of Action. The process of drafting a NAP helps to consolidate a successful Interministry Committee<sup>38</sup>—a process followed in the neighboring Dnipro Basin. It would seem sensible for the Black Sea, Danube, and Dnipro projects to share single IM Committees in countries where their programs clearly overlap and many goals are similar.

In the Plata Basin, projects such as Bermejo and Upper Paraguay have conducted careful stakeholder analyses and have subsequently achieved high levels of participation from

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<sup>35</sup> Opinions on the role of the donors as observers or full members of Steering Committees differ widely. Ultimately, the IA has the right to withhold financial support if the project is clearly off track (compared with the project document) or if there is evidence of serious management anomalies. The IA is also accountable to the GEF Council.

<sup>36</sup> The observer status in these projects is one of voice, but no vote. In practice, the coordinators in both projects play a crucially important active role in the Steering Committee (Executive Committee in the case of the Plata Basin). The exclusion of other observers in both cases is a consequence of the participant governments' response to political sensitivities in the region.

<sup>37</sup> For most of its 11-year history, the Black Sea Environmental Programme (a loose term grouping interventions by the GEF and its partners) has been dominated by representatives of the “environment sector” (ministries of environment or equivalent). These are among the weakest ministries in these countries; in the case of Russia, the ministry has been downgraded, first to a state committee and once again to a department. Interministry Committees for the Black Sea in these countries are also mostly weak or absent.

<sup>38</sup> There are some good examples of IMCs in other regions: Several countries in the Caspian Sea project have strong IMCs; the South China Sea project has helped to create IMCs that meet at least twice annually in most of the participant countries. Brazil has created a strong IMC to examine all GEF proposals and ensure full involvement of all relevant sectors.

most economic sectors and the public in general. Downstream however, FREPLATA<sup>39</sup> has neither stakeholder analysis nor national Interministry Committees and has little demonstrable impact in public awareness or participation. The Upper Paraguay project has used a number of community-level projects to build confidence among some of the least-privileged sections of society and achieve their buy-in to the goals of the project itself. Confidence-building actions (following a careful analysis of stakeholders) have been the mainstay of demonstration projects managed by PEMSEA (see Box 3.4) and the Lake Victoria Project. The Lake Victoria Project has the difficulty that two of the national capital cities are remote from the lake, but compensated for this through strong representation by decentralized administrations coupled with the appointment of local-level public participation officers working within beach management units. Despite this, and the establishment of a formal Basin Commission, it still lacks national-level IMCs, however.

From the projects reviewed and visited, we are convinced that the strongest country ownership results from broad stakeholder participation and a structure that includes formal IMCs. This provides resilience during periods of political change. The participatory process (at all levels) also requires a good communication strategy, however. A number of the projects visited have excellent technical outputs, but have not translated them into a style and format that make them accessible to a wider audience, including policymakers and the general public. With notable exceptions,<sup>40</sup> there was a gap in many projects between promotional pamphlets and heavy technical volumes. Techniques such as giving positive media exposure to national focal points (when they attend key events, for example) have positively increased political buy-in.

The interests of transparency are best served by appropriate use of the Internet to make all information available to stakeholders. The approach taken to this differs considerably between projects. The South China Sea project is a good example of openness; meeting reports are posted within a few days of the meetings themselves, and budgetary information is freely available. FREPLATA is a good example of technical excellence in presenting scientific analyses underpinning the TDA.

Projects have had very divergent approaches to working with nongovernmental organizations (NGOs). Early attempts to organize NGO forums in the Black Sea and Danube projects met with failure because there was no compelling reason for these locally oriented and heterogeneous organizations to work together. They also had little chance of raising the necessary funds to attend future regional meetings, and the structure was therefore donor-dependent. Recently, the two projects have taken different approaches. The Danube developed a public participation strategy through the independent Regional Environment Centre in Budapest (with more than 10 years of developing such projects). In the Black Sea, a competitive small grants initiative was established to foster NGO activities, but its effectiveness is currently difficult to

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<sup>39</sup> The consortium implementing FREPLATA comprises two commissions belonging to the foreign ministries of Argentina and Uruguay.

<sup>40</sup> The newsletters produced by PEMSEA and Globallast are good examples of how to target and engage a particular audience.

evaluate.<sup>41</sup> Curiously, in the case of the neighboring Dnipro Basin project, NGO representatives (one per country) were invited to participate in negotiations of the regionwide ecosystem quality objectives. Their participation was enthusiastic, and they agreed to form an NGO forum on their own initiative. In the South China Sea project, NGOs have been contracted to implement national subcomponents of the project in cases where they are the most appropriate partners.

In conclusion, we feel that there is continued need for improvement of stakeholder participation in IW projects and there is a need for mandatory stakeholder analyses in all OP8 and 9 projects. There are sufficient positive experiences for the best practices to be recognized and shared with new projects at the pipeline or early implementation stages.

### 3.5. CRITERION 4: REPLICATION AND CATALYSIS

#### *Context*

The IW Focal Area has accumulated a wealth of experience in demonstration projects and other activities that may be replicable. These range from local-level initiatives such as the projects funded through PEMSEA, through larger initiatives in the context of global demonstration projects, to projects of several million dollars such as the Marine Electronic Highway initiative in the Straits of Molucca or the demonstration projects within the Black Sea Strategic Partnership. In this section, we will analyze some of the issues observed related to the development of demonstration projects in the regions studied, together with the global demonstration projects under OP10.

Another aspect of GEF IW projects has been their ability to catalyze larger-scale changes. The IW Focal Area is unique in not acting as a financial mechanism to support implementation of a global convention. We will demonstrate that some projects have helped to create innovative new regimes or mechanisms that remain active as agents of change when the project has been finalized.

#### *Analysis*

Several GEF IW projects, or components of projects, are designed on the basis of achieving global benefits through replication of nationally based demonstration projects. In three cases, these are global demonstration projects addressing the issue of the global spread of opportunistic invader species by ships' ballast water discharges;<sup>42</sup> the problem of mercury contamination arising from huge, but globally dispersed, artisanal gold mining;<sup>43</sup> and the global problem of excessive by-catch of non-target species

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<sup>41</sup> Our study of the project revealed that most of the projects had never been visited by Project Implementation Unit (PIU) staff and the resulting regional report is weak and currently represents a lost opportunity to evaluate the impact of this important experiment.

<sup>42</sup> Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries – *GloBallast* (UNDP-IMO, \$7.61 million GEF funds, 1999–2004).

<sup>43</sup> Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies – *Global Mercury* (UNDP-UNIDO, \$7.12 million GEF funds, from 2001).

### Box 3.5. GloBallast: Cornerstone of a New Global Regime

The global transport of invasive alien species (IAS) by ships' ballast water constitutes one of the greatest threats to marine biodiversity. Economic costs of IAS can be significant, and they can lead to the permanent collapse of traditional sectors and livelihoods. The Global Ballast Water Management Programme (GloBallast) is a highly successful GEF project that has catalyzed the issue of transport of IAS into a global priority, decisively contributing to an emerging international legal regime. As expressed by the Chairman of the IMO Working Group that drafted the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWC), "GloBallast made us believe that it was possible."

GloBallast developed versatile state-of-the-art methodologies and tools in the process of enabling six pilot countries to establish ballast water management frameworks and expertise. These have proven to be of interest to both developing and developed countries, created a worldwide network of engaged stakeholders. It also provided a platform for advancing technological responses to the problem and contributed to the development of the

standards and guidelines needed to manage ballast water.

One of GloBallast's greatest achievements has been its success in taking a highly technical problem and making it a priority issue among a broad and diverse range of stakeholders, both within the maritime sector as well as at top policymaking echelons. The fact that both the Prime Minister and the Deputy Prime Minister of India, one of six pilot countries, presided over an awareness-raising event is illustrative. Lack of information about the transfer of organisms in ships' ballast water constitutes the single greatest barrier to addressing the growing threat of bio-invasions.

GloBallast appears to have engineered one of the few instances of South-North knowledge and technology transfer. Through its execution and linkages to the convention process, it has become a vehicle for changing national, and potentially regional and global, practices that should translate into far-reaching global benefits. These are significant accomplishments for a 4-10-year, US\$7.61 million GEF-funded project led by a two-person PCU.

during shrimp trawling.<sup>44</sup> In addition, there is a long-standing, regionally based project for demonstration projects in SE Asia, currently termed PEMSEA.<sup>45</sup> Several recently approved projects have also included substantial demonstration components during the SAP development phase (for example, South China Sea project, Guarani Aquifer) or the SAP implementation phase (for example, Bermejo River Basin; or most notably, the Black Sea Strategic Partnership—see Box 3.4). As far as we are aware,<sup>46</sup> about half of all projects have significant demonstration activities. These wide-ranging initiatives provide ample scope for testing the replication approach. In the current review, we can only highlight some general points and remark that a thorough analysis of demonstration projects would be useful for future strategic planning.

<sup>44</sup> Reduction of Environmental Impact from Tropical Shrimp Trawling through Introduction of By-Catch Technologies and Change of Management (UNEP-FAO, US\$4.78 million GEF funds, from 2000).

<sup>45</sup> PEMSEA is employed here to refer to two projects. The first is the completed GEF Pilot Phase project, Prevention and Management of Marine Pollution in the East Asian Seas (UNDP, US\$8.03M GEF funds, 1993–98), and the second is denominated Building Partnerships for the Environmental Protection and Management of the East Asian Seas (UNDP, US\$16.22 million, 1998 to the present).

<sup>46</sup> Of the 20 respondents to the IW questionnaire, 11 confirmed that they are or were implementing demonstration projects.

Of the three global demonstration projects, only GloBallast is at a stage that allows an objective evaluation of results (Global Mercury is already generating first outputs). Our review and extensive interviews (see Box 3.5) confirm the extraordinary success of this project in catalyzing international action (by strengthening the negotiation process of a global convention) and laying the ground for the establishment of a new and effective global regime. It must be noted, however, that not all of the demonstration sites were equally successful (the team visited the least successful site in Odessa, Ukraine), but the overall result was impressive. By not limiting the project to easy wins, valuable experience (positive and mediocre) was obtained to achieve replicability on a global scale.

PEMSEA is another success story in terms of replication. The project initially selected coastal sites with severe human pressure impacting environment attributes of regional or global importance (species, habitats, cultural heritage). It achieved stress reduction by applying the principles of integrated coastal zone management. This is not a story of instant success, however; the process of developing each coastal site took about three years from identification to implementation and an additional five years to refine the process and gather information for replication. The Xiamen (China) and Batangas Bay (Philippines) sites developed in the early stages of the project spawned 11 additional successful sites with multiple pressures such as those of Danang (Vietnam), Sihanoukville (Cambodia), or Nampo (PR of North Korea<sup>47</sup>). A measure of the success in replication is that a system of parallel sites has now been developed in which countries are nominating sites with 100 percent national funding (PEMSEA provides the know-how through formal training, networking, and study tours to successful sites). Some 20 sites are in consideration, of which four (South Korea, Philippines [two], and Indonesia) are in early stages of implementation. Interestingly, in the case of GloBallast too, four of the six participating pilot countries are applying the GloBallast approach to other national ports, using their own resources

There are potential problems, however, with the approach of achieving global benefits by replicating Integrated Coastal Zone Management (ICZM) projects on a local scale. (These are illustrated in Box 3.6 for the case of the Xiamen demonstration project.) The difficulty is that environmental problems exist at various scales in space and time. Problems such as eutrophication, management of migratory fisheries, or the conservation of mobile species cannot be resolved by adding together a series of local projects because regional-scale priorities may be entirely different from local-scale ones. Furthermore, a strategy based on strict zoning of the entire coastal and shelf seas would reduce its resilience to long-term change, particularly climate change. The spawning areas of fish, for example, may well shift with changing water temperatures. Clearly, there must be a balance between a strategy based upon replicating local projects and a strategy based upon river basins (and associated sea areas) and large marine ecosystems. All of these approaches are valid, provided that the problem and causative stresses are within the same management boundaries.

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<sup>47</sup> Encouraging North Korea to participate fully in PEMSEA is a noteworthy diplomatic achievement.

Fortunately, this difficulty has been recognized by PEMSEA, and the project is undertaking two demonstration projects within wider boundaries (Manila Bay and the Bohai Sea<sup>48</sup>) and has successfully promoted a sustainable development strategy for the region. Though an important step forward, the strategy remains declaratory in nature and lacks the strength and purpose of a formal SAP, endorsed by all governments.

Unlike PEMSEA, which is focused on stress reduction, the demonstration project element of the South China Sea (SCS) project focuses on the sustainable use of key habitats, selected through an innovative and rigorous process of objective analysis. Inevitably, to reach the desired goal of sustainable use, stress reduction measures (or at least, stress management) will also be required. Replicability is sought by choosing sites that typify conditions in the region and then demonstrating the economic and social value of sustainable use. The demonstration projects are in the process of being launched at present, and it is too early to assess the results of the SCS approach. However, there are some encouraging signs (see Box 3.7). It will be important to monitor any overlaps between the SCS and PEMSEA projects very carefully; though both approaches have strong merits, dialogue between the two projects is limited, and an opportunity for synergy may be lost.

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<sup>48</sup> Improvements to the Bohai Sea are also constrained by issues of scale because the catchment of the sea includes the vast population in the Yellow River Basin (which is outside the project boundaries). However, this has been recognized in the project design, which is clearly focused on reducing stress in the coastal zone itself.

### Box 3.6. Managing the Human Footprint of Xiamen: A Question of Scales

Since 1994, the GEF PEMSEA project (and its precursor) has been working with the local authorities in the island city of Xiamen, China. Xiamen was a willing partner for the project; the authorities had already perceived the importance of environmental protection when they began a US\$47 million project to clean up the Yuan Dang Lake in the center of the city in 1986. Completion of the cleanup and extension of the concept to the coastal area, however, was a formidable challenge, largely because of the number of sectors involved. The Integrated Coastal Management (ICM) methodology offered by the GEF project enabled the development of the processes and structures necessary to bring the parties together and resolve their conflicts of interest. Over the 10-year period since Xiamen's selection as a demonstration site, there has been a dramatic change in the relationship between this city of 2 million people and its marine environment. The Deputy Mayor leads a marine management coordination group of 23 key sectors; strong local by-laws have been developed; a zoning scheme adopted; a marine management office with a supervisory force has been created; and national investments of more than US\$60 million made in wastewater treatment and the remedial measures. The cleaner and landscaped waterfronts attract larger numbers of tourists, and waterfront housing prices have risen. Careful use of zoning has enabled schemes to protect or restore the habitats of endangered egrets, lancelets, and white dolphins in the bay (the population has dwindled to around 100 individuals). Considerable local and global benefits are emerging.

Although the Xiamen story is remarkable, there are even more daunting challenges ahead. Further major improvements in the marine environment cannot be made without the participation of the five neighboring cities that share its catchment. Estuarine nutrient concentrations, for example, have seen little improvement since 1996, and there were four red tides—harmful algal blooms (HABs)—in 2003. Solid waste continues to affect the harbor, despite more than 95 percent treatment in the municipality, and bathers are advised to swim on flood tides, partly because of untreated effluents from other cities. Xiamen has begun complex negotiations with its neighbors and has even financed preliminary work in partnership with at least one of them. Upscaling the ICM project to a catchment management project will be a difficult task, however, and will require a different approach, with many more stakeholders involved.

The economic success of Xiamen itself may create unexpected problems. It has contributed to a recent annual per capita GDP growth of 18 percent, partly due

to a shift from a production- to a service-based economy. During the marine zoning process, it was decided to move the inherently polluting aquaculture farms out of the western estuary, replacing them with a mix of leisure areas and port development. This resulted in a considerable improvement in water quality and economic return. The port now handles 2.3 million containers annually, ranking it among the 30 largest container ports in the world. The overall net present value of the benefits of improvement of the Western Sea Area is estimated as \$655 million (cumulative since 2001), and the overall value of Xiamen's ocean industry (all uses) is calculated as about US\$1.4 billion (20 percent of GDP). The growing affluence and increased tourism are inevitably creating a greater demand for seafood (a major component of the local diet), largely satisfied by the same aquaculture industry that has been moved away from the city. The human footprint of the city has, in effect, been extended to other parts of China. There is a real danger that the human footprints of major cities will rapidly occupy the entire coastal area of China, constraining further growth and presenting a major threat to biological diversity. Harmful algal blooms of unprecedented scale reported in May 2004 along the northeast coast of China may be evidence of this problem. To its credit, the Government of China has used the experience of Xiamen and other pilot areas to introduce national legislation for marine zoning, but the pressures on the marine environment are growing rapidly, and the resilience of natural marine ecosystems is endangered. This problem requires yet another scale of action if it is to be addressed effectively, together with recognition of the high level of uncertainty inherent to managing marine systems. The maintenance of marine biological diversity must figure alongside other legitimate uses of marine systems if surprises, such as HABs, are to be avoided.

The success of the Xiamen demonstration project resulted from a stepwise process of confidence building that began even before the GEF was created by the decision to convert a murky lagoon into the center point for the development of a garden city. With GEF support, this confidence was extended to a larger scale with the generation of initial global benefits. The total incremental costs of ICM were estimated as \$10.6 million over a four-year period (of which the GEF contributed some 5 percent). However, this generated net benefits of US\$441.4 million over the same period. The confidence created in Xiamen has helped other cities follow the model; success breeds success. Now the challenge is to extend the process further at other scales that are less tangible for the human population—and less able to generate immediate economic benefits.

