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Managing multi-lateral, intergovernmental projects and programmes: the case of the UNEP/GEF South China Sea project

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**A R T I C L E  I N F O**

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**A B S T R A C T**

The management of comprehensive and extensive, multi-lateral and multi-national programmes and projects in the field of coastal and ocean management poses numerous organisational problems encompassing co-ordination between: the actions of individual participating countries at the regional level; the national level actions of institutions from different sectors; and actions that are designed to address issues as diverse as: biological diversity conservation and sustainable use; fisheries management; maritime transport; and the control of land based pollution. Most large multi-lateral projects focus on sound scientific knowledge and information, and pay less attention to the design of a management structure that will ensure coherence and co-ordination of the interventions once the programme or project is under implementation. The project entitled “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand” was complex since it addressed three priority areas of concern namely the loss and degradation of coastal habitats, over-exploitation of fisheries in the Gulf of Thailand, and land-based pollution. It is suggested that the success of the management framework reflects the following key design elements:

- The framework permitted and encouraged both “horizontal” (inter-country) and “vertical” (intra-country) interactions and networking between individuals at all levels of project implementation and execution;
- Inclusion of a body (the Regional Scientific and Technical Committee) that served as a forum for reconciling both sectoral and national interests and priorities;
- The clear separation between discussions of scientific and technical matters from discussions dealing with policy and principles at both the national and regional levels;
- The framework facilitated the incorporation of sound scientific and technical advice and information into politically based decision-making;
- The use of regional experts and consultants from the participating countries fostered “ownership” of the activities and outputs;
- Restriction of the membership of the Project Steering Committee to government representatives only, and exclusion of observers from regional and international agencies and institutions other than UNEP; and,
- The framework allowed for adaptive management and was not a rigid unchanging structure.

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**1. Introduction**

The management of comprehensive and extensive multi-lateral and multi-national programmes and projects in the field of coastal and ocean management poses numerous organisational problems encompassing co-ordination: among the actions of individual
working groups); it was too large, and unwieldy; and that it committees and groups (52 national and 8 regional committees and framework was too complex in that: it involved too many were expressed by individuals directly involved in project execu-departments, eleven research institutions, institutions and organizations comprised fourteen government 3.580 0.294 0.505 4.379 4. Project Co-ordination and Management EA Overheads 0.600 0.235 0.835 2.331 3. Land-based Pollution 1.760 0.461 0.110 2.331 2. Over-exploitation of fisheries in the Gulf of Thailand 1.650 0.735 0.960 3.345 1. Habitat degradation & loss 2.733 2.374 1.585 6.692 1.1 Mangroves 2.587 2.326 1.590 6.473 1.2 Non-oceanic Coral Reefs 2.529 2.305 1.585 6.419 1.3 Seagrass 0.975 0.400 0.082 1.457 1.4 Wetlands Table 1 GEF approved project budget summary and component financing in million US$. Project activities GEF Co-financing Grand Project Total 16.414 8.895 6.622 31.931 project preparation for convening regional meetings and to cover in-country costs of project preparation. 5 The estimated regional co-ordination costs included the costs of convening some 16 regional meetings per year for the first two years and around 10 per year thereafter, together with the costs associated with the activities of the Project Coordinating Unit. This criticism is examined in greater detail in the section on cost effectiveness below.5 2. The management framework 2.1. Rationale for the design of the management framework At the time of project development, a number of factors influ-enced the design of the management framework, including inter alia: the geopolitical context of the South China Sea; the need to have a sound scientific basis for intended actions; and the desire to create a mechanism that was operationally effective and, at the same time, cost-effective. The latter concerns led to a recognition of the need for separate bodies of specialists to guide the imple-mentation of the individual components and subcomponents whilst, at the same time, providing a framework (the Regional Scientific and Technical Committee) within which individual specialists could interact to determine overall regional priorities from a scientific and technical standpoint. The geopolitical context, with the ongoing territorial disputes and arguments regarding sovereignty, dictated the need to exclude non-involved countries from participating in decisions regarding project management and dictated the limitations on membership of the Project Steering Committee. Similarly, the desire of China not to “internationalise” the South China Sea resulted in limitation of the extent to which other international and regional organisations could be involved in the project. The design of the project management structure was based on recognition of several operational principles. First, that the outputs of a committee are in general inversely proportional to the size of the committee: the larger the committee the less is achieved. Second, that there was a need to balance national objectives and priorities, with regional objectives and priorities taking into consideration the need to meet the GEF objective of generating regional and global environmental benefits. Third, with seven participating countries, each representing different ecological sub-regions with widely differing biodiversity and social and economic 3 Cambodia, China, Indonesia, Malaysia, Philippines, Thailand and Viet Nam. 4 In the case of Cambodia, the limited human capacity in the country resulted in the coral reef and seagrass sub-components being combined under the responsibility of a single Specialised Executing Agency, the Department of Fisheries. The mangrove and wetlands sub-components were similarly combined resulting in the creation of only four rather than six national committees in Cambodia. 2 Planning commenced in 1996; the project became fully operational in February 2002; and was formally closed at the end of January 2009. A brief history of the development of the project is provided in Chen (2013). The project was complex since it addressed three priority areas of concern identified in the Transboundary Diagnostic Analysis (TDA)9 (Talauce-McManus, 2000): namely the loss and degradation of coastal habitats, over-exploitation of fisheries in the Gulf of Thailand, and land-based pollution. Of these three substantive project components, the first, relating to habitat degradation and loss, was the largest and divided into four sub-components. The fourth component of the project dealt with regional co-ordination including facilitation of national level execution and securing inter-country agreement on project related matters. The financial appropriations approved by the GEF Council are presented in Table 1, where it can be seen that the allocations from all sources for the priority habitats (mangroves, coral reefs, seagrass and wetlands) total just over 21 million US dollars or 63% of total project costs. The allocation for mangrove related activities was greater than all other components and sub-components. The project was designed to be implemented over a period of five years and involved the signing of Memoranda of Under- standing (MoUs) between UNEP, as the GEF Implementing Agency, and seven focal Ministries, (the ministries responsible for the environment in each country) and thirty-one Specialised Executing Agencies (SEAs) in the seven participating countries, each responsible for one component or sub-component of the project.4 These institutions and organizations comprised fourteen government departments, eleven research institutions, five universities and one non-governmental organisation (NGO). At the time that the project became operational, some concerns were expressed by individuals directly involved in project execu-tion at the national level and by others implementing other GEF projects both in the region and outside that the management framework was too complex in that: it involved too many committees and groups (52 national and 8 regional committees and working groups); it was too large, and unwieldy; and that it involved too many regional co-ordination or transaction costs (an estimated 4.4 million US dollars or 13.5% of total project costs).
conditions, there was a need to achieve a balance in the spread of activities among all countries. Fourth, there existed a need to maximise involvement of national level stakeholders if actions were to be effective, both nationally and regionally.

