GEF Evaluation Office

Impact Evaluation of the GEF in the South China Sea and adjacent areas

Approach Paper

December 2010

Contents

Contacts

Aaron Zazueta, Senior Evaluation Officer, GEF EO, azazueta@thegef.org
Neeraj Negi, Evaluation Officer, GEF EO, nnegi1@thegef.org
Jeneen Garcia, Research Analyst, GEF EO, jgarcia2@thegef.org

GEF Evaluation Office
1818 H Street NW
Washington DC 20433
Tel: 202 473-4054
Fax: 202 522-1691
www.gefeo.org

I. Introduction

1. Encompassing roughly 3.5 million km², the South China Sea (SCS) is the world's largest body of water after the five oceans. It is located in Southeast Asia and, for the purpose of this review, is defined as stretching in a southwest to northeast direction with a southern border between South Sumatra and Kalimantan (Karimata Strait), and a northern border at the Strait of Taiwan between the northern tip of Taiwan and the Fujian coast of mainland China. Important sea currents and migratory species patterns link the SCS with other East Asian seas, as well as the Pacific and Indian oceans. The SCS is adjoined to the west by the Gulf of Thailand, to the south by the Java Sea, to the east and southeast by the Sulu-Sulawesi Seas, and to the northeast by the East China Sea. The SCS region has a population of approximately 350 million, with at least 270 million living in coastal areas[1]. More than 25% of the national population in seven of nine SCS riparian countries live in low-elevation coastal urban zones; all countries have at least 10% of their population living in such areas[2].

2. The region is among the richest in the world in terms of marine resources. Over 300 hard coral species and 3,365 fish species have been identified in biodiversity hotspots within the SCS[3]. Estimates suggest that approximately 2 million ha of mangrove forest (12% of the world's total) are located in countries surrounding the SCS[4]. Approximately 5 million tons of fish is captured in the region per year, or about 10% of the world's total catch[5]. Nearly 100 million people in Southeast Asia depend directly on fisheries or related service sectors. These include some 10 million people directly dependent on fisheries, roughly the same number of people in supporting industries and, in addition, the families of these workers[6].

3. Yet rapid economic growth over the past 40 years – the "Asian Miracle" – has been accompanied by rapid urban growth in the form of coastal mega-cities, which has directly and indirectly contributed to coastal habitat destruction and increased pollution[7,8]. Efforts to

[1] UNEP. 2005. Wilkinson, C., DeVantier, L., Talaue-McManus, L., Lawrence, D. and D. Souter. *South China Sea, GIWA Regional Assessment 54*. University of Kalmar: Kalmar, Sweden. The SCS region is defined as the upland and coastal catchment areas of the riparian countries that drain into the South China Sea.

[2] United Nations Human Settlements Programme. 2008. *State of the World's Cities 2008/2009: Harmonious Cities*, p. 147. Earthscan: London and Sterling, VA.

[3] UNEP, 2004. *Coral Reefs in the South China Sea*. UNEP/GEF/SCS Technical Publication No. 2. UNEP: Bangkok, Thailand.

[4] Talaue-McManus, L. 2000. *Transboundary Diagnostic Analysis for the South China Sea*. EAS/RCU Technical Report Series No. 14, p. 14, 41. UNEP: Bangkok, Thailand.

[5] Heileman, S. VIII-15 South China Sea: LME #36. 2008. In Sherman, K. and G. Hempel (eds.). *The UNEP Large Marine Ecosystem Report. A perspective on changing conditions in LMEs of the World's Regional Seas*. UNEP Regional Seas Report and Studies No. 182. UNEP: Nairobi, Kenya.

[6] Williams, M.J. and D. Staples. 2010. Southeast Asian Fisheries. In Grafton, R.Q., Hilborn, R., Squires, D., Tait, M. and M. Williams et al. (eds.). *Handbook of Marine Fisheries Conservation and Management*, p. 243. Oxford University Press: New York.

[7] Yeung, Yue-man. 2001. Coastal mega-cities in Asia: transformation, sustainability and management. *Ocean & Coastal Management* 44 (2001) 319-333.

protect the SCS region's rich marine resources are complicated by the area's outstanding political disputes, as seven of the nine countries bordering the sea have marine territorial claims that overlap under the United Nations Convention on the Law of the Sea (UNCLOS) provision for delineating Exclusive Economic Zones[9]. These outstanding territorial disputes are being addressed under the 2002 ASEAN-China Declaration on the Conduct of Parties in the South China Sea, and earlier efforts at collaboration have been made under Part IX, Section 2 of the UNCLOS, which exhorts cooperation among nations bordering the same enclosed or semi-enclosed seas in the areas of scientific research and management of marine resources[10]. The situation, however, remains volatile[11].

4. Since 1993, the Global Environment Facility (GEF) has allocated over 200 million USD to projects that have been or are being implemented in the South China Sea and surrounding areas. These include: 25 International Waters (IW) regional or national projects with grants totaling 182 million USD and co-financing of 1.3 billion USD; 11 projects in other GEF focal areas with a total of 42 million USD in grants and 162 million USD in co-financing; and 8 global projects for which the funding dedicated to the SCS is difficult to quantify. Annex 1 provides a list of projects that will be included in the evaluation.

5. The SCS was chosen as the subject of this impact evaluation for several reasons. During preparatory consultations, many of the GEF stakeholders felt that lessons from the SCS and adjacent areas would be applicable to other international water bodies in developing countries. In recent years, the region has faced several transboundary environmental challenges that are becoming increasingly common in international bodies of water in developing countries. The SCS was also selected for this evaluation because it is one of the international bodies of water with which the GEF has been involved the longest, and to which the GEF has given the most number of IW project grants. In addition, all three major GEF agencies have been involved in implementation of GEF projects in this region, and new GEF agencies – especially the Asian Development Bank – are increasingly becoming involved in the SCS projects. Although information gaps do exist, 16 years of continuous GEF involvement in the region provides several strands of information that allow for a longitudinal analysis of GEF contributions in the region and their likely impacts.

---

[8] Rosenberg, D. 1999. *Environmental Pollution around the South China Sea: Developing a Regional Response.* Contemporary Southeast Asia Vol. 21.

[9] Shen, J. 2002. China's Sovereignty over the South China Sea Islands: A Historical Perspective. *Chinese Journal of International Law (2002) 1(1): 94-157;* US Energy Information Administration. 2008. *Country Analysis Briefs: South China Sea Territorial Issues*. http://www.eia.doe.gov/cabs/South_China_Sea/SouthChinaSeaTerritorialIssues.html. These are China, Vietnam, Malaysia, Brunei Darussalam and the Philippines staking claims over different parts of the Spratly Islands; China and Vietnam over the Paracel Islands; and Thailand, Cambodia, Vietnam and Malaysia over various islands in the Gulf of Thailand.

[10] Von Hoesslin, K. 2005. A View of the South China Sea – from Within: Report on the Joint Oceanographic Marine Scientific Research Expedition (III) in the South China Sea. *Culture Mandala* Vol. 7, No. 1, December 2005.

11 Emmers, R. 2007. *The De-escalation of the Spratly Dispute in Sino-Southeast Asian Relations*. Presented at "The South China Sea: Towards a Cooperative Management Regime" Conference, 16-17 May 2007, Singapore. S. Rajaratnam School of International Studies Maritime Security Programme, Singapore; Austin, G. 1998. *China's Ocean Frontier: International Law, Military Force and National Development*. Sydney: Allen & Unwin.

II. GEF's Approach to International Waters

6. This evaluation stems from a recommendation made in the Fourth Overall Performance Study of the GEF (OPS4) to carry out an in-depth assessment of progress towards impacts in the International Waters focal area. Since the OPS4 focused more on assessment of likely impacts of individual projects, it was not able to fully capture the GEF contributions at the project cluster level. Most of the GEF IW operations in any particular water body take place through multiple projects that seek to support riparian countries in addressing transboundary concerns that affect these water bodies.

7. With respect to the process, the GEF IW approach includes foundational, demonstration, and investment activities (F-D-I). Foundational activities are meant to build trust and confidence among countries, strengthen the knowledge base on the extent and root causes of the priority transboundary environmental concerns, improve national capacities to formulate and implement policy, and strengthen regional mechanisms to carry out coordinated actions to address the transboundary concerns. Foundational activities also support the development of mechanisms to monitor stress reduction, environmental status, and socioeconomic status. Demonstration activities are meant to develop, test, and adapt approaches and technologies that address priority transboundary environmental concerns, as well as catalyze further action by countries and other actors. Investments are generally interventions with a much wider reach that seek to replicate, upscale, and/or mainstream technologies and approaches that have been shown to work. Given the scale of investment required to address transboundary concerns and GEF's self-ascribed catalytic role, investments, upscaling, and mainstreaming are left to the country governments and other actors, and offer an indication of likely future impacts (See Diagram 1). Though this sequential approach is proposed as an ideal, the GEF is open to undertaking opportunistic projects that may not follow a sequential order but are justified because of the global environment benefits that they may provide on their own.