### Box 3.7. An Unexpected Output

The Chinese government provided additional in-cash cofinancing of US\$1.8 million to the South China Sea project (see Box 3.2) to strengthen national inputs during the first two years of project execution. This new cofinancing, additional to that available at the time of work plan approval, was made available to the national Executing Agencies to improve the information base on which decisions regarding national and regional priorities were based.

In Chinese, there is no word to distinguish sea grass from seaweed. The Chinese government had recognized sea grass beds as important to the endangered dugong, but had not recognized the

importance of sea grass beds as nursery grounds for commercially important fish. Using the government cofinancing, the national focal point from the South China Sea Institute of Oceanology was able to develop a GIS database using satellite imagery and ground truthing of all sea grass beds along the entire coast of China bordering the South China Sea. These data were contributed to the regional GIS database and represent the first internationally available information on sea grass in Chinese territorial waters.

One of the largest sea grass beds, 540 hectares, at Hepu in Guangxi province, has now been selected as a demonstration site.

We observed projects where demonstration sites made important local contributions, but were unlikely to be replicable within the region. In the Upper Paraguay Basin, for example, there is a demonstration project to manage mercury contamination from the town of Pocone in Brazil. Gold mining<sup>49</sup> began in 1977 directly under the town, reaching a production of 2 tons of gold per year by the early 1990s and 7,700 hectares of degraded land. Regulation was so poor that mineshafts were even constructed inside people's homes. The demonstration project helped the process of regulation, but also facilitated rehabilitation of degraded sites and is restoring community pride in the local environment. This is enormously important work, of course, but does it help to achieve transboundary benefits? Fortunately, within the region there is no evidence of mercury pollution (the project conducted detailed studies). The demonstration project therefore has only local benefits, albeit important ones. Potentially, it could have global benefits as a demonstration site in the context of the Global Mercury project, but there are no connections between the two projects (the local team had no knowledge of this project). We see this as a missed opportunity and a worrying symptom<sup>50</sup> of loss of a global vision of some GEF-IW projects as a consequence of inefficient liaison<sup>51</sup> between IAs, particularly at the regional level.

There is an interesting example from Lake Victoria where a GEF-funded demonstration activity has been so effective that it resulted in the catalysis of similar actions in other

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<sup>49</sup> Gold mining itself does not cause mercury contamination. The problem is caused by on-site extraction of gold using mercury to produce an amalgam and subsequently removing the mercury by heating, often in uncontrolled circumstances.

<sup>50</sup> This example is not unique. There is little evidence, for example, of any replication of demonstration projects conducted through the Regional Activity Center for Coastal Zone Management in the Black Sea, despite 10 years of operation and funding by GEF and Tacis; benefits seem to be limited to the coast of the Russian Federation.

<sup>51</sup> To follow the previous footnote, it is worth noting that the WB, too, has a coastal zone management project in the Black Sea (Georgia), but there is no evidence of any liaison between the regional center for CZM in Russia and the WB project.

countries around the lake. For some years, the lake had become progressively choked with water hyacinths, impacting its biological diversity and the income of local people. After many attempts at dealing with the problem mechanically, pilot-scale trials were conducted in Uganda of biological control, using a species of weevil. News of the success of the trial spread quickly and spawned a massive and successful locally driven and implemented follow-up around the lake.

Catalysis normally occurs at a different scale, however. In the Lake Tanganyika project, the initial GEF support has catalyzed the development of a convention, as well as investments and actions by other donors. The GloBallast project contributed very significantly to the acceleration of an otherwise slow process toward a global convention. This was achieved by a combination of demonstration sites, a concerted targeted awareness-raising program, and technological inputs that helped to lay the bases for the convention's uniform interpretation and for decisions on its standards. GloBallast's work convinced a diverse range of stakeholders that the convention was achievable. Effective targeted outreach helps to build the confidence that may lead to a catalytic effect. The timing of such events as donor conferences are critical; donors are convinced by results, rather than mere processes.

There are many other agreements, conventions, and treaties that have been catalyzed by actions in the GEF-IW Focal Area. These include the Caspian Sea Convention, the Dnipro Basin Agreement, the Protocol for Sustainable Development of Lake Victoria Basin, the Lake Ohrid Treaty, and the Pacific Tuna Treaty (the first under the 1995 Fish Stocks Agreement).

### 3.6. CRITERION 5: COST-EFFECTIVENESS AND LEVERAGE

#### *Context*

In this section, we will explore the two related concepts of cost-effectiveness and leverage. Our discussions of cost-effectiveness will focus on project execution issues. Reference is also made to the comments in Section 3.2 regarding interrupted project cycles, however. Projects are unlikely to be cost-effective if they are interrupted for months or even years between the PDF and full-scale project phases. The investments to create information resources, human capacity, and political momentum are easily lost in the gaps from one phase to another. Similarly, poorly designed projects are unlikely to be cost-effective ones.

We shall present some examples of projects that have achieved high levels of leverage. Emergent mechanisms for creating investment opportunities will also be discussed.

#### *Analysis*

Currently there are no direct means for measuring the cost-effectiveness of projects. This is partly due to the divergent visions of cost-effectiveness itself (for example, operational cost-effectiveness of project implementation, cost-effectiveness for achieving the

transboundary environmental objectives<sup>52</sup>). The most promising approach is to compare the project with alternatives for achieving the same transboundary benefits. Most projects, however, present only a single means to this end (*the* GEF alternative) and compare it with the environmental cost of not intervening at all (the baseline). We feel that the study of alternatives is central to effective decision making and note that the analysis of various options is an important part of the SAP process.

As an example, it is unclear how the cost of nutrient removal by tertiary sewage treatment for small towns in the Danube Basin compares with the alternative approach of permitting secondary treatment and compensating for the increased nutrient loads by rehabilitating wetland. The equation is not a simple one because operation and maintenance costs must be included in the case of the treatment plant (these are low for the wetland). On the other hand, the rehabilitation of the wetland has inevitable costs for displaced resource users, again partly compensated by the multiple benefits of nutrient removal and natural habitat regeneration. This example is very pertinent to the Black Sea/Danube Strategic Partnership. The initial investment projects were selected on an opportunistic basis, but provide a unique opportunity<sup>53</sup> to conduct a thorough evaluation of cost-effectiveness of alternative approaches.

It is felt that the current wide range of GEF initiatives and approaches should enable improvements in future cost-effectiveness. Such studies are being taken very seriously in the case of PEMSEA (see Box 3.6 for example) and the South China Sea<sup>54</sup> projects, though the emphasis is one comparison of costs and benefits, rather than comparing the cost of viable alternatives to attain agreed on socially acceptable environmental goals. Regional and interregional guidance on these techniques would be very useful; environmental economics offers powerful tools, but these must be employed with a full understanding that non-tangible benefits (for example, biological diversity, cultural values) are also an important component in any decision-making process affecting the natural environment.

At a project management scale, the comparative study of alternatives would also provide useful insights. The management approaches of different Executing Agencies could usefully be compared from a cost-effectiveness perspective (see Box 3.8). To our knowledge, this has not occurred, though it could promote greater management

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<sup>52</sup> This key question can be expressed another way: Do we measure against the outputs (the project) or the outcomes (the program) and over what time period? If a truly strategic approach is envisaged, cost-effectiveness can be measured only against outcomes.

<sup>53</sup> It was unclear from our study whether this opportunity will be used. The study of alternatives was considered during the Black Sea/Danube stocktaking meeting in 2000. At that time, it was appreciated that insufficient data were available to set cost-effectiveness as a criterion for project approval. However, implementation of the projects should change this situation.

<sup>54</sup> The SCS is one of the few projects to have a task team of environmental economists and to present studies of costs and benefits. One limitation of this approach is the choice of discount rate when making economic assessments (the balance between costs and benefits is rather sensitive to the discount rate chosen). This becomes less important when comparing costs of alternative means to achieve a given benefit, however.

efficiency. We observed several different approaches to project management in the case study areas:

- Very small coordinating units with less than 10 staff relying on contracted national (beneficiary country) organizations or consultants to conduct most of the studies and demonstration projects; minimum use of outside consultants (for example, South China Sea, FREPLATA, Patagonia Shelf, Guarani, Bermejo, Upper Paraguay, Lake Victoria, Dnipro, GloBallast, Global Mercury)
- Coordinating units that make use of the infrastructure of permanent commissions, adding small numbers of project staff as a dedicated unit (Black Sea, Danube, Mekong); all rely on both beneficiary consultants and substantial numbers of external consultants to conduct much of the substantive work
- Large central team (more than 30 staff) funded by various donors with very limited use of consultants (PEMSEA).

In all of the above cases, coordination costs are generally below 20 percent of the GEF contribution. Execution of projects by national or regional agencies potentially generates additional benefits (greater buy-in and more sustainable institutional capacity), though it also carries the risk that the host organization becomes reliant on donor funds (see Section 3.6).

In the projects we examined, the degree of involvement of the IA differed considerably. Much of the attention of project coordinators was on financial management, procurement,<sup>55</sup> and personnel policy issues, and there were wide differences regarding procedures and practices. We noted that the supervisory visits to projects by IW specialists were very limited. This is a result of the very limited staff time available in IAs for this purpose and the lack of funding that can be allocated for site visits. As a result, some of the project coordinators feel disenfranchised from the GEF family. The International Waters Learn project (OP10) is encouraging a better corporate atmosphere through its excellent website and the biennial IW Conferences (see Box 3.11), but nevertheless we feel that overall cost-effectiveness could be improved with greater specialist supervisory contact.

The issue of project leverage is much more tractable than cost-effectiveness, though it is sometimes difficult to ascertain whether the leverage was entirely due to the GEF intervention itself. Indeed, there are cases where GEF funding itself was a result of leverage from another process. An example was the Danube project, which was initially triggered by European Union support to the region (indeed, the first location of the Project Coordination Unit was Brussels). The EU-Tacis support was largely (though not entirely) related to what might be described as baseline issues. Now that many of the original beneficiary countries have acceded to the EU or are in the process of accession, the role of the GEF has changed considerably—the baseline for incremental costs itself

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<sup>55</sup> The coordinator of the Patagonia Shelf project, for example, commented that the cost of following the World Bank's tendering procedures (in terms of advertising in national newspapers) was sometimes disproportionate to the scale of the procurement and, coupled with lengthy communications delays with Washington, was resulting in late project delivery.

has changed because strict adherence of the countries to the EU's environmental directives would reduce much of the transboundary stress to the Black Sea.<sup>56</sup> The Mekong River is another clear case of the GEF adding value to an existing process; the South China Sea Project also builds upon foundations laid by UNEP's COBSEA and a number of national initiatives. Outside the five case study areas, there are many examples of this kind; the Benguela Current,<sup>57</sup> Baltic,<sup>58</sup> Mediterranean,<sup>59</sup> and Aral Sea<sup>60</sup> projects are examples of leverage of GEF support. The Upper Paraguay is an interesting case in which the original leverage failed to materialize. The project was originally intended to accompany a large Inter-American Development Bank (IDB) loan for the Pantanal, but the negotiations were delayed indefinitely. From being an accompanying project, the Upper Paraguay became the only project, and adjustments were made to enable it to operate alone. Interestingly, the GEF project has now provided technical information and confidence that may well enable the IDB loan to proceed, perhaps in a different form from its original conception.

GEF interventions also have a good record of leveraging additional donor funding, below and above the baseline of incremental costs. Leveraging through the demonstration projects of PEMSEA is particularly high (see Table 3.1). The South China Sea project, covering many of the same countries, has also demonstrated early promise in leveraging support for its demonstration projects (see Box 3.7, for example). The Lake Tanganyika project has been highly successful in leveraging US\$80 million funding for practical follow-up actions (see Section 3.7). The Black Sea/Danube strategic partnership has leveraged investments with an overall 1:3.2 ratio<sup>61</sup> (this is the average; the leverage varies considerably between projects). The Danube project created a huge portfolio<sup>62</sup> of potential loans, both below and above the baseline. Some of these are now being taken up through a process, DABLAS, managed by the European Commission. The relationship between DABLAS and the Black Sea/Danube Strategic Partnership is unclear. The Black Sea/Danube Strategic Partnership does not appear to have a formal role within the DABLAS process.

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<sup>56</sup> This is a double-edged sword, however. The EU Common Agricultural Policy could stimulate growth of this sector in the Danube Basin, potentially providing a renewed source of stress through increased nutrient loading to the Black Sea.

<sup>57</sup> Building upon the BENEFIT scientific program started by a number of bilateral donors.

<sup>58</sup> Closely related to both the Helsinki Commission and the International Council for the Exploration of the Sea (ICES).

<sup>59</sup> Hosted by UNEP's Mediterranean Action Plan.

<sup>60</sup> Initiated in dialogue with the International Fund for the Aral Sea.

<sup>61</sup> The GEF target was 1:3, and it is currently 1:3.2, including pipeline projects. This is partly a result of blending with WB agricultural pollution reduction projects in Turkey (1:8.8) and Bulgaria (1:8.0).

<sup>62</sup> Indeed, it has been widely criticized as providing an excessively large "shopping list" without clear priorities based upon the comparative transboundary benefits.

### Box 3.8. Impact of Project Execution Modalities on Project Performance

The execution modality of a GEF project can seriously impact its performance and ultimate cost-effectiveness. If the financial conditions imposed on an Executing Agency are too stringent, the success of the project can be undermined from the outset, no matter how good the design or the country ownership. The GEF Executing Agencies typically are operating under very low returns, giving them little or no facility for project adjustment or revision.

The risk for poor project performance borne by the Implementing Agency (IA) is greater if the project is executed by a U.N. agency/office (UNOPS, UNON, IMO, or UNIDO) than if through a commercial organization, and this is reflected in the execution or management fees levied. Management fees for U.N. Executing Agencies are typically between 6 and 8 percent for large International Waters projects. This is applied to the total project value, rather than to the project staff inputs, as usually occurs in commercial organizations. The management fee covers the usual head office costs. Typically, the cost of project staff inputs and subcontractors represents 30–40 percent of the total cost, excluding the management fee, and therefore an 8 percent fee would be equivalent to a staff cost multiplier, which is how commercial organizations measure the viability of a project, of 1.26, while commercial organizations would be seeking a minimum multiplier of 2.0.

The U.N. agencies are therefore executing the GEF projects well below what would be seen in the commercial arena as viable, and GEF is getting a very low-cost service. There are a number of differences that might explain how the U.N. agencies are able to deliver on such a low management fee:

- No requirement for U.N. agencies to make a profit
- Little or no business development/tendering costs
- No indemnity insurance
- Subsidy of fixed costs through central agency budget
- Transfer of risk to independent consultants
- Loose contractual arrangements, enabling project risk to be off-loaded to the IA.

The last difference is probably the most important. The U.N. Executing Agencies work to a specification, but they also work to a budget; once the budget is exhausted, the work stops, irrespective of the status project deliverables. Good project managers are encouraged to manage their budgets to maximize the priority project outputs and outcomes while still holding a contingency, because the agreement does allow the Executing Agency to go over budget. Contingencies have to be set aside to pay for the project staff costs to cover the delays in execution that are common and often due to factors outside the control of the Executing Agency.

The project document is therefore rarely fully realized, and 80–90 percent delivery is seen as a good target,

irrespective of product quality. There are surpluses in this very simple delivery system to allow for revising or redoing activities that are judged as substandard. This is one of the reasons why GEF project documents are typically written in a loose, flexible form to give the project manager maneuverability. Alternately, highly prescriptive, output-focused project documents under these execution constraints can get into trouble quickly. If a project goes seriously wrong because of the initial project design or poor management, there is no real means of correcting it, because redesign or recasting of the project is rarely considered. Poor performing projects are often written off, and no attempts are made to resuscitate them. There is also a temptation to spend out the projects as quickly as possible to claim the execution fee. Project evaluations are often tardy and lack any real teeth or impact; also, it is not in the interests of either the Implementing or Executing Agencies to publicize a bad project, which they do not have the resources to remedy. A lack of contingency funds means that technical resources are either overstretched or cannot afford to be deployed, if they exist in an Agency (Implementing and Executing). Training for project staff is almost nonexistent, and staff turnover often high.

The World Bank sometimes employs commercial organizations to execute projects in other contexts. These are bound by their contract to deliver the full terms of reference to the satisfaction of the IA, meaning that a good level of quality assurance can be provided. The commercial organization, rather than the IA, bears the risk of poor project management and, to an extent, poor project design. However, for this very reason, a poorly written project document will attract higher bids because of the hidden risks. The onus is therefore on the IA to prepare clear, comprehensive, unambiguous output-orientated documents against which the competitive tenders can be bid. The IA has to invest considerable time and effort in preparing these documents, something to which the WB and other IFIs are accustomed. However, compared with the U.N. agencies, commercial organizations are expensive, and, by necessity, the project documents required are quite prescriptive and lack operational flexibility.

In the future, the GEF needs to undertake a realistic assessment of the execution fees, rather than, as at the moment, accepting the lowest offer. Putting pressure on agencies to reduce execution fees without any clear rationale can be just as likely to be detrimental as beneficial to project cost-effectiveness. It is wrong to assume that the agencies, particularly the U.N. agencies, know the real cost of project execution without hidden subsidies. In addition, some form of project-specified contingency built into the project budget should be considered; at present, contingencies are often hidden in budget lines with purposely vague titles.