2.2. Regional level coordination

2.2.1. The project steering committee

The Project Brief, as approved by the fifteenth meeting of the Coordinating Body on the Seas of East Asia (COBSEA) and the Sixteenth meeting of the GEF Council, formally established the Project Steering Committee (PSC). This committee was created as “the supreme decision-making body of the project,” and made responsible for “reviewing and approving, on an annual basis, project activities, including the location of demonstration sites to be funded by the GEF project” (UNEP, 2000b, Appendix).

The wide ranging and comprehensive nature of the proposed activities necessitated the creation of regional and national management structures that supported the Project Steering Committee in the fulfilment of its responsibilities. Such supporting structures were needed to ensure that decisions of the Project Steering Committee were based on country requirements and priorities and reflected the requirements of the GEF that project activities achieve regional and global environmental benefits. The overall framework is illustrated in Fig. 1, which depicts the national and regional level structures and their relationships to one another.

The responsibilities of the Project Steering Committee were further amplified in Paragraph 40 of the Project Brief that stated: “The Project Steering Committee’s primary responsibility will be to ensure synergy and integration in the planning and execution of the project sub-components.”

2.2.2. The regional working groups

At the regional level, the structure included six regional working groups each reflecting the primary components of the project, namely mangroves, coral reefs, seagrass, wetlands, land-based pollution and fisheries, and their sub-components. Each working group comprised the national focal points for the component or sub-component from each of the seven countries, together with up to four internationally recognised experts from the region (i.e., a maximum of 11 members) and one member of the Project Coordinating Unit. Each group had agreed Terms of Reference (UNEP, 2001, Annex VIII) and Rules of Procedure, which stated that each group should elect its own Chairperson, Vice-Chairperson and Rapporteur from among the members. The Officers were to serve for one year with the possibility of being re-elected for one further year. During the first phase of the project (2002–2004), the regional working groups were responsible for developing criteria that were used in the selection of the various demonstration activities to be executed during the operational phase of the project (2005–2007) (Pernetta and Jiang, 2013). In addition, the working groups were responsible for assembling information and data for inputting into a regional GIS and meta-database and for conducting the analyses required to demonstrate the regional and global importance of the demonstration sites proposed to the Project Steering Committee.

2.2.3. The regional scientific and technical committee

To ensure that the results of each working group were mutually supportive and that the recommendations and activities did not result in overlap or conflict, a Regional Scientific and Technical Committee was created. The membership of this committee consisted of the Chairpersons of the six regional working groups, the chairpersons of the seven National Technical Working Groups and up to six additional senior marine and social scientists of recognised international standing drawn from the participating countries. In addition, the Project Director was a full member of the committee. The primary function of this committee was to provide sound scientific and technical advice to the Project Steering Committee. Terms of Reference for this group and rules of procedure were approved by the Project Steering Committee (UNEP, 2001, Annex VIII); the members elected their officers annually.

2.2.4. The regional task forces

The terms of reference for each of the national bodies provided guidance regarding the types of individuals and/or organisations that should be included in the membership of each body. Thus, it was envisaged that the national committees having responsibility for executing each component in the country would include legal specialists and economists to provide appropriate inputs during the work of the national committees. However, it became apparent quite early during project execution that the focal points responsible for constituting the national committees had difficulty in identifying appropriate specialists and that outputs were correspondingly weak in the areas of economic valuation and legal instruments.

In recognition of this problem, the Regional Scientific and Technical Committee recommended to the Project Steering Committee that two Regional Task Forces be created, one on legal matters (RTF-L) and one on economic valuation (RTF-E), each comprising nominated experts from each participating country. The Project Steering Committee approved the creation of these two additional bodies in December 2002, just eleven months following the commencement of project activities. Each of these new task forces had specific terms of reference and work-plans designed to complement and strengthen the work of the national committees and regional bodies. In discharging their responsibilities under the terms of reference, the Task Forces provided direct advice regarding national levels of analysis in each area of the project to the national committees and sub-committees whilst at the same time providing advice regarding the regional level of analysis to the Regional Scientific and Technical Committee and the Project Steering Committee. The membership of the RSTC was subsequently augmented by the chairpersons of the two regional task forces.

2.2.5. The project co-ordinating unit

The Project Co-ordinating Unit acted as the secretariat for each of the regional level structures established under the project and was the main conduit for reporting on project implementation to the GEF Council and UNEP Governing Council via the UNEP Global Environment Facility Co-ordination Division. It was also responsible for due diligence monitoring of project execution and financial management. Through direct interaction with the East Asian Seas Regional Co-ordination Unit (EAS/RCU), synergy and complementarity were ensured with the work of the UNEP Division of Environmental Conventions (UNEP/DEC) in accordance with the decisions of the UNEP Governing Council (UNEP GC). It was also responsible for preparing documentation for the regional meetings, arranging travel and accommodation for all meeting participants and managing the project website.