8. The F-D-I approach addresses topics that the countries are willing to address, while at the same time building the trust that would allow countries to address more fundamental concerns down the line. It is assumed that country willingness and commitments to cooperate vary from case to case, but these are also assumed to be key factors influencing outcomes. For example, the effectiveness of regional mechanisms will depend on the extent to which participating countries have an interest in making mechanisms work, as well as the extent to which countries provide them with political, technical and financial support. The GEF IW approach also assumes that country interests are not monolithic, and therefore emphasis is placed on engaging the relevant country sectors, including different sectoral ministers and levels of government, the private sector, civil society, and other stakeholders, in policy-making and implementation. The diverse priorities and perspectives of different ministries and stakeholders within a country also require mechanisms for dialogue and decision-making. Communication between countries is further complicated by different political and public administration systems.

   GEF's early engagement often prioritizes information as a basis for decision-making. Countries are invited to jointly develop an understanding of transboundary concerns and their root causes through the use of Transboundary Diagnostic Analysis (TDA) or similar science-based exercises. Demonstrations are supported to test options and approaches, and a Strategic

Action Program (SAP) is promoted as a tool to develop political agreements and roadmaps of steps to address concerns. While the GEF IW approach may not provide an ultimate solution to transboundary environmental issues, the assumption behind the F-D-I approach is that by focusing first on issues or processes in which countries are willing to engage, countries test mechanisms for interaction and communication, and develop the foundation for future collaboration. Increased levels of GEF support in the form of demonstration activities or investments are then contingent on a country's demonstrated commitment to resolving priority transboundary environmental concerns. For example, riparian countries are often expected to sign SAPs prior to subsequent phases or follow-up projects. Thus, in the GEF IW approach, country commitment is a key factor that both influences the impact of F-D-I interventions, and functions as a feedback mechanism affecting the form and level of GEF support. Context is also presumed to heavily influence results. For example, in the SCS (as in several other areas in which GEF operates), maritime territorial disputes limit the issues and mechanisms through which countries are willing to engage with one another. The GEF approach to IW has also changed over time, incorporating lessons derived from experience. For example, more attention has been given to identifying early results while pursuing long-term strategic goals, and there has also been an increasing awareness of the importance of the evolving private sector.

9. In the South China Sea, where in account of long-standing territorial disputes, countries often prefer to gradually test approaches prior to adopting formal commitments, the GEF IW focal area support has taken place in several ways. The GEF has supported one set of projects implemented by UNEP that has contributed to the development of a *Transboundary Diagnostic Analysis of the South China Sea*, and to the process leading to the adoption--and in part, the implementation--of a *Strategic Action Program for the South China Sea*, which now has some components under implementation with GEF support[12]. The GEF has also supported another set of projects under the leadership of UNDP and PEMSEA that is based on the application and replication of Integrated Coastal Management (ICM), as well as the adoption of specific country targets that are captured in the *Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)*[13]. GEF is also financing a set of World Bank investment projects in support of the implementation of the SDS-SEA[14]. Other GEF projects in the SCS are river basin-specific, regional, global, or have been approved under other GEF focal areas.

[12] http://www.unepscs.org/

[13] http://www.pemsea.org/knowledge-center/the-sds-sea/the-sds-sea

[14] http://pemsea.org/about-pemsea/pemsea-news/world-bank-and-pemsea-to-cooperate-on-environment-in-east-asian-seas/?searchterm=gef

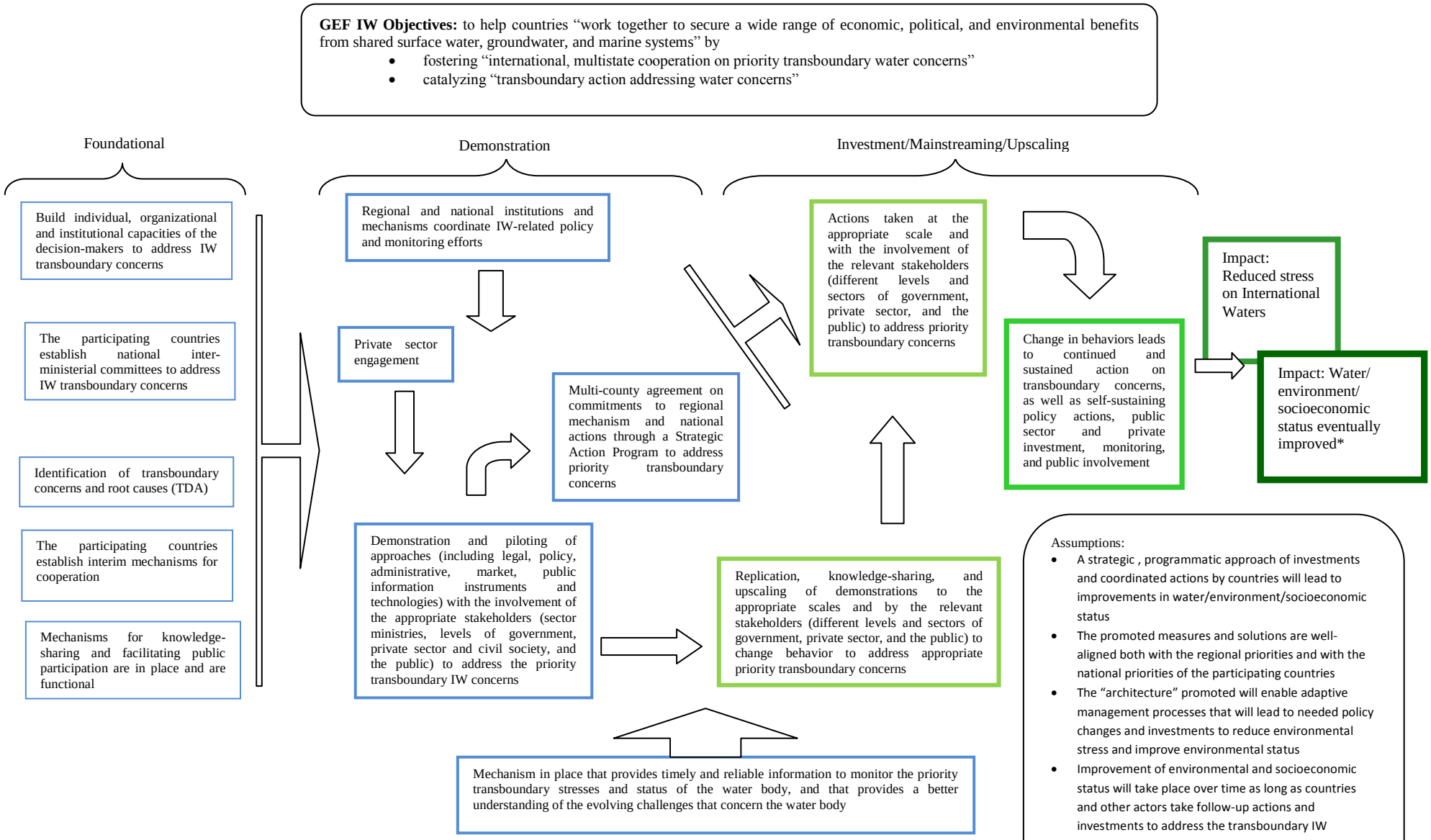

Diagram 1: GEF Approach to International Waters

III. Objectives of the Evaluation

10. The main objective of this impact evaluation is to analyze the extent to which the processes, knowledge, technologies, and capacities to which the GEF contributes have led to--or are likely to lead to--changes in policies, technology, management practices, and other behaviors that will address the priority transboundary environmental concerns that affect the social, economic, and environmental services of the South China Sea, the Gulf of Thailand, and the surrounding areas. The impact evaluation will answer the following four questions:

    1) To what extent has the GEF support been **relevant** to the transboundary environmental threats in the SCS, as well as to the action plans, priorities, and strategies that countries in the area have adopted to solve environmental problems?
    2) What have been the effects of GEF support (positive or negative, intended or unintended) on country efforts and achievements in addressing critical transboundary environmental problems and concerns?
    3) What are the critical factors (internal to the GEF or related to implementation of GEF projects, and in the context in which GEF support takes place) that affect the extent to which GEF support is likely to lead to actions (by countries and other stakeholders) that would result in the reduction of transboundary environmental stresses and improvement of environmental and socioeconomic status?
    4) What can be learned from the successes and failures of the GEF-supported interventions that would be applicable in the SCS and elsewhere?