**Table 3.1.** Leverage by PEMSEA Pilot Projects (Information from PEMSEA Secretariat)

<b>Country/Location</b>	<b>Project</b>	<b>Funds leveraged</b>	<b>Source</b>
Rep. of Korea/Shiwa Lake	Upgrading of wastewater treatment facilities	US\$625 million	National and local governments
Philippines/San Fernando City	Integrated solid waste management system	US\$5 million	City government/ private sector
Philippines/Bataan Province	Integrated solid waste management system	US\$7 million	Province/city/municipalities/ private sector
Vietnam/Danang	Integrated industrial wastewater and hazardous waste treatment system	US\$10 million	City government/private sector
China/Bohai Sea	Bohai Sea Management Plan (capacity building)	US\$100 million	State Oceanic Administration

The PEMSEA project offers some interesting lessons in the application of new instruments for financing, particularly public-private partnerships (PPPs) (see Box 3.9). This mechanism is still at a development stage, and it is important to point out that it may not be immediately applicable to other regions. The negotiation process is complex and requires entrepreneurship and a profound knowledge of negotiation skills. Nevertheless, it has enormous potential and should be given a place alongside the projects that rely on traditional public funding mechanisms.

The Black Sea/Danube process raises important conceptual issues regarding the role of the GEF during the post-SAP implementation phase of a project. To what degree should it be regarded as a mechanism to leverage loans? In some circles, the GEF contribution has been regarded as a “sweetener” (sic) to soften loans and make them more attractive to individual countries. Certainly, this offers the potential for achieving action below and above the baseline as a single packaged investment. Actions such as the Romania Agricultural Pollution Control Project<sup>63</sup> also have the advantage of replicability. However, care must be taken not to regard the creation of investments as the only modus operandi of the implementation phase.<sup>64</sup> Implementation requires a suite of actions, including those related to achieving institutional and regulatory reforms (including economic instruments), enhanced stakeholder participation, and improved coordination and compliance at the national and regional scale. It is the combination of all of these factors, guided by the SAP, that will ultimately determine success, measured by the degree to which the operational objectives of the SAP are met and the sustainability of the adaptive management process. Unfortunately, in the case of the Black Sea process, the essential glue between the various components appears to have dissolved; each part is going its own way, and the huge potential synergy among all of the components is being lost. Unless this is corrected, the true value of the GEF as an effective mechanism for leverage will also be lost.

<sup>63</sup> Implemented by the World Bank with US\$5.45 GEF funding and US\$5.65 total cofunding.

<sup>64</sup> For example, though not privy to details, we feel compelled to express concern regarding the apparent relationship between the leverage of a loan and the provision of GEF support for the proposed Malawi/Nyasa project. Further clarification is sought on this matter.

### Box 3.9. Public-Private Partnerships (PPPs) in South East Asia

PPPs (or Public-Private Partnership Initiatives, as they are sometimes known) are an interesting emergent mechanism that can be utilized for financing actions below and above the GEF incremental costs baseline. Pilot initiatives under the PEMSEA project are one of the few early practical examples of this approach in the GEF IW Focal Area.

PEMSEA has spawned a number of partnerships. The Bataan Coastal Care Foundation, for example, is financed by 18 companies in the region (shipping, oil, agroindustry, and so forth) and finances 50 percent of the local coastal zone management project (the provincial government provides the balance). Similarly, the oil pollution emergency response training for the Gulf of Thailand, Manila Bay, and the Bohai Sea is supported by the shipping and insurance industries. The GEF Marine Electronic Highway project for the Malacca Straits also has a major private sector funding component.

Perhaps the most interesting experiments in PPPs in PEMSEA are the solid waste management projects developed for coastal municipalities, initially in Philippines. Solid waste is a major problem affecting the quality of rivers, coastal waters, and associated habitats. The projects operate at the following levels:

- Village level – primary collectors and segregators
- Municipal level – regulations, tariffs, and so forth
- Civil society/NGOs – public education and awareness, waste reduction
- Financial institutions – affordable options, financing and guarantees
- Private sector – devising acceptable and affordable waste management strategy.

The stages in the PPP process are (1) scoping and consensus building, (2) packaging and promoting

(includes research on companies), (3) investors' roundtable (selection of partners), (4) partnership building (memorandum of understanding), and (5) institutionalizing the partner arrangements.

Practical examples of this approach are the cases of solid waste management for San Fernando City (Manila Bay) and for Bataan. Some 30 companies attended the investors' roundtable. The Governor of Bataan presented his case, providing the site for the landfill and offering 30 percent of capital costs. For San Fernando, the land was offered, but no public capital. The financial model in the Bataan case splits the equity 30:70 (the 30 percent is the land cost and technical inputs from the public sector, the 70 percent is private sector debt). Profits are divided according to equity, though social projects will be funded as part of the profit.

Seven companies presented bids for Bataan and eight for San Fernando. Each company presented an expression of interest that, apart from the technical proposal, included the social vision of the partnership. Following screening, four companies emerged for San Fernando (Bataan is still in process), and following an oral presentation to stakeholders, one was selected on 6 May 2004. The winning proposal, from a Philippines-German corporation, is proceeding with the US\$5 million project.

Of course, this is a project that generates benefits that are mainly domestic (that is, below the GEF baseline), but the approach is highly replicable and involves minimal GEF funding. The highly transparent and consultative selection process avoids potential abuses of influence and by itself is a valuable exercise in clean business. Though we are cautious regarding the universality of the approach, it certainly helps to address the thorny issue of ensuring baseline investments, without which transboundary and global environmental benefits cannot occur.

### 3.7. CRITERION 6: INSTITUTIONAL SUSTAINABILITY

#### *Context*

One of the underlying reasons for limited cooperation between countries on transboundary waters is the lack of effective and sustainable institutional mechanisms. This has been the bane of many international processes; the joint institutional arrangements (for example, commission secretariats, program coordinating units) tend to get off to an enthusiastic start and then gradually run down as successive governments

redirect their attention (and funding) to new emergent issues. We prefer to discuss institutional sustainability in terms of joint institutional arrangements (JIAs) because rather than a mere coordination office, sustainability requires an institutional network that is rooted deeply into central and decentralized administrations and sectors and includes active stakeholder participation. (We present our vision of how institutional sustainability develops in the GEF context in Box 3.10.)

At the current stage in development of most GEF IW projects, it is difficult to ascertain the degree of achievement of institutional sustainability; we can only examine the evidence of creation of new mechanisms that are no longer sustained by the GEF<sup>65</sup> or other donors and the degree to which these are related to statutory obligations and incorporated into an active network and surmise regarding the achievement of a critical mass of trained professionals.

### *Analysis*

The longest-standing GEF interventions are in the Danube and Black Sea. Currently there are fully ratified formal environmental conventions in both regions, as well as SAPs, but the institutional frameworks servicing them are at very different states of development. In the case of the Danube, the International Convention for the Protection of the Danube River (ICPDR) and its Secretariat are fully funded by the 13 Danube member countries. Despite some tardy payments, the annual contribution amounted to €799,511 (US\$994,416) in 2002, enabling a healthy program of actions and active implementation of the convention. In the case of the Black Sea, the projected budget of the Secretariat was US\$261,360, but nonpayments<sup>66</sup> have left an annual net budget of only US\$174,240. The Black Sea Secretariat can afford to employ only two professional staff (plus support staff) and organize a limited schedule of meetings and missions. Despite considerable goodwill, it has no real means to ensure compliance with the 1992 Bucharest Convention or its annexes. Furthermore, the tasks of the Secretariat have gradually increased as a result of taking on responsibility for implementing the SAP, a new Protocol on Biological and Landscape Diversity, and a catalytic role for fisheries negotiations. Even if all of the contracting parties were to pay their contributions, the level of financing would be insufficient to enable more than basic information gathering and reporting. As we commented in the introductory paragraphs, however, the problem is a much deeper one. We could see little tangible evidence that the JIAs for the Black Sea extended beyond the immediateness of its Advisory Groups, most of which are partly sustained with support from other donors (the GEF, Tacis, and so forth). The lack of clear NAPs and interministry processes and transparent information available to stakeholders leads us to conclude that institutional process cannot be regarded as a sustainable one at the current juncture.

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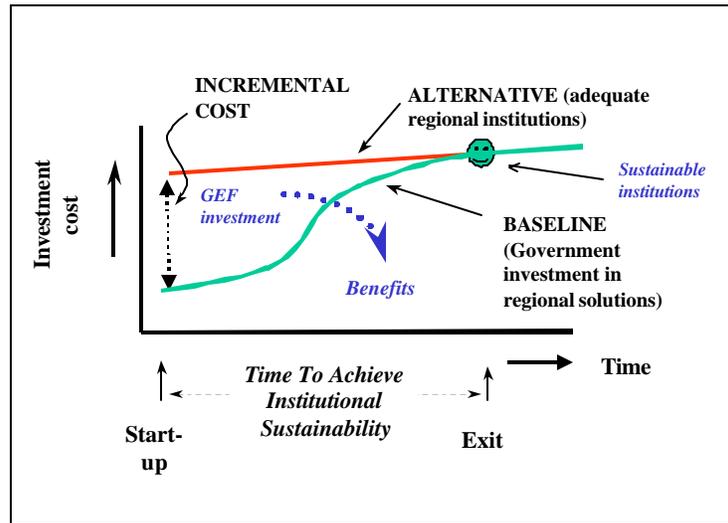
<sup>65</sup> The present section does not examine the institutional sustainability of PEMSEA. This is an interesting, but unique, case of a project that operates as a regional facilitator of initiatives at various scales. Its role in facilitation should not be understated; without it, many of the regional demonstration projects would not have existed. The project is now engaged in an exercise of examining its own future, perhaps in the context of the sustainable development strategy for the East Asian seas cited in previous sections.

<sup>66</sup> Georgia has never paid its annual US\$43,560 contribution, and Ukraine paid on only one occasion.

### Box 3.10. The Incremental Cost of Achieving Sustainable Institutions

The management of transboundary waters, whether national or international, is often hampered by absent or inadequate institutions. Whatever form these may take, they will only continue to operate in the long term if the

stakeholders, often represented by governments, are willing and able to finance them. One of the most difficult tasks of the GEF has been to assist governments in the establishment of these long-term joint institutional arrangements through projects that are, by definition, short term. The challenge is illustrated by the diagram below:



The figure illustrates the funding streams necessary to establish and maintain regional institutions. The total cost is illustrated with a sloping line: the cost gradually increases because of inflation (a fact frequently forgotten during intergovernmental negotiations). At the time of project start-up, government investment (the green baseline) is low or absent, and the GEF provides the incremental costs through a project that are necessary to enable temporary institutional support—usually through the management of a TDA/SAP process. This support builds capacity and infrastructure and enables the governments to work with stakeholders to find new financial mechanisms. Properly managed, the GEF investment will lead to benefits that accrue below the baseline, gradually ramping it up. Note that the ramp is not a linear one; project activities and expenditure normally take some time to get under way, reach a midterm maximum, and then taper off as the exit point is reached. At some agreed on point, the government funding must be sufficient to maintain the institutions at the level necessary to implement actions agreed on in the SAP and other

relevant agreements. This enables GEF support to cease or to be refocused on SAP implementation.

It is easy to imagine what would happen if the project cycle were interrupted or the exit point ill defined. Without the financing necessary to reach the critical institutional strength, the green line would continue at the same level or more likely decline back to the start-up point.

Though this scheme is conceptually relatively simple, it masks a series of complex discussions and decisions necessary from the outset of an intervention. To some degree, the necessary institutional strength will be found by trial and error (learning through doing), and this will require strong monitoring and feedback mechanisms. The ability to maintain viable institutions also depends upon inspired leadership, injection of new ideas, and close relationships with the stakeholders. Unfortunately, we have seen few cases where all the necessary ingredients are present and the institutions are operating in an efficient and objective manner.

The Danube ICPDR has two inherent advantages in comparison with the Black Sea: it includes affluent contracting parties, and its work provides a direct input into the implementation of the EU's environmental directives. Because six of the basin countries are now EU Member States with another three expected to join shortly, the overall policy in the region will be largely dictated by the EU Water Framework Directive.<sup>67</sup> The institutional sustainability of the ICPDR seems assured, but the political situation of the region is highly unusual, and the Danube process is unrepresentative of most GEF project cycles.

The only other long-standing GEF projects within the study areas to create completely new institutional mechanisms have been the Lake Victoria and Lake Tanganyika projects. All other projects have taken advantage of existing institutional mechanisms or are at a very early stage in their development.<sup>68</sup> In the case of Lake Victoria, the development of new institutional mechanisms was not a prime objective of the US\$35 million GEF project. However, it developed the scientific information and infrastructure, as well as confidence-building initiatives, that made the ground more fertile for new mechanisms to develop. The pathway between these activities and the development of new institutions is not entirely clear, however; there were other actors involved, and some stakeholders considered the GEF approach to be too science-based and disconnected from other initiatives.<sup>69</sup> Nevertheless, the creation of new capacity is undeniable,<sup>70</sup> and the huge success in controlling water hyacinths gave an enormous boost to stakeholder confidence. As a result of increased attention to the lake and its catchment, the Partner States of the East African Community, namely Kenya, Uganda, and Tanzania, have established the Lake Victoria Basin Commission in 2003 as a separate autonomous body under the East Africa Community (EAC) to oversee all aspects of the management of the basin. This body will have its headquarters on the shores of the lake. The GEF project has made a significant contribution to the following achievements:

- The East African Community denoted Lake Victoria Basin as a special economic development zone.
- A protocol on the development of Lake Victoria Basin was signed by the Partner States.
- An MOU on cooperation on environment was signed by the Partner States.
- A treaty on cooperation by the three East African States was signed and ratified.
- The Lake Victoria Basin Commission was established by the three Partner States.

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<sup>67</sup> The WFD does not include marine waters beyond one mile from the coast and will have little influence on Black Sea management, except in its important ability to control Danube inputs to the system.

<sup>68</sup> We have not included the Guarani Aquifer project in this analysis because it is at a very early stage in development. The JIAs that it is establishing, however, are impressive; the project is managed from an office located in the Mercosur (the common market for South America) and already has strong intersectoral committees in most of the participating countries (Argentina, Brazil, Uruguay).

<sup>69</sup> There were also difficult management issues. For example, the location of the Regional Project Headquarters and the Tanzanian National Project Headquarters in Dar es Salaam, thousands of miles away from Lake Victoria, was cited as a hindrance by several stakeholders.

<sup>70</sup> For example, the project has successfully completed training of 23 specialists to Ph.D., 56 to M.Sc., 5 Diplomas, and held 140 other skill development courses in the three East African countries.

- The Lake Victoria Fisheries Organization was established and fully funded by the three East African Partner States and donors.
- Regional Guidelines for Environmental Impact Assessment for shared ecosystems were formulated.
- An Environmental Management Agency was created in Kenya.
- Lakewide restoration strategies were formulated involving fish species conservation, aquatic weed management, and pollution control.

These achievements reflect a process that had a longer gestation period than the GEF project itself. The project, in parallel with other donor initiatives,<sup>71</sup> helped to build momentum that the countries in the region carried through to develop new institutions. Now the GEF Council has recently approved a Medium-Sized Project that will enable a TDA/SAP process to help the countries orient their future activities within basin boundaries and applying adaptive management strategies.

In the case of Lake Tanganyika, a TDA/SAP process was followed from 1995 to 2000 with the clear intention of generating momentum toward a sustainable institutional structure. The GEF project was completed in 2000, but the process of negotiating a formal convention continued until its signature in 2003. This establishes a Lake Tanganyika Authority. The project was also successful in attracting key development partners to participate in funding project programs. Cofinanciers have agreed to contribute \$80 million. A PDF-B project<sup>72</sup> is now preparing the way for an implementation phase for the SAP. The successful outcome of the initial Lake Tanganyika project was a remarkable achievement in the face of huge political uncertainties resulting from regional armed conflict, economic hardships, and the serious public health consequences of HIV/AIDS. The success was partly due to maintaining a very close link between the project and community-level beneficiaries on one hand and the best regional technical experts on the other. The main lesson from this is that if project activities are to be implemented smoothly and experiences are to last and be sustainable, use of local people, local administrative settings, and local communities is essential. This makes it possible for project objectives to be achieved and for the activities to continue even after the project has ended. In the context of this project, GEF acted only as a facilitator; not doing, but only guiding; leaving the doing and execution to the local counterparts at all levels.

As mentioned earlier, many projects have operated in a working relationship with ongoing institutions or processes. These range from complete integration (for example, the Mekong Water Utilization Project, WUP, is *fully integrated* into the Mekong River Commission Secretariat) to a very loose relationship (for example, the South China Sea project *informs* UNEP's Regional Seas COBSEA Program). On one hand, the use of an existing host has the advantage of building into a process that has already surpassed many of the problems outlined in the previous paragraphs. On the other hand, however, the institution or process may have already been captured by particular sectoral or

<sup>71</sup> For example, a US\$30 million EU-funded fisheries project.

