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Agenda Item 11

GEF Annual Impact Report 2012

(Prepared by the GEF Evaluation Office)

Recommended Council Decision

The Council, having reviewed document GEF/ME/C.43/04, "*GEF Annual Impact Report 2012"*, and document GEF/ME/C.43/05, "*Management Response to the GEF Annual Impact Report 2012*", takes note of the considerable achievements of GEF support to the South China Sea and adjacent areas including, amongst others, that in 21 of 26 cases where comparative data could be obtained, GEF has supported initiatives that reduced environmental stress and improved or maintained socioeconomic conditions.

Given the important contributions that GEF support has made to addressing regional transboundary concerns, and the role of the GEF as a critical player in the region, as noted by the report, the Council requests the Secretariat to:

1) Take into account the findings and recommendations of this evaluation when screening future proposals submitted for GEF funding in the South China Sea and adjacent areas, most notably:
   - when choosing areas for expansion, that the conditions conducive to broader adoption are present in those areas
   - that the distinctive competencies within the GEF partnership are more fully drawn on to mainstream transboundary environmental concerns among sectorial ministries and regional trade organizations
   - that systems for managing risks and trade-offs are specified
   - that more attention is given to the support of actions that address regional environmental goods and services
   - that cash and in-kind cofinancing for regional services provided by GEF projects reach sustainable levels by project end
   - that adequate coordination and management of risks within the GEF partnership be given attention.

2) Adopt a more robust tracking and reporting approach to ensure Agency accountability for collaboration and cooperation in the South China Sea and the East Asian Seas.

3) Take in to account the findings and recommendations of this evaluation when developing the GEF 6 International Waters Strategies.

The Council requests the GEF Agencies to:

4) Ensure that M&E systems for environmental and socioeconomic impact are in place and consistently implemented, and that data is used and reported for management and public accountability; and

5) Ensure that M&E data and information on the impact of GEF projects be made available to the GEF Evaluation Office in a timely and transparent manner when requested.

Table of Contents

EXECUTIVE SUMMARY

1. This 6th Annual Impact Report covers the period from October 1, 2011, to September 30, 2012, and is divided in two chapters. The first chapter consists of the findings and recommendations of the Impact Evaluation of GEF Support to the South China Sea and Adjacent Areas. The second chapter reports on the other activities carried out by the Evaluation Office with reference to impact evaluation for the reporting period.

2. The Impact Evaluation of GEF Support to the South China Sea (SCS) and Adjacent Areas was carried out from December 2010 to September 2012. The evaluation covered 34 projects in 7 countries, spanning almost 20 years of GEF support. It is the first impact evaluation to be done by the GEF on international waters initiatives, and posed several methodological challenges due to the complex nature of the linkages between the social and ecological systems involved. The following five conclusions were reached by the evaluation:

(1) Although environmental pressures in the SCS continue to increase, GEF has made important contributions that are relevant to addressing regional transboundary issues.
(2) GEF has become a critical player in the region by linking initiatives at multiple scales, and providing a channel for other donors and stakeholders to support these transboundary concerns.
(3) In 21 of 26 cases where comparative data could be obtained, GEF has supported initiatives that reduced environmental stress and, as a result, also improved or maintained socioeconomic conditions.
(4) Broader adoption of GEF-supported initiatives is taking place, and is critical to fully addressing environmental pressures at the appropriate scales, but faces constraints to further progress.
(5) GEF projects in the SCS and adjacent areas have major deficiencies in the accessibility, use for management, and reporting of environmental monitoring data.

3. The Impact Evaluation of GEF Support to the SCS and Adjacent Areas provides three sets of recommendations. The first refers to the GEF IW support in the SCS and adjacent areas, the second to impact monitoring and evaluation systems of GEF projects, and the third to the GEF IW Focal Area Strategy for GEF-6. The following eight recommendations are made by the evaluation:

(1) GEF support should more fully draw on the GEF partnership to mainstream transboundary concerns within countries and existing regional organizations.
(2) GEF should give more attention to supporting countries to work together to address concerns related to regional environmental goods and services.
(3) GEF should more clearly define the role and linkages of regional mechanism/s in the context of its broader regional strategy, and ensure country and donor commitments to increasing levels of cofinancing to

cover the full costs of regional services by the end of the next phase of support.

(4) UNDP needs to ensure that the social risks of the projects it finances in the SCS are identified and addressed.
(5) A more robust programmatic approach should be developed for GEF IW support to the SCS and adjacent areas.
(6) Impact monitoring and related reporting systems supported by GEF should be consistent with local capacities and priorities. They should also be flexible to accommodate the more user-friendly and affordable technologies that are rapidly emerging.
(7) Impact M&E data and information should be made available to the GEF Evaluation Office in a timely and transparent manner.
(8) The findings of this evaluation should be considered when developing the GEF 6 International Waters Focal Area and, when applicable, the strategies of other focal areas.

4. During this reporting period, the GEF Evaluation Office also made progress in the Impact Evaluation on GEF Support to Climate Change Mitigation, and started the Impact Evaluation on GEF Support to Biodiversity. An assessment of the quality of arrangements to measure impact integrated into project proposals at CEO endorsement was also carried out, and has been expanded to include a follow-up assessment. A preliminary report of this assessment was presented to the June 2012 Council in the 2011 APR. Impact-related considerations continue to be mainstreamed across other evaluation streams in the Evaluation Office to ensure the availability of information on GEF impacts in future evaluations. This was particularly relevant this year in the thematic evaluation of GEF focal area strategies.

OVERVIEW OF IMPACT EVALUATION WORK IN 2012

5. In 2012, the GEF Evaluation Office completed its two-year impact evaluation of GEF support to international waters, made progress in the impact evaluation on GEF support to climate change mitigation, and started an impact evaluation on GEF support to biodiversity. An assessment of the quality of arrangements to measure impacts integrated into project proposals at CEO approval was also carried out, and has been expanded to include a follow-up assessment. A preliminary report of this assessment was presented to the June 2012 Council in the 2011 APR. Impact-related considerations continue to be mainstreamed across other evaluation stream in the Evaluation Office to ensure the availability of information on GEF impacts in future evaluations.

6. This 6th Annual Impact Report covers the period from 01 October 2011 to 30 September 2012 and is divided into two chapters. The first chapter consists of the findings and recommendations of the Impact Evaluation of GEF Support to the South China Sea and Adjacent Areas. The second chapter reports on the rest of the activities carried out by the Evaluation Office with reference to impact evaluation for the reporting period. The Impact Evaluation of GEF Support to the South China Sea (SCS) and Adjacent Areas completed this year provides three sets of recommendations. The first refers to the GEF IW support in the SCS and adjacent areas, the second to the GEF IW Focal Area Strategy for GEF-6, and the third to impact monitoring and evaluation systems of GEF projects. The findings of this evaluation also provide a basis to further assess the impacts of GEF support to international waters at a global scale. Novel evaluation approaches that were used and developed in this evaluation to assess impacts in complex social-ecological systems will also provide inputs to other impact evaluations in the future, as well as to current evaluations. For example, a generic framework for theory of change analysis for GEF support has been developed for OPS 5. This framework has been used in the evaluation of the GEF focal area strategies and in the progress-to-impact reviews of project terminal evaluations.

7. The Evaluation Office has also been very active in the development of guidelines for impact evaluations through the United Nations Evaluation Group (UNEG) impact evaluation task force and in the Evaluation Cooperation Group (ECG). The Evaluation Office made a presentation in UNEG's Evaluation Practice Exchange Seminar on the application of complex systems analysis in theory of change-based evaluations.

CHAPTER 1: IMPACT EVALUATION OF GEF SUPPORT IN THE SOUTH CHINA SEA AND ADJACENT AREAS

Background

8. The Evaluation Office initiated this impact evaluation to follow up on one of recommendations of the GEF's Fourth Over-all Performance Study (OPS4) that called for an in-depth assessment of progress towards impacts in the International Waters (IW) focal area. OPS4 had focused on the likely impacts of individual projects, and had not been able to adequately capture the combined impacts of GEF projects over time and across the larger area within which interventions are taking place. This impact evaluation

addressed this by focusing on assessing progress towards impacts[1] of a cluster of projects contributing to the management of a large marine ecosystem. The South China Sea (SCS) and Gulf of Thailand are the focus of this evaluation based on the level of GEF engagement, maturity of the GEF portfolio, applicability of the lessons from the site to other areas, and the extent that it has not been covered yet by other major evaluations.