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6 COBSEA – The Co-ordinating Body for the Seas of East Asia, an intergovernmental forum of presently 10 member countries, established by UNEP in 1981 and designated by the then 5 member countries as a means of executing the East Asian Seas Action Plan (UNEP, 1981). COBSEA was at that time congruent with the ASEAN Coordinating Body on the Seas of East Asia (COBSEA) and the 2.2.1. The project steering committee

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2.3. National level co-ordination

2.3.1. National component committees

The Memoranda of understanding that were established between UNEP and the specialised executing agency (SEA) at the national level (Table 2) specified the individual within the institution who would serve as the national coordinator for that component. At the national level, the national co-ordinators or focal points for each component were responsible for convening regular meetings of a national committee or sub-committee with membership drawn from the government and national level stakeholder groups having interests in, or responsibilities for, the habitat or issue at the national level. Terms of reference for these committees were approved at the time of project document review by the first meeting of the Project Steering Committee (UNEP, 2001. Annex VII). Thus, the focal point for mangroves from one country, for example, was required to chair a group of specialists within the country having interests in research, management and use of mangrove habitats and resources. In some instances, such as mangroves, national committees8 existed in some countries before the project commenced; in others, new bodies were created.

2.3.2. National technical working groups

In each country, a government designated senior official served as the National Technical Focal Point with responsibility for convening and chairing meetings of a National Technical Working Group9, comprising representatives of the National Committees or Sub-Committee together with, additional experts and representatives drawn from the public and private sectors and civil society. This working group was intended to provide sound scientific and technical advice to the Inter-Ministry Committee regarding national priorities and actions as the basis for national level decisions regarding project activities. A primary function of these groups was to ensure synergy and complementarity among the actions proposed at the national level within each component and sub-component of the overall project. As noted above, each regional working group comprised the chairpersons of the national committees. A major task for the regional working groups was to ensure that the national priorities determined by the national committees for each component and sub-component were adequately taken into consideration in determining regional priorities for action.

2.3.3. Inter-ministry committees

At the national level, each Inter-Ministry Committee (IMC) included within their membership the National Technical Focal Point and the National Focal Point for the project, the latter serving as Chairperson of the Committee. In addition, this committee included high level representatives of other sectoral ministries and government agencies having interests in, and responsibilities for, the management of the marine environment and resources. As noted above, the National Technical Focal Point was normally a senior official with operational level responsibility whilst the National Focal Point was a more senior official or Minister with responsibility for overall policy within the marine sector. Terms of reference for the national committees, the National Technical Working Groups and the Inter-Ministry Committees were agreed inter-governmentally prior to the commencement of the project (UNEP, 2001, Annex VII).

The primary role of the Inter-Ministry Committees in each country was to function as the national equivalent of the regional Project Steering Committee and to ensure co-ordination across sectors and stakeholder groups at the national level. The Chairperson of the Inter-ministry Committee served as the Government representative on the national level Project Steering Committee.
| Habitats                      | Fisheries                                      | Land-based pollution | Regional task forces                  |
|------------------------------|------------------------------------------------|----------------------|---------------------------------------|
| Coral reefs                  | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Seagrass                     | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Mangroves                    | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Wetlands                     | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Fisheries                    | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Land-based pollution         | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Regional task forces          | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Nature Conservation and Protection - Ministry of Environment |
| Economic valuation           | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Planning and Legal Affairs - Ministry of Environment |
| Legal matters                | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Fisheries - Ministry of Agriculture, Forestry and Fishery | Department of Planning and Legal Affairs - Ministry of Environment |

*Table 2: The specialised executing agencies by country and by component.*
thus ensuring that decisions taken by all participating countries accorded with the priorities and requirements at the national level.

2.4. Relationships between national and regional structures

The relationships originally envisaged among the national and regional management structures are illustrated in Fig. 2 in which it can be seen that the specialised executing agencies in each country assembled national data and information in the light of national priorities and plans. National priorities were integrated into a regional approach through the work of the six regional working groups responsible for managing each of the major components and sub-components of the project. The relationships between the Regional Task Forces created in late 2002 and the other regional entities are also illustrated in Fig. 2, which represents the operational management structure at the time of project closure.

The specialised executing agencies in each country interacted via the National Technical Working Groups that, in turn, fed national information to the Regional Scientific and Technical Committee. The Regional Scientific and Technical Committee reconciled the national priorities of each participating country with the overall regional and global priorities for action within the project as a whole. Overall decision-making at the national level was taken via the inter-ministry committees that, in turn, provided national inputs to regional, policy level decision-making by the Project Steering Committee.

The existence of these two bodies at the national level and their counterparts at the regional level was designed to provide a clear separation between discussions of the scientific and technical issues and concerns and discussions of the higher level policy and principles that govern interactions among sectors at the national level and among participating countries at the regional level. Ultimately, decisions were taken, both at the national and regional levels, by an appropriately constituted body having authority and responsibility for policy level decision-making. These bodies, the Project Steering Committee and Inter-Ministry Committees, were advised by the Regional Scientific and Technical Committee and the National Technical Working Groups, respectively, on matters of substance relating to the scientific and technical soundness of alternative courses of action. This allowed for a potentially improved integration of scientific and technical data into the decision-making process than would be possible with a single, joint forum that could have confused the discussion of purely scientific and technical issues, on the one hand with policy related issues and concerns, on the other.