<sup>72</sup> Developing Detailed Regional and National Project Proposals and Financial Mechanisms to Implement the Lake Tanganyika Strategic Action Programme and the Convention (UNDP).

stakeholder interests that compromise its objectivity or effectiveness. The availability of GEF support, tied to an obligation for an objective analytical process such as the TDA/SAP, may trigger new thinking and reforms within the institution.

Two cases in point are the FREPLATA project and the Plata Basin PDF-B process. Both are linked to institutions that have existed for more than 20 years, but had lost their relevance in the context of contemporary approaches to integrated management. In the case of FREPLATA, there are two binational institutions covering the estuary and marine areas: the Administrative Commission for the Plata River (CARP) and the Joint Technical Commission for the Maritime Front (COFREMAR). Both belong to the respective ministries of foreign relations. The GEF project enabled the two commissions to work as a single consortium for the first time in their histories. The effectiveness of this new joint body will be determined by its ability to formulate a participatory intersectoral SAP and the appropriate institutional structures to manage it.<sup>73</sup> In the case of the new Plata Basin PDF-B project, the host organization is the Intergovernmental Coordinating Committee for the Plata Basin (CIC), established in 1967 and given legal standing through the five-country<sup>74</sup> Plata Treaty in 1969. This body had lost most of its power to other commissions (many of its own creation) by 2000 and had become a forum of foreign relations diplomats that exercised little real influence on environmental governance in the Basin. However, the member governments decided to reform its functions in 2002, and with the technical backing of the Organization of American States,<sup>75</sup> successfully applied for GEF funding to conduct a mega-TDA of the basin. The success of this process will depend on the ability of the CIC to relate to the stakeholders by establishing a less hierarchical, rigid, and bureaucratic structure that will give sufficient flexibility to implement adaptive management and the ecosystem approach.

In summary, this section has demonstrated the importance of achieving institutional sustainability and some of the formidable practical difficulties faced by GEF projects. There is no one size fits all model. However, the creation of rigid structures that are distanced from stakeholders by excessive bureaucracy or sectoral capture will inevitably lead to failure. As yet, there are few success stories to relate. Those that appear to be successful however, have consciously or unconsciously followed an adaptive management pathway, periodically injecting new ideas and enthusiasm into the institutional process. Without this continuous renovation based upon tangible benefits, processes soon become stagnant and momentum lost.

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<sup>73</sup> This is not an easy task. The commissions have limited influence over other government sectors, as demonstrated by their inability to persuade the institution managing fisheries in Uruguay to participate in TDA formulation. Their geographical mandate is also limited to the offshore part of the system, whereas most of the threats to its integrity are from land-based activities.

<sup>74</sup> Argentina, Bolivia, Brazil, Paraguay, and Uruguay.

<sup>75</sup> The OAS itself is an example of an organization that has undergone a transition from a development-based body, heavily influenced by the North, to a more flexible self-funded mechanism. Its role as a GEF Executing Agency for UNEP and the World Bank (Upper Paraguay, Bermejo, Guarani Aquifer, Plata Basin, Rio San Juan, Sao Francisco, Cuareim) now represents a major part of its overall portfolio. We noted the efficient management of these projects and feel that OAS regional offices should be more thoroughly briefed on the GEF-IW strategy for achieving global environmental benefits to further enhance its effectiveness.

### 3.8. CRITERION 7: INCORPORATION OF MONITORING AND EVALUATION PROCEDURES

#### *Context*

There are three basic types of monitoring undertaken in GEF IW projects: (1) environmental and socioeconomic status monitoring, (2) stress reduction monitoring and (3) process monitoring (including capacity building, legal and policy reforms and project implementation itself). Our present study is mainly focused on (3) though we shall begin with some general comments regarding (1) and (2). In making our comments, we reiterate the importance of monitoring and evaluation in adaptive management (see also Box 3.11).

#### *Analysis*

##### *(1) Environmental and Socioeconomic Status Monitoring*

Ultimately, most GEF IW projects will be judged on their ability to generate tangible environmental benefits. These downstream benefits may be felt some time after the conclusion of the intervention itself and it is thus important that a monitoring system is put into place that can be sustained by the beneficiary countries. The foundations of the system can be laid in the process of data gathering for the TDA/SAP process or within the demonstration project development process and it is important that the measurements are performed by beneficiary institutions (perhaps in collaboration with external organizations where this is part of a capacity building program) and not by outside consultants. In most cases such a system requires measurable and relevant indicators of both environmental and socioeconomic status. Headline indicators (for example, those related to Ecosystem Quality Objectives) that are understandable to all stakeholders including the general public are more likely to be sustained in the future.

It is not easy to convince some governments to sustain a monitoring system, and this can be the Achilles heel of the adaptive management process. The Black Sea is an example of this problem: Despite 10 years of discussions, capacity building, and donor support, a coherent monitoring system is still not in place, except in Romania and partially in Ukraine. Even in the neighboring Danube, where the EU requires monitoring for implementation of its Water Framework Directive, the adequacy of data quality from downstream countries (Romania, Bulgaria, Moldova, and Ukraine) is still hotly debated. The situation is somewhat better in the case of the Dnipro River (Ukraine, Russia, and Byelorussia), where the participatory process followed in the TDA/SAP appears to have engaged a wider range of stakeholders.<sup>76</sup>

In the case of Lake Victoria, more attention has been given to environmental status monitoring following the sustained efforts in capacity building through the GEF project

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<sup>76</sup> It should be noted, however, that the project is at a much earlier stage in development than that of its neighbors. Some of the monitoring work conducted for the TDA was through joint (split-sample) monitoring with outside laboratories. Again, much attention was given to chemical indicators, less to habitat and species indicators, and even less to social and economic indicators.

and the clear understanding of the need to apply an ecosystem approach to managing the lake's resources. Projects studied in South America also appear to give more credence to establishing monitoring systems, though these, too, tend to focus on chemical monitoring,<sup>77</sup> rather than on monitoring changes to habitats and species and the social and economic consequences of human-induced changes in the systems. Because only the Bermejo and Upper Paraguay projects have completed TDAs, it is difficult to objectively analyze the effectiveness of their monitoring systems. Certainly, we saw no evidence of harmonization of indicators or monitoring systems to generate a basinwide information base, however, and this is not a stated priority in the Plata Basin PDF-B (hopefully, it will emerge in the analysis). The OP10 project, Development and Implementation of Mechanisms to Disseminate Lessons Learned and Best Practices in Integrated Transboundary Water Resources Management in Latin America and the Caribbean<sup>78</sup> (UNEP-OAS), may also provide another opportunity to improve harmonization of monitoring between these projects, though this is not a stated objective.

The innovative approach taken by the South China Sea project (see Box 3.2) has helped to kick-start monitoring programs because the availability of agreed on key information is a prerequisite for any proposed location to be considered as a demonstration site. We saw convincing evidence that this had resulted in an entirely new sea grass monitoring program in China. Interestingly, the experience from PEMSEA's Xiamen demonstration site in China also indicates great local willingness to invest municipal funds in monitoring the environment using a wide suite of indicators.

## *(2) Stress Reduction Monitoring*

Though change in environmental status may take longer than a GEF project cycle (except at a pilot scale), it is reasonable to expect measurable reductions in stress. This can be monitored in many ways, determined by the operational objectives of the project document or the SAP itself, and we are reasonably satisfied that such monitoring is occurring in most projects. The reporting formats are very diverse, however, the information is often buried in heavy documents, and it is difficult to determine whether systematic monitoring programs have been established.

In some cases, stress reduction can be monitored by the complete removal of immediate threats, such as hotspots or excessive fishing capacity, or the creation of protected areas. In other cases, however, it relies on chemical monitoring of potential pollutants, sediment loads, water discharges, and so forth. This is a longer-term monitoring need, similar to that discussed earlier for status monitoring, and compliance will depend upon the sustainability of monitoring systems and their use in the regulatory process. Though progress is being made in this area, we saw no cases of exemplary programs that could be described as best-practice. We noted the role of IAEA's Hydrology and Marine Environmental Laboratories in successfully providing capacity-building and data-quality services to some GEF projects (Black Sea, Dnieper, Guarani, Caspian)—a service that

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<sup>77</sup> Chemical measurements are usually an indicator of system stress rather than status, and there is much confusion on this in the design of monitoring programs and the interpretation of resultant data.

<sup>78</sup> This project was highly commended by the GEF Focal Points in Argentina and Brazil and appears to be effective as a mechanism for communication between Latin American projects.

might be extended further, provided that it closely corresponds with the real needs of governments. We also noted the patchy involvement of UNEP's Global Programme of Action for Land-Based Activities.<sup>79</sup>

### (3) *Process Monitoring*

There are two basic types of process monitoring: monitoring of project *achievements* (in terms of regulatory and institutional reforms, stakeholder participation, leveraging, and so forth) and monitoring project *progress* (meeting internal targets, spending and efficient use of resources, reporting, and so forth). Current monitoring and evaluation systems appear to lack objective indicators for monitoring achievements and place different emphases on the various means of measuring progress. As part of the current study, in addition to a review of outputs, we examined the results of questionnaires distributed by the GEF M&E Unit (for the purposes of the current study<sup>80</sup>) and accessed the project implementation reviews (PIRs), midterm evaluations, and final evaluations of projects where possible (we also reviewed SMPRs, where available). These documents provide information on achievements and progress (in some PIRs, as a tangled mixture). We found the PIRs particularly unhelpful because they are based upon self-assessment (often very generous), have few comparators, and give few early warnings of impending problems. Midterm evaluations, however, are more far-reaching, can genuinely assist the executants and beneficiaries with their work, and lead to corrections of faults in project design. This sometimes happens only after three years, though, and there are examples where it did not appear to happen at all.<sup>81</sup> Also, the degree of external reviewing at midterm is clearly different among the various IAs.<sup>82</sup>

Part of the problem with process indicators is during project design.<sup>83</sup> The main indicators should appear in the logical framework matrix, alongside a description of the means to verify them. These descriptions are often too generic for practical use and are difficult to relate to the body of the project document.<sup>84</sup> Logical frameworks do not identify the stages between project outputs and outcomes, making it difficult to conduct a post-project assessment. The remarkable similarity between the Monitoring and Evaluation sections of project briefs suggests that this is often a cut-and-paste exercise, rather than a thoughtful joint exercise in monitoring design with the IA. The M&E Unit's current guidelines for IW projects are also too generic and ambiguous. The questionnaires from the study areas (based on the agreed on M&E indicators) suffered from the same

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<sup>79</sup> The GPA's role is rather unclear, even in UNEP's own projects, such as the South China Sea or its South American projects.

<sup>80</sup> The questionnaire was developed in consultation with the GEF IW Task Force (we comment on its outcome in Section 4).

<sup>81</sup> The second phase of the current Danube project and the Black Sea Ecosystem Recovery Project, for example, were approved without an external review of the first phase. Though this follows the regulations (if the two phases are considered part of the same project), it is an unhelpful action that decreases transparency and efficiency.

<sup>82</sup> The process appears to be more of an internal review in the case of the World Bank.

<sup>83</sup> We have already noted that the level of detail in design varies among IAs, with the World Bank paying closest attention to project progress indicators.

<sup>84</sup> For example, we noted the severe criticism of the Project Document LogFrame analysis in the terminal evaluation of the Pacific SIDS (OPR component).

problem as the PIRs, a highly variable level of objectivity resulting from unspecific and ill-defined indicators (more on this in Section 4).

### Box 3.11. Developing a Knowledge-Based GEF IW Community

To date, the GEF's IW Focal Area is the largest global effort ever made to tackle transboundary waters problems. By following the paradigm of adaptive management, it has committed itself to a process of learning by doing. This involves the adoption of a variety of pragmatic approaches that must be monitored closely and the lessons learned distributed widely. Transparent knowledge exchange is vital to moving the process forward and incorporating successful strategies while learning from those that do not meet their objectives. The dissemination of knowledge among such a diverse group of specialists (including managers) and stakeholders is a challenging endeavor, however. A number of projects and activities have been developed to facilitate this process, the most ambitious of which is the International Waters Distance Learning Project (IW:Learn) project, now entering its second phase.

IW:Learn was launched in 1999 with the purpose of improving "global management of transboundary water systems by increasing capacity to replicate best practices and lessons learned in each of the GEF International Waters Operational Programs." A number of approaches were employed to achieve this goal, including formal distance learning courses (led to a master's degree), the development of a web-based information system encompassing all GEF-IW projects and the provision of new knowledge products and tools, a number of e-forums (for example, of IW managers), and training to spawn new networks and help projects achieve higher standards in information exchange.

The independent project assessment considered the project to be highly successful, despite an overambitious design (see also 3.2). The assessment included interviews with a large number of IW project managers to examine the success of these components and concluded that the IW:Learn website ([www.IWLearn.net](http://www.IWLearn.net)) has become an important portal for finding information on IW projects and that the training of specialists had indeed spawned new networks, but that the e-forums and distance learning programs had limited success.

Among the regional networks is Delta-America, a network for Latin America (UNEP, executed by OAS). We were impressed during our mission to

the Plata Basin with the level of engagement in this network, and it received positive comments from GEF Focal Points in Argentina and Brazil.

The reason for the limited success of the IW manager's forum was the limited time available for project task managers and coordinators to attend to matters outside their immediate scope. For those on the outside of projects, it is difficult to comprehend the enormity of the workload of a successful project manager. Effort spent on liaison with other projects, external M&E, or global forums is at the expense of other project activities. The same applies to the IA task managers: "How could I convince my line manager that the time is well spent?" was one comment. Beyond consideration of the IW:Learn forums, this also explains part of the reason why interproject communication tends to be rather poor, even on a regional level. Managers will only communicate if they have a good reason to do so and feel that it adds value to their own work.

The project that financed the first phase of IW:Learn also funded the first two biennial GEF IW Conferences in Budapest in October 2000 and in Dalian in September 2002. These highly interactive meetings brought together most of the IW project coordinators, together with task managers, key specialists, GEF Focal Point representatives, and relevant staff from IAs and Executing Agencies. Most of the participants interviewed at these conferences found them to be very valuable experiences of great importance for the development of their work; it is not easy to replace face-to-face contact, and a verbal dialogue is often franker than one involving written exchanges.

It is often difficult to convince funding agencies of the need to invest in interproject communication. This has not been a major feature of previous projects. Recently, funds have been set aside within all new projects in the Sahel region for annual interproject meetings. This is an important step forward in the promotion of knowledge exchange and should produce important dividends through the adaptive management process. Regional exchanges should extend across focal areas, where possible, to encourage synergies and improve the effectiveness of projects for delivering global benefits. This approach should be developed in other regions, even if it means retrofitting existing projects.

In conclusion, we regard monitoring and evaluation as a process requiring much greater attention in the future. This should not be taken to imply more of the same, however. Some project coordinators were exasperated by having to report the same information on different formats for several different processes; we fully sympathize with them. A new, more interactive process is required (see Section 7 for specific recommendations), with more objective criteria and indicators incorporated during the process of project design.

### 3.9. CONCLUSIONS

Section 3 of this report has examined the feedback from our four case study regions (plus the review of global demonstration projects) to probe specific aspects of the GEF IW Focal Area. Throughout our missions to the study areas, we were frequently reminded of the unique role that the GEF plays in the sustainable use and protection of transboundary waters, and it is vital to use this role in the most efficient and effective manner possible. We do not wish to understate the achievements of the focal area and trust that our comments will be regarded as constructive. We also appreciate that it may not be possible to generalize all of our observations to all projects covered by the IW portfolio. Nevertheless, it has provided insight into the strengths and weaknesses of execution of the IW OPs. Projects have been particularly successful in terms of replication, catalysis, and leverage, but, as yet, there is limited evidence of institutional sustainability and tangible environmental benefits (partly because of the long time frame for these to become visible). Many of the weaknesses observed result from inadequacies in project design (including M&E criteria), failure to identify and incorporate stakeholders,<sup>85</sup> poor or absent coordination among IAs, and limited visibility of the projects and the GEF itself. The latter issue also has consequences for the achievement of global benefits. Transboundary issues also need local and regional champions to keep them on national and international political agendas.

One final point concerns the difficulty we faced in gathering objective information. The current monitoring-and-evaluation system seems somewhat like a patchwork quilt with indeterminate linkages between the pieces. Each of the pieces has value to someone at a given time, but the overall combination does not add up to a coherent M&E system. The PIR information in particular proved of very limited use in making an overall assessment. We feel that a fresh look at the entire system could achieve greater efficiency, better quantitative information, less pressure on projects to supply duplicate sets of information, and greater overall cost-effectiveness. We are fully aware that the GEF M&E Unit has made considerable efforts to strengthen information gathering and has only recently acquired an independent status, but we consider that this situation should now be employed to carry out a more fundamental reform.

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<sup>85</sup> In making our comments on the issue of stakeholder involvement, we are intensely aware of the differences among cultures and worldviews from region to region (and sometimes within regions). The adaptive management approach that is implicit in the GEF IW OPs makes no assumptions regarding political models or worldviews. It can be applied to both community-based management and to command-control situations, but only provided that proper feedback mechanisms are available. This explains why the approach appears to be working in the case of the Dnipro (without overhauling the political system), but not in the Black Sea, despite both projects sharing two governments (Russia and Ukraine). The Dnipro has ensured the awareness and participation of decisionmakers from all relevant sectors and decentralized bodies, whereas that Black Sea has not.