IV. Approach, Scope and Limitations

11. The GEF Evaluation Office has experimented with several methods and approaches to project impact evaluations. The Office accepts the impact definition in the glossary published by the OECD Development Assistance Committee (2002), which defines impact as "positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended"[15]. The impact evaluation also seeks to develop an understanding of how GEF support contributes to change and, when the evidence base is sufficient, show the extent to which interventions made a difference. Considerable Office efforts have been dedicated to the development and application of the ROtI (**R**eview of **O**utcomes **t**o **I**mpacts) methodology[16] to assess progress of projects' outcomes toward impact, and thus the likelihood of reaching the ultimate global environmental benefits: reduction of environmental stress and improvement of environmental

[15] See the *OECD-DAC Glossary of Key Terms in Evaluation and Results Based Management* at http://www.oecd.org/dataoecd/29/21/2754804.pdf.

[16] See the *ROtI Handbook* at http://thegef.org/gef/node/2225; a summary of the GEF Evaluation Office work on impact can be found in Van den Berg, R. and D. Todd. *The Full Road to Impact: the Experience of the Global Environment Facility Fourth Overall Performance Study* (unpublished document). Much of GEF's impact evaluation work draws from the theory of change approach to evaluation which has been documented by Chen, H. T. 1990. *Theory-driven Evaluations*. Sage Publications: Newbury Park.

status[17]. The Evaluation Office also carried out an impact evaluation on *Ozone-Depleting Substances (ODS): Impact Evaluation in Countries with Economies in Transition*. Subsequently the Evaluation Office has conducted an assessment of the likely impacts of GEF support on Biodiversity in Peru[18], and undertook a quasi-experimental impact evaluation in Costa Rica to assess the effect of GEF contributions on change in forest cover. This evaluation will build on the impact evaluation work carried out by the Office and in Peru, in particular, to further test and develop the theory of change (TOC) base methodology for assessing impacts and the progress towards impacts of the multiple GEF interventions that target an ecosystem.

12. Building on the previous work carried out by the Office, this evaluation will focus on assessing the extent to which GEF project outcomes in the SCS region have helped countries move towards impacts, the intermediate stages leading towards impact, and the factors that are likely to contribute to or hinder progress towards impact. The emphasis of the evaluation will be on assessing the impact of GEF support in the South China Sea and the Gulf of Thailand, including the assessment of GEF projects supporting marine issues, coastal zone management, and related river basins in southern China, Vietnam, Cambodia, Thailand, Indonesia, Malaysia, Singapore, Brunei Darussalam and the Philippines. The evaluation will also examine specific aspects of GEF support related to governance and stress reduction in the Yellow Sea and governance in the Coral Triangle. This region was selected based on a process that entailed: 1) definition of the selection criteria, 2) classification of IW projects by water catchment, 3) assessment of the candidate water bodies proposed by stakeholders during the 5th IW Conference in Cairns (Australia), 4) a brief characterization of GEF's involvement in selected water catchments, and 5) the final selection through bilateral consultations. Details of the criteria used and the selection process are provided at http://www.thegef.org/gef/node/3528.

13. The evaluation will consider the aggregate outcomes of all co-financers and their likely impact on the social, economic and environmental services provided by the water body. It will include an assessment of the results (largely outcomes and impacts) to date, and of the remaining steps required to influence the transboundary trends or drivers that impinge on the political, social, economic, and environmental services provided by the SCS. This analysis will also include an examination of the assumptions behind why and how interventions generate change, of how contextual factors affect the likelihood of impact, and of the extent to which efforts and resources are commensurate with the threats.

14. This evaluation will assume that there are multiple paths toward impact, and will pay close attention to the role of context in determining whether the impact path continues after project completion[19]. Moreover, following Ostrom's model of complex social-ecological systems[20],

[17] GEF. *Fourth Overall Performance Study for the GEF: Progress towards Impact.* Third Meeting for the Fifth Replenishment of the GEF Trust Fund. October 14-15, 2009, Paris, France.

[18] GEF Evaluation Office. 2010. *Study of the Impacts of GEF Biodiversity Projects in Peru: Application of the Review of Outcomes to Impact (ROtI) Methodology.*

[19] Pawson, R. 2006. *Evidence-Based Policy: A Realistic Perspective.* Sage Publications: London.

the evaluation will assume that the systems the GEF seeks to influence have three basic characteristics that underlie the extent to which project outcomes move towards impacts: 1) systems are polycentric, in as much as independent units interact with one another; 2) they are multi-scalar, in as much as the boundaries of systems that the GEF seeks to influence take place at different geographic scales or levels; and 3) they are multi-temporal, as there are diverse temporal lags between actions and system responses. The implication of Ostrom's model for this evaluation is that the outcomes of GEF support interact with independent and nested systems, and that the same GEF intervention can lead to different outcomes and impact paths when interacting with different parts of the social-ecological system. While applicable to most GEF operations, these considerations of the complexity of impact paths are particularly important for the SCS. Units interacting in a polycentric system (for example nation states, sectoral ministries, communities, or individuals) enter into competing or cooperating relations for control of natural resources[21]. For example, a key consideration driving the interaction between nation states is the conflicting maritime claims of seven of the countries in the region. These territorial disputes affect the countries' willingness to engage in joint initiatives or formal agreements, as well as the likelihood of regional cooperation. The objectives and interests of resource users are also diverse, often at odds with one another, and require policy trade-offs that create winners and losers. The path of outcomes to impacts will depend to a great extent on the nature of interactions among nations, sectors, communities or individuals competing or cooperating for access to resources.

15. Since natural systems are nested and the environmental concerns addressed by the GEF take place at diverse levels, two important issues should be taken into consideration. The first issue considers the extent to which the linking of institutions and processes takes place at multiple levels. Local forms of resource use and regulation, although potentially effective at one level, are affected and sometimes overwhelmed by other types of resource use in a different part of the ecosystem[22]. Thus, approaches have to be cast at the appropriate scale. Natural system boundaries, governance structures and processes, and types of actors and stakeholders will vary for different environmental concerns. For example, while an approach that tests well at the local level and is replicated on a broader scale might work to address many of the concerns related to mangrove conversion, this approach would be inappropriate in addressing migratory fisheries; with migratory fisheries, the key stakeholders and entities that need to be engaged, the decision-making processes and institutions, and the natural dimensions of the phenomena have boundaries that transcend any given locality.

16. The second consideration refers to time. Temporal considerations are affected by inherent delays in a natural system's response. As in other areas supported by the GEF, in most cases,

[20] Ostrom, E. 2009. Beyond Markets and States: Polycentric Governance of Complex Economic Systems. *Nobel Prize Lecture*. Aula Magna, Stockholm University.

[21] Ibid.

[22] Brondizio, E., Ostrom, E. and O. Young. 2009. Social-Ecological Systems: The Role of Social Capital. *Annual Review of Environmental Resources*, 34: 253-278.

no measurable change in the environmental status of international waters can be expected for decades. There is a lag between an intervention and the desired response of the natural system. For example, there is a lag between the reduction of fertilizer loads and reduced eutrophication downstream[23]. This presents two challenges: first, predicting how the coupled social and ecological systems will respond to an intervention; and second, convincing decision-makers that it is worthwhile to take action[24]. The time dimension also implies significant uncertainty and a temporal trade-off for decision makers as country priorities change, technological innovation takes place, economic cycles change incentives for resource conservation or use, and climate change likely increases the severity and frequency of natural disasters.

17. Related to the temporal dimension is the further consideration that GEF support does not take place in isolation. In most cases, other initiatives addressing social and environmental concerns pressed GEF support, or take place parallel to or in consort with GEF support. Thus, to better understand the role and contributions of the GEF in the SCS, the evaluation will identify other major initiatives and regional actors in the SCS related to IW environmental concerns prior to and during GEF support. The evaluation will also assess how GEF support has interacted with these initiatives and regional actors.

18. The evaluation is likely to encounter several constraints. First, a major constraint could be gaps in data which could make it difficult to establish environmental trends, especially at the appropriate scale. Second, there could be gaps in scientific knowledge that may constrain data interpretation and limit the extent to which robust conclusions may be drawn. Third, even on issues where extensive information is available, there may be challenges in establishing counterfactuals and, in many cases, sufficient time may not have elapsed to allow for measurable environmental results. Consequently, the environmental effect of GEF contributions in the SCS may be difficult to measure. This constraint has been experienced in other evaluations undertaken by the Evaluation Office. For example, the ODS impact evaluation was not able to establish reliable counterfactuals because of the obvious substantive differences between the "experiment group" countries and those that potentially could be considered to comprise a "control group." Nonetheless, the evaluation will actively seek such opportunities for analysis at different levels of intervention, including those at the project activity level. The evaluation will address efficiency and performance issues as they relate to the impact, and not in general terms.