9. Encompassing roughly 3.5 million km², the SCS is the world's largest body of water after the five oceans. The region is among the richest in the world in terms of marine resources and environmental value. Rapid economic growth, however, has resulted in increasing coastal habitat destruction, pollution and overfishing. The region is also known for its history of maritime border disagreements. Thus, addressing transboundary coastal and marine concerns has been a challenge.

10. GEF IW support is distinct from other focal areas in that it focuses on addressing concerns in water bodies such as large marine ecosystems, lakes, aquifers or rivers that are shared by several countries. The presumption is that nation states need prompting and support to address these environmental concerns that cut across country borders. GEF seeks to fill this catalyst role. During the early stages of its engagement, GEF typically focuses on helping countries build trust and confidence among themselves and with other actors, a robust knowledge of concerns and their root causes, agreements on priority concerns and actions, national capacities to formulate and implement policies, and effective regional and national intersectoral bodies to carry out coordinated actions. Once an enabling environment has been created, the focus shifts to the testing of implementation strategies, including technologies, approaches and mechanisms. Where appropriate, GEF may subsequently support activities that aim at broader adoption of the tested strategies through the mainstreaming, replication and scaling-up of lessons learned and implementation strategies that have been shown to work. Given the scale of investment required to address transboundary concerns and GEF's self-ascribed catalytic role, broader adoption processes are usually left to national governments and other actors. However, in some instances, GEF may provide financing for a small proportion of funding required for such activities.

11. Several GEF IW focal area projects, however, may not follow this sequence in types of activities for addressing transboundary water concerns. Projects that are not consistent with this progression are often undertaken in an opportunistic manner because they facilitate country buy-in and/or make targeted contributions to a priority transboundary concern of the countries in the region.

12. Since 1992, GEF approved financing amounting to US$ 115 million to address transboundary international waters-related concerns in the SCS, with a total cofinancing commitment of US$ 689 million. The GEF portfolio relevant to the SCS includes 34 projects and 150 small grants[2] in 7 countries: Cambodia, China, Indonesia, Malaysia, Philippines, Thailand and Vietnam. Of these, 20 projects and 119 small grants were

[1] Impact is defined as "positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended." (OECD Development Assistance Committee, 2002).
[2] The 35 projects account for US$ 112 million in GEF funding and US$ 692 million in cofinancing. The remainder is accounted for by 150 SGP grants provided through GEF's Small Grants Programme (SGP).

supported through the international waters focal area; the remainder was supported through other focal areas.

Objectives and Methodology

13. The main objective of this evaluation was to analyze the extent of contributions of GEF support towards progress in addressing the transboundary environmental concerns that affect the social, economic, and environmental services of the SCS and Gulf of Thailand. The four main evaluation questions were:

- Has support been **relevant** to SCS transboundary environmental threats and priorities?
- What are the **effects** of GEF support (positive or negative, intended or unintended) on country efforts and environmental problems?
- What are the **critical factors** that affect the likelihood that support will catalyze broader actions to reduce environmental stress and improve environmental and socioeconomic status?
- What **lessons** can be learned that apply to the SCS and elsewhere?

14. The evaluation design took into account three main aspects: 1) the theory of change implicit in GEF's interventions and its implementation approach; 2) the characteristics of the complex, linked social and ecological systems that GEF interventions are trying to influence; and 3) the challenges associated with assessing the impact of GEF interventions, given both the nature of these systems and of the interventions.

15. Among the challenges posed to the evaluation by the SCS as a complex social-ecological system were: boundary disputes among countries, multiplicity of scales of linked institutions and processes, mismatches in boundaries of natural/ecological and administrative/social systems, unpredictability in system responses (e.g. time lags between intervention and change in environmental status), and the multiplicity of independent actors that interact and influence each other's behaviors, making it difficult to establish cause-and-effect links. Attribution of results to GEF support was assessed when possible; in most cases, however, GEF contributions were assessed within the context of the contributions of other actors. GEF support was also assessed according to what extent socioeconomic dimensions were integrated with environmental objectives so as to reinforce environmentally sound behavior.

16. The evaluation adopted a mixed-methods approach – both quantitative and qualitative tools were used. Primary and secondary sources were used for gathering information, such as field visits, key informant interviews, online surveys, peer-reviewed literature, remote sensing data, global databases, and historical archives; several sources were used in order to triangulate evidence.

17. To assess GEF contributions within the context of a complex social-ecological system, methods and tools such as a non-linear theory of change, discounting of rival

hypotheses, social network analysis, extensive analysis of historical precedents and contexts, and counterfactual analysis were used. Conventional evaluation tools, such as portfolio analysis and case study analysis of countries and regional themes, were also used.

18. The approach paper for the evaluation was approved by the Director of the Evaluation Office in December 2010. Field verification was done from April to October 2011 of 29 sites in 5 countries[3]. Interviews were conducted with almost 400 representatives of GEF project staff, beneficiaries, agencies, local and national governments, and regional organizations from all 7 GEF-eligible SCS countries.

19. The study was conducted by an interdisciplinary team that included GEF EO staff, and several national and international marine, legal and evaluation experts. Stakeholder inputs were solicited through meetings of the IW Task Force, composed of representatives from the GEF agencies, and the Reference Group, composed of staff of GEF projects, implementing and executing agencies, national governments, as well as non-GEF regional stakeholders. The Reference Group was convened twice to provide inputs to the evaluation approach, direct the evaluation team to credible information sources, and comment on preliminary findings.

Findings and Conclusions

Conclusion 1: Although environmental pressures in the SCS continue to increase, GEF has made important contributions that are relevant to addressing regional transboundary issues.

20. Except for marine capture fisheries, activities in economic sectors that are dependent on and affect the health of the SCS—specifically aquaculture, tourism, mining, agriculture and shipping—have been steadily increasing over the last 50 years, with some accelerating in the last decade. Resource over-exploitation, land-based pollution, and habitat degradation and destruction have been steadily increasing since the 1950s, resulting in an over-all continuous decline in environmental conditions in the SCS. However, improvements have been seen locally, showing that given the right approaches, environmental decline can be slowed or reversed.

21. In complex systems such as the SCS, communication and trust are key to addressing transboundary environmental concerns. GEF has increased the opportunities for communication and collaboration through the support of networks of scientists, legal experts and local government officials across the region. Through these networks, new knowledge such as environmental assessment methods and ecological baselines was

[3] In-depth case studies were done for China, Philippines, Thailand and Vietnam, as these 4 countries accounted for 86% of GEF funding in the SCS. Twenty-seven out of a total of 36 sites in these countries were randomly sampled for field verification. Due to logistical constraints, 3 of the 27 sites were not visited but were verified through in-depth interviews of executing staff and other key informants in the relevant countries. SGP and comparable non-GEF sites were visited when the opportunity arose. A brief visit to Cambodia was also done, with 2 additional demonstration sites visited.

produced for the region. A notable knowledge product developed with GEF support is the transboundary diagnostic analysis (TDA), which has provided a scientific basis for the priority transboundary concerns in the SCS that need to be addressed. Exchanges of knowledge, experiences and lessons learned were supported through websites, study tours, congresses, forums, and other learning activities. In the process, awareness and technical skills have increased at the local, national and regional levels, in some cases resulting in more environment-conscious behavior and laws.

22. GEF support has allowed the development or testing of management approaches and tools to address these priority environmental concerns, such as integrated coastal management (ICM), port safety, health and environmental management (PSHEM), risk assessment and management, ecosystem valuation, fisheries refugia system, and joint wastewater treatment systems. Strategic action plans at the local, national and regional scales were produced, incorporating these tools and approaches. Financial mechanisms to implement these approaches, such as alternative livelihoods, revolving funds, public-private partnerships and user fee systems, were also introduced with GEF support. In several instances, supporting legislation at the municipal and provincial levels to implement these approaches was also facilitated through GEF support. GEF, along with other actors, has done the same at the national scale, such as through Executive Order 533 on ICM in the Philippines and the Sea Use Law in China. Many of the project implementing mechanisms and bodies have been incorporated into the local government structure as permanent offices. These implementing strategies at the local and national scales fit within the larger framework of actions needed to address the transboundary concerns of the SCS.

23. GEF has made significant contributions in trust-building by facilitating cooperative arrangements among community members and among government agencies at the local and national scales. At the regional scale, GEF has facilitated five important intergovernmental arrangements in the SCS: the memorandum of agreement between two provinces in Cambodia and Vietnam for seagrass management, the joint framework for oil spill response in the Gulf of Thailand among Cambodia, Thailand and Vietnam, the adoption of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) and the Partnerships for the Environmental Management of the Seas of East Asia (PEMSEA), the SDS-SEA implementing mechanism composed of 11 countries and 19 non-country partners, and the approval of priority actions for the SCS by 7 countries through a Strategic Action Plan (SAP).