## 4. THE EFFECTIVENESS OF THE TDA/SAP AS A KEY TOOL FOR GEF IW ENABLING ACTIVITIES

### 4.1. INTRODUCTION

The previous IW Study<sup>86</sup> highlighted the role of transboundary diagnostic analyses (TDAs) and strategic action programs (SAPs) as useful tools in OPs 8 and 9 for identifying actions to deliver transboundary global benefits in international waters. The present chapter will examine the development of this approach, based on the responses received from questionnaires, an initial review of existing TDAs and SAPs, and the results of the site visits. It will explore the degree to which the TDA/SAP process is being incorporated into GEF project design and implementation and the degree of coherence of the outputs with the Operational Programs.

The TDA/SAP process is a major element of an adaptive management strategy that sets long-term goals based upon *environmental status* targets and indicators that are achieved through a stepwise process of interventions guided by shorter-term *stress reduction* and *process* targets and indicators. Feedback mechanisms, based upon objective information, stakeholder participation, and interministry (national) and intergovernmental (international) action, enables the various targets to be periodically assessed and adjusted.

The main technical role of a TDA is to identify, quantify, and set priorities for environmental concerns that are transboundary in nature; identify their immediate, intermediate, and root causes; and identify specific practices, sources, locations, and human activity sectors from which environmental degradation arises or threatens to arise. Consequently, a TDA provides the factual basis for the formulation of an SAP. In addition to this, however, the TDA is part of a process of engagement of the stakeholders through initial joint fact finding and subsequent (during the SAP) development of alternative solutions. Stakeholder identification and consultation and studies of institutional capacity, governance, and investment are all essential components of the TDA process.

The SAP is a negotiated policy document, endorsed at the highest level of all relevant sectors, that establishes clear priorities for action (for example, policy, legal, institutional reforms, or investments) to resolve the priority problems identified in the TDA. A key element of the SAP is a well-defined baseline. This enables a clear distinction between actions with purely national benefits and those addressing transboundary concerns with global benefits. Another key element involves the development of institutional mechanisms at the regional and national levels for implementing the SAP and monitoring and evaluation procedures to measure effectiveness of the outcomes of the process.

### 4.2. METHODOLOGY

Our initial strategy was to gather most of the information based on responses to the IW questionnaire described earlier. Of the 23 projects that responded, 15 included the

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<sup>86</sup> Evaluation report No. 1-01, GEF M&E Unit, Washington, D.C., 2001.

development of a TDA, but only 7 had completed it. This was a rather limited sample, albeit a useful one. In view of this situation and the need to ground truth in the information, we decided to conduct a general evaluation of 16 completed TDAs and 13 SAPs (see Table 4.1), using the following criteria:

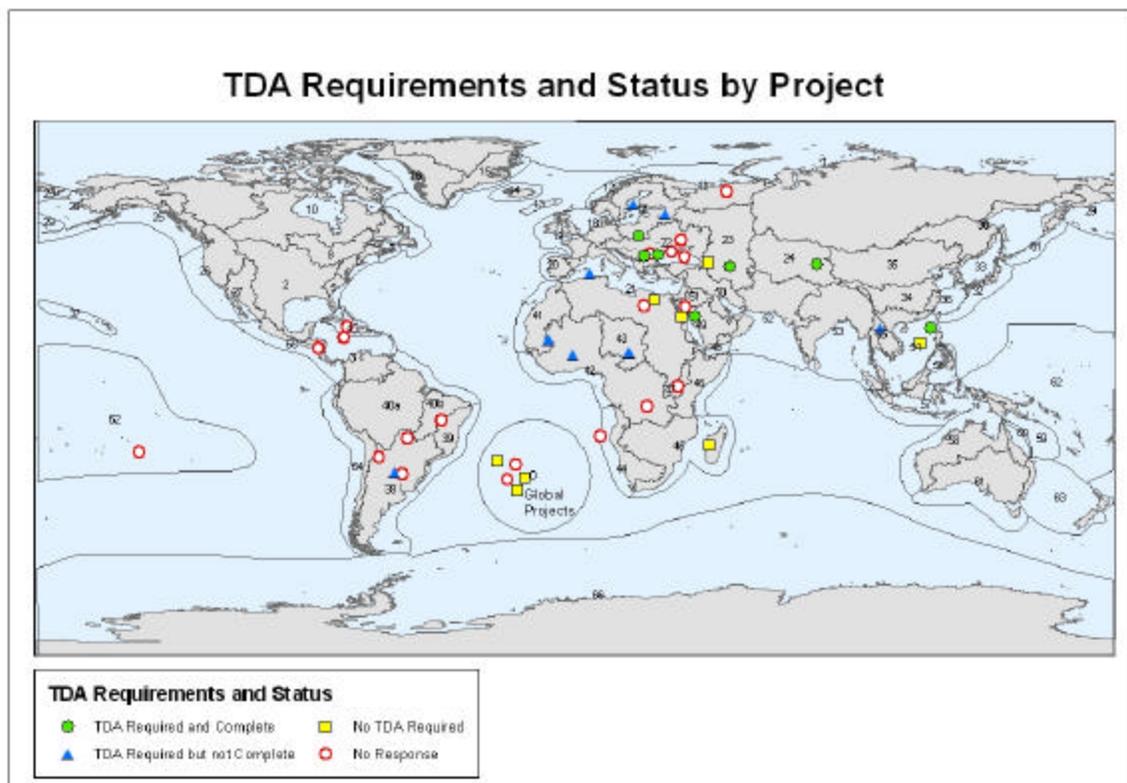
*TDA Evaluation*

- Discrimination between transboundary and national issues
- Identification and prioritization of issues
- Identification of system boundaries
- Identification of the causes (immediate, underlying, and root)
- Stakeholder participation

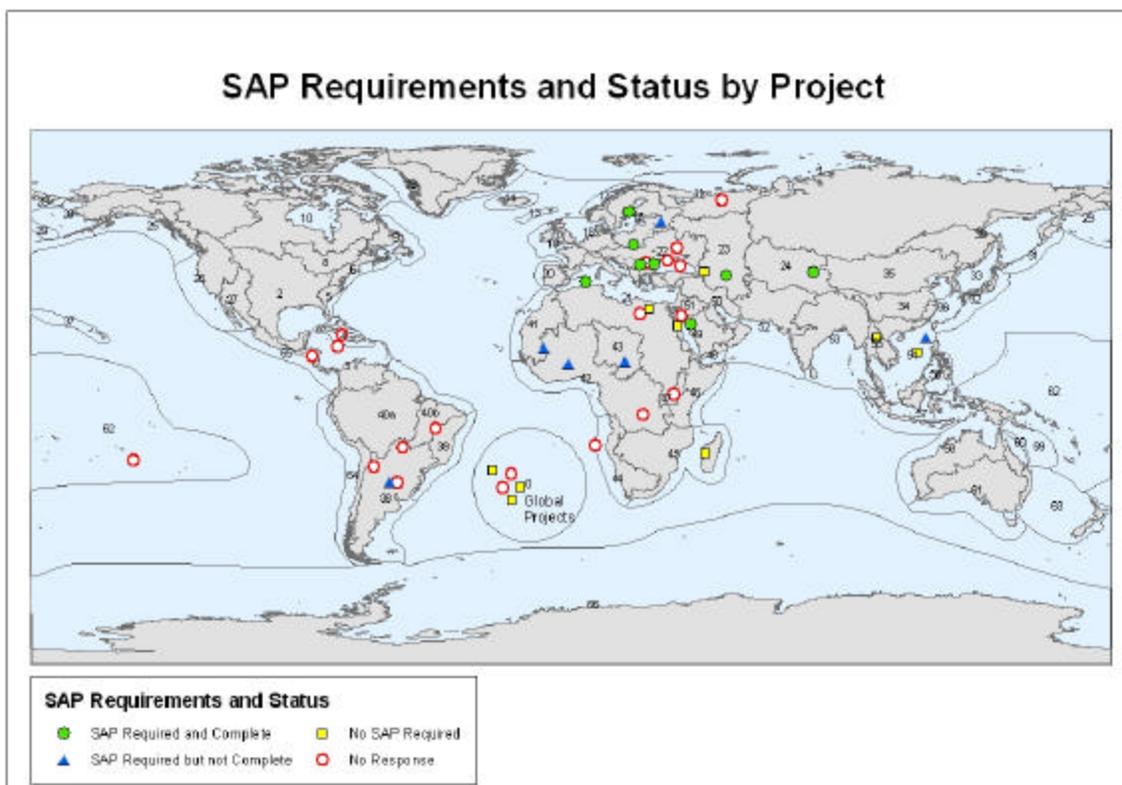
*SAP Evaluation*

- Characterization of interventions and actions, and linkages with issues and causes
- Formulation of National Action Programs (NAPS)
- Monitoring and evaluation indicators
- Stakeholder involvement

The full report of this analysis will be available from the GEF M&E Unit. It is important to note, however, that this does not constitute a rigorous analysis of all aspects of each TDA and SAP, but focuses solely upon the selected criteria.



**Figure 4.1.** TDA Development Status in Projects Selected for Appraisal by Questionnaire



**Figure 4.2.** SAP Development Status in Projects Selected for Appraisal by Questionnaire

**Table 4.1.** TDAs and SAPs Examined in the Current Chapter

No.	Project	TDA Completed	SAP Completed
1	Caspian Sea Environment Program	2002	2003
2	Dnipro Basin Environment Program	2003	2004
3	Reversing Environmental Degradation in the South China Sea and Gulf of Thailand	2000	2000
4	Pollution Control to Protect the Biodiversity of Lake Tanganyika	2000	2000
5	Benguela Current Large Marine Ecosystem Program	1999	1999
6	Strategic Action Plan for the Binational Basin of the Bermejo River	2000	2000
7	Volta River Basin Project	2002	2002
8	Danube Pollution Reduction Program	n.a.*	1995
9	Mediterranean Action Plan	1997	1998
10	Black Sea Environment Program	1996	1996
11	Addressing Land-Based Activities in the Western Indian Ocean	2002	2002
12	Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and Its Coastal Zone	1997	–
13	SAP for International Waters of the Pacific Islands Region	n.a.*	1997
14	Strategic Action Program for the Red Sea and Gulf of Aden	n.a.*	1998
15	Integrated Management of the Okavango River Basin	1998	–
16	Yellow Sea Large Marine Ecosystem Project (YSLME)	2000	–

\* combined TDA/SAP

### 4.3. INFORMATION FROM THE QUESTIONNAIRE

The main findings of the questionnaire are reported below (Box 4.1) in bullet form. Note that “respondents” refers only to those of the 15 projects engaged in the TDA/SAP process that answered the particular question.

The responses are quite difficult to interpret given the small sample size. They indicate a high level of engagement in the TDA/SAP process, but very diverse interpretations of its contents. This reflects that until recently there has been very limited advice on how to conduct a TDA/SAP. Areas of concern with some of the responses are (a) the limited development of national-level Interministry Committees, (b) the limited general stakeholder and public access to the TDA or to information gathered for it, (c) confusion regarding the practical interpretation of terms used in describing causality (for example, “root causes,” “issues,” “stress,” “status”), and (d) the divergence between questionnaire responses and the actual project outputs (see next section). Point (d) is a very important one for the M&E process, and we shall discuss this in detail in Section 4.5.

### 4.4. INFORMATION FROM THE TDA/SAP REVIEWS

The reviews of TDAs and SAPs provided much useful information on the development of the process. Though we have applied the criteria given in Section 4.2 to all of the available documents, this does not take into account the evolving nature of the products (hopefully, each has benefited<sup>87</sup> from the experience gained by previous ones). The main conclusions of our review of TDAs are as follows:

#### *1. Discrimination between Transboundary and National Issues*

- Most TDAs do not discriminate clearly between transboundary and national issues. However, nearly all of them regard the issues described as “transboundary.”
- Notable exceptions were the Dnipro Basin and the Caspian Sea TDAs, where discrimination between transboundary and national issues was presented.

#### *2. Identification and Prioritization of Issues*

- All TDAs (with the exception of the Okavango River Basin TDA) identified the major transboundary issues.
- The issues were generally well defined, although in many cases there was confusion between what constituted an issue, the impact or consequence of an issue, or the cause of an issue.
- Most TDAs did not prioritize the major transboundary issues. Notable exceptions include the South China Sea, Lake Tanganyika, the Volta River Basin, and the Dnipro Basin TDAs.

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<sup>87</sup> Our analysis shows that TDA design has improved in incremental steps. The earliest TDA, for the Black Sea, was simply used as a template for many others, despite its inadequacies. Improvements were introduced in the Benguela (better layout), Bermejo (first causal chains), South China Sea (better assignment of priorities), Dnipro (more participatory, detailed causality), and so forth. There is no “faultless TDA.”

## **Box 4.1. Main Questionnaire Findings regarding the TDA/SAP Process**

### *Process Outcome Indicators for TDA*

- Less than half of the respondents considered that all of the governments involved have provided proof of agreement with TDA findings, although the majority considered that most governments involved have provided the necessary staff and funding for the country's TDA-related activities.
- The majority of respondents agreed or strongly agreed that for ongoing and concluded TDAs, the TDA was conducted by and under the leadership of local scientists, benefited from the assistance of international experts, and had adequate methodological guidance.
- Regrettably, the questionnaire did not ask the projects about the use of other stakeholders (for example, industry, NGOs, government) in the TDA process.
- The majority of respondents indicated that the root causes of transboundary environmental degradation were addressed well or very well in the TDA. This was not totally supported by the TDA/SAP Review, where a number of TDAs failed to establish causality.
- A number of the respondents listed the root causes identified in their TDAs, but it is apparent that some did not understand the concept. For example, pollution, eutrophication, and overexploitation of living resources were cited as root causes. As with the identification of threats, this criticism is in general agreement with the OPS3 TDA/SAP Review.

### *Process Outcome Indicators for SAP*

- Less than a third of respondents considered that all the participating governments had endorsed the SAP.
- The majority of respondents agreed or strongly agreed that a stakeholder analysis was conducted that had successfully identified all significant stakeholders involved in the priority problems and their solutions. This was not supported by the TDA/SAP Review.
- Less than half of the respondents agreed that a detailed public plan for stakeholder participation had been implemented.
- The vast majority of respondents felt that the SAP reflected or fully reflected the information and analysis presented in the TDA. However, less than half of respondents considered that access to information was fully established.
- The majority also agreed or strongly agreed that the SAP specifies commitment by the governments; has quantitative targets and a clear timetable; identifies capacity-building requirements; addresses policy and regulatory reform; and identifies critical investments. Again, this is not completely supported by the TDA/SAP Review.

### *Process Outcome Indicators for Joint Implementing Arrangements (JIAs)*

- Just over half of the respondents considered that all the participating governments have provided adequate staff support to JIA country-related issues and have budgeted financial support. Further, the majority considered that high-level staff officials represent all participating governments.
- The majority of respondents agreed or strongly agreed that JIAs have established a consultation group or other mechanism to systematically and regularly consult with relevant key stakeholders.
- The majority of respondents also agreed or strongly agreed that the JIA consistently influences policies or actions of members of government.

### *Process Outcome Indicators for Interministry Committees*

- Less than half of the respondents considered that all the participating countries had four or more relevant ministries in the IMC.
- Almost half of the respondents considered that less than 50 percent of the participating countries have the Minister of Economics (or similar) involved in the IMC.
- Half of the respondents considered that less than 50 percent of participating countries have IMCs that have met at least 3 times in the past 12 months.
- Just over a third of respondents considered that the majority of IMCs include the representation of all stakeholders identified in the TDA.
- A third of respondents considered that less than 50 percent of their outcome commitments under the SAP are on target. A minority considered that all of IMCs are on target.
- The majority of respondents considered that financing has been found for 25–50 percent of the investment needs identified in the SAP. Under a half considered that financing had been found for 75 percent of investment needs.

- The methodological approaches for identifying issues were clear and objective in some TDAs (for example, the Volta River Basin, Benguela Current, Western Indian Ocean, and Dnipro Basin TDAs), but relatively poor in others (for example, the Black Sea, Mediterranean Sea, and Red Sea/Gulf of Aden TDAs).

### 3. *Identification of System Boundaries*

- In all cases (with the exception of the Bermejo River TDA<sup>88</sup>), the system boundaries for each transboundary issue were not implicitly detailed in the TDA, although supporting text often described the geographical extent of the issues. Unfortunately, the text was usually difficult to locate.

### 4. *Identification of the Causes (Immediate, Underlying, and Root)*

- The identification of causes should be a primary aim of the TDA. However, some projects presented little or no information on this subject (for example, the South China Sea and Okavango River TDAs).
- Many identified the root causes, but failed to distinguish the immediate and underlying sectoral causes. Furthermore, most failed to determine the linkages between the issues' immediate, underlying, and root causes.
- In some cases, the causal chain approach was good and the material presented was logical and easy to understand (for example, the Benguela Current, Volta, Bermejo River, and Dnipro Basin TDAs). However, in others the approach lacked logic and was confusing and the material was poorly presented (for example, the Lake Tanganyika, Mediterranean Sea, Red Sea/Gulf of Aden, and the Caspian Sea TDAs).