19. The GEF IW model, which lays out GEF's approach or causal linkages to achieving impacts in international waters (IW), has several limitations as an evaluative tool. It is not applicable to all situations – for example, it leaves out opportunistic projects undertaken by the GEF on IW in the SCS area. It also does not reflect the sequence of interventions implemented by some projects such as the path taken by the PEMSEA cluster of projects. The model will be used as a tool in the analysis of the over-all GEF support in the region; it will only be used at

[23] Mee, L. 2006. Reviving Dead Zones. *Scientific American*, 295(5) 54-61.

[24] Mee, Laurence D. 2008. Evaluating the Global Environmental Facility: A goodwill gesture or a serious attempt to deliver global benefits?. *Global Environmental Change*, doi:10:1016/J.gloenvicha.2008.07.005.

the project or project cluster level when applicable. The initial step in the analysis will fully consider and reflect the development process and causal links undertaken by specific projects or clusters of projects. The GEF IW model will be used in subsequent steps, which seeks to understand how all GEF-supported projects relate to one another and to the over-all GEF approach to large marine ecosystems (LMEs), which is the main concern of this evaluation. Thus, this analysis will focus on the GEF's over-all support in the region, and not on the specific projects; performance of specific projects is assessed during terminal evaluations. The evaluation will also assess the strengths and weaknesses of the GEF approach to IW and how this approach has been applied.

V. Products of the Evaluation

20. There are three broad phases or areas of inquiry and data-gathering that this impact evaluation will undertake (see Section IX for details). The work undertaken under these areas will lead to distinct products such as technical papers, databases, and case studies. The main purpose of these products will be to address specific issues that need to be investigated in order to answer the evaluation's key questions. Thus, these products will constitute important building blocks for the final evaluation report. Based on the criteria of quality and utility, wherever these products merit dissemination for knowledge-sharing and learning purposes, they will be posted on the GEF EO website.

Development of the theory of change of the GEF support to International Waters in the South China Sea

21. The first step of the evaluation will be to identify the main clusters of projects (projects that have been developed under a common framework or are sequential) and to develop a theory of change for each of the clusters. The theories of change will be developed using as a point of reference the GEF approach to IW in terms of the types of activities that projects undertake, but will reflect the actual process, steps, and components of each cluster strategy over the last 14 years. The "theory" is meant to identify the main problems or environmental concerns addressed and their root causes, and will include the explanation of why and how an action or a specific set of actions is likely to lead to the desired impacts. This will also include the chain of causality of actions and their results, assumptions on key actors' expected responses, and assumptions on the influence of contextual factors. In the specific case of the South China Sea, a theory of change would indicate how and why GEF support is expected to catalyze actions by governments and other stakeholders to address transboundary priorities for the sustainability of the goods and services provided by the water body. The evaluation team will work with project staff and other key stakeholders to fine-tune the model for analysis. This part of the evaluation will also analyze the complementarities of project clusters and, taking into account the diplomatic factors, will also assess the extent to which GEF addresses the root causes related to the main transboundary environmental concerns in the SCS.

Assessment of the context of GEF Support in the South China Sea

22. The analysis of the regional context of GEF support to the South China Sea will include two sub-studies:

Characterization of the political, social, economic and environmental services of the SCS and of the transboundary factors affecting those services.

23. This analysis will produce a report that will synthesize the trends related to the most important social, economic and ecological services of a transboundary nature provided by the South China Sea. Thus, the analysis will also identify the drivers of environmental trends such as population growth, development paths followed by countries, world markets demand, and urban growth in coastal areas, and will identify the key transboundary environmental concerns affecting the ecosystem's capacity to continue providing services. This analysis will also identify the natural system boundaries of the specific services under consideration; identify any existing governance mechanisms or instruments to address environmental concerns; and assess the extent to which historical and conflicting territorial claims by maritime countries have affected use and management of maritime and coastal resources and environmental trends. The synthesis will also identify potential trade-offs and risks behind the ways in which services currently take place.

24. The trend analysis will focus on the main services provided by the South China Sea. Seven of these services have already been identified by the Technical Advisory Group of the Evaluation. These are: 1) fisheries (both marine and aquaculture), 2) waste disposal (land- and marine-based, liquid, solid, hazardous, etc.), 3) land reclamation and land use conversion, 4) tourism and recreation, 5) natural disaster protection, 6) transportation, and 7) oil and mineral exploration.

25. If available, the evaluation will draw on materials available at the IW: Science project database. It will explore the use of GIS and remote sensing as tools for the analysis of trends affecting the area. This component will also identify information gaps in environmental trends that are critical for the evaluation.

Map of GEF support in the context of other institutions addressing the social, economic, and environmental services of a transboundary nature of the SCS and surrounding areas.

26. A detailed inventory of the major programs and projects undertaken by the GEF and other institutional actors in the SCS region will be prepared. The geographical location of activities, timeline, nature of activities undertaken, sources of funding, and interactions and linkages among different activities will be mapped. This will facilitate comparisons across the institutional actors in terms of the activities undertaken, geographical focus, objectives, and financial allocations. The objective of this study will be to situate GEF support in the context of other relevant initiatives in the region, and to assess the significance of the GEF's role in the region in comparison with other initiatives. This analysis will include the examination of programs by national governments, regional organizations, multilateral donors and bilateral donors, and will also look at programs or initiatives that preceded GEF support in the region. Also important is to understand how the region's needs have changed over time as regional organizations have given more attention to environmental issues. Thus, the evaluation will examine GEF's role and support in the context of shifting conditions, regional needs and efforts by other actors. This analysis will expand upon previous work

carried out on this topic[25]. It will include review of documents, organizations' websites, and telephone and face-to-face interviews with representatives of institutions, including GEF institutions.

Assessment of the relevance, effectiveness, and efficiency of GEF Support in the South China Sea

Portfolio analysis of GEF support in the SCS.

27. The portfolio analysis is a desk review that will include a compilation of a database on GEF-supported projects and project activities with GEF funding of 100,000 USD or more. The database will characterize projects and project activities in terms of levels of investment and co-financing, partner institutions, geographical scope, and the regional, national or local elements of the GEF IW Approach to which each contributes, and the root causes they address. In as far as the available documents will allow, it will also identify backward links to other GEF projects and projects supported by other stakeholders, and will record the extent of replication and uptake by other actors. The database will compile information on progress towards outcomes and, using the parameters defined by the IW Tracking Tools, will identify promising areas for further inquiry with regards to stress reduction and improvement of social and environmental status. The portfolio analysis will also develop hypotheses regarding the factors and conditions (internal to the project and to the social-ecological systems in which GEF support has taken place) that affect the impact paths considering polycentrality, scale, and time, and will provide preliminary information to identify further thematic and country case studies. The portfolio analysis will seek to determine the extent of GEF support to the following type of regional, national and local activities:

- Foundational activities will be examined in terms of the extent to which they contribute to capacities, or address constraints or obstacles to addressing transboundary environmental constraints. These activities will be assessed based on the extent to which they contribute to building trust and confidence, improving the knowledge base, and building country capacities to formulate and implement policies. Foundational activities will also be assessed based on the extent to which they help to put in place or strengthen country mechanisms (inter-ministerial committees, local mechanisms, etc.) to address priority transboundary environmental concerns.

[25] Previous work has been carried out in support of organizations involved in the South China Sea. These include: Tengberg, A. *Overview of Regional Transboundary Initiatives, Projects and Programmes for the Seas of East Asia: Status and Funding Opportunities.* Paper presented at the workshop on Addressing Transboundary Issues through Regional/ Subregional Seas Cooperation in East Asia, EAS Congress, 23-27 November 2009, Manila, Philippines; Rayanakorn, K. and P. Moor. 2009. *Rapid Assessment of the Opportunities for Sustainable Regional Mechanisms for Governmental and Civil Society Collaboration on the Integrated Costal Management of the Indian Ocean Region, South Asian Seas and Southeast Asian Seas*. Mangroves for the Future (MFF) Initiative – IUCN. In addition, PEMSEA has requested that all member countries report on the programs in place under the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The Philippines has already submitted its report, and other countries are expected to submit reports by June 2010.

- Demonstrations of approaches and technologies will be analyzed based on the extent to which they have tested ways to address priority transboundary environmental concerns considering the relevant socio-cultural, economic and environmental factors. The evaluation will also assess the extent to which demonstrated approaches or technologies are being adopted or replicated by riparian countries, and the extent to which demonstrations are influencing the implementation of policies, market reforms, technological innovations, and, in general, behavior that is likely to address priority transboundary environmental concerns.

- The evaluation will assess the extent to which GEF investment grants are strategically designed to provide country incentives for investments that reduce transboundary environmental stress and are likely to improve an ecosystem's status. The evaluation will also examine the extent to which such grants are strategically oriented towards investments that are incremental, and are not substitute for investments that riparian governments are likely to undertake by themselves.