Conclusion 2: GEF has become a critical player in the region by linking initiatives at multiple scales, and providing a channel for other donors and stakeholders to support these transboundary concerns.

24. Although GEF is a relatively new player in the region, it has gained a position in the regional network of actors comparable to those of long-standing organizations—in terms of the number and types of actors it is able to reach and influence—due to its mode of working through partnerships. A social network analysis of regional actors in the SCS

shows that all major regional actors with the greatest longevity addressing environmental concerns have been partners in GEF initiatives, either as implementing agency, executing agency, cofinancer, or collaborator in one way or another. GEF support has also helped link actors that generally work either outside the region or at the country level. A further analysis of the reach of actors in the network with and without GEF shows that some actors would have their reach reduced by as much as 44% in the absence of GEF initiatives. While it is possible that these links could have been established through means other than those supported by the GEF, the linking role of the GEF for less-central actors in the region was confirmed by a survey done as part of the evaluation. With this broad reach, GEF has a strategic position in mainstreaming global environmental objectives in the regional agenda.

25. Furthermore, an analysis of bilateral donor investments in East Asia since the 1980's shows that GEF has become the primary funder of regional coastal and marine initiatives in the SCS in the last 20 years (Table 1). Through its position, GEF has provided opportunities for other donors and institutions to support regional initiatives in cases where they primarily contributed only to national or local objectives. GEF support was also found to have enabled long-standing organizations in the region to expand the nature and scale of their support towards addressing transboundary environmental concerns.

Table 1. Grants related to regional coastal and marine environmental initiatives in the Seas of East Asia (1988-2008)

Donor	Total Regional Grants (in current US$M)
GEF (57.5 in SCS alone)	~142.63
Sweden	~42
Canada	>25.1
United States	>24.2
European Commission	21.3
Australia	>16.2
Netherlands	8.8
Switzerland	6.3
Italy	5.5
Germany	4.1
Japan	1.4

Source: GEF PMIS, www.aiddata.org (for bilateral donor investments, accessed on 29 September 2011) and project documents.

Conclusion 3: In 21 of 26 cases where comparative data could be obtained, GEF has supported initiatives that reduced environmental stress and improved or maintained socioeconomic conditions.

26. Of the 27 sites that were covered through field verification, 20 sites had completed demonstrations, and were at a stage where environmental stress reduction could be expected. As each site typically addressed multiple environmental concerns, the evaluation found that in these 20 sites, a total of 40 cases of stress reduction needed to be monitored (Table 2). Of these 40 cases, in only 26 cases (65%) was data available to determine if stress reduction occurred or not. Stress reduction may also have occurred in other sites, but due to the lack of available and relevant environmental monitoring data, these changes could not be assessed by the evaluation. Given this caveat, 21 cases where before-and-after data were available reported a reduction in environmental stress, with almost half of these related to habitat and biodiversity concerns. In cases where stress reduction was not systematically measured, anecdotal accounts of stress reduction were obtained for 4 cases of habitat and biodiversity-related initiatives, and 5 cases addressing fisheries. These anecdotal accounts generally pertained to the reduction of destructive fishing practices (e.g. blast fishing, trawling) and mangrove-cutting among local community members.

Table 2. Number of cases of reported environmental stress reduction in verified demonstration sites

ENVIRONMENTAL CONCERN	NO. OF CASES OF SITES EXPECTED TO HAVE STRESS REDUCTION	NO. OF CASES OF SITES WITH COMPARATIVE DATA AVAILABLE	NO. OF CASES OF SITES WITH MEASURED STRESS REDUCTION	NO. OF CASES OF SITES WITH ONLY ANECDOTAL REPORTS OF STRESS REDUCTION
Habitat and biodiversity	17	12	10	4
Fisheries	12	6	4	5
Pollution	11	8	7	0
Total cases of sites	**40**	**26**	**21**	**9**

27. Since it was difficult to find comparable sites to measure the results with and without GEF support, larger-scale trends were used for counterfactual analysis. In each of the parameters measured—coral, seagrass and mangrove cover as indicators of habitat health, and biological oxygen demand (BOD) as an indicator of coastal water quality—regional and national trends showed continuing declines in habitat and water quality. This shows that GEF-supported approaches have generally been effective at the specific sites where they have been implemented, as opposed to the rest of their respective countries and the region where these approaches have not been widely implemented. In the 4 sites

where specific pollution control technologies were demonstrated, improvements in water quality at the points of wastewater discharge after the technologies were in operation shows the direct effect of GEF support on environmental status.

28. In 9 of the 20 completed demonstrations that were sampled, GEF-supported management initiatives not only reduced environmental stress, but were also reported to help foster cooperative relationships, improve livelihoods, and diversify sources of income as a direct result of improvements in environmental status. This has reinforced the implementation and promotion of environmental management initiatives within the sites and elsewhere in their respective countries. In 5 other sites where environmental stress reduction was reported, alternative sources of income related to ecotourism and fisheries that were introduced to mitigate losses in livelihood have, for the most part, encouraged environmental protection behavior among community members, or at the very least have reduced behavior causing environmental pressure. In most cases, reports on socioeconomic impacts were anecdotal in nature, as these were typically not measured or monitored by the demonstrations. In 2 sites, alternative livelihoods were supported, but no information could be obtained on their status or results.

29. Despite successful implementation of the demonstrations, the extent of stress reduction has been limited in several sites because of larger-scale factors that the demonstrations failed to and/or could not address. These sites have generally used habitat protection as the main approach, which does not consider the larger context in which the concern being targeted exists. For example, in Con Dao, Phu Quoc and Hon Mun (all in Vietnam), regulations apply only within the protected area. While fishers from within the target municipalities tended to comply with the new regulations, it was more difficult to ensure compliance from large-scale commercial fishers coming from outside the area. A similar situation was found in Kampot and Sihanoukville (both in Cambodia), where local fishers tended to follow regulations, but trawlers from outside the area continued to fish in shallow waters against regulations. Over-exploitation therefore continues in the adjacent waters beyond these areas of jurisdiction. Experiences at these sites demonstrate that other approaches have to be introduced at the scale of these drivers for these initiatives to result in broader environmental benefits.

30. Coral cover was found to have increased or been maintained within GEF-supported MPAs in 5 of the visited demonstration sites over at least a five-year period. In all 5 sites, ecotourism and fisheries-related alternative livelihoods reduced fishing pressure and provided incentives to local fishers to protect the reefs. Despite this, fish abundance continues to decline in Con Dao and Phu Quoc (both in Vietnam) likely due to weak enforcement outside the MPAs. This is also due in part to environmental pressures that are not being addressed, or that the GEF-supported approaches are not designed to address at the scale at which they take place, as mentioned above. Examples of these drivers are overfishing by commercial trawlers and land-based pollution from tourism and agriculture.

31. While there is insufficient long-term data to determine significant changes in seagrass cover, anecdotal information indicates an improvement in 2 out of 5 sites where

seagrass management took place[4]. GEF support has contributed to this by helping develop relevant legal and regulatory measures, increase public awareness on seagrass conservation issues, and improve enforcement and compliance through community participation. For example, in Kampot (Cambodia) and Bolinao (Philippines), local community organizations reported that with GEF support they have expanded the area under management, and regularly patrol for destructive fishing practices. Both sites have reported improved productivity and income from fishing. In Hepu (China), GEF support has resulted in seagrass beds being incorporated into an existing national park. However, destructive fishing practices and possibly poaching continue in most sites, especially outside the protected areas.

32. In 4 of the visited demonstration sites where mangrove protection and rehabilitation were supported, remote sensing analysis showed that mangrove cover was seen to be increasing even before GEF support began. While the increase in mangrove cover may not be directly attributed to GEF support, GEF has provided incremental value by sustaining the momentum of mangrove-related initiatives and, in some cases, facilitated their expansion. Increased crab productivity resulting from improved mangrove cover has strengthened mangrove protection efforts by community members in Trat (Thailand). GEF-supported ecotourism initiatives in Shankou-Weizhou (China) have likewise provided an incentive to community members to protect the mangroves. Peam Krasop (Cambodia), which was not visited but was analyzed through remote sensing, was the only site that showed a continuous decline in mangrove cover over the last three decades. In this case, drivers related to high migration into the area contributed to rapid deforestation at the time of GEF support.