3. Results and experiences in operating the framework

However good a management structure might appear in theory, the real test of its effectiveness can only be measured in terms of: its capacity to deal with changing circumstances (adaptive management); acceptability by the individuals operating within it; timeliness of delivery of anticipated outputs; the scale and quality of the products; cost effectiveness; and, in the longer term, the benefits of having that particular structure rather than an alternative.

3.1. Adaptive management

3.1.1. Modifications to the structure based on experiences of its operation

As noted above, within the first year of operation, weaknesses became apparent in the extent to which both legal and economic considerations were being incorporated into national assessments and planning. On the recommendation of the Project Co-ordinating Unit, the Project Steering Committee approved, in December 2002, the creation of two additional regional level bodies namely; the Regional Task Force on Economic Valuation and the Regional Task Force on Legal Issues. The Legal Task Force was initially charged with assisting the national committees but subsequently undertook an extensive region-wide review of national legislation related to
the environment and of possible alternative arrangements for regional level coordination. The economic task force was initially created to assist the regional and national committees with economic analysis of ecosystem values and cost benefit analyses of alternative course of action. In addition, they were charged by the project steering committee with responsibilities for determining regionally applicable values for ecosystem goods and services that could be used in a cost benefit analysis of regional level interventions.

By the end of 2003, it had also become apparent that considerable benefit could be derived from the convening of biennial scientific conferences to share experiences of project interventions across the project components and among countries. Consequently, budget adjustments were made to allow provision for such conferences. By the time that the first conference was convened in 2004, the first demonstration sites had been selected. Included amongst the participants in the conference were provincial governors, mayors of coastal cities and senior political leaders from the sites in which project management interventions were to take place. At the time of approval of the first set of demonstration sites, the Steering Committee agreed that all future regional project meetings would be convened at the locations of the demonstration sites to enhance involvement of the local authorities and communities in the activities of the project. Mayors' round tables were convened in association with all three regional scientific conferences and served as a mechanism for the direct exchange of experience among local government officials and environmental managers and, subsequently during the conference, among regional scientists and environmental managers involved in all aspects of the project.

3.1.2. Modifications to the work plan and budget to meet changing circumstances

The original workplan\textsuperscript{10} called for 54 regional meetings to be convened at regularly spaced intervals over the 69 months of the operational phase of the project (0.78 meetings per month). During implementation, the actual number convened was 92 regional meetings over a period of 80 months of operation (1.15 meetings per month) see Table 3. These resulted from the necessity of rescheduling of meetings during the SARS outbreak together with the approval of new regional bodies (the task forces) and agreement to convene additional types of meetings (Regional Scientific Conferences and Mayors' Round Table meetings) to enhance networking within the project as a whole.\textsuperscript{11}

3.2. Acceptance of the management framework by the individuals operating within it

Considerable attention was devoted during the first regional meetings of all project committees and working groups to the presentation and explanation of the management framework and of the manner in which it was envisaged that it would function. The independent mid-term evaluation (Bewers and Su, 2004) noted that:

"At no point during this meeting [the first regional scientific conference] there was evidence of any confusion over the responsibilities of each of the bodies created within the project, disagreements or misunderstandings of the roles and responsibilities of these bodies, or any lack of recognition and acceptance of the de facto jurisdiction of the Project Steering Committee."

3.3. Timeliness in delivery of anticipated outputs

The project was originally planned to run from the beginning of 2002 to the end of 2006. Delays during the early part of project implementation stemmed from: the greater than anticipated time taken at the national level to assemble the national data sets and characterise potential demonstration sites; and the impacts of the widespread outbreak of Severe Acute Respiratory Syndrome (SARS) between November 2002 and July 2003 that caused disruption to the programme of regional meetings as a consequence of quarantine restrictions and bans on travel between countries in the region. In February 2004, therefore, the Project Steering Committee agreed to extend the duration of the project to June 2007. At its fifth meeting in December 2005, the Project Steering Committee took note of delays in the implementation of the demonstration sites and agreed to further extend the project's operational activities to June 2008 and operation of the Project Co-ordinating Unit to the end of that year to permit closure of financial documents and clean-up of any outstanding activities. Both these decisions involved no increase in the amount of the GEF grant funds, merely a reallocation of existing funds (Table 4). However, government in-kind and in cash co-financing was increased on both occasions to take account of additional costs, both financial and in terms of involvement of individuals from the countries in project activities.

All outputs anticipated in the project document were therefore delivered between January 2002 and June 2008 an increase in expected duration of 18 months compared with the originally planned sixty nine months (a 26% time overrun).

3.4. Analysis of costs

Table 4 shows that although the total project costs rose from the estimated 34.05 million to 36.17 million, reflecting the overall extension of duration of the project activities from 69 months to 80 months the actual cost to the GEF was less than the original estimate by 454,828 (2.7%). In contrast, the government co-financing increased from an estimated 30% to 53.6% of total project costs. The estimate of personal co-financing from PCU staff (403,809 US$) reflects unpaid overtime, holidays worked and weekends spent on travel. This illustrates the point made earlier that during project planning, personnel requirements are frequently underestimated by fund sources.

Table 5 compares the original project estimates against final expenditures of the GEF grant. A number or notable points are illustrated by these data. First, although the total number of regional meetings convened under the auspices of the project rose from an originally planned 54 to 92 and, of these, the scientific conferences and mayor's round table meetings involved considerable numbers of participants the total costs of all meetings was 7% less than originally budgeted. The reasons for this reflect the decision of the Project Steering Committee to convene all regional meetings at the demonstration sites. This meant that the unit costs per person were considerably lower than the unit costs of convening the same meeting in a capital city or tourist destination. It is worth noting in this context that the unit costs per man day of the regional meetings actually declined over the life of the project, despite the fact that airfares increased.