28. The database will include information from 44 projects – 25 IW regional or national projects, 11 projects in other focal areas, and 8 global projects for which the funding dedicated to the SCS is difficult to quantify. Annex 1 lists the projects that will be included. The database will include the following: information from the ROtI analysis of all completed projects, project documents, terminal evaluations, project implementation reports, and other relevant documents and web searches. In some cases, face-to-face and telephone interviews will be held to clarify issues with the GEF Secretariat, Implementing Agencies, regional organizations, country representatives, project management staff, and other key informants.

Analysis of the GEF contributions to transboundary environmental governance of the SCS and surrounding areas.

29. Building on the previous section, this part of the evaluation will further assess GEF contributions to the structures, functions, processes, and traditions that have been used in the region to define and address priority transboundary environmental concerns and objectives. Much of GEF's foundational activities are oriented at supporting sound transboundary environmental governance. At the regional level, GEF typically supports the development of agreements on transboundary priorities, root causes, and priority actions, as well as the

> ***Governance*** concerns the structures, functions, processes, and organizational traditions that have been put in place within the context of a program's authorizing environment to define and achieve objectives. Good governance adds value by improving the performance of the program through more efficient management, more strategic and equitable resource allocation and service provision, and other such efficiency improvements that lend themselves to improved development outcomes and impacts. It also ensures the ethical and effective implementation of its core functions.
>
> *Sourcebook for Evaluating Global and Regional Partnerships and Programs*, 2007; IEG-World Bank (http://www.worldbank.org/ieg/grpp).

establishment of regional mechanisms to coordinate country efforts and monitor progress in environmental and socioeconomic status. At the national level, foundational activities support the establishment of national commitments to policy, legal, and institutional reforms and functional inter-ministerial committees. This evaluation will address four elements of international governance generally assessed during evaluations: voice, accountability, effectiveness, and efficiency. The analysis will consider historical factors, precedents to GEF support, and context affecting cooperation in the region (including territorial disputes, diplomatic history, and history and diversity of state administration among riparian countries). It will include the following three areas:

1) **The evolution of regional environmental governance in the SCS since the early 1990s.** This will involve the examination of: intergovernmental institutions (including agreements and organizations), and processes and traditions by which countries interact with one another to identify and address transboundary environmental issues; links and interactions of the major intergovernmental institutions with national government agencies, laws and policies; and avenues by which nongovernmental stakeholders such as civil society organizations, scientific or research institutions, and the private sector interact with decision-making and implementation. When addressing these issues, consideration will be given to the contextual difficulties of regional action in the SCS, as this is an area with among the smallest number of legally-binding conventions due to territorial disputes and cross-border sensitivities.
2) **The contributions and roles of the GEF in supporting transboundary environmental governance in the region.** The evaluation will examine the extent to which GEF support has contributed to trust and cooperative action among the various countries, and the extent to which governance structures and mechanisms address appropriate scales and build vertical links among units of different scales. This analysis will include an assessment of the extent to which the approach and vision of the support provided by the various Implementing Agencies and project clusters have complemented each other, and an assessment of the extent to which GEF is coherent. This assessment will build on the preceding steps and will also draw from interviews with the Agencies, regional organizations, and informed observers.
3) **The effectiveness of the current transboundary environmental governance mechanisms and processes in the SCS.** This evaluation will examine the structures and processes undertaken in the region, and will consider the experiences and approaches of other areas, such as the Coral Triangle, the Yellow Sea, the Gulf of Thailand, and the Mekong River Commission. This assessment will address the following questions:

    - To what extent have countries reached agreements on objectives and actions that address the root causes of priority transboundary environmental problems? Do the priority transboundary environmental concerns agreed upon by governments address critical factors affecting the services provided by the South China Sea?
    - What is the effectiveness of current architecture (mechanisms, processes, and actors, both regional and national) to generate and coordinate country actions to address

priority transboundary environmental concerns? How effective are the country's political, financial, and technical support to regional and national mechanisms and processes? And how effective are the established mechanisms to engage sectoral country stakeholders in actions that are likely to reduce transboundary environmental stress?

- What transboundary environmental governance gaps exist and require further attention?
- What are the main factors that have contributed to, and have constrained effective architecture for transboundary environmental governance in the SCS?

Case studies on the impact of GEF support in participating countries.

30. Seven country desk studies will be carried out to better assess the effectiveness of GEF support at the country level, as well as the context in which GEF operates. These will include contextual factors contributing to or impeding country progress towards impact. Detailed terms of reference for case studies will be developed on the basis of the preliminary information, conclusions, and hypothesis drawn from the portfolio analysis and the regional analysis carried out in the preceding evaluation sub-components. Broadly speaking, the country case studies will assess in greater depth progress towards impact, the efficacy of F-D-I actions in bringing about investments and reforms for the adoption of technologies, and other behavioral changes that address priority transboundary environmental concerns and their root causes. The case studies will review the extent to which policies have been put into place, laws passed and enforced, and the extent to which country resources have been allocated to carry out the necessary investments. Case studies will look into the extent to which GEF agencies mainstreamed transboundary environmental concerns in their overall country strategies and engaged in country dialogue to upscale investments. Case studies will also identify steps that still need to be taken at the country level to ensure the sustainability of the services provided by the water body. OPS4 hypothesized that there were four key factors that contribute to or hinder progress towards impact. The evaluation will assess these as potential hypotheses in light of the findings of the portfolio analysis. The factors are: 1) a robust understanding of ecosystems services for transboundary bodies of water; 2) clear relevance of priority transboundary environmental concerns to national priorities, and consequently, country willingness to invest in solutions to such concerns; 3) engagement with industrial and agricultural interests and other sectors (such as municipalities) directly involved in the management of natural resources; and 4) a meaningful mechanism in place to track progress in the improvement of the social, economic, and ecological services provided by the water body. Desk case studies will be done for all the seven countries participating in GEF projects in the SCS.

31. Once desk studies are done and the issues for further research have been identified, three or four countries will be selected for further in-depth assessment of country progress towards impact, and factors that promote or hinder such progress. In-depth country studies will:

a. assess project outcomes, progress towards impacts, and factors affecting progress towards impacts--has GEF support led to increasing channeling of country resources to address transboundary environmental concerns?;
b. assess the extent to which national policies and programs that address the priority transboundary environmental concerns are in place, and under implementation and enforcement;
c. assess the extent to which there is a national functioning mechanism to coordinate intersectoral engagement;
d. assess the extent to which approaches address priority transboundary issues at the right scale and with the appropriate stakeholders, the progress made in terms of upscaling, replication, or mainstreaming, and the factors affecting the remaining steps towards impact.

This analysis will include an assessment of the trade-offs countries or stakeholders have confronted or are likely to confront in the process.

Assessment of the environmental impact and likelihood of improving the social, economic, and environmental services provided by the South China Sea

Progress in reduction of transboundary environmental stress and in improvement of socioeconomic and environmental status.

32. This step will consist of the analysis of the information obtained during the portfolio analysis and the case studies. The evaluation will review the extent to which the approaches and technologies promoted by the GEF and its partners are contributing or are likely to contribute to the reduction of environmental stress and risks (such as oil spills) affecting priority transboundary environmental concerns. The evaluation will also search for any evidence indicating changes in socioeconomic and environmental status. However, this assessment will be approached with care, as time lags between actions and natural system responses vary, and attribution of improvements to GEF support is likely to be difficult to assess, considering the multiplicity of actors and complexity of processes involved. Thus this analysis will give special attention to the extent to which stress reduction is being realized or is likely to be realized at the appropriate scale. When data is available, the evaluation will quantify stress reduction achievements. This part of the analysis will also assess the significance of stress reduction in the context of priority transboundary environmental concerns and natural ecosystem boundaries.

33. When available, this part of the evaluation will use independently-generated information, such as remote sensing data or other forms of scientifically compiled information. In other cases, the evaluation will explore information displays in graphic form through GIS. For example, GIS could be used to assess distribution of activities, including intensity, overlaps, and intervention gaps; and to analyze the association between GEF-supported interventions and stress reduction. During interviews in Cairns, several project representatives indicated that information on stress reduction outcomes and replications of GEF projects is available.

Most of the available information pertains to accomplishments more directly related to GEF-supported projects, but sometimes it is also available for areas in which GEF activities have been replicated.

Identification of intermediate steps and actions needed in order to reach impact.

34. This part of the evaluation will turn to the analysis of actions or stages prescribed by the IW theory of change that still need to happen to reach the desired impacts. It will assess whether there are any necessary additional intermediate actions that were not initially contemplated, and will also assess the extent to which the assumptions are likely to hold. In addition, this part of the analysis will explore the extent to which there are any actors who are not involved or are not sufficiently involved in the process, but who have a role to play in the trends affecting the services provided by the SCS.

Assessment of the likelihood of delaying or preventing permanent damage to environmental services.