33. GEF-supported demonstrations in 7 of the 9 visited sites addressing land-based sources of pollution have generally resulted in stress reduction and, in some cases, improved water quality. This has led to an increase in property values, cleaner beaches, and the growth of the tourism industry in urban areas such as Xiamen (China) and Chonburi (Thailand), and better air quality and more sources of income for farmers in Guangdong (China). Organic pollution continued to increase in Manila Bay (Philippines), despite improvements in some parameters, due to the large-scale drivers of population and economic growth beyond the geographical and technical scope of GEF-supported technologies and approaches.

Conclusion 4: Broader adoption of GEF-supported initiatives is taking place, and is critical to fully addressing environmental pressures at the appropriate scales, but faces constraints to further progress.

34. As discussed above, even though the changes at the demonstration site level are linked to changes in the transboundary water body, broader adoption of promoted approaches and technologies would be required to effect changes at the larger scale. Building on previous work carried out during OPS 4, the evaluation focused on three

[4] Of the 5 sites, 2 (Kampot, Cambodia and East Bintan, Indonesia) were not part of the 27 sampled sites. Kampot, however, was field-verified in addition to the 27 sampled sites.

processes or mechanisms by which broader adoption may occur. The first is through mainstreaming, which involves elements of GEF-supported approaches being incorporated in laws, policies, regulations, programs and other stakeholder initiatives that are usually already part of their regular program or mandate. The second is through replication, where the GEF-supported approach or technology is adopted in other localities at a comparable administrative or ecological scale. The third is scaling-up, where a similar initiative is implemented in a larger geographic area, often including new aspects or concerns. These new concerns may be political, administrative or ecological in nature. This helps in addressing concerns that cannot be resolved at lower scales, and in spreading the promoted interventions to contiguous areas. These three processes of broader adoption may be at work at the same time for a given demonstration, and may take place at different scales; often, one process may have to occur for another process to take place.

35. Of the 27 verified demonstration sites, 21 sites were completed or were at a stage in which indications of broader adoption could be identified. While there were big differences in extent, 18 of these 20 sites reported some form of broader adoption. There were reported 14 cases of replication, 10 cases of scaling-up, and 14 cases of mainstreaming. At the regional and national scales, broader adoption is more commonly seen in the mainstreaming of GEF-supported approaches (e.g. ICM, national strategic action plans) in national laws, and in mechanisms and non-binding agreements among countries to address transboundary concerns. However, broader adoption at the local, national and regional scales is impeded by the following barriers:

A. Conditions for broader adoption not always present

36. Broader adoption was found to be more likely to take place through replication, scaling-up and mainstreaming when four key conditions are in place: incentives to commit based on the attributes of the introduced technology or approach, institutional capacities of the adopting governments, available financial resources, and appropriate policy frameworks. Mainstreaming and scaling-up were most successful in areas that had the same receptive capacity as those in the demonstration site, most notably economic and governance capacities. In addition, mainstreaming works best where administrative and geographical boundaries match those of the problem being addressed. This was most apparent in sites demonstrating the ICM approach, supported through the UNDP/PEMSEA stream, as GEF support to this stream has been the longest, and the demonstrations were designed with broader adoption as a primary objective.

37. In both Xiamen (China) and Batangas Bay (Philippines), the first two GEF-supported ICM demonstration sites, broader adoption has taken place through replication in other cities and provinces within their respective countries; mainstreaming at the municipal, provincial and national scales; and scaling-up to include other water bodies and watersheds adjacent to these two sites. These two cases have several characteristics in common. In both countries, there is a robust decentralization policy framework which delegates management of natural resources and environment-related services to local governments. In this sense, the ICM processes in Xiamen and Batangas Bay were aligned with country priorities--an important factor for their incorporation into national policy.

The context was thus receptive to the lessons that ICM provided. Sufficient administrative capacities in the adopting local governments were also in place before they began to implement ICM. Economic growth was robust--both Xiamen City and Batangas province and their adjacent areas have been among the highest-earning in their countries. In both places, the tourism and real estate industries have been important factors of growth. The experiences demonstrated that there are significant pay-offs from giving early attention to environmental concerns in the process of economic development, before the consequences of pollution became irreversible or too expensive to remediate.

38. The broader adoption process in Xiamen and Batangas Bay can be contrasted with the experience in Danang (Vietnam) and Sriracha, Chonburi (Thailand). As in the case of Xiamen and Batangas, Danang, a port city, also experienced an economic boom with a particularly strong growth in the tourism and real estate industries. Similarly, ICM has helped to plan growth and to address early environmental concerns. It has also been identified as an area for development by the Vietnam government. More recently, as part of a national law to implement ICM in 14 coastal provinces of Vietnam, ICM was replicated in three other provinces. However, the cities in which ICM is being expanded do not have the dynamism of Danang, a port city, nor access to as much fiscal resources. Decentralization policies in Vietnam, while delegating to provinces the responsibility for management of natural resources, have not fully transferred the necessary financial resources to put this into action. Plans for the establishment of a national ICM training center in Danang have been slowed by lack of expected funding from the central government. Existing capacities at the provincial level are also a limiting factor.

39. In Thailand, the ICM demonstration that started in the municipality of Sriracha in the province of Chonburi started shortly after a new decentralization policy was passed, granting the local governments more responsibility in managing their natural resources. ICM activities initially focused on five municipal local government units (LGUs) in the vicinity of the Sriracha Port. These LGUs were selected primarily because of their history of collaboration, financial resources, and relatively strong institutions. Scaling up allowed the LGUs to share wastewater treatment facilities and therefore collectively cut costs. Starting in 2009, the ICM approach was extended to all coastal LGUs eventually to all upland LGUs, covering all 99 municipalities of the province of Chonburi. However, there are big differences between the coastal and upland municipalities. In Sriracha and its LGUs, there are strong initial human, institutional and financial capacities. Upland LGUs lack the fiscal resources generated by the economic spillover of the Sriracha port, the oil refineries, and the tourism industry. The incentives for upland adoption of ICM are also not as prominent for the inland LGUs. In the case of the coastal LGUs, the rapid growth of tourism and real estate values are important incentives to protect the beaches. Scaling-up in Chonburi faces the classic upstream / downstream dilemma in which upland LGUs will have to invest in activities that will largely benefit coastal LGUs.

40. The difference between the Xiamen and Chonburi experiences in scaling-up is that first, scaling-up in Xiamen has gradually taken place over almost two decades, and second, it has so far involved only comparatively progressive cities that can support the costs of implementing the approach and coordinating with the other cities. Scaling up the unit of management in Batangas has been relatively easier as well, given that the

additional bays are all within the jurisdiction of the same high-income province, albeit composed of additional municipalities. Because the GEF-supported demonstration was initially done with the province as the primary administrative unit, it had an inherent authority to convene other municipalities in order to scale up ICM to include all other water bodies in the province beyond Batangas Bay. In Chonburi, on the other hand, the provincial government itself has not had as much of an implementing role. Sriracha has had to take on the leadership role of getting other municipalities in the province to adopt and scale up ICM, requiring the creation of new implementing structures both at the level of the additional municipalities and at the level of the clusters of municipalities. In Chonburi, the costs of coordinating regulations and activities across municipalities of very different economic and institutional capacities may be too high, needing significant political and financial support from the national government that is currently not present.

Table 3. Comparison of conditions necessary for broader adoption in scaled-up ICM demonstration sites

Scaled-up Demonstration Site	Incentives for adoption	Institutional capacities	Availability of financial resources	Appropriateness of policy framework
Xiamen + Jiulong River Basin	High	High	High	High
Batangas Bay + entire Batangas Province	High	High	High	High
Danang + other coastal provinces in Vietnam	High	Low	Low	Low
Sriracha + other Chonburi municipalities	Low	Low	Low	High

B. Systems for managing trade-offs and risks not always in place

41. Change in land or sea use as part of coastal area zoning often requires the displacement of stakeholders from their livelihoods and/or homes. In the process of achieving global environmental objectives, 15 of the 27 sampled demonstrations have required trade-offs and posed risks to human welfare. While in 11 sites, executing agencies have clearly taken measures to address these concerns, the appropriate systems to identify and mitigate socioeconomic risks were reported to not always be in place and, as a result, not all measures taken were adequate in preventing negative unintended impacts.

42. Ten of these 15 demonstrations involved a reduction in access to coastal resources, and therefore had alternative livelihoods as a measure to mitigate socioeconomic losses. Five of these sites were reported in the previous section as having

been successful in providing supplemental income and reducing environmental pressure, but 2 were found not to be successful because market needs and appropriate environmental conditions were not considered in designing the livelihoods. More detailed information was not available for the 3 other sites.