Second, the costs of running the PCU increased by 23% reflecting the extension of project activities from 69 to 80 months and the life of the PCU to 84 months. It should be borne in mind, however, that

\textsuperscript{10} The term 'workplan' is a construct used in the GEF community and corresponds to "work plan" in English.

\textsuperscript{11} The first meeting of the Project Steering Committee was convened in advance of the project formal approval by the GEF and therefore is not included in the total number of meetings convened during the operational phase of the project.
not all of the PCU costs were devoted to project management; a significant proportion of the PCU professional staff time was in fact devoted to substantive project activities including, for example, compilation of data and information and loading this onto the website, cluster analysis, and work on the economic valuation. It is estimated that as much as 25% of staff time in the PCU was directed to project substantive matters and the remainder to project management.

4. Discussion

4.1. Conclusions of independent evaluations regarding the management framework

The mid-term independent evaluation of the project was undertaken between February and July 2004 by two independent evaluators. It concluded that:

“The project structure and consultative mechanism established by the Project Coordinating Unit (PCU) and endorsed by the Project Steering Committee constitutes a model of project management and administration that warrants emulation elsewhere. (Bewers, J.M. & J. Su, 2004; Executive Summary)”

It is salutary to note that this “mid-term” evaluation, in Section 5.2.7 states:

“Fig. 1 that was prepared by UNEP/DGEF and adopted within the project has stood the test of time and served the project remarkably well. It specifies the hierarchy of administration and management procedures within the project, the identities and subject topics of the Regional Working Groups in relation to each of the component activities, and the overall consultative mechanisms incorporated into the project. What is particularly pleasing is that the import of this organogram appears to be universally accepted and understood by those involved in project implementation. This was abundantly evident during the Regional Scientific Conference held in Bangkok in February 2004 within which there was wide discussion of all aspects of the project. At no point during this meeting was there evidence of any confusion over the responsibilities of each of the bodies created within the project, disagreements or misunderstandings of the roles and responsibilities of these bodies, or any lack of recognition and acceptance of the de facto jurisdiction of the Project Steering Committee. During the Regional Scientific Conference the supportive and advisory role played by the PCU was in clear evidence and evidently appreciated by the participants. It should also be noted that, in discussions with the Chinese scientists and officials participating in the project, there is a unanimous high regard for the project structure. In their view, consensus has been reached largely on scientific merit and/or sound reasoning at all levels within the project.”

In addition, two further independent evaluations of the project conducted for different purposes in 2004 came to similar conclusions. The GEF Specially Managed Project review (GEF, 2004a) concluded that:

“The management structure has been very effective on several grounds. The clear separation of roles of the policy and decision-making structures from the scientific and technical functions has been a key to the success of the project. The highest-level decision-making structure is the Project Steering Committee (PSC) that consists entirely of government officials from the participating countries. The main scientific and technical forum, Regional Scientific and Technical Committee (RSTC), forms the bridge between the PSC and the Regional Working Groups (RWGs) dealing with the scientific and technical aspects of the project. The RSTC makes recommendations to the PSC as to the appropriate actions based on the scientific work carried out within the RWGs and at the

| Table 3 | Numbers of originally planned (P) and actually convened (C) regional meetings. |
|---------|--------------------------------------------------------------------------------|
|         | 2001 P | 2002 P | 2003 P | 2004 P | 2005 P | 2006 P | 2007 P | 2008 P | Total P | 2001 C | 2002 C | 2003 C | 2004 C | 2005 C | 2006 C | 2007 C | 2008 C | Total C |
| PSC     | 1      | 1      | 1      | 1      | 0      | 1      | 2      | 1      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 6      | 7      |
| RSTC    | 2      | 2      | 1      | 1      | 2      | 1      | 1      | 1      | 1      | 0      | 1      | 1      | 0      | 1      | 6      | 9      |
| RWG-M   | 2      | 2      | 2      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 0      | 1      | 7      | 8      |
| RWG-C   | 2      | 2      | 2      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 0      | 1      | 7      | 9      |
| RWG-S   | 2      | 2      | 2      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 1      | 1      | 7      | 8      |
| RWG-F   | 2      | 2      | 2      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 1      | 7      | 8      |
| RWG-LbP | 2      | 2      | 2      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 1      | 1      | 7      | 8      |
| GIS wkshp | 0    | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 0      | 1      | 1      | 1      | 7      | 8      |
| RTF-E   | 0      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 7      | 8      |
| RTF-L   | 0      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 0      | 1      | 7      | 8      |
| RSC     | 0      | 0      | 0      | 0      | 0      | 1      | 0      | 0      | 0      | 1      | 0      | 0      | 1      | 0      | 3      |
| Mayors’ RT | 0  | 0      | 0      | 0      | 0      | 1      | 0      | 0      | 0      | 1      | 0      | 1      | 1      | 0      | 4      |
| Total   | 15     | 16     | 14     | 14     | 8      | 14     | 8      | 15     | 54     | 54     | 91     | 91     | 91     | 91     | 91     | 91     |

Table 4
Total project financing compared with the original estimates.

| Original budget | Actual budget |
|-----------------|---------------|
| Cost to GEF Trust Fund: | 16414000.0 | 15959172.0 |
| (in cash & kind) | 48.2 | 44.12 |
| Government in-kind | 10200830.0 | 19369459.0 |
| co-financing | 30.0 | 53.55 |
| Gov, in-kind co-financing | 7052461.0 | 19.50 |
| Regional meetings | 43960.0 | 0.12 |
| Participation in Expert meetings | 5523.0 | 0.15 |
| Participation in RSC. | 203704.0 | 0.56 |
| MRT, NGO Forum etc Regional Training | 157570.0 | 0.44 |
| Echo-seminars | 367080.0 | 1.01 |
| Chinese Government | 18000000.0 | 4.98 |
| Cash Co-financing | 1230818.0 | 3.40 |
| Operational Phase | 6810000.0 | 20.0 |
| Cash Co-financing | 8468576.0 | 23.41 |
| Demonstration site and pilot activities | 403809.0 | 1.12 |
| Personal co-financing (PCU staff) | 630000.0 | 1.8 |
| Cost to UNEP (in cash & kind) | 431902.0 | 0.19 |
| Total cost of project | 34054830.0 | 100.0 |
| Total | 36168541.0 | 100.0 |
Comparison of original estimates and actual expenditures by object of expenditure.

| Project Personnel (PCU) | Original | Actual | % Change |
|------------------------|----------|--------|----------|
| Consultants            | 2,322,000| 3,686,414| 64.4     |
| 368,000                | 196,941  | 46.5   |
| Administrative support | 612,000  | 330,703 | 46.0     |
| Travel on official business | 460,000 | 315,820 | 31.3     |
| Total PCU costs        | 3,672,000| 4,511,879| 22.0     |
| MoUs for SEAs and Demonstration sites | 8,941,000 | 8,337,443 | 7.0 |

Meetings/conferences
- Project Steering Committee meetings
- Regional Scientific & Technical Committee
- Regional Working Group
- Mangroves (RWG-M)
- Regional Working Group
- Corals (RWG-C)
- Regional Working Group
- Seagrass (RWG-S)
- Regional Working Group
- Wetlands (RWG-W)
- Regional Working Group
- Fisheries (RWG-F)
- Regional Working Group
- Pollution (RWG-1P)
- Regional scientific meetings in
  - Legal Task Force meetings
  - Economic Task Force
  - Mayors and Demo Site
  - Managers Round Table
- Other mtgs
- Total Meeting Costs
- Expendable equipment
  - (items under $1500 each)
  - Non-expendable equipment
    - (computers, office equipment)
  - Premises (office rent, maintenance of premises, etc)
  - Operation and maintenance of equip.
  - Reporting costs (publications, maps, newsletters, printing, etc)
  - Sundary (communications, postage, freight, clearance charges, etc)
- Hospitality and entertainment
- Evaluation (consultants fees/travel/DOSA, admin support, etc)

Table 5

2004b) concluded:

“Non-expendable equipment

| Total Meeting Costs | 1,648,000 | 1,532,510 | 7.0 |
|---------------------|-----------|-----------|-----|
| Meetings/conferences | 150,000   | 89,567    | 40.3 |
| Regional Scientific & Technical Committee | 180,000   | 146,086   | 18.8 |
| Regional Working Group | 126,000  | 98,610    | 21.7 |
| Mangroves (RWG-M) | 126,000   | 73,107    | 42.0 |
| Regional Working Group | 126,000  | 104,888   | 16.8 |
| Corals (RWG-C) | 126,000   | 88,100    | 30.1 |
| Regional Working Group | 108,000  | 88,736    | 17.8 |
| Seagrass (RWG-S) | 126,000   | 85,011    | 25.3 |
| Regional Working Group | 108,000  | 256,295   | 29.4 |
| Wetlands (RWG-W) | 126,000   | 296,741   |       |
| Regional Working Group | 126,000  | 73,107    | 42.0 |
| Fisheries (RWG-F) | 126,000   | 98,610    | 21.7 |
| Regional Working Group | 126,000  | 104,888   | 16.8 |
| Pollution (RWG-1P) | 126,000   | 88,100    | 30.1 |

Regarding the first point, the separation of scientific and technical matters from policy-related matters resulted in clarity of discussion and decision-making at both levels and, as noted in the mid-term review, "scientific and technical considerations do not become obfuscated by political discussions". Scientific and technical issues and considerations were discussed and analysed in a strictly operational context by scientists and managers from the countries and the region, resulting in recommendations being made to the policy level decision-making bodies (the Project Steering and Inter-Ministry Committees) solely on the basis of the best available, scientific and technical, data and information. This separation is implicitly recognised in the following extract from the mid-term evaluation report, which states:

“"The Project Steering Committee has fulfilled its role well in acting upon the information provided to it by the other project bodies, especially the RSTC and the PCU. It has not shied away from difficult decisions and has maintained an appropriate level of monitoring and oversight. The RSTC has fulfilled its role equally well by evaluating the technical aspects of working group activities and products and making appropriate recommendations to the PSC".

4.2. Design factors contributing to the success of the framework

It is perhaps worthwhile considering the elements that have contributed to this apparent success. These can be considered to be, first, in terms of the structure itself, and, second, in terms of the execution modalities (see Section 5.6.1 of Bewers and Su, 2004).

With regard to the structure itself two significant features are apparent:

- The clear separation between scientific and technical discussions, on the one hand, and the policy discussions, on the other; and,
- The significant feedback loops within the system that commit each individual and entity to communication and information exchange in two directions.

A more subtle feature of the management structure is the presence of feedback loops within the structure that provide two alternate pathways, one direct and one indirect, for any single individual or entity to interact with every other individual or entity in the project. These feedback loops are designed to enhance vertical as well as horizontal communication and interaction at all levels, resolve issues, and ensure that parties are both equipped for and, in fact are, carrying out their agreed actions.

Such mechanisms are necessary to avoid problems identified in other regions. For example, in many regional and multi-lateral projects and programmes, emphasis is placed on a hierarchical structure such that a single country node or focal point is engaged by the co-ordinating agency or lead organization in dialogue with counterparts from other participating countries. In general terms, a multi-country project or programme Steering Committee is frequently constituted of high level, policy oriented, representatives from each country, who delegate operational level responsibility for the execution of activities to individuals or institutions within each country. Very often, the operational level individuals or institutions are neither provided with a regional forum within which to raise concerns reflecting operational difficulties within each country nor, indeed, have any contact with their operational counterparts in the other countries. More importantly, in these types of structure, the focus of attention remains at the national level. This structure has allowed the PSC to make its decisions based on accurate and appropriate scientific and technical advice.”