35. This step of the evaluation will assess the likelihood that the necessary actions and intermediate stages will take place in time to prevent or delay permanent damage to key services provided by the ecosystem. If the budget permits, the evaluation team will convene an expert group to help assess the trends of the services provided by the SCS, actions undertaken, levels of effectiveness of actions undertaken, etc. The group will be asked to provide an expert opinion on the likelihood that actions could be taken to sustain the services provided by the ecosystem and to consider different scenarios in this assessment. The specific factors that will be considered in this analysis will become clear during the course of the evaluation. Two factors that will be included in this analysis are: 1) the likely commitment and ability of key actors to undertake the necessary actions (in this case, mostly riparian governments and industry), and 2) the context in which actions are likely to take place. For example, in the SCS, conflicting territorial claims severely limit the extent to which countries are willing to engage in regional processes to improve the management of marine resources. In this analysis, attention will be given to the tradeoffs and social distribution of costs that countries would face by not addressing factors affecting specific services. This part of the evaluation will also draw on the IW:Science project database.

Identification of lessons from the South China Sea impact evaluation for GEF support to International Waters

36. The evaluation will identify lessons that can be drawn from the information gathered and synthesized. Lessons will be drawn from the analysis of the factors that contribute to or hinder progress towards impacts. Some of these factors might be internal to GEF operations, and might pertain to the extent to which GEF-supported projects deliver quality outcomes. They may also pertain to the extent to which the GEF is engaging the appropriate stakeholders, and applying technologies and approaches that are well-suited to the region's cultural, political and institutional conditions. Factors outside of GEF control that are contextual in nature can also affect the extent of uptake of project outcomes, regardless of the level of project accomplishments. This can include competing country priorities, non-

conducive geopolitical environment, etc. The evaluation will also seek to draw lessons applicable to other GEF operations on topics such as the interactions between GEF Agencies, the links with projects in other GEF focal areas, and other topics relevant to the UNDP/PEMSEA/World Bank partnership. The evaluation will also identify instances of missed opportunities. Other areas of learning will become apparent as the evaluation comes to maturity. Lessons will be drawn in close interaction with the GEF stakeholders.

37. The evaluation will be carried out through a process of data-gathering and analysis, in which further fine-tuning of the questions and possible end-products will take place at key moments. This will allow for interaction with stakeholders, particularly with the GEF IW Task Force and stakeholders representing major project clusters both inside and outside of the geographical area of the evaluation, to ensure that issues most relevant for the future will gain emphasis, while less relevant issues can either be downgraded or dropped, unless they are essential to evaluating GEF contribution. As indicated in the preceding discussion, several sub-products will be developed as inputs to the evaluation. As the evaluation progresses, inputs or sub-products that are considered of higher value and utility will be identified and further developed into theme papers for distribution. Key moments in this process are:

- First meeting of the Reference Group to interact on the key questions, concepts, approach, products, sub-studies etc.
- Interactions with the IW Task Force on interim products such as the theory of change, database of GEF support, technical documents on environmental trends in the SCS, etc. (see detailed timeline in Annex 3).
- Second meeting of the Reference Group to discuss key findings and emerging conclusions.

38. The evaluation will also explore further possibilities of prospective work needed to be done on the topic in consultation with the Technical Advisory Group and an expanded group of IW professionals who could help identify crucial areas for further work.

VI. Stakeholder Involvement

39. The OPS4 Peer Review and the Senior Advisors recommended upstream stakeholder involvement in evaluations as a way to raise the utility of evaluations to operational stakeholders in the GEF. Consultation with stakeholders for the IW Evaluation started in the 5th GEF IW Conference in Cairns, Australia (October 26-29, 2009). There, the Evaluation Office presented the tentative questions, and proposed criteria for catchment selection and a timetable for the evaluation. The feedback from stakeholders was obtained through questions and comments in a plenary presentation, a small group discussion, and bilateral consultations. Specific issues pointed out by stakeholders addressed in this paper include, for example, the revision of criteria to include operational utility and relevance, application of selection criteria to the seven water bodies proposed by stakeholders, and incorporation of operational stakeholders early in the evaluation process.

40. Three groups will be formed to draw input from stakeholders and support the evaluation.

- **Reference Group.** This group is composed of 20 people that include a representative from the GEF Secretariat, representatives from GEF Agencies directly involved in project supervision, key staff in the management unit of the main GEF SCS project clusters, and some non-GEF stakeholder institutions, such as country representatives or relevant regional organizations. The Reference Group will: 1) comment on the approach paper and drafts of the report; 2) comment on ways in which the evaluation could provide lessons that are more useful for operations; 3) help to identify and establish contact with the appropriate project managers and with relevant country counterparts; and 4) help to identify and facilitate access to information. The Reference Group will play a particularly important role in helping identify available information and in ensuring that the correct information regarding Agency operations is provided to the evaluation team. Operational stakeholders participating in the Reference Group will be invited to comment on drafts of selected evaluation products, and will also be expected, during the course of the evaluation, to suggest by-products that, with little or no additional cost, can provide useful outputs for project and task managers. One output that has already been identified by stakeholders is the compilation of activities, outputs, and outcomes of all the GEF projects financed in the SCS in a single GIS database. Much of this information is now available but resides within agencies or projects.

- **Technical Advisory Group (TAG).** This group includes six members. Three of them are scientific and technical specialists with expertise in International Waters: Edgardo Gomez, Professor Emeritus at the University of the Philippines; Laurence Mee, Director of the Scottish Association of Marine Science; and Meryl Williams, an IW specialist from the GEF Scientific and Technical Advisory Panel (STAP). The other three TAG members are evaluation specialists. These are: Alan Fox from the UNDP Evaluation Office; Mohit Kumar from ADB Evaluation Office; and Michael Spilsbury from the UNEP Evaluation Office. The main roles of the TAG will be to provide advisory support and guidance on methodological issues, evaluation approach, scientific and technical issues, identification of existing data sources, and facilitation of contact with relevant research institutions. The TAG will be convened for formal meetings by the Director of the Evaluation Office, but TAG members will also be asked to work on specific issues directly coordinated by the evaluation Task Manager.

- **IW Task Force.** The GEF IW Task Force consists of the IW focal area coordinators in the 10 GEF Implementing Agencies, the GEF Secretariat, and the STAP. Its main role in this evaluation will be to provide inputs on the selection of the IW body for the evaluation, and provide comments on the drafts of the approach paper and the impact evaluation report. Some IW Task Force members will be asked to participate in the Reference Group, and Task Force members will also be asked to suggest members for the Reference Group for the evaluation, including members of their own organizations or representatives of other key organizations relevant to the water body. Earlier versions of the concept paper for the evaluation were circulated for comments among the IW Task Force members and the GEF Secretariat, and their feedback has been taken into account in preparing this version. Sub-products of the evaluation will be presented and discussed with the IW Task Force and, as the evaluation moves along, the Task Force will help the

evaluation team identify knowledge products or issues of interest for operational GEF stakeholders.

VII. Management of the Evaluation

41. The core evaluation team will be composed of Aaron Zazueta, Senior Evaluation Officer and team leader, Neeraj Negi, Evaluation Officer, and Jeneen Garcia, Research Analyst, all at the GEF Evaluation Office. Several consultants (three to five) will also be hired to produce sub-reports for the evaluation on topics such as the characterization of the transboundary social, economic, and environmental services provided by the SCS and the factors affecting it; analysis of the GEF contributions to transboundary environmental governance in the SCS and the surrounding areas; and country case studies. At least two consultants will also be hired to mine the data available at the PEMSEA Resource Facility in the Philippines and in the UNEP regional office, which has a very rich archive on GEF-supported activities in the South China Sea. A joint technical paper with Mangroves for the Future is also under consideration; it will analyze trends and drivers affecting mangroves in the region.

VIII. Final Report

42. The various sub-studies of the evaluation will be brought together in one report. A preliminary sketch of the evaluation report is as follows.

43. The report will include an analysis of the "theory of change" that guides GEF International Waters support in the SCS. This will be followed by an assessment of the effects of GEF support on regional environmental governance affecting the South China Sea. This analysis will present regional governance trends, actions undertaken by other actors to address priority transboundary environmental concerns, and GEF support in the context of the key services provided by the SCS and the factors affecting its services. Thereafter, the report will present an analysis of the progress made by GEF and its partners in putting into place the building blocks to address transboundary environmental trends affecting the services provided by the SCS. This would include the extent to which the GEF IW's F-D-I approach functions as an effective tool to bring about changes that: 1) address key transboundary environmental concerns and their root causes, 2) are likely to reduce stress, and 3) are likely to contribute to the sustained social, economic and environmental services of the SCS. The report will also assess evidence of stress reduction that has resulted directly or has been "catalyzed" by GEF-supported projects. The report will then present an analysis of the extent to which the GEF and its partners are likely to catalyze actions that will address the transboundary environmental trends leading to improvements in the social, economic, and environmental services provided by the SCS. This analysis will include the identification of intermediate steps and necessary actions that still need to occur to address priority transboundary environmental concerns, and secure the services provided by the water body. After this, the report will include an assessment of the likelihood of delaying or preventing permanent damage to environmental services. The last chapter of the report will address the conclusions and lessons drawn from the evaluation.