43. In 5 of the 15 sites, relocation of homes and livelihoods was necessary to make way for new uses of coastal areas. This has typically—but not always— been dealt with by providing financial compensation and resettlement sites to displaced communities. In 2 of these sites, both implemented by the World Bank, appropriate safeguard policies set in motion processes to mitigate risks to ensure that stakeholder concerns were addressed in a fair and timely manner. In the 3 other sites, the measures taken may not have met international standards. For example, the UNDP/PEMSEA funding stream, which promotes the ICM approach, has reported that it typically follows the respective country's policies in dealing with relocation and resettlement issues that arise in the course of coastal zoning and ICM program implementation. While some countries' practices might meet international standards, in other countries, they do not. The evaluation could only ascertain the risks, but not the actual impact on the affected population of such resettlement practices. Resettlement issues that are not properly addressed may also pose a risk to GEF's reputation.

44. A similar reputational risk is seen in 1 site where insufficient stakeholder engagement was done in the forging of public-private partnerships (PPPs) in Puerto Galera (Philippines). While this has greater implications for limiting the broader adoption of demonstrated approaches, it may also create distrust and disaffection among stakeholders and towards GEF-supported initiatives.

C. Reluctance of countries to support initiatives addressing regional transboundary environmental concerns and global environmental benefits

45. East Asia is known for being one of the few regions in the world that does not have a legally-binding convention for the management of its regional seas. The multilateral environmental instruments in the region are mostly non-binding, and come in the form of declarations, strategies and action plans, most of which are not financed by the countries themselves. Disagreements among littoral countries over maritime domains and resources have greatly restricted the area and the terms in which most states are willing to engage in cooperation on marine environmental governance in the SCS. When these domains and transboundary resources are at stake, countries have preferred to work through legally-binding instruments that are primarily economic in intent and bilateral in nature. It is difficult to get participating countries to agree to conducting environmental research and monitoring activities in the high seas and in the contested islands. Even though there is very strong evidence that fish stocks are declining, and all countries would gain from more productive fisheries, participating countries have been wary of entering into multilateral regional arrangements or in supporting activities related to the management of transboundary fish stocks. This is resulting in a tragedy of the commons at a regional scale, as seen in the continuing decline of the environmental health of the SCS.

46. GEF support has mostly been able to move the transboundary environmental agenda forward where there is alignment with country priorities, and more specifically where countries derive direct benefits. The approach of GEF to the constraints posed by disagreements in maritime borders—as manifested in its strategic programming and in the design of its projects—has been to facilitate consensus among the participating countries, and support regional cooperation wherever possible. Most of the regional support provided by GEF has been in the form of foundational activities (e.g. transboundary diagnosis, priority-setting, knowledge generation). Actual environmental responses that have been supported by the GEF have taken place mostly at the country level, and on issues that do not require coordinated intergovernmental responses. Notable exceptions are the cooperation between Cambodia and Vietnam in the management of seagrass beds, joint framework on oil spill response in the Gulf of Thailand adopted by Cambodia, Thailand and Vietnam, and the South China Sea Strategic Action Programme.

D. Differences in extent of country support for environmental multilateral mechanisms, and currently heavy dependence of regional environmental mechanisms on donor funding, including GEF support

47. As part of the GEF IW approach, broader adoption by countries of a viable regional mechanism that provides specific core coordinating services is necessary to achieving global environmental benefits in the long run. This assumption is based on experiences elsewhere in the world, and on the countries' capacity needs to address transboundary environmental concerns in the region. But some countries have expressed that they are not convinced of the need to create more regional organizations. Countries in the SCS have been engaged since the 1970's in a complex network of intergovernmental institutions, through which they have adopted an array of instruments pertaining to the region's critical environmental concerns. However, regional environmental initiatives of intergovernmental organizations have historically been financed mostly by donors. In contrast to their reluctance to commit financially to regional environment initiatives, littoral countries have contributed consistently to intergovernmental organizations that address primarily economic issues.

48. Since 1993, GEF has provided a stream of financial support to PEMSEA, which has since then functioned with an outreach broader than the SCS to include other seas of East Asia. While it is clear that most countries appreciate the support provided by PEMSEA, not all countries have recognized PEMSEA as an international regional organization. In 2009, 8 countries signed an agreement recognizing PEMSEA's international legal personality, with 3 of the 7 GEF countries bordering the SCS yet to sign until now. While four countries (China, Japan, Korea and Philippines) have pledged voluntary contributions towards annual operating costs of PEMSEA[5], all of the signing countries have indicated that they will not commit to regular financial contributions or be financially liable for PEMSEA. Instead, countries support the approach that each country should make voluntary contributions according to its means.

[5]The Philippines has signed a 10-year agreement providing PEMSEA the use of a building and its amenities. Timor-Leste also has contributed US$100,000 per year, which is earmarked for activities undertaken on a cost-sharing basis by the PEMSEA Resource Facility and Timor-Leste.

49. Given this situation, after 20 years of support, PEMSEA remains heavily dependent on GEF funding for the continuation of its services. According to PEMSEA's 2010 budget, GEF funded 86.5% of total operations and implementation costs, which involved a broad range of activities under the SDS-SEA project (GEF ID 2700). PEMSEA is aware of the risks of their dependence on one major donor, and has developed a Financial Sustainability Framework Plan for strengthening PEMSEA through voluntary contributions and other financial mechanisms.

50. GEF has adopted a phased approach in its support to PEMSEA. It is expected that a project proposal will be presented for approval in the November 2012 Council for the last phase of GEF support. The GEF Evaluation Office was informed that one of the main objectives of this project will be to support a five-year transition to the full financial sustainability of PEMSEA. Also, based on PEMSEA's PRF Re-engineering Plan and SDS-SEA Regional Implementation Plan, it is apparent that PEMSEA intends to expand its services by strengthening the PEMSEA Resource Facility (PRF). With GEF support in the next 5 years, PEMSEA plans to implement its Financial Sustainability Plan to create various funding sources and "sustainable streams of income", with the view of being financially sustainable by 2016.

51. Considering the widespread consensus that the current global economic recovery is likely to be slow and over a long period of time, it is uncertain at present how the resource-intensive core coordination and technical support functions of the PEMSEA Resource Facility (PRF) as currently defined can be supported over the long-term. If GEF continues to channel funds towards increasing PEMSEA's services in the next 5 years, it faces the ***risk*** that when it phases out support, this expanded regional mechanism will face an abrupt financial shortfall and a difficult adjustment once GEF financial support is phased out, if the required funding is beyond that which the member countries themselves or other donors are willing to support with their own resources.

E. Low coordination and insufficient management of internal risks within the GEF partnership

52. A programmatic approach has been an important aspect of GEF IW support since the publication of the Operational Programs in 1996. This approach is key when seeking to contribute to transboundary environmental benefits by tackling the multiple dimensions that need to be addressed, which include a better understanding of the interactions of diverse natural systems within a broad geographical area, the engagement of multiple countries and stakeholders and, stemming from these, the long and unpredictable timelines and the various directions in which results take place.

53. GEF has supported multiple complementary initiatives in the South China Sea that proposed novel approaches to addressing coastal and marine environmental concerns previously identified in the region. These have contributed to increased communication among the various regional organizations, and have contributed to cooperative engagements among countries. However, except for the Small Grants Programme (SGP), these initiatives, while linked, were not integrated with existing regional organizations,

worked mostly in isolation from one another, were rarely coordinated, and on occasion have competed with one another.

54. While the lack of integration of GEF-supported initiatives to existing regional organizations has allowed for the development of novel approaches that might have not been possible otherwise, the evaluation identified several risks related to how these novel approaches developed. The lack of coordination among GEF'S otherwise complementary main financing streams has resulted in higher transaction costs for the countries, requiring governments to spread thin their qualified staff. In effect, the way GEF support has taken place in the SCS has resulted in a higher number of regional initiatives that require financial and political support from countries, further contributing to competition and duplication among regional organizations. Low coordination and cooperation among the different GEF funding streams has also undercut the potential for GEF to offer comprehensive solutions needed to address the challenging transboundary concerns in the region. In addition, while GEF's promotion of "champions" has been key to outstanding achievements of GEF support in the SCS and to major gains in broader adoption , the lack of management of the risks of relying on "champions" has resulted in approaches not being integrated, lack of introspection, and losses in the momentum and synergy of GEF-supported initiatives.