The GEF 2004 review of the International Waters Portfolio (GEF, 2004b) concluded:

“The advantage of this structure is that it provides a balance of political and technical inputs to the Steering Group (sic), hopefully avoiding sectoral capture that affects many other projects. (Page 23, GEF, 2004b)"

And on page 24

“The innovative management structure of the South China Sea project is an interesting experiment in how to achieve a transparent mechanism that balances the skills and interests of technical experts and political representatives. It demands considerable project staff time for the management of some 40 separate contracts with Specialised Executing Agencies and requires considerable dedication from the staff of the PCU.”
level and regional and global considerations are frequently not considered in a national context at all.

Such hierarchical structures suffer from the problem that whilst the vertical lines of communication are emphasized nationally, horizontal communication across the region is often weak or absent. The structure of the South China Sea Project provides an opportunity for the operational level personnel from each country to meet and share individual experiences regarding difficulties and solutions to the resolution of national level difficulties or impediments to successful completion of regionally agreed activities. This system was enhanced though the direct engagement of the national operational institutions (the Specialised Executing Agencies) and the focal ministries with a neutral third party, i.e., (UNEP, through Memoranda of Understanding MoUs). These MoUs commit the operational institution (and the named individual concerned) to complete tasks according to an agreed work plan and timetable, while those with the Focal Ministry commit the Ministries of Environment to undertake a national co-ordination role.

Consequently, the Project Co-ordinating Unit had two channels of communication to reach the SEAs, directly, under the terms of the MoU, or, indirectly, via the focal ministry and vice versa. A failure to implement agreed actions at the national level on the part of the coordinating ministry can be addressed directly by the SEA or indirectly through communication with the Project Co-ordinating Unit. As the focal points for each component in each country were members of their respective regional working group, direct communications between UNEP, represented by the PCU, and the component focal points were possible, enabling direct problem-solving between the two parties concerned. In cases, however, where such communication was unsuccessful in resolving difficulties, the PCU could (and in two instances did) approach the National Focal Point and National Technical Focal Points in the Focal Ministries to intervene. Similarly, if the PCU failed to fulfill its responsibilities to an SEA and direct approaches did not solve the problem, then the SEA could enlist the support of the National Focal Point or National Technical Focal Point to approach the PCU on their behalf.

4.3. Operational factors contributing to successful management

4.3.1. Inter-agency linkages

This project was rather atypical of a GEF project in that it was implemented by national level institutions contracted directly to UNEP as the Implementing Agency of the GEF. In contrast, most GEF projects are implemented through an intermediate organization, such as a regional commission or regional office of an International agency or NGO that becomes responsible for the contractual arrangements, fund management and due diligence monitoring of national level actions. Not only does this increase the overall transaction costs but also it removes by a further step the GEF from its clients, the countries.

As no regional commission exists with a specific mandate focusing on the environment of the South China Sea, UNEP dealt directly with the countries, which were truly in charge, without filters, without false ambassadors and meddling intermediaries, with their own agendas.

An alternative mode of operation might have been to pass responsibility for the execution of the components of the project to individual regional or other entities. For example, the habitat subcomponents could have been executed by international NGOs such as IUCN or Wetlands International, the fisheries component by FAO and the Land-based pollution component by IUCN-WESTPAC. In part, such a mode of project implementation was precluded by the requirement of China that no international organisation other than UNEP be involved in project management. Had such an alternative mode of execution been adopted, it is unlikely that the resultant project would have been as well integrated or as well accepted by the participating governments as the project ultimately was.

4.3.2. Steering committee composition

The second key to success of the management structure concerned the manner in which the framework itself has been used, the nature of the consultations and participatory processes. There was a clearly articulated sense of ownership on the part of the governments, institutions and individuals involved in the project that stemmed, in part, from the fact that the Project Steering Committee comprised only two representatives of each participating country (total 14 members) with the Project Director serving as Secretary to the Committee. This composition was seen (implicitly) as being unnecessarily restrictive by the evaluators responsible for the International Waters Programme review who, in discussing the composition of various GEF Project Steering Committees state:

“The Project Co-ordinator is generally present as an observer, and in some cases (but not all), donor and NGO representatives are also given observer status. The chosen formula depends upon political and cultural realities; in the extreme case of projects such as the South China Sea and FREPLATA, the Steering Committee exclude all observers, except for the project co-ordinator. (GEF, 2004b page 31)

In the case of the South China Sea project, the political reality was that all seven countries were in disagreement with one or more of their neighbours regarding various territorial issues and sovereign rights. Under such circumstances, it is perfectly understandable that the countries did not wish to present an opportunity for external interference, whether direct or indirect, in what was, in 2002, the only multi-lateral intergovernmental forum addressing issues specific to the South China Sea.

The composition of the Project Steering Committee resulted in the country representatives themselves deciding upon what would and would not be done and the allocation of budgets to activities, within the overall limitations set by the GEF and presented in Table 1 of this document. The Project Steering Committee was therefore neither agency driven nor was its agenda unnecessarily influenced by the goals and objectives of international and regional organisations or the donor community. Many such organisations use inter-governmental bodies for purposes other than those for which they were created, frequently resulting in loss of momentum and in extreme cases breakdown of the communication mechanism itself. A further aspect of the operation of the present system was the use of experts and consultants entirely from within the region as noted by both the Mid-term evaluation and the SMPR.