IX. Evaluation Work Plan and Calendar

44. The evaluation is being carried out in three phases, with some overlap among the phases at transition. The first phase of the evaluation, which involves preparatory work, started in October 2009 and will end in November 2010. The second phase, which involves data gathering and analysis, will start in November 2010 and end in August 2010. The last phase of the evaluation, which entails synthesis and evaluation report preparation, will start in July 2011 and end in August 2012. Annexes 2 and 3 provide a more detailed timetable of activities. Some of the activities such as interactions with the TAG and the Reference Group will be iterative throughout all the three phases.

First Phase

45. The first phase includes activities such as upstream consultations, site selection, establishment of the TAG and the Reference Group, preparation of the approach paper, and development of a theory of change (TOC) for the projects, project clusters and GEF activities in the SCS area.

46. Activities such as upstream consultation with stakeholders (Oct–Nov 2009) and site selection for evaluation (December 2009) were undertaken during the preliminary stages of the first phase. The TAG was established in March and the Reference Group in August 2010. The preparation fof the approach paper started with development of a concept note for the evaluation. This was circulated among the TAG members and the IW Task Force in March 2010. Their feedback on the concept note was taken into account for preparing a draft approach paper. The preliminary versions of the paper were shared with the TAG members and the IW Task Force, and their feedback was incorporated in the subsequent versions. In September 2010 a workshop was organized in Bangkok to present the approach paper to the Reference Group, and their feedback has been incorporated in this version of the approach paper.

47. The development of a TOC for the projects, project clusters and GEF activities in the SCS area started in August 2010. Draft TOCs for the key clusters and for the SCS were presented to the Reference Group in September. Based on the feedback received, the project cluster TOCs are being finalized. In addition, TOCs for other clusters and projects are being developed. The TOCs for these will be finalized in November 2010.

Second Phase

48. The second phase is comprised of activities to gather and analyze data on key questions of the evaluation. It will start in November 2010 and is expected to be completed by August 2011. The activities that will be undertaken in this phase include analysis on the status of the water body, ecosystem services, trends, concerns and root causes; portfolio analysis; analysis on other actors in the SCS region and adjacent areas; country case studies; and thematic case studies.

49. The analysis on the status of the water body, ecosystem services, trends, concerns and root causes will begin in November 2010 and is expected to be completed by March 2011. The portfolio analysis, which will be based on a dataset prepared through a review of the GEF project of the SCS, will be started in November 2010 and end in January 2011. The analysis

of other actors in the SCS area will begin in November 2010 and will be completed in March 2011. The analysis will be based on data collected from the organizations operating in the region, interviews with key individuals, and information provided from the portfolio analysis.

50. Two major sets of activities that will be undertaken during this phase include thematic studies and country case studies. Thematic case studies will be initiated in February 2011 and are expected to be completed by August 2011. These will cover themes such as governance, fisheries, maritime transportation, waste disposal, and land reclamation. The country case studies will be initiated in March 2011 and are expected to be completed by August 2011. Two types of country case studies will be undertaken: desk studies and field studies. Desk studies will be undertaken for the seven countries that border the South China Sea and have received GEF funding. For some of these countries, more intensive field studies will be conducted.

Third Phase

51. The third phase consists of synthesis of data from various sources and preparation of the impact evaluation report. The synthesis of information from various sources is expected to begin in July 2011 and end in October 2011. It will entail the synthesis of information on progress towards impact, assessment of achievements in reducing priority transboundary environmental stresses, and outlining of the remaining steps needed to ensure the sustainability of the social, economic, and ecological services provided by the South China Sea.

52. The drafting of the impact evaluation report will begin in September 2011. The preliminary drafts will be shared with the TAG and IW task force, and their comments incorporated in the subsequent versions. A revised version of the draft report will then be presented to the Reference Group in a workshop. The feedback of the Reference Group will be incorporated in the evaluation report that will be presented to the GEF Council in April 2012. Thereafter, the focus will be on preparing evaluation products that will be useful to other stakeholders of the evaluation. A final report is expected to be published in August 2012.

Annex 1: GEF Projects included in this evaluation[26]

Table 1: GEF IW regional and national projects in the South China Sea and adjacent areas

GEF ID	Agency	Country List	Project Name	Project Status	Approval Date	GEF Project Grant ($)	Co-financing Amount ($)	Project Type
396	UNDP	China, Indonesia, Cambodia, Korea DPR, Malaysia, Philippines, Thailand, Vietnam	Prevention and Management of Marine Pollution in the East Asian Seas	Project Completion	7/1/1993	8,000,000	3,400,000	FP
597	UNDP	China, Indonesia, Cambodia, Korea DPR, Republic Of Korea, Malaysia, Philippines, Thailand, Vietnam	Building Partnerships for the Environmental Protection and Management of the East Asian Seas	Project Completion	11/1/1998	16,224,000	12,321,000	FP
2188	UNDP	China, Indonesia, Cambodia, Korea DPR, Malaysia, Philippines, Thailand, Vietnam	East Asian Seas Region: Development and Implementation of Public Private Partnerships in Environmental Investments	Under Imp.	9/2/2003	1,000,000	808,500	MSP
2700	UNDP	China, Indonesia, Cambodia, Lao PDR, Philippines, Thailand, East Timor, Vietnam	Implementation of Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)	Under Imp.	6/14/2007	10,876,336	33,374,400	FP
885	UNEP	China, Indonesia, Cambodia, Malaysia, Philippines, Thailand, Vietnam	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand	Project Completion	11/1/2000	17,620,830	16,399,000	FP
1270	World Bank	Indonesia, Malaysia	Marine Electronic Highway Demonstration	Project Completion	8/25/2003	8,300,000	7,500,000	FP
2138	World Bank	China, Thailand, Vietnam	Livestock Waste Management in East Asia	Project Completion	4/6/2005	7,000,000	17,006,300	FP
2135	World Bank	China	Guangdong - Pearl River Delta Urban Environment	Project Completion	3/22/2004	10,000,000	432,380,000	FP
3309	UNEP	China	Participatory Planning and Implementation in the Management of Shantou Intertidal Wetland	Under Imp.	6/28/2007	400,000	515,200	MSP
3188	UNEP	Indonesia	Demonstration of Community-based Mgt of Sea grass Habitats in Trikora Beach East Bintan, Riau Archipelago Province, Indonesia	Under Imp.	6/26/2007	397,800	391,950	MSP
2758	World Bank	Vietnam	Coastal Cities Environment and Sanitation Project - under WB/GEF Partnership Investment Fund for	CEO Endorsed	11/10/05	5,000,000	21,684,888	FP

[26] Tables composed on the basis of information available in the GEF Project Information Management System as of November 23, 2009.

			Pollution Reduction in the LME of East Asia*					
2759	World Bank	Philippines	Manila Third Sewerage Project (MTSP) - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia*	Under Imp.	11/10/2005	5,000,000	87,810,000	FP
3187	UNEP	Vietnam	Demonstration of Sustainable Management of Coral Reef Resources in the Coastal Waters of Ninh Hai District, Ninh Thuan Province, Viet Nam	CEO Approved	6/5/2008	406,900	528,286	MSP
3523	UNDP	Indonesia, Philippines, Vietnam	CTI West Pacific-East Asia Oceanic Fisheries Management (WPEA OFM) Project - under the Coral Triangle Initiative	CEO Approved	6/22/2009	925,000	3,667,431	MSP
587	World Bank	China	Ship Waste Disposal	Project Closure	05/01/1999	30,000,000	34,800,000	FP
615	World Bank	Cambodia, Lao, Thailand, Viet Nam	Mekong River Water Utilization	Project Closure	05/07/1999	11,100,000	5,300,000	FP
3619	FAO	Asia and the Pacific (Indonesia, Papua New Guinea, Philippines, Thailand, Vietnam)	CTI Strategies for Fisheries Bycatch Management	Council approved	4/21/2009	3,000,000	6,700,000	FP
Total for IW projects in the South China Sea						*135,250,866*	*684,586,955*	
GEF IW Projects in Areas Adjacent to the SCS								
3589	ADB	Indonesia, Malaysia, Philippines	Coastal and Marine Resources Management in the Coral Triangle: Southeast Asia under the Coral Triangle Initiative	Council Approved	4/24/2008	10,310,000	76,000,000	FP
3524	UNDP	Indonesia, Malaysia, Philippines	Sulu-Celebes(Sulawesi) Sea Sustainable Fisheries Management (SCS SFM) Project under the CTI	CEO Endorsed	4/24/2008	2,890,000	3,230,000	FP
790	UNDP/ UNOPS	Regional (China, Korea)	Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem	Under Imp.	05/01/2000	14,394,183	10,214,066	FP
2750	World Bank	China	Ningbo Water and Environment Project - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia*	IA Approved	11/10/2005	5,000,000.0	133,900,000	FP
2972	World Bank	China	Liaoning Medium Cities Infrastructure - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia*	IA Approved	11/10/2005	5,000,000.0	187,700,000	FP
2979	World Bank	China	Second Shandong Environment - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia*	IA Approved	11/10/2005	5,000,000.0	201,900,000	FP
3223	World Bank	China	Shanghai Agricultural and Non-Point Pollution Reduction project (SANPR) - under WB/GEF Strategic Partnership Investment Fund for Pollution Reduction in the LME of East Asia*	CEO Endorsed	06/14/2007	4,788,000.0	26,870,000	FP