55. Structural factors within the GEF partnership have played an important role. With equal standing in the GEF partnership, none of the agencies have the authority or incentive to convene others for collaboration on similar initiatives. In the past, the IW task force, convened by the GEF Secretariat, allowed for some coordination in the partnership. With the loss of prominence of focal area task forces since GEF-4, the modest coordinating functions of the IW task force have been further reduced. In recent years, GEF has been experimenting with programmatic approaches such as the Coral Triangle Initiative, which seeks to tap into the competencies of several agencies. GEF has tried to ensure coordination by assigning a lead agency to coordinate joint implementation of projects, but still lead agencies report that they are finding it difficult to engage other agencies as cycles, reporting requirements, and priorities differ. GEF has also sought to address regional programmatic issues through stocktaking meetings that convene all the GEF projects in a given region to discuss coordination and collaboration issues. The East Asian Seas Stocktaking Meeting in October 2010 suggested recommended actions such as joint planning in project preparation and implementation, and strengthening of national inter-agency coordination mechanisms. However, it still failed to address the key structural issues related to the need for an incentive structure for GEF agencies and funding streams to collaborate, and the absence of an entity that can make agencies accountable for coordination and collaboration.

Conclusion 5: GEF projects in the SCS and Adjacent areas have major deficiencies in the accessibility, use for management, and reporting of environmental monitoring data.

A. Environmental monitoring data is being collected in 32 of 40 cases, but only in 19 cases was data available, due to information management systems either not being in place or not suited to country conditions.

56. Each of the 27 sampled sites aimed to improve environmental status in relation to habitat and biodiversity, fisheries, land-based pollution, or a combination of these concerns. Given these multiple concerns in each site, there were a total of 40 cases of sites where environmental monitoring was to be conducted (Table 4). Sixteen of 17 cases that were expected to be monitoring habitat and biodiversity parameters were found to be doing so. However, data was only available through publications or made accessible during field visits in 9 of these cases. Of the 12 cases of sites expected to monitor improvements in fisheries, 8 were found to be collecting data, and only in 6 cases was the data available. Of the 11 cases of sites expected to monitor coastal pollution from land-based sources, 8 were collecting data, but only 4 had the data available.

Table 4. Number of cases observed of sites addressing and monitoring specific environmental concerns

ENVIRONMENTAL CONCERN	NO. OF CASES OF SITES EXPECTED TO BE MONITORING	NO. OF CASES OF SITES WITH PERIODIC DATA COLLECTION	NO. OF CASES OF SITES MONITORING WITH DATA AVAILABLE
Habitat and biodiversity	17	16	9
Fisheries	12	8	6
Pollution	11	8	4
Total cases of sites	**40**	**32**	**19**

B. In 12 out of 20 sites that had completed demonstrations, no evidence was found of data being used and reported for management and public accountability.

57. In 6 of the sites, GEF support was key to initiating habitat and pollution monitoring activities. While information management and reporting systems have also been supported to store monitoring data and make them accessible for analysis, management and reporting, in most cases, these sophisticated systems were found to have been used only when a high level of financial and technical support was provided by GEF. Even then, the technology and standardized tools introduced, particularly the Integrated Information Management System (IIMS), web-based geographic information system (GIS), and State of the Coast (SOC) reporting system, saw limited adoption partly because they were not well-suited to local capacities. Lack of budget among local and national government agencies and frequent staff turnover has been a common obstacle in continuing M & E activities, even in the few sites where human resources are readily

available. Low adoption was also found in past non-GEF projects in the region that supported similar systems.

58. Notable examples where monitoring data have been used for management and/or public accountability were found in Manila Bay, Batangas, Bolinao and Masinloc (Philippines); Hon Mun, Con Dao and Phu Quoc (Vietnam); Xiamen (China); and Sihanoukville (Cambodia), where the technologies and systems used were typically already existing in the countries. For example, since 2007, Xiamen has been sending out text messages to fishers to disseminate monitoring data and prevent disasters. In Manila Bay, monitoring data showed that water quality criteria were not being met, and the reports produced using the IIMS were used by the Supreme Court of the Philippines to compel the responsible national agencies to fulfill their mandates in improving water quality in Manila Bay to avoid facing administrative sanctions.

Recommendations

59. The GEF Evaluation Office has formulated three sets of recommendations from this evaluation. The first set of recommendations refers specifically to the future of GEF support in the South China Sea and adjacent areas. The second set addresses monitoring and evaluation (M&E) issues within the IW focal area. The third set of recommendations pertains to the GEF IW focal area, and is proposed to be incorporated when developing the International Waters Focal Area Strategy for GEF-6. The Evaluation Office did not have access to the current proposals that are being prepared for the SCS and East Asian seas, so it was not possible to assess if these proposals adequately address issues raised in this evaluation. Thus, the Office also recommends that the GEF Council take into account the findings of this evaluation when considering further proposals for the SCS and adjacent areas and, where appropriate, that these findings be addressed by CEO endorsement.

Recommendations related to the South China Sea and adjacent areas

Recommendation 1: GEF support should more fully draw on the GEF partnership to mainstream transboundary concerns within countries and existing regional organizations.

60. The evaluation has identified important cases in which lessons of GEF support are being mainstreamed and are affecting aspects of the broader policy context. These have been important accomplishments that by and large take place through the same sectorial ministries or administrative structures through which the specific stream of GEF support has taken place. The engagement of the relevant sectorial ministers has been a key aspect of GEF approach to IW since the Operational Programs were developed in 1996. The GEF Evaluation Office 2004 Program Study of International Waters also points out the importance of further engaging a broad range of relevant sectorial ministries in GEF projects. GEF has already taken steps in this direction in the region, for example through the Yellow Sea SAP, which has brought countries to agree on the reduction of fish catch by 40%. As indicated in this evaluation, several projects in the region have worked with

different sectorial ministries in demonstrating approaches and technologies locally and also in seeking their broader adoption. While GEF should continue its bottom-up support through local demonstrations, GEF should strategically strengthen its work from the top down seeking opportunities for transformational changes that can create more favorable conditions for broader adoption. More specifically, GEF could provide support to its well-positioned partners to more actively look for opportunities to mainstream the transboundary environmental concerns to the broader policy framework of such ministries as the economy, finance, agriculture, public works, fisheries, and other sectors that affect drivers related to the management of transboundary environmental goods and services. This support need not be done through big investments, but rather by providing modest resources to agencies that already have the access to these key ministries. Similarly, while continuing to support approaches such as the SDS-SEA and the SCS SAP, GEF support should draw on its prominent position in the region to more directly engage with regional economic and trade organizations to identify opportunities to integrate transboundary concerns related to regional environmental goods and services in the agreements and processes of these institutions.

Recommendation 2: GEF should give more attention to supporting countries to work together to address concerns related to regional environmental goods and services.

61. GEF should also further ensure that its IW funding is structured in such a way as to provide it with the flexibility to present countries with incentives to work together to address the "tragedy of the commons", and also to support collaborative endeavors among countries to improve the management of regional environmental goods, as exemplified by the fisheries refugia initiative developed by the SCS TDA-SAP project.

Recommendation 3: GEF should more clearly define the role and linkages of regional mechanism/s in the context of its broader regional strategy, and ensure country and donor commitments to increasing levels of cofinancing to cover the full costs of regional services by the end of the next phase of support.

62. The two previous program studies have recommended that GEF give more attention to the sustainability of regional mechanisms. While it is clear that GEF support to PEMSEA should continue, to be consistent with Recommendation 5 below, GEF should also clarify how its support to PEMSEA fits in and is linked with other major GEF-supported initiatives and GEF's broader programmatic strategy in the region to support the countries to work together to address transboundary environmental concerns.

63. GEF should carefully assess the sustainability risks of providing its support towards the expansion of services provided by the PRF and the implied higher costs that will have to be borne by the countries once GEF support phases out in five years. GEF should also assess the likelihood of this approach being able to draw the required levels of financial support from countries and donors, given mid-term forecasts of the global economy, and the reluctance that so far most countries have shown in committing funds.

One option is to ensure country and donor commitments to increasing levels of cofinancing as to achieve, by project end, payment for the full costs of the regional services put in place by GEF support. This might also require focusing GEF support on only the most critical functions, while requiring that expansion of PEMSEA's program and services be financed by sources other than GEF. GEF should draw on its privileged position in the region to engage the countries and other donors in a dialogue on the PEMSEA services that they are willing to support. In this process, GEF support should also draw on its prominent position to help PEMSEA attain robust cofinancing ratios on the costs of running PEMSEA and the technical services it provides, as to demonstrate the financial viability of the approach proposed.