“All consultants and reviewers hired to date come from the participating countries and Singapore. This has resulted in the PSC more readily accepting the recommendations of the RSTC, which wholly comprises ‘insiders’ who clearly have no external (i.e., extra-regional) agenda.” (Bewers, & Su, 2004)

4.3.3. Transparency and decision-making

The sense of national and regional ownership was further enhanced by the fact that the regional working groups conducted substantive work during their meetings to develop processes and procedures for assembling, analysing and synthesising data and information and, furthermore, actually conducted such syntheses and analyses during the meetings.12 This resulted from the fact that the project document does not detail “how” certain actions are to be implemented or decisions taken; rather it specifies “who” will be

12 The medium of communication throughout the project was English, which is not the first language of any participating country. This necessitated individual concentrations of effort on the part of all participants and frequently led to better interactions because individuals with greater facility in English tended to assist those with more limited understanding or capacity.
A committee of scientists of twenty people for example is unlikely to contain adequate specialist knowledge with respect to six project components and the differing socio-economic, legal and environmental situations in seven countries. Putting coral reef biologists, mangrove foresters and seagrass scientists together will not result in sound advice on “coastal habitat management”. This is because the nature of the environmental and ecological processes in these three systems, their use by human populations and the management measures required for their sustainability, are fundamentally different and, frequently, not part of the “shared” body of ecological knowledge. By creating a more specialised lower-level forum, the opportunity existed to consolidate a wider body of highly specialised knowledge and experience before sharing it with specialists having other, often very divergent, interests and concerns. Thus, not only were the mangrove scientists networked together but they were also linked to, and networked both nationally and regionally with, other habitat specialists, pollution experts, fisheries specialists, lawyers and economists. By having each regional entity working together, the opportunities for learning were expanded with, for example, the economic forum providing advice on matters such as economic evaluation to the biologists and the legal specialists providing advice to the national committees regarding the needs for strengthening the national legal regime.

The extent of stakeholder involvement was only partially reflected by the MoUs concluded between UNEP and the Specialized Executing Agencies. A number of the SEAs also established institutional sub-contractual links with other organizations at the national level such that the network of institutions directly involved in the project expanded to in excess of one hundred and the number of institutions indirectly involved through individual participation on National Committees and Sub-committees and Regional Working Groups exceeded four hundred. These kinds of linkage facilitated wider stakeholder involvement of local and national NGOs and provincial and local government agencies in the project, which expanded as the demonstration sites become operational.

4.3.5. Planning time

Finally, the lengthy process of project planning and preparation (6.5 years) resulted in more detailed itemisation of the execution arrangements than would have been possible in a shorter time frame. In addition, time was available for discussion and clarification of the structures, their roles and responsibilities at least at the level of the focal ministries resulting in a common understanding among the major parties. Consequently, what might have been seen as purely bureaucratic and political delays proved to be beneficial in that the management framework was fully outlined prior to commencement of project activities. The interpretation of this framework during project implementation was flexible and modifications were made to it during the first three years of project execution as circumstances demanded. An example of such modifications was the creation of a Regional Task Forces on Economic Valuation and Legal Matters that were not foreseen as necessary in the original project document.

5. Conclusions

It might be concluded that the constraints imposed on the design of the management framework by the requirements of the participating countries, provided positive benefits to project management. The restriction of membership of the Project Steering Committee to representatives of the participating countries resulted in a strengthened sense of ownership by those countries. The limitation on the involvement of other regional organisations in project management also worked to the benefit of project execution because it forced UNEP to deal directly with the countries rather than through an intermediary. More importantly, it resulted in the establishment of an effective Project Co-ordinating Unit and contributed to stronger interaction with UNEP at the national level than might have been the case. Both of these restrictions might therefore be equally applicable elsewhere where strong regional coordinating mechanisms have not been developed.

In conclusion, two cautionary notes merit mention. First, whilst this framework appears to have worked successfully in the context of the South China Sea Project, it would be unwise to simply replicate this in other regions in which different social and cultural contexts are apparent and different government structures and processes are used. Careful consideration needs to be given during
project or programme design to existing committees and their linkages at both the national and regional levels. Where possible, management of new projects and programmes should build on existing structures rather than duplicating them simply for the purposes of simplicity of project management.

Second, the amount of management time required to ensure smooth operation of an organizational structure such as that created for the SCS project, together with its associated networks, should not be under-estimated. All too frequently, funding agencies try to cut costs by reducing management and, in particular, personnel costs in the mistaken belief that such structures and processes are “not integral” to the success of a project or programme. In reality, however, a well-operated management structure provides numerous opportunities for cross-sectoral leaning and serves the dual purposes of not merely addressing the problem itself but, also, building capacity to solve future problems.

It may be concluded that the management framework designed for the implementation of the UNEP/GEF project entitled "Reversing Environmental Degradation in the South China Sea and Gulf of Thailand" has proved far more effective than was originally anticipated.

It is concluded that contributing factors to this success include:

- The design of a management framework that permits both “horizontal” (inter-country) and “vertical” (intra-country) interactions and networking among individuals at all levels of project implementation and execution;
- A management framework that includes a body (the RSTC) that serves as a forum for reconciling both sectoral and national interests and priorities;
- Clear separation between discussions of scientific and technical matters from discussions dealing with policy and principles at both national and regional levels;
- A management framework that facilitates the incorporation of sound scientific and technical advice and information into politically-based decision-making;
- The use of regional experts and consultants from the participating countries;
- Restriction of the membership of the Project Steering Committee to government representatives only and the exclusion of observers from regional and international agencies and institutions, other than the agency managing the activity;
- The framework allows for adaptive management and is not a rigid unchanging structure; and,
- Adequate time for detailed planning of the execution arrangements.

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