4092	World Bank	China	Huai River Basin Marine Pollution Reduction*	Council Approved	06/14/2007	5,000,00.0	30,660,000	FP
Total for IW projects in adjacent areas						*47,382,183*	*639,814,066*	
Total for IW projects in the South China Sea and adjacent areas						**182,633,049**	**1,324,401,021**	

*These projects are approved under the 1st tranche of the World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia (ID 2454 and 3025).

Table 2: GEF Global IW projects with incidence in the South China Sea

GEF ID	Agency	Country List	Project Name	Project Status	Project Approval Date	GEF Project Grant ($)	Co-financing ($)	Project Type
514	UNEP	Global	The Role of the Coastal Ocean in the Disturbed and Undisturbed Nutrient and Carbon Cycles	Project Closure	11/01/98	720,000	458,000	MSP
584	UNEP	Global	Global International Waters Assessment (GIWA)	Project Closure	11/01/97	6,495,000	6,670,001	FP
610	UNDP	Brazil, China, India, Iran, South Africa, Ukraine	Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries	Project Closure	05/07/99	7,392,000	2,800,000	FP
884	UNEP/ FAO	Cameroon, Colombia, Costa Rica, Cuba, Indonesia, Iran, Mexico, Nigeria, Philippines, Trinidad and Tobago, Venezuela	Reduction of Environmental Impact from Tropical Shrimp Trawling through Introduction of By-catch Technologies and Change of Management	Project Closure	11/01/00	4,450,000	4,370,000	FP
1223	UNDP	Brazil, Indonesia, Lao PDR, Sudan, Tanzania, Zimbabwe	Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies	Under Impl.	12/07/01	6,806,800	13,052,000	FP
2261	UNDP	Angola, Argentina, Brazil, Cote d'Ivoire, Chile, China, Costa Rica, Algeria, Ecuador, Egypt, Ghana, Guatemala, Croatia, India, Iran, Jordan, Libya, Morocco, Mexico, Panama, Peru, Sudan, Turkey, Trinidad and Tobago, Ukraine, Venezuela, Yemen, South Africa	Building Partnerships to Assist Developing Countries to Reduce the Transfer of Harmful Aquatic Organisms in Ships' Ballast Water (GloBallast Partnerships)	Under Impl.	06/14/07	5,688,000	17,701,939	FP
2474	UNEP	Global	Promoting Ecosystem-based Approaches to Fisheries Conservation and LMEs	Project Closure	04/15/04	995,000	740,000	MSP
3639	UNDP/ ADB	Global	GEF IW: LEARN: Portfolio Learning in International Waters with a Focus on Oceans, Coasts, and Islands and Regional Asia/Pacific and Coral Triangle Learning Processes – under the Coral Triangle Initiative	Under Impl.	04/24/08	2,700,000	3,034,000	FP

Table 3: GEF Projects in other focal areas directly related to the South China Sea

GEF ID	Agency	Country	Project Name	Project Status	Focal area	Project Approval Date	GEF Project Grant ($)	Co-financing ($)	Project Type
4	World Bank	Vietnam	Hon Mun Marine Protected Area Pilot Project	Project Closure	Biodiversity	12/1/1999	972,447	1,148,627	MSP
653	World Bank	Philippines	Coastal and Marine Biodiversity Conservation in Mindanao	Project Closure	Biodiversity	5/7/1999	1,250,000	4,800,000	FP
913	UNDP	Philippines	Biodiversity Conservation and Management of the Bohol Islands Marine Triangle	Project Closure	Biodiversity	12/5/2000	718,270	637,611	MSP
1031	UNDP	Vietnam	Biodiversity Conservation and Sustainable Use of the Marine Resources at Con Dao National Park	IA Approved	Biodiversity	11/10/2003	970,450	877,850	MSP
1128	UNDP	China	Biodiversity Management in the Coastal Area of China's South Sea	IA Approved	Biodiversity	10/15/2002	3,195,000	43,410,000	FP
1185	ADB	Philippines	Integrated Coastal Resources Management Project	IA Approved	Biodiversity	9/27/2004	9,000,000	54,000,000	FP
1201	UNDP	Malaysia	Conserving Marine Biodiversity through Enhanced Marine Park Management and Inclusive Sustainable Island Development	IA Approved	Biodiversity	3/22/2004	1,952,400	2,013,144	FP
1829	World Bank	Indonesia	Coral Reef Rehabilitation and Management Project Phase II (COREMAP II)	IA Approved	Biodiversity	5/1/1997	7,500,000	35,000,000	FP
2329	UNIDO	Philippines	Global Programme to Demonstrate the Viability and Removal of Barriers that Impede Adoption and Successful Implementation of Available, Non-Combustion Technologies for Destroying Persistent Organic Pollutants (POPs)	IA Approved	POPs	5/21/2004	4,565,000	7,762,380	FP
2932	UNDP	China	Alternatives to DDT Usage for the Production of Anti-fouling Paint	IA Approved	POPs	8/28/2006	11,610,000	12,250,000	FP
3647	ADB/ UNDP/ FAO/ World Bank	Fiji, Micronesia, Indonesia, Malaysia, Papua New Guinea, Philippines, Palau, Solomon Islands, Timor Leste, Vanuatu	CTI The Coral Triangle Initiative (PROGRAM)	Council Approved	Multi Focal Area			$0	FP
Total							**41,733,567**	**161,899,612**	

Annex 2: Milestones of the evaluation

Date	Activity
October 2009	Upstream consultations on the evaluation questions and the candidate water bodies for evaluation
December 10, 2009	Selection of candidate water catchments
March 15 , 2010	Selection of Technical Advisory Group (TAG)
March 15, 2010	Circulation of Concept Paper among the TAG and IW Task Force
March 30, 2010	Scoping visit to region
April 27, 2010	First full TAG meeting
August 15, 2010	Constitution of Reference Group
August 30, 2010	Circulation of draft of Approach Paper to Reference Group and GEF Agencies and posting on the internet
September 10, 2010	Development of GEF IW theory of change for Large Marine Ecosystems
September 27-28, 2010	Meeting with Reference Group in the region to discuss Approach Paper
January 2011	Portfolio Analysis
March 2011	Mapping of institutional actors and programs in the SCS
March 2011	Characterization of the social, economic, and ecological services of the SCS
August 2011	Thematic studies
August 2011	Country case studies
October 2011	Assessment of likelihood of transboundary environmental impacts
February 2012	Meeting of the Reference Group to discuss comments on the draft
April 30, 2012	Report and Council paper prepared
July/August 2012	Publication and learning products

*The shaded milestones have already been achieved.

Annex 3: Schedule of activities

Activities	2010				2011												2012							
Month	Preceding months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1. Upstream Consultations																								
2. Site Selection																								
3. Technical Advisory Group																								
4. Reference Group																								
5. IW Task Force																								
6. Approach Paper																								
Preparation of a draft approach paper																								
Workshop to share approach paper																								
Finalization of approach paper																								

Activities	2010				2011												2012							
Month	Preceding months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
7. TOCs (project, clusters, and SCS)																								
8. Portfolio Analysis																								
Review of projects																								
Analysis of project data																								
9. Analysis of other actors in the SCS																								
Co-financing partners																								
Other organizations																								
10. Country Case Studies																								
Preparation of TORs																								
Desk Studies																								
Field Studies																								
11. Thematic studies																								
Preparation of TORs																								

Activities	2010				2011												2012							
Month	Preceding months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Governance																								
Fisheries																								
Other thematic studies																								
12. Services, trends, concerns, root causes, and transboundary impacts																								
13. Evaluation Report																								
Draft report																								
Workshop to share draft report																								
Preparation of Council Paper																								
Publication and learning products																								