Recommendation 4: UNDP needs to ensure that the social risks of the projects it finances in the SCS are identified and addressed.

64. UNDP needs to ensure that PEMSEA and other executors of GEF support in the region properly identify social risks of GEF-supported activities, and that plans to prevent realization of risks or risk mitigation are in place, followed and monitored. UNDP needs to ensure that PEMSEA and other executors of future GEF projects in the SCS and adjacent areas meet GEF policy PL/SD/01 Agency Minimum Standards on Environmental and Social Safeguards.

Recommendation 5: A more robust programmatic approach should be developed for GEF IW support to the SCS and adjacent areas.

65. Issues that have emerged in this and in OPS 2, OPS 3 and the 2001 and 2004 IW Program Studies that have escaped the current approach in the SCS and adjacent areas include the lack of an explicit indication of how different projects fit into a broader programmatic strategy, insufficient collaboration, and the failure to realize the full benefits of the complementarity intended among the various projects and distinctive competencies of implementing agencies. GEF has attempted some solutions such as the joint agency implementation of projects and, more specifically in the IW Focal Area, the introduction of stocktaking meetings (first introduced in the Danube Black Sea and more recently in the Seas of East Asia), which have not done much to overcome the hurdles. GEF needs strengthen its current programmatic approach in in the South China Sea and adjacent areas by addressing the following gaps:

66. ***Accountability gap.*** While multiple GEF projects in a transboundary water body typically have an implicit programmatic strategy[6], these strategies have not been formally articulated or adopted by the GEF in such a way as to fully identify how different projects fit into an over-all GEF strategy for the region. Nor is it clear how the different projects or agencies are accountable in relation to the broader strategy of GEF support to the countries in the region. While project documents clearly define the expected outcomes to which each project is accountable, less clear or left implicit are the inter-agency roles,

[6] Key elements of these strategies, including a strategy for the SCS and the Seas of East Asia, were presented in a technical document written in preparation for OPS 2 with the title "Geographically Based Programmatic Approaches".

operational links, and the areas and extent of coordination and collaboration that are expected in the context of GEF's broader regional strategy. The project-based approach combined with the funding stream/agency dynamics of GEF support in the South China Sea and adjacent areas has contributed to the development of robust initiatives with strong identities that during implementation have high risks of becoming disjointed. In the case of the SCS and adjacent areas, except for SGP, which has an incentive in linking with other projects, other streams have little incentive to coordinate and join efforts during implementation. This undercuts the extent to which the benefits of the combined competencies of the various GEF partners can be realized. A comprehensive approach is needed to encompass the links and interactions of the full range of GEF funding in the region. A challenge will be to strike the right balance between clear accountability and overly prescriptive directives.

67. ***Tracking and reporting gap.*** GEF engagements with the magnitude of support given in the SCS and adjacent areas require more robust tracking and reporting of multi-agency commitments to communication, coordination and introspection among IW projects, and a common focus on global benefits. GEF has introduced the stocktaking meetings for this purpose, but as indicated above, they have only skirted around critical GEF partnership issues. Given the structural nature of the interactions among agencies (being equals), the responsibility for more robust tracking and reporting with regards to multi-agency collaboration and cooperation should be placed on the GEF Secretariat. This new function should be approached as an instrument for adaptive management. It should also allow for inputs from the various GEF stakeholders, including country representatives, and seek to identify and tackle critical issues affecting the functioning of the partnership and the execution of the broader GEF strategy in the region.

68. ***Funding gap.*** GEF has not fully acknowledged that coordination and collaboration carries a cost. While costs of stocktaking meetings have been channeled through projects, the budgets of projects have not always allocated additional funds to lead agencies that coordinate activities of other agencies. Funds and staff time of the GEF Secretariat to play a oversight including attendance to regional meetings has also been uncertain. Relatively small additional funds can make a big difference in ensuring that large amounts of GEF support move in the right track. GEF should carefully identify, cost out, and finance key functions needed to ensure the proper oversight of coordination, introspection and inter-agency communication in major regional engagements such as the SCS and the Seas of East Asia.

69. ***Distinctive competency gap.*** As indicated in this evaluation, entrenchment among agencies and streams of funding has hampered the synergy of drawing on the distinctive competencies of agencies within the GEF partnership. GEF should ensure that during project preparation, the most qualified agency or GEF instrument is drawn upon to implement a given project or project component. For example, activities related to private sector investments and interactions with ministries related to finance and infrastructure are areas that the World Bank is already engaged in through its regular business. It is therefore the best equipped in implementing these components in GEF projects or programs, even if the project or program itself is implemented by a different lead agency. Similarly, the UNDP-SGP has extensive experience in managing community-based

demonstrations, and is therefore most suited to implement components of GEF projects that take place at this scale.

Recommendations Related to Monitoring and Use of Monitoring Data

69. Monitoring and evaluation (M&E) concerns have been among the most prominent raised by previous IW Program Studies and Overall Performance Studies. While significant progress has been made with regards to monitoring process indicators, GEF-supported projects in the South China Sea and adjacent areas continue to have major gaps with regards to M&E systems that would allow for a fuller assessment of the impact of GEF support in the region.

Recommendation 6: Impact monitoring and related reporting systems supported by GEF should be consistent with local capacities and priorities. They should also be flexible to accommodate the more user-friendly and affordable technologies that are rapidly emerging.

70. The evaluation found many instances in which GEF supported the introduction of information and communication technology (ICT) for data storage and retrieval. In most instances, the use of ICT required specialized user skills and significant training. Given that the Integrated Information Management System (IIMS), for example, has been used mostly for compiling data instead of its more sophisticated functions of modeling and generating reports, less technically complicated solutions may be the most appropriate until local human and especially financial capacities are increased. Similarly, while the State of the Coast (SOC) reporting system is a useful tool that promotes the interaction of different government agencies and information-sharing, slow adoption may be a result of too many indicators needing to be populated, adding to the workload of government staff, compounded by the lack of available data. A reporting tool that requires fewer indicators but presented more frequently may be more useful in sites with low technical capacity, complemented by a more comprehensive but less frequent SOC report produced as the site builds greater capacity.

71. This can only happen when governments make monitoring & reporting systems a fiscal priority, which in turn will be realized only when they find the need for this as a decision-making and accountability tool rather than just for collecting and compiling data. Given the human resource constraints faced in several countries, it is unlikely that anytime soon local governments will be able to attract and retain the required qualified staff or needed financial resources. Also, the rapid pace of technological change is increasingly moving towards much more user-friendly and affordable technology, such as smartphones, tablets, rapid provisioning of services, cloud computing, and geo-referenced digital photography and data. These and other current technologies could be applied to data collection, storage and retrieval, having the advantage of more intuitive user interfaces. These are all technologies now in reach of GEF but not often found in the sites visited.

Recommendation 7: Impact M&E data and information should be made available to the GEF Evaluation Office in a timely and transparent manner.

72. The evaluation team encountered numerous problems in access to timely and complete data, reports, and in general information needed to carry out the evaluation. Some of the problems were caused by inefficient information storage and retrieval systems. The evaluation found instances in which upon project closure, agencies stopped supporting websites, or turnover of staff resulted in loss of institutional memory of existence or location of information. Other times, access to information was not given priority, and project executors and stakeholder responses were slow. At other instances, requests resulted only in partial information or were altogether ignored. Researchers were also sometimes reluctant to provide information that they had not yet used in their publications.

73. GEF Agencies should take the contractual and practical measures needed to ensure that M&E data and information for GEF projects be made available to the GEF Evaluation Office in a timely and complete manner. Agencies must also ensure that monitoring data and information include geo-referenced boundaries and locations of demonstrations. These geospatial data should be provided at CEO endorsement, mid-term review and terminal evaluation of each project.

Recommendation addressed to the GEF 6 International Waters Focal Area Strategy

Recommendation 8: The findings of this evaluation should be considered when developing the GEF 6 International Waters Focal Area and, when applicable, the strategies of other focal areas.

74. The evaluation presents findings that highlight many valuable experiences as well as hindering factors that affect progress to impact of GEF support. The findings and recommendations of this evaluation should thus be taken into careful consideration when developing the GEF 6 International Waters strategies.

