





United Nations Environment Programme UNEP/GEF South China Sea Project

Global Environment Facility

# Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand

### **REPORT**

Seventh Meeting of the Regional Working Group for the Coral Reefs Sub-component

Kudat, Sabah, Malaysia, 10<sup>th</sup> – 13<sup>th</sup> July 2006







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Cover Photo: Coral reef in Koh Chang (Thailand) Demonstration Site, by Marine Biodiversity Research Group, Ramkhamhaeng University.

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# Report of the Meeting

#### 1. OPENING OF THE MEETING

#### 1.1 Welcome Address on behalf of UNEP

- 1.1.1 The Senior Expert, Dr. Vo Si Tuan formally opened the Seventh Meeting of the Regional Working Group on Coral Reefs (RWG-CR). He welcomed participants to the meeting on behalf of the Executive Director of UNEP, Dr. Achim Steiner; the Officer in Charge of the UNEP Division of Global Environment Facility Co-ordination, Mr. Olivier Deleuze, and the Project Director, Dr. John Pernetta. Dr. Tuan informed the meeting that Dr. Pernetta would participate in the last two days of the meeting.
- 1.1.2 Dr. Tuan noted that the important agenda items for this meeting included consideration of the finalisation, adoption and implementation of National Action Plans; the coral reef elements to be included in the Strategic Action Programme and in particular, elaboration of the actions and their associated costs; regional GIS, meta-database, and project website; and the South China Sea Training Programme. He noted that an operational plan and budget for the Tun Mustapha Park demonstration site, needed to be developed during the meeting.
- 1.1.3 Dr. Tuan welcomed Mr. Vellayutham Pachaimuthu, the Programme Officer of East Asian Seas, Regional Co-ordinating Unit (EAS/RCU), and noted that his presence provided a good opportunity to discuss the potential contributions of the South China Sea Coral Reef Focal Points to the facilitation framework for management and monitoring coral reefs currently being developed by the East Asian Seas, Regional Co-ordinating Unit. Mr. Pachimuthu would present the outcomes of the "COBSEA Workshop on Coral Reef Monitoring and Management and the proposed COBSEA Coral Reef Facilitation Framework", under agenda item 9.
- 1.1.4 Dr. Tuan extended a warm welcome to, Mr. Nipat Somkleeb, the Mu Koh Chang Site Manager and researcher of the Department of Biology, Faculty of Science, Ramkhamhaeng University, and to Mr. Nasrulhakim Bin Maidin; the Marine Research Officer of the Sabah Parks.

### 1.2 Opening Statement by a Representative of the Sabah Government

1.2.1 No opening statement was delivered on behalf of the Sabah State government.

### 1.3 Introduction of Participants

1.3.1 The Senior Expert informed the meeting that regrettably Professor Ridzwan could not attend the meeting due to severe personal health problems. He noted that since there were a number of observers present a brief introduction of the participants would be appropriate. Dr. Tuan therefore invited participants