### 5. *Stakeholder Involvement (also refers to SAPs)*

- For the majority of TDAs and SAPs reviewed, there is little evidence of stakeholder analysis or stakeholder participation. It should be noted that this does not mean that stakeholders were not consulted on the process, just that their contribution is not recognized.
- However, there are a small number of good examples of stakeholder involvement or participation. These include the Caspian Sea, Lake Tanganyika, and the Bermejo River TDAs and SAPs.

In most cases, the TDAs were well presented and well written. In only one case was the TDA poorly translated (Bermejo River TDA). However, the documents often lacked a logical structure and were difficult to navigate. Many suffered from confusion of terms (for example, Issue, Threat, Problem, Major Problem, Transboundary Problem, and Subissue, and there is a need for consistency in terminology. Many also suffered from a lack of “glue” holding the document together, making it feel like a series of tables and figures loosely linked with text. Of concern was the number of TDAs that placed considerable emphasis on solutions and interventions. This should be considered a function of the SAP, not the TDA, and detracts from the concept of providing objective information without political influence.

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<sup>88</sup> We are not judging whether the designations were correct (see Box 3.1), but simply that they were specified.

The analysis demonstrates the evolution of TDAs, but raises concerns regarding a poor level of stakeholder analysis and involvement and the unclear discrimination between national and transboundary problems. The latter issue may also be a reflection of the deficient guidance given in the OPs themselves (see Chapter 2).

The conclusions of our analysis of SAPs are the following (again applying the criteria described in Section 4.2):

*Characterization of Interventions and Actions, and Linkages with Transboundary Issues and Causes*

- Generally, there is good linkage between the interventions and actions listed in the SAPs and the transboundary issues and causes identified in the TDAs, although the linkages can be confusing and difficult to follow at times.
- Two different approaches for developing interventions and actions have been used. Historically, most have used a target- or action-based methodology (for example, Lake Tanganyika, Bermejo River, Benguela Current, South China Sea, and the Mediterranean Sea SAPs). More recently, the use of Ecosystem Quality Objectives<sup>89</sup> (EcoQOs) has become popular (for example, Caspian Sea and the Dnipro River Basin SAPs).
- A general concern regarding many of the targets, EcoQOs, or proposed actions is that they are vague and cannot easily be associated with quantitative indicators that encourage accountability.
- Furthermore, a number of SAPs do not prioritize the proposed actions, provide alternatives or costings, or list anticipated outcomes (and benefits), although in some cases these have been detailed in the TDA. Again, solutions and interventions should be considered a function of the SAP, not the TDA.
- Because of the failure to clearly identify outcomes, it can sometimes be difficult to determine those proposed actions that are national (baseline) in scope and those that are global (potentially incremental).
- Another major concern is that many of the proposed actions are detailed at the national level and not at the regional. These should be detailed in the NAP, not the SAP.

*Formulation of National Action Programs (NAPS)*

- The majority of projects have not formulated NAPs, although in a number of cases a general objective of the SAP was to prepare guidelines for their formulation (for example, the Bermejo River, Benguela Current, South China Sea, Mediterranean Sea, Volta River, and Western Indian Ocean SAPs).

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<sup>89</sup> The term “Ecosystem Quality Objective” is currently in vogue as an expression of defining an objective in accordance with the “Ecosystem Approach” (as originally defined by the CBD). Many projects have used the term “Environmental Quality Objective,” which has a narrower meaning: it refers to a particular aspect of the natural or human environment. We fully appreciate the lack of consensus on these terms at present.

- Notable exceptions include the Caspian Sea and the Dnipro Basin, both of which formulated NAPs.

#### *Monitoring and Evaluation Indicators*

- Monitoring and evaluation indicators were not presented in most SAPs, although some have stated that they would be developed in accordance with the GEF M&E approach (for example, the Bermejo River, Caspian Sea, Dnipro Basin, Volta River, and Western Indian Ocean SAPs).
- However, a number of these simply list generic indicators according to the proposed action and do not specify the type (for example, process, stress reduction, or environmental status).

In conclusion, though the development of SAPs is showing encouraging progress, we are concerned that many of these outputs lack key elements that enable them to be useful *operational* documents. At a regional level, it appears that many governments have limited themselves to formulation and agreement of documents that establish a loose agenda of actions to resolve identified problems. This does not imply a lack of good faith in the process on their part. However, it has long been recognized that international processes often generate noble declaratory statements that fail because they are not linked to hard commitments toward pragmatic national actions (including institutional and legal reforms and investments), resilient and sustainably financed coordination mechanisms (at national and international levels), and accountability to stakeholders through inclusivity and transparent monitoring. Unfortunately, we have not seen substantial evidence of these elements in many of the SAPs produced to date, and we are particularly concerned at the lack of National Action Programs or similar supporting documents.

#### 4.5. INCONSISTENCIES IN REPORTING

We identified a number of inconsistencies between the results of the questionnaire and our analysis of TDAs and SAPs. There is a clear difference, for example, on one hand, with the view of the majority of projects that stakeholders were involved and consulted and, on the other, with the lack of explicit stakeholder analysis underpinning the TDAs or embodied in the SAPs. The poor identification of causality in many TDAs is inconsistent with the view of most projects that this was conducted in a satisfactory manner. Furthermore, most respondents to questionnaires uncritically regarded their SAPs to have generated quantitative targets and a clear timetable, identified capacity-building requirements, addressed policy and regulatory reform, and identified critical investments—whereas our analysis of the SAPs and our site visits question the validity of this statement.

We do not wish to undervalue the enormous progress made by projects in implementing the TDA/SAP approach. We have seen ample evidence of progress. However, we are concerned that an over-reliance on self-assessment would not enable early feedback to projects and governments on the real progress of projects toward their stated goals. Self-assessment can be effective only with robust indicators, and these are clearly lacking.

## 4.6. CONCLUSIONS

Eight years have passed since the first TDA and SAP were published.<sup>90</sup> Since then, at least 13 of these processes have been completed and much experience has been gained. We are not overly concerned with the lesser technical imperfections<sup>91</sup> of some of these documents, provided they make a significant contribution to the overall adaptive management process and generate tangible outcomes of decreased stress to transboundary aquatic systems and their improved status. The adaptive management process requires that assessments and strategies should be revisited periodically, however, to examine new information, set new targets, and adjust the strategies for achieving them. This will soon be put to the test in the Black Sea, where a new TDA and revised SAP are urgently required to underpin the work of the Black Sea and Danube Commissions and major interventions such as those of the Black Sea Strategic Partnership (see Box 3.4). The revised TDA and SAP will be an opportunity to complete a full learning cycle and should be carefully evaluated for lessons learned for other GEF IW projects. It should be noted, however, that the success and failure of the adaptive management approach, including the TDA and SAP as key tools, relies heavily upon quality monitoring<sup>92</sup> and robust institutions. Without these, the process will be deemed to have failed.

In the next chapter, we will bring together the overall lessons learned from Chapters 2–4 of this study.

## 5. LESSONS LEARNED

In this chapter, we shall draw upon the findings of the study to examine generic lessons learned. These are presented as numbered paragraphs for ease of reference. Footnotes are employed to provide additional information and cross-references. We invite the IW Task Force to consider these carefully to agree on the most appropriate way forward. (Our main recommendations are provided in Chapter 7.)

### THE PROJECT CYCLE

1. Donor expectations regarding project time frames are often unrealistic<sup>93</sup> and force compromises<sup>94</sup> that limit buy-in and eventual sustainability (for example, through

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<sup>90</sup> The Black Sea TDA, adopted in June 1996; SAP signed on 1 October 1996.

<sup>91</sup> We do not consider as “lesser” the failure to identify transboundary issues, to set boundaries, define and incorporate stakeholders, and identify social and economic root causes.

<sup>92</sup> We are fully aware of the development of a “negotiated” set of M&E project indicators for international waters by the IW Task Force. Regrettably, this does not seem to have brought about the necessary improvement in objective reporting, but should be revisited and strengthened. (This point will be examined further in Chapters 5, 6, and 7.)

<sup>93</sup> Huge delays (up to five years) in project start-up caused by lengthy negotiations among parties represent an immediate handicap, even before implementation begins (see examples in Chapter 3).

<sup>94</sup> Some collateral donors work within project cycles as short as two years and exhort clear tangible outputs. This has been described as “funding the low-hanging fruit” and may consume a disproportionate amount of the available staff time, funding, and effort of national counterparts. It also leaves the more difficult (and sometimes less attractive) tasks to the longer-term GEF-funded components. It is important to frame such projects within a clear long-term strategy (or programmatic approach) agreed on by all parties. It is also

excessive use of external consultants<sup>95</sup>). Irrespective of whether a topdown (strategic planning followed by regional, national, or local actions) or bottom-up (replication of demonstration projects are proposed), sustainable mechanisms are rarely created in less than a 10-year total time frame.<sup>96</sup> We could not find any examples of new sustainable institutional mechanisms created and fully operational in less than a 10-year period.

2. Some of the GEF interventions do not appear to have established, from the outset, clearly stated outputs and outcomes together with an exit strategy.<sup>97</sup> This exit strategy should constitute an agreement among all parties regarding the actions that will be taken at the end of the intervention, or earlier if basic assumptions are not met or if required outputs are not achieved.

#### THE TRANSBOUNDARY DIAGNOSTIC ANALYSIS

3. The TDA is sometimes regarded as a bureaucratic prerequisite for donor funding,<sup>98</sup> rather than an element of an adaptive management strategy enabling the identification of transboundary issues and their causes. As part of a continuous process, a TDA should be periodically updated to reflect the changing regional situation. As yet, this has not happened in any of the IW projects (though it is planned for the Black Sea).
4. The TDA, where applied, is an effective tool, providing that it sets appropriate boundaries, identifies all relevant stakeholders, conducts studies by joint fact finding (without excluding any relevant regional expertise), includes an appropriate balance of disciplines, identifies the socioeconomic causes of the transboundary problems identified, evaluates the institutional capacity, and makes all the information available to the stakeholders in a concise and nonjargonistic manner. Unfortunately, some of the TDAs examined<sup>99</sup> have not considered all of these elements, and the scope of the study has been constrained by inappropriate boundaries,<sup>100</sup> limited input of social scientists,<sup>101</sup> weak analysis, and poor

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important to negotiate a common participatory process for the various projects, to avoid stakeholder confusion. Poor collaboration between the EU-Tacis and GEF Black Sea program (despite sharing common facilities) is an example of this problem.

<sup>95</sup> This has direct adverse effects on country buy-in where consultants are employed to reduce project implementation time through bypassing the need to build local capacity or consensus.

<sup>96</sup> It is important to establish clear benchmarks (milestones) within the process of strategic planning.

<sup>97</sup> See Section 3.2.

<sup>98</sup> Projects such as the Argentina Coastal Contamination Prevention and Sustainable Fisheries Management (Patagonia Shelf) project have not given the TDA any importance in their implementation strategy, whereas it is a central tool in other project in the same region.

<sup>99</sup> See Section 4.4.

<sup>100</sup> We have addressed this issue earlier in the current document. Boundaries may often be constrained by political factors: For example, China is not involved in the Mekong Water Utilization Project, despite occupying some 30 percent of the catchment (Box 3.3); Rwanda and Burundi were not involved in the Lake Victoria project (because of political strife), despite having a major influence on its catchment.

<sup>101</sup> This is a pervasive problem in most of the projects examined. In some cases, resource economists were included, but sociologists rarely figured in projects. Social science is often seen as an “add-on” element (after natural science), rather than an integral part of studies at all levels. Much of the effort of interventions

diffusion to stakeholders.<sup>102</sup>

5. We are particularly concerned that many IW projects have failed to conduct careful analyses of stakeholders,<sup>103</sup> institutional capacities, and responsibilities. This has led to difficulties in strategic planning and effective operationalization of projects at a later stage. It also risks capture of projects by particular sectors. Stakeholder analysis and institutional mapping should be an integral component of all TDAs and proposals for demonstration sites.

## THE VALUE OF DEMONSTRATION PROJECTS

6. Early use of demonstration projects has helped to build confidence among stakeholders and ensure greater buy-in and tangible local benefits, as well as global ones.<sup>104</sup> Replicability requires careful site selection and efficient overall mechanisms to promote stakeholder exchanges and technological transfer, including capacity building. Demonstration projects alone do not resolve problems that exist at greater scales, such as eutrophication, changing river hydrology, or the decreased recruitment of fish to straddled stocks.<sup>105</sup>
7. The two Global Demonstration Projects<sup>106</sup> reviewed (GloBallast and the Global Mercury Project) illustrate the usefulness of this approach to deliver clearly identified global benefits. Both projects, although focused on single sectors, address issues that cover environmental, health, capacity-building, and legal issues. Such multidisciplinary expertise is not widely available, particularly in developing countries where socioeconomic and environmental impacts are particularly severe. The projects are having an important catalyzing and multiplying role by developing state-of-the-art tools (such as training packages and integrated methodologies), as well as providing a framework for replication. In addition, this approach can effectively contribute to awareness raising at global levels and to the emergence or consolidation of new regimes, required for effective and sustained response.

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is in changing people's behavior, but few of the studies objectively examine the social issues of achieving this aim.

<sup>102</sup> There were many different opinions regarding who should be responsible for this work. Though regional diffusion is necessary, it also relies on national focal points to distribute the information generated, with the disadvantage that this may be of a very general nature. More targeted and carefully monitored national or subnational programs for diffusion of popular versions of TDAs are likely to be more effective. Even in mature programs such as for the Black Sea, it was noted that key documents such as the TDA and SAP had not been translated and widely distributed in each country, despite government commitments.

<sup>103</sup> See Sections 3.4 and 4.4.

<sup>104</sup> This has been a major factor in the success of PEMSEA, which clearly demonstrated the value of confidence building at a demonstration-site scale. Scaling the process up, from local to regional, is not an additive process, however, because different priorities emerge when larger scales are chosen. Recent projects (for example, the Guarani Aquifer under OP9) are using a combined approach of demonstration projects embedded in a regional strategy. It will be important to monitor the success of this hybrid approach carefully.

<sup>105</sup> See Box 3.6 on the Xiamen demonstration site.

<sup>106</sup> See Section 3.5. Implementation of the Fisheries By-Catch project is still in an early stage, and our review of this was restricted to a desk evaluation of the project document.

## SELECTION OF APPROPRIATE SCALES FOR ASSESSMENT AND MANAGEMENT

8. The ecosystem approach<sup>107</sup> may be applied at a variety of different scales, in some cases involving catchment area management or resource use management at the LME level. In some projects, political considerations have overridden the selection of appropriate natural boundaries,<sup>108</sup> and the ecosystemwide objectives are unlikely to be met.
9. Not all transboundary problems, however, require a common regional approach (for example, harmonized laws and regulations) for effective management to meet agreed on regional and global objectives. While the regional protection of mangroves, for example, is best served by common regionwide objectives, the strategy employed at each site must be tailored to the geographical scale of pressures on the system, the local governance structure, and the available human capacity.<sup>109</sup>

## THE VALUE OF STRATEGIC PLANNING

10. Strategic planning, whether explicit (that is, approval of an SAP) or implicit (during preparation of a GEF project brief), has been a key requirement for most of the IW projects. The approach taken to this process by different projects has been highly variable. Those focusing upon declaratory statements<sup>110</sup> have encountered greater difficulties to implement than those with more-detailed targeted and costed<sup>111</sup> operational strategies. Well-designed country-driven SAPs, together with National Action Programs (NAPs),<sup>112</sup> provide a benchmark to encourage and assess progress toward commonly defined goals and milestones.
11. The first step in SAP or similar processes should be an agreement on regional objectives, defined in space and time. In some cases, these may constitute

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<sup>107</sup> As defined in CBD (1998) Report of the Workshop on the Ecosystem Approach, Lilongwe, Malawi, 26–28 January 1998. UNEP/CBD/COP/4/Inf.9, 15 pp.

<sup>108</sup> The case of the Mekong Water Utilization project is described in Box. 3.3. Box3.1 discussed the difficulties encountered in the Plata Basin.

<sup>109</sup> The demonstration scale approach taken to ensure sustainable utilization of mangroves, wetlands, sea grasses, and “nonoceanic” coral reefs in the South China Sea is an excellent example of an effort to set appropriate scales at a regional and local level. Care was taken to select sites according to transparent, regional-scale priority criteria, but actions at the sites themselves are being developed within carefully studied and pragmatic boundaries that incorporate as many elements of the causal chain as practicably possible.

<sup>110</sup> The Black Sea and Benguela Current SAPs are examples of declaratory statements. Both include objectives, milestones, and institutional mechanisms and are endorsed at a very high level. They do not include operational details and financial plans, however. In the case of the Black Sea, it was assumed that this would occur in detailed national programs, but these were not subsequently developed in most cases.

<sup>111</sup> See Sections 3.2 and 3.6.

<sup>112</sup> The development of NAPs in parallel with SAPs is one approach that may lead to more pragmatic results in terms of actions at the country level. The Caspian and Dnipro projects are good examples of this approach.

Ecosystem Quality Objectives.<sup>113</sup> In all cases, however, they should be congruent with the TDA and clearly understandable to all stakeholders involved. The establishment of such objectives, together with a statement of vision, has not occurred in many projects, and their effective public diffusion is often ignored.<sup>114</sup>

12. In recommending actions within the SAP/NAP process, greater care should be taken to integrate social issues. Projects that have linked reforms to the provision of alternative livelihoods,<sup>115</sup> poverty alleviation,<sup>116</sup> and gender issues<sup>117</sup> have been particularly successful at engaging community support. This may result in tradeoffs among measures that would maximize economic yield, environmental benefits, and social benefits. Such tradeoffs are highly political and require well-informed participatory processes and careful impartial facilitation. The ability to demonstrate the linkages between sustainable economic and social development and the maintenance of natural capital is a crucial input to this process.<sup>118</sup>
13. Projects developed to date have shown that a great deal of pragmatism is required to develop a SAP. The SAP should enable the achievement of the agreed on regionwide objectives through specific national actions and, at a regional level, identify, reinforce, or create the sustainable institutions necessary for effective regional coordination.<sup>119</sup> National Action Programs are an essential part of this planning mechanism, but we have seen little evidence of their widespread development to date. They need to give detailed information on how the regional objectives will be operationalized. This should include deployment of human capacity (or capacity-building needs), infrastructure, legal and policy reforms, finance, and investments. Care must be taken not to lose sight of the global benefits in the national-scale planning process;<sup>120</sup> costs, benefits, and alternatives

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<sup>113</sup> EcoQOs have been developed for the Dnipro and for the Humboldt Current (as part of the PDF-B project). The draft SAP for the South China Sea was, in effect, a statement of visions and targets that was very similar to this approach. (See also Section 4.6.)

<sup>114</sup> Part of the challenge for maintaining momentum in SAP implementation is to set clearly understandable goals. Unfortunately, many existing goals are couched in a technical language that some stakeholders find difficulty in relating to.

<sup>115</sup> This has been a major issue in projects where poverty alleviation depends upon resource use. A major challenge of the Mekong Water Utilization Project, for example, is balancing the use of the river for irrigation or energy production against the huge social benefit derived from downstream artisanal fish production.

<sup>116</sup> One of the most successful facets of the Lake Victoria project was its ability to engage local people in combating the proliferation of water hyacinths. This is largely because they were able to relate the problem to their own loss of livelihoods and health.

<sup>117</sup> Recognition of the important social role of women and close cooperation with women's organizations has been an important factor in the success of the PEMSEA Da Nang demonstration project in Vietnam.

<sup>118</sup> The Upper Paraguay project for example, is facing the challenge of maintaining the enormous natural capital of the Pantanal wetlands in the face of strong economic pressures that are rapidly developing its catchment for agriculture. The Brazilian government already had to make a difficult choice between developing the Upper Paraguay river as a waterway or maintaining its natural state as a key functional component in the Pantanal. It took the bold decision not to develop the waterway.

<sup>119</sup> See Section 4.4

<sup>120</sup> The "local benefits study" conducted on the Bermejo project for example, suggested that the implementation phase of the project had lost much of its focus on global benefits (though the project itself is very well implemented and generates considerable local benefits).

should be fully explored. The transboundary issues identified in the TDA should be addressed, according to their agreed on priorities.<sup>121</sup>

14. Both the SAPs and the NAPs should identify baseline and incremental processes and costs. They should identify regional and national arrangements for monitoring the environmental status and trends, pressure relief, and the implementation of the action programs themselves. They must incorporate a process for periodically revising the short-term goals and the overall regionwide objectives, and each revision should be endorsed at a high level.<sup>122</sup> To date, very few IW projects have developed such detailed operational strategies and effective monitoring programs at a national level. The consequence of this situation is limited accountability, transparency, and sustainability.

#### THE INTERMINISTRY PROCESS

15. In designing an SAP, care must be taken to maintain political momentum. Interministry Committees (IMCs) have not been developed in many projects,<sup>123</sup> but they are crucial at a national level to avoid capture of the project by a particular sector or to avoid difficult discussions that will be needed in order for the project to succeed. The experience in GEF IW projects suggests that the representatives should be senior enough to have genuine authority in their respective sectors, but not so senior as to be subject to the volatilities of frequent political change. The IMC should be chaired by a Minister or Deputy Minister from the appropriate sector. Special arrangements will be required in highly decentralized countries to ensure inclusion of relevant government entities.<sup>124</sup>
16. The IMCs by themselves may not be sufficient to maintain the necessary political momentum. Local-level actions should be included with full stakeholder involvement and clear public participation plans, but these are currently absent from almost all SAPs. This may require additional intersectoral groupings at the regional, national, or local levels.
17. Involvement of the private sector in IW projects has, until recently, been rather limited. The emergence of the first Public/Private Sector Partnership Investments

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<sup>121</sup> Our study suggests that in most cases there is a reasonable coherence between the TDA and the SAP.

<sup>122</sup> The key to successful adaptive management is the ability to take a first step towards the agreed overall objectives (often expressed as EcoQOs) and then to monitor the results very carefully. These results are then used to determine the next step and the validity of the original objectives. Monitoring is a key component of the strategy; without a reliable monitoring program it will inevitably fail.

<sup>123</sup> See Section 4.4.

<sup>124</sup> In projects in South America, it has been quite difficult to match the political systems of large federal countries (for example, Brazil and Argentina) with smaller unitary neighbors. Argentina, for example, has a three-tier system of federal, provincial, and municipal government, whereas Uruguay has a two-tier (national and municipal) structure. This presents the risk of asymmetry both within and between countries. An IMC at the federal level, for example, could have difficulty in implementing actions in provinces and municipalities. The Bermejo project has convinced the Government of Argentina to work at the provincial (decentralized) level.

(PPPIs) is encouraging,<sup>125</sup> though this model should not be regarded as one-size-fits-all.

## PROJECT OPERATIONAL ARRANGEMENTS AND SUPPORT

18. There is a perceived need to improve transparency and accountability in the feedback to proposers of projects. It was felt that the current text of OPs 8, 9, and 10 give insufficient guidance<sup>126</sup> to project developers regarding such matters as the scope of each OP,<sup>127</sup> the expectations regarding global benefits,<sup>128</sup> and the relationships among other OPs (including those in other focal areas, such as biodiversity). It was also felt that the language employed in communications (the word “GEF-speak” was used on several occasions) is unhelpful, particularly to non-English speakers.
19. Where close coordination between Implementing Agencies at the planning and operational level has occurred, it has generated benefits that far outweigh the transaction costs.<sup>129</sup> The current low level of management fees that can be charged by the IAs makes such task sharing increasingly unattractive, however. For co-implemented projects to be successful, active technical coordination needs to occur between IAs at the regional level; otherwise, there is a tendency for the projects to be split into self-standing components, with a consequent danger of fragmentation.<sup>130</sup>
20. Current interproject coordination remains ad hoc and often deficient,<sup>131</sup> particularly between projects in different program areas<sup>132</sup> (for example, OP2 and OP8 or 9). Valuable opportunities for synergy are being lost at the regional level.

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<sup>125</sup> See Box 3.9 on the approach used in PEMSEA.

<sup>126</sup> See Section 2.3 for a full discussion of this problem.

<sup>127</sup> This was evident from the response received to the questionnaires. A high proportion of the projects were unable to correctly locate the OP to which their project had been assigned. Several of the GEF Focal Points consulted also expressed their concern with the written guidance available.

<sup>128</sup> There are particular difficulties in this context with OP9. Short-term global benefits from projects such as the Upper Paraguay or Bermejo may accrue through the protection of system resilience or biological diversity, rather than at the level of transboundary waters. The interpretation of OP9 could benefit from greater clarity on the nature of benefits that could be considered as global.

<sup>129</sup> The Caspian Sea and Red Sea projects are cited as examples in which all three IAs have contributed to the overall success by sharing their comparative advantages.

<sup>130</sup> Box 3.4 explores this in detail for the case of the Black Sea. Similar difficulties occurred in the Red Sea project. The Caspian Sea project, on the other hand, is an example of good interagency cooperation at the regional level.

<sup>131</sup> For example, there seems to be virtually no communication between the South China Sea project (UNEP) and PEMSEA (UNDP), despite sharing overlapping geographical areas and interests.

<sup>132</sup> We observed many inconsistencies between projects developed in the IW Focal Area and OP2. These could have been resolved by better interproject coordination during their development phase. A case in question is in the coastal regions of Uruguay and Argentina, where OP2 projects are proposed for both coasts of the Plata estuary, but to date these have benefited only slightly from interaction with the OP9 Rio de la Plata and its Maritime Front project. Clearly, a regional strategy across the two focal areas would have generated enhanced benefits.

21. A large number of the projects visited voiced concerns regarding the technical support available to them for building staff capacity for project management and implementation of processes such as TDA/SAP development. Ongoing work developed by projects such as IW:Learn and Train Sea Coast are helping to fill this gap, though care must be taken not to create overly prescriptive mechanisms that stifle the innovation that has driven the IW Focal Area forward. Furthermore, these technical projects do not replace the need for management support to enable project coordinators to fulfill their mandates<sup>133</sup> in an efficient manner. Recurrent problems with procurement procedures, for example, are slowing the implementation of a number of projects.
22. Another recurrent problem is the limited time available to support projects by national counterparts in some countries. There are suggestions of chronic over-commitment of some public officials acting as technical focal points or providing expertise as a national contribution for project implementation. Some projects have adopted systems for formally accounting for counterpart contributions, and this approach should be further evaluated in the interest of transparency and future institutional sustainability. Another approach adopted in some cases has been the gradually tapering down of GEF support to the joint implementing mechanisms, enabling a smooth transfer of institutional responsibility to the region.<sup>134</sup>
23. A frequent difficulty facing Executing Agencies is the long lag time between the initiation of PDF-B interventions and the effective commencement of a resulting full-scale project. Part of the delay occurs during the detailed negotiations on the formulation and implementation of the project document itself. This is a complex process, but in some cases, the delays are for as much as two to three years, by which time any momentum generated in the PDF-B phase has been lost. The situation can be improved in many cases if the project document is prepared in tandem with the project brief and all relevant MOUs are completed within a strictly defined time frame before approval of project documents. Some IFIs are now introducing disincentives for laggard parties to avoid the financial losses implicit in delayed negotiations.

## **6. IMPLEMENTATION OF THE RECOMMENDATIONS OF THE PREVIOUS STUDY**

### **6.1. INTRODUCTION**

The 2000 IW Program Study contains 15 recommendations for improvement in design and delivery of the IW OPs. At the request of the IW Task Force, we have reviewed their implementation in the light of the results of the present study. The results of our analysis are presented in Table 6.1. This provides the text of the original recommendation and the

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<sup>133</sup> See Section 3.2.

<sup>134</sup> See Box 3.10.

degree of achievement, both textually and through a rating of 5 (full implementation) to 0 (no significant implementation). (Overall comments are made in Section 6.2 below.)

**Table 6.1.**

Previous Recommendations	Degree of Achievement	
	Description	Rating (5 = fully implemented)
The review found that much more could be done to clarify the role of the various Operational Programs. . . . For instance, OP8 and OP9 should be clarified to make them mutually coherent and consistent with the new OP12.	Our analysis (Annex 3) is in complete agreement with the previous recommendation, and we have seen little evidence of progress to remove any ambiguities, apart from some useful text in the poorly distributed M&E Working Paper 10 (also the need remains to ensure consistency with OP2 and OP15).	1
Along these same lines, the definitions in OP10 should be revised to reduce the emphasis on ship-derived impacts on international waters and increase the emphasis on land-based activities and their effects, including those mediated by atmospheric transport pathways. Concurrently, the classes of priority contaminants should be reconsidered and revised to reduce the emphasis on metals, hydrocarbons, and those persistent organic pollutants of primary relevance to the new POPs Convention.	Though we have seen no evidence of any change to the definitions, we note that the range of projects implemented under OP10 is expanding. There are still no comprehensive studies of the so-called new contaminants (such as estrogenic substances), however, and the approach employed continues to be more reactive than anticipatory.	1
The use of science-based transboundary diagnostic analyses as a basis for the formulation of strategic action programs should continue. This will increase confidence that priority threats are being effectively addressed in SAPs. It will also ensure that in cases where land degradation is a priority issue, appropriate resources are provided to meet that threat in subsequent GEF interventions.	We are fully satisfied that this recommendation has been implemented.	5
A procedure and timetable for the preparation of guidelines on major concepts used within GEF's operational strategy and the Operational Programs should be devised. Specifically, these guidelines should provide clear definitions and examples of the following topics: incremental cost estimation, the application of the ecosystem management concept, transboundary diagnostic analysis, and the large marine ecosystem concept, assuming that these concepts will continue to be of relevance to the International Waters Focal Area.	The M&E Working Paper 10 (see footnote 1) goes some way toward addressing this point, but has not been widely distributed. Training materials in preparation by the Train Sea Coast project and web-based materials from International Waters Learn also represent an advance. On balance, however, we still feel that there is a gap to be filled in the provision of a consolidated manual for project proposers and managers.	3
Consider increasing assessment of the suitability of proposed Executing Agencies to ensure competent project management and the sustainability of any activities (administrative arrangements or organizations) engendered through GEF international waters projects. Such	We agree with the need to ensure the suitability of Executing Agencies and remain concerned about institutional sustainability. No formal mechanisms appear to have been established, but we feel that this should be part of the normal project appraisal process.	3

Previous Recommendations	Degree of Achievement	
	Description	Rating (5 = fully implemented)
evaluations would reduce the prospects of implementation delays and other problems attributable to Executing Agencies. There is a need to ensure, at the project proposal stage, that appropriate measures are incorporated into projects to maintain the viability of any basin or regional organizations used or established for the purposes of executing GEF international waters projects beyond the life of the project.		
All high-risk projects, or those with high-risk components, should be subjected to a midterm review. Most projects, in fact, would benefit from midterm reviews. The clear benefits exemplified by the influence of the midterm review of the Lake Tanganyika project suggest that such reviews can significantly improve project performance. However, the costs associated with midterm review of all projects would consume too large a proportion of project implementation costs. Therefore, midterm reviews could be confined to those projects exhibiting high risks of failure to deliver on the major objectives, as judged during the Project Implementation Review process.	We are fully satisfied that this recommendation has been implemented; indeed, all projects are now submitted to midterm reviews or evaluations.	5
In addition to increased use of midterm reviews, final or terminal evaluations of projects should only be conducted <i>after</i> project implementation has been completed. Moreover, GEF should insist on uniformity for these final evaluation reports. This will require GEF to define and adopt a common format for these reports and insist on adherence to it. Such a step would enable easier comparison of performance among projects and streamline feedback processes, leading to improvements in the quality of project proposals.	We are not aware of any recent projects that have conducted terminal evaluations before completion. We consider that the difficulties facing the M&E process are deeper than report format and that a complete overhaul of project monitoring is required to develop a system that enables objective data gathering and reporting without duplication of effort.	3
Given the complex nature of international waters projects, which can involve the cooperation of a large number of countries and Implementing Agencies, there is a need for an interagency advisory function within the GEF to help ensure the coordination and effective development of the International Waters Focal Area. In addition to providing advice on overall portfolio development, this also could ensure that demonstration projects are replicable in a global context and focus on priority problems for which solutions are needed beyond the project area.	The need for improved coordination continues to be evident, particularly at the regional level. At the global level, the International Waters Task Force could be strengthened to take on this role.	1
Procedures for feeding back lessons learned to the formulation of projects in the International Waters Focal Area have been initiated through the IW:LEARN project and	The IW:Learn project has entered a second phase, a second IW Conference was held in 2002, and a new one is scheduled in 2004 (see Box 3.11). We do	4

Previous Recommendations	Degree of Achievement	
	Description	Rating (5 = fully implemented)
the GEF Biennial International Waters Conference, held for the first time in October 2000. Accordingly, there is a need to formalize this process in a transparent and effective mechanism within the GEF.	not feel the need to formalize the process further, because it is subjected to a regular critical review that maintains its usefulness.	
While it is too early to expect much information regarding measured improvements in international waters environments from GEF interventions, as GEF's experience increases, preparations should be made for including more comparable information on process, stress reduction, and environmental status indicators in future project evaluations. Process indicators, for instance, are already available in most cases, but it is also extremely difficult to make coherent and objective comparisons among the process indicators for individual projects.	An attempt was made to address this concern, but we feel that more robust indicators are still required as part of a reformed M&E system. We do, however, recognize that not all indicators can be universal in nature.	3
In South America, an evaluation of progress in project development should be conducted with a view to identifying opportunities for accelerating attention and national commitments to resolving environmental problems in large catchments, particularly those on the eastern side of the Andes. Consideration should also be given to opportunities for developing country-driven projects that address dominant problems in the smaller catchments draining regions to the west of the Andes. Such projects could be the basis for projects in all western South American countries.	The Plata Basin project (currently at the PDF-B stage) effectively addresses the first part of this recommendation. The second part would rely upon evidence that transboundary problems are being addressed, rather than national ones, and a uniform approach is probably impracticable.	4
A streamlined oversight and tracking methodology should be prepared and implemented by the GEF defining the procedures to be used from project inception through final review and feedback. This methodology should include appropriate and uniform documentation to ensure transparency and accountability. The methodology should be reviewed by an independent group of management and technical experts before its adoption within the GEF. By eliminating the redundant and ineffective procedures currently in use, the costs of such an exercise should be more than recovered.	This recommendation has not been implemented and remains valid. A new integrated M&E system is required.	0
The reviews of GEF projects should concentrate increasingly on those offering the greatest potential benefit to international waters activities. Reviews at the concept/PDF and project submission and completion phases, plus the PIR, are the most valuable to the program. Other forms of GEF review, including midterm	Much of this recommendation was adopted. Many deficiencies in the review mechanism remain, however (though midterm reviews and SMPRs are now common). The PIR process gathers some useful information, but we have observed inconsistencies with self-assessment methods.	4

Previous Recommendations	Degree of Achievement	
	Description	Rating (5 = fully implemented)
reviews of high-risk projects and reviews periodically carried out by the M&E Unit for specific purposes of overall focal area alignment and performance, should be carried out as need arises.		
The GEF Secretariat should take immediate steps to ensure that all documents pertaining to GEF projects produced by the Secretariat are amenable to proper citation and accessible through a single website. Furthermore, in view of the lack of universal access to the Internet, hard copy and electronic (diskette or CD-ROM) copies of all documents should be maintained in a central facility within the Secretariat for distribution on request.	<i>This has been largely implemented. We consider that large stocks of paper documents should be avoided; it is both inefficient and environmentally unfriendly. The Internet has become widely accessible at this time.</i>	5
A unique alphanumeric identifier for each project should be assigned by the GEF Secretariat to avoid confusion among projects and to obviate the current widespread practice of using diverse short-form or truncated titles for the same project, a problem not limited to international waters projects. This should be complemented by guidelines defining the length, structure, and formats of all project documents, both to enhance transparency and to facilitate comparative evaluations of projects and project reviews. It is understood that the Implementing Agencies have their own procedures, requirements, and documentation regarding project formulation, administration, and management. This recommendation applies only to the documents collated and assembled by the GEF Secretariat, for which greater uniformity, simplicity, and transparency is warranted.	<i>This has been largely implemented. More attention is required to an accurate central database of project management metrics, however. We had great difficulty finding basic information on project timings and expenditure.</i>	4

## 6.2. CONCLUSIONS

The overall rating for implementation is 3, suggesting that about half the recommendations have been implemented. There have been significant improvements in some areas, particularly in the implementation of the TDA/SAP approach and in the use of midterm reviews (the implementation in this case has exceeded initial expectations).

Some of the areas identified as concerns in the previous study require further action. These can be summarized as follows:

### *(1) Clarification of OPs, Working Terminology, Processes, and Practices*

Though some progress has been made in this area (or is well under way), it is evident that there is a need for a consolidated source of information in plain English that clarifies

many of the ambiguities identified in the previous and current studies. A eventual review of the OPs themselves may be appropriate.

*(2) The Provision of an Integrated System for Monitoring and Evaluation*

There has been progress on several of the components of M&E (better MTRs, attempts at a set of indicators, improved project identification). As with its predecessor, the present study has also identified shortcomings in M&E, however, largely because these components do not integrate well into a system. This results in duplication of requests for information from projects and considerable reliance on self-assessment, rather than complementary requirements that lead to a deeper and more responsive understanding of project development.

*(3) Supervisory Issues at the Program and Project Levels*

The previous study alluded to weaknesses in supervision and the provision of advisory support and recommended its strengthening “to help ensure the coordination and effective development of the International Waters Focal Area.” The present study has also identified this as a general area of weakness, both at the global and regional levels. We shall present further recommendations on this issue.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

### **7.1. PREAMBLE**

The GEF IW Focal Area provides a unique mechanism for supporting actions that address transboundary environmental problems in continental and coastal waters and the global marine commons. The global justification for the program has not diminished; demands on the aquatic environment for water, transport routes, food, energy generation, waste disposal, and recreation are continuing to grow, threatening the future capacity of the system for sustaining biological diversity. Recent commitments, in forums such as the WSSD and the CSD, for sustainable use and protection of aquatic systems have highlighted the continuing relevance and urgency of GEF interventions in this area.

The GEF is a truly unique financing mechanism for helping to resolve these problems; the GEF Secretariat and Implementing Agencies shoulder a huge joint responsibility for the efficient and effective management of the resources allocated by governments through the Council. In turn, the team conducting the present study is conscious of its important role in providing an objective and constructive assessment, with the firm desire to ensure that the global objectives of the GEF are met despite the scarce resources available. In the current chapter, we shall limit ourselves to considering the overarching conclusions and making recommendations to address them.

### **7.2. OVERARCHING CONCLUSIONS**

We have been impressed with the development of the IW Focal Area and its expanding portfolio of interventions. There is a huge diversity of projects in OPs 8, 9, and 10 that are having a positive impact in almost every GEF-eligible marine area and associated

large catchment on the planet. The GEF has proven itself as a mechanism for catalyzing actions at a national and regional level, for gathering information and conducting assessments, for strategic planning, and for leveraging funding to assist with the realization of the plans.

It will still take some time before many of the tangible outcomes—measured in terms of stress reduction or improved status—become apparent.<sup>135</sup> In part, this is a consequence of the length of time required to bring about improvements in status. Even in the most developed countries (for example, in the Great Lakes between the USA and Canada), effective improvements were only achieved on decadal time scales, and many problems remain. As yet there are only a few projects, such as the Black Sea–Danube Strategic Partnership, that have entered a strategic action program implementation phase, and these are still at too early stages to generate outcomes measurable in terms of environmental improvements. However, they are making important contributions to stress reduction that will help to prevent further degradation of vital systems and will lay the foundations for improved resource use and sustainable development. The GEF IW Focal Area has proven itself as an effective instrument for foundational and demonstration activities and, through catalytic effects, may also become an agent of global<sup>136</sup> or regional change.

The OP 8, 9, and 10 projects we reviewed consisted of interventions based on foundational (TDA/SAP) activities, the replication of demonstration activities, or mixtures of both. The following were the key factors determining the level of success of these interventions:

- Choice of geographic or temporal scales
- Analysis of social and economic root causes
- Understanding of the concept of global benefits
- Proper stakeholder identification, consultation, and eventual participation
- Ability to create interministry bodies or national-level strategies
- Governmental support to sustain the joint institutional arrangements
- Identification and costing of alternatives for resolving identified transboundary issues
- Pragmatism in the identification of follow-up investments.

Failure to give due consideration to any one of these factors was seen to severely compromise project outcomes and the search for sustainable solutions. Some cases were identified in which this had occurred.

The impressive range of demonstration activities merits a more detailed study because there are valuable experiences in methodology, participation, catalysis, leverage, and replication that could improve future project design. Challenges to be overcome in strategies reliant on demonstration projects include difficulties in identification and focusing on global benefits, upscaling the projects, and sustaining them in the longer

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<sup>135</sup> A notable exception was the case of control of water hyacinths from Lake Victoria.

<sup>136</sup> There are already some hopeful signs, such as the successful negotiation of a regime for preventing the transfer of opportunistic species in ballast waters.

term. To overcome these challenges, mature demonstration projects (such as PEMSEA) had found the need to work within or develop a formal regional policy context to foster longer-term sustainable global benefits. We conclude that interventions combining demonstration and foundational activities are the best strategy for maintaining stakeholder attention while developing longer-term strategies based upon the TDA/SAP approach, and we note that several recently approved projects have taken this approach.

With few exceptions, the projects visited were characterized by a high level of staff commitment and excellent technical management. Where difficulties arose in project implementation and the achievement of optimal global benefits, these usually resulted from one or more of the following underlying reasons:

- Poor design of some interventions, leading to projects that are excessively complex and overambitious and lack a clearly defined exit strategy (there are large differences in the approach taken to design of project documents by the three Implementing Agencies)
- Approval processes that appear complicated and un-transparent to project proposes
- Poorly negotiated institutional and cost-sharing arrangements, without due attention to future sustainability
- Difficult-to-understand basic documentation regarding the Operational Programs, their differences, and their conceptual basis
- Inadequate training of project coordinators and other key staff
- Limited coordination with parallel initiatives of other donors, between GEF IW interventions in the same region, and between interventions in the IW and Biodiversity OPs
- Lengthy start-up phases of projects leading to lost momentum, outputs, and credibility
- Inadequately objective monitoring and evaluation criteria incorporated in each project document and at a more generic program level
- Over-reliance on self-assessment by Implementing Agencies and the GEF Secretariat, particularly at critical early stages of implementation
- Insufficient direct supervision by specialist staff from the Implementing Agency.

In each of the case study missions to four key regions, we observed deficiencies in coordination between Implementing Agencies. Further analysis of the wider project portfolio suggest that joint implementation of individual projects in other regions has significantly increased since the previous program study. This is a welcome trend that should be continued, but needs better financial incentives for the agencies concerned (management costs must be spread even more thinly with joint implementation). The difficulties observed in the study regions arose from coordination *between* projects, however, and it is clear that current coordination arrangements are not leading to synergies, particularly across focal areas (including OP2, OP8, and OP15). Furthermore, fragmentation of key regional efforts such as the Black Sea Strategic Partnership, as a result of deficient communication between agencies at the operational level, is leading to suboptimal outputs. This can only be resolved by clustering projects and assigning clear responsibilities for interproject coordination and by allocating funds from the projects for

articulating these new mechanisms. The recent clustering of Sahel projects provides an antecedent for doing this.

From a management perspective, we consider that the portfolio of IW projects has outgrown the capacity of the existing interagency arrangements for coordination and for monitoring and evaluation, particularly at the operational level. How can a group of five or six hard-pressed individuals, dealing with multiple portfolios and meeting together two or three times per year, jointly review the progress of a US\$0.5 billion portfolio of projects, as well as ensuring regional coherence and overall strategic planning? In part, this situation results from severe budgetary constraints imposed by the GEF Council. While some limits must be imposed, the current level of support for management is self-defeating because it forces a low-cost approach with inevitable externalities. We feel that this situation has led to over-reliance on self-assessment and a partial transfer of responsibility to the Executing Agency or project level, leaving an interagency coordination gap at the regional level. Management systems cannot simply be scaled up by adding patches when crises occur (this has led to the demise of many commercial companies); they need to be redesigned according to the new circumstances. The recommendation of the previous study for “procedures to be used from project inception through final review and feedback” remains virtually unimplemented and highly pertinent.

An encouraging emergent feature of the underlying philosophy of the IW Focal Area is the increased emphasis on adaptive management. The TDA/SAP process is evolving rapidly, for example, and despite the difficulties to be resolved, it is achieving the goal of improved transboundary strategic planning. This process of learning by doing (while moving toward agreed on objectives) adjusts well to the economic and cultural diversities of the GEF-eligible countries. It allows locally viable solutions to be developed for globally significant issues. Properly managed and monitored, it enables the successes and inevitable mistakes made in project design and implementation to feed back into the process as lessons learned. We see the current review as part of the essential overall feedback loop and hope that those reading this document will also be encouraged to remain open and innovative in seeking to resolve the problems identified.

### 7.3. RECOMMENDATIONS

The present section of this study presents four major recommendations designed to address the causes of some of the difficulties observed in the study, as well as outstanding issues from the previous one. In addition to these, in Chapter 5 we have highlighted a number of lessons learned for consideration and possible action by the International Waters Task Force (the formulation of a long list of resultant recommendations is beyond the scope of our terms of reference).

**Recommendation 1: The production and use of an accessible GEF International Waters Focal Area manual** to clarify the concepts, tools, and processes that are giving rise to recurrent difficulties for project design and implementation

This should include clearer descriptions of the *Operational Programs*; *concepts* such as global and local benefits, incremental costs, and leverage; *tools*, including adaptive management, transboundary diagnostic analysis, and strategic action program and demonstration projects; and *processes*, including the project submission and approval process and monitoring and evaluation mechanisms. The document should explain the relationship of IW programs with programs in other focal areas, particularly biodiversity and land degradation. It should be written in plain English (with translation into all U.N. languages), illustrated by current project examples, and include a full glossary of terms and a guide to the Implementing Agencies.

We consider that this document, approved by the GEF Secretariat and all IAs and available from the GEF website, would do much to resolve the conceptual confusion we observed and would considerably improve transparency and accountability. During the process of preparing this manual, it would be necessary to revisit many of the concepts, tools, and processes themselves. The text of the Operational Programs guidance documents should also be examined and amended, where necessary.

The main immediate use of the manual would be during the induction training of all GEF project staff. Our study has demonstrated that the current ad hoc or absent training is a major problem that contributes to slow project start-up, early misconceptions regarding the purposes of GEF funding, and a lack of identity as part of the GEF family. The manual would also underpin presentations of the IW Focal Area to actual or potential national-level beneficiaries. The cost of preparing the manual would be insignificant compared with its immediate benefits.

Recommendation 2: **To develop a comprehensive M&E system for IW projects** that ensures an integrated system for information gathering and assessment throughout the lifespan of a project. The system should encompass monitoring of project *achievements* (in terms of regulatory and institutional reforms, stakeholder participation, leveraging, and so forth) and monitoring project *progress* (meeting internal targets, spending and efficient use of resources, reporting, and so forth). For this to occur, it will be necessary to review and revise current indicators and databases. The questionnaire developed for the current study, in cooperation with the IWTF, highlighted the shortcomings of current indicators as a basis of assessment.

The new M&E system should not be regarded as an additional layer of evaluation, above and beyond that which is already in

place; it would entirely replace it and hopefully incorporate those elements of evaluation that are common to all IAs. The objective would be to provide information to project coordinators, Executing Agencies, Implementing Agencies, and the GEF Secretariat that will assist them to monitor progress and recommend corrective measures, where appropriate.

**Recommendation 3: The incorporation of a regional-level coordination mechanism for IW projects.** The objective of the new mechanism would be to increase the synergies between IW projects within defined natural boundaries and their focus on global benefits, to enable communication and coordination with relevant projects in other focal areas, to enhance feedback between projects and the IW Task Force, and to facilitate implementation of the M&E strategy at the regional level.

The proposal could be operationalized in the following manner: (1) the IWTF develops recommendations for clustering projects within natural boundaries or groups of natural boundaries, (2) coordination functions are assigned to a lead project in each cluster, and (3) the lead project maintains electronic communications and organizes annual workshops of all projects in the cluster. The annual workshops would be attended by key project staff, enabling forums on cross-cutting issues. They would also include representatives of all IAs and the GEF Secretariat, enabling bilateral meetings and a regional panel of project coordinators with IA and GEF Secretariat (GEFSec) representatives. It would also provide an opportunity for discussions of PIRs as part of a more interactive M&E system.

Costs for most participant projects would be minimal. Funding for this mechanism would be through an additional item on the workplan and budget of all new projects in the cluster. Existing projects would be retrofitted by providing funds to cover this activity through additional funding granted to the lead project (this would also cover lead project costs). The proposal could also be adapted to existing mechanisms in place in some regions (for example, the Sahel). The project should increase efficiency by providing an opportunity for IA and GEFSec staff to interact with a number of projects on single occasion. The GEF Secretariat may need to increase its regional presence to service this arrangement.

Though we are reluctant to recommend the creation of new mechanisms, the regional-level coordination gap has been plainly apparent in our study (and was already alluded to in the previous study). We feel that this proposal would generate major benefits resulting from reduced overlaps, maintenance of institutional

memory, avoidance of missed synergies and other opportunities, greater transparency, and improved accountability, as well as providing early warnings of operational difficulties. It would be part of a strategy to ensure greater overall coherence of the focal area at the regional level. The proposal is completely compatible with—indeed, supports—the GEF Instrument, particularly its Annex D<sup>137</sup> (Principles of Cooperation among the Implementing Agencies). The new mechanism would facilitate the existing obligations of the Secretariat in this respect, and the added oversight would enable the M&E system to be strengthened at a regional level. By improving coordination, it should also facilitate the work of the IAs and make better use of their comparative advantages. Involvement of National GEF Focal Points should also be considered to ensure enhanced national support.

**Recommendation 4:** **The redefinition of the GEF International Waters Task Force.** The current GEF IWTF is already reviewing its terms of reference. It is important that these should enhance its role in the definition of technical guidelines and policies. It should ensure the optimum use of comparative advantages of the Implementing Agencies within each intervention and also examine the selection of Executing Agency in accordance with agreed on criteria. The IWTF would also receive regular reports from each of the regional facilitators defined in recommendation 3 and provide them with feedback to maintain a globally coherent focal area.

In redefining the role of the GEF IWTF, an independent study should also be conducted of the management costs of GEF IW projects (including multiple IA projects), together with a needs assessment for their efficient technical backstopping and supervision. This information is particularly significant if changes in the present cap are to be proposed. It is clear from the present study that current provisions for supervision are deficient.

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<sup>137</sup> Under General Principles of the Instrument

in point 5: . . . the “implementing Agencies will focus on joint programming and implementation with eligible countries, either directly or where appropriate, at a sub regional or regional level, of program priorities and criteria adopted by the Conference of the Parties to each Convention.”

in point 9: “ . . . Collaboration among the Implementing Agencies will be sufficiently flexible to promote introduction of modifications as the need arises.”

Under Process of Collaboration

in point 13: “Responsibility for facilitating and coordinating the GEF -financed activities will be vested in the Secretariat in accordance with paragraph 21.”

It later indicates that “ . . . the Secretariat will provide a focal point for coordinating the GEF-financed activities of the Implementing Agencies, including interaction of the Implementing Agencies with the council, coordination of the preparation of the GEF joint work program, oversight of the implementation of program activities pursuant to the joint work program . . . . ”