CHAPTER 2: PROGRESS ON OTHER IMPACT-RELATED WORK

Progress on the Impact Evaluation of GEF Support to Climate Change Mitigation

75. GEF serves as a financial mechanism for implementing guidance from the United Nations Framework Convention on Climate Change (UNFCCC) on an interim basis. Since GEF's inception, it has provided funding support through its Trust Fund for climate change adaptation, and primarily for climate change mitigation (CCM)[7]. As of August

[7] GEF has supported adaptation activities through the various trust funds it manages. This includes the GEF trust fund, SCCF, LDCF and Adaptation Fund. The impact evaluation focuses on climate change mitigation activities supported through resources from the GEF trust fund.

2011, GEF had provided a funding of US$ 9.12 billion for the generation of global environmental benefits[8], of which US$ 3.04 billion was for CCM-related activities.

76. The "Impact Evaluation of the GEF Support to Climate Change Mitigation" is being undertaken as an input to OPS 5. While past evaluations on CCM have addressed the over-all GEF portfolio, major emerging economies have not been a focus. Major emerging economies are especially important in terms of their climate change mitigation potential because, given the size of the markets and an increasing trend in energy demand, any improvement over the baseline is likely to lead to greater absolute GHG emission reductions.

77. The impact evaluation aims to do a comparative assessment of the extent and ways in which GEF is transforming CCM relevant markets in major emerging economies[9]. More specifically the impact evaluation aims to:

- assess contributions of GEF supported activities to GHG emission reduction and avoidance;
- assess progress made by GEF supported activities towards transforming markets for climate change mitigation; and
- ascertain the impact pathways and factors affecting further progress towards market transformation.

78. The approach paper for the evaluation was approved in June 2012. Field verification in four major emerging economies—China, India, Mexico and Russia—will be done from October to November, with India and Mexico having more detailed country case studies. Evaluators for each country have already been contracted for this. The final evaluation report is scheduled to be completed in early 2013 and incorporated into the first OPS 5 report.

Progress on Impact Evaluation of GEF Support to Biodiversity

79. GEF serves as a financial mechanism for implementing guidance from the United Nations Convention on Biological Diversity. In this capacity, it has funded more than 900 projects in over 150 countries since 1991. The GEF EO and the UNDP EO have agreed to undertake a joint impact evaluation of GEF support for biodiversity, assessing impact from an environmental as well as socioeconomic perspective. The intent is to help GEF and UNDP assess the extent to which existing strategies, programs and interventions have been able to enhance species and habitat protection and restoration, while securing livelihoods, good health, and resilience for poor people. Given the structure and maturity of the GEF Biodiversity portfolio, the evaluation will focus on the contribution of GEF support to the protection of biodiversity through protected areas, also examining how they have been mainstreamed into landscape management frameworks. The biodiversity impact evaluation will take place from November 2012 to September 2013.

[8] This excludes fees provided to the agencies to meet their implementation costs

[9] Geller and Nadel (1994; 1996) have defined market transformation as the lasting changes in the structure and/or function of markets, used within the context of energy efficiency-relevant markets. But this term could also be extended to cover other CCM relevant markets.

80. The evaluation has two phases. The first phase is the drafting of the approach paper, and the second phase is the conduct of the evaluation. A consultant was hired in September to draft the approach paper for the evaluation, which will be finalized in November 2012. While the approach paper is in its final approval, the team to carry out the evaluation will be identified. The evaluation approach will be developed based on the following main questions:

- To what extent has the support been relevant to country priorities in the protection of biodiversity (through protected areas and landscape management) as well as to the country priorities for sustainable development?
- What have been the effects of support (positive or negative, intended or unintended) on country efforts and achievements in sustaining biodiversity protection in ways that also meet the social and economic needs of countries and local populations?
- What are the critical factors affecting the extent to which GEF and partner support has led to actions or is likely to lead to further actions (by countries and other stakeholders) resulting in sound management of biodiversity while also generating social and economic benefits to local populations?

81. Special attention will be given to identifying the main factors enabling "win-win" scenarios, where successful habitat protection and sustainable livelihoods are mutually reinforcing. Conditions in which trade-offs take place will also be examined, including the role of the private sector when relevant. The evaluation design will seek to move the discussion beyond anecdotal stories of success, providing a more rigorous, verifiable documentation of positive environmental and socioeconomic impact. Among the expected methods to be used are the analyses of global databases, quasi-experimental design, remote sensing analysis and field verification.

82. The long duration of GEF support and large number of initiatives increases the likelihood of impact to have taken place through this focal area. From the GEF perspective, this impact evaluation fits within an ongoing set of impact evaluations covering each of its focal areas, and which will provide an important set of findings for the second report of the GEF 5th overall performance study. For the UNDP, this constitutes the first in a set of impact evaluations of UNDP programming, and builds from the findings and conclusions of a recent thematic evaluation focused on the nexus of issues linking UNDP poverty and environmental protection support to countries. The bulk of UNDP's biodiversity portfolio has been implemented through GEF support.

Progress on Assessment of Quality at Entry of Arrangements to Measure Impact

83. The last three Over-all Performance Studies (OPS 2, 3 and 4) since 2005 reported considerable gaps in the evidence base on impact due to weaknesses in environmental M&E systems in GEF-supported projects. The constraints faced by the SCS impact evaluation team in obtaining environmental monitoring data confirmed these concerns. The quality of information that is available to assess the impact of GEF support on stress reduction and environmental status depends to a large extent on the quality of M&E

arrangements integrated into project design, and the extent to which these are implemented and remain functional after GEF support ends.

84. Previous reviews of the quality of M&E arrangements at entry in 2005 and 2009 have provided real-time feedback to members of the GEF partnership, and have resulted in the revision of project appraisal criteria, stricter implementation of M&E requirements, and improved compliance with the minimum M&E requirements. The focus of this current evaluation is on M&E for impact, and is more concerned with the quality of the arrangements rather than compliance. As this requires expert knowledge of environmental impact indicators, the Evaluation Office has collaborated with GEF's Scientific and Technical Advisory Panel (STAP) to carry out the evaluation. The assessment has focused on assessing the quality of arrangements to measure impact that are incorporated in the design of GEF projects and programs, and on providing feedback on the effectiveness of the project and program proposal appraisal process in ensuring the quality of these arrangements. Specifically, the assessment asked:

- To what extent is the appraisal process for project and program proposals effective in ensuring the quality of arrangements to measure impact?
- To what extent is the approach proposed in the project or program proposals to measure impact scientifically sound and likely to generate reliable information on the achievement of impacts?
- To what extent are the proposed approaches realistic, practical, and in line with the existing capacities in the recipient country/countries?
- Are the resources allocated for implementing arrangements to measure impact sufficient and appropriate?

85. In 2012, a representative sample of 55 projects and programs that were endorsed by the GEF CEO in FY 2011 were reviewed by a panel of two subject-area experts per project. A standardized tool was used to assess the reliability, feasibility and practicality of the arrangements, and the sufficiency of resources allocated for impact monitoring-related activities. GEF stakeholders, such as the Secretariat and GEF Agencies, were also interviewed on the effectiveness of the systems for quality control & assurance for measurement of impact, and the factors that affect it. A preliminary report of the evaluation was presented in the 2010 APR to the June 2012 Council. The final report, including an analysis of factors explaining the results of the review, was originally scheduled for this Council. However, on the suggestion of STAP, the evaluation will include an additional light review in the middle of 2013 to track if any changes have been done on the projects that were reviewed for this evaluation. This will also identify which factors are most and least effective in ensuring that M&E arrangements for impact are in place and being implemented. The evaluation report will be integrated with the final OPS 5 report.

Mainstreaming of Impact Evaluation across Different Evaluation Streams

86. The Evaluation Office continues to mainstream impact-related considerations across its other evaluation streams (i.e., country portfolio evaluation, performance evaluation, and thematic evaluation). In the country portfolio evaluation stream, impact-related aspects are being addressed through documentation of the catalytic effects and long-term achievements of GEF activities, and through ROtI analysis for completed projects where applicable. In the performance evaluation stream, impact evaluation is being mainstreamed through the inclusion of imapact-based criteria into the terminal evaluations and terminal evaluation reviews of GEF projects. A desk review of these terminal evaluations, terminal evaluation reviews and ROtIs is currently being done to assess the progress to impact made by all completed projects of the GEF 4 and GEF 5 cohorts. The results of this assessment will be integrated with the first OPS5 report in early 2013. In 2012, mainstreaming of impact evaluation largely took place through the thematic evaluation stream. The impact evaluation stream provided a framework for evaluating the GEF focal area strategies through a theory of change that identifies the elements that indicate progress towards impact. The framework was developed earlier this year as an offshoot of the Impact evaluation of GEF support in the South China Sea and Adjacent Areas, and builds on previous impact work carried out in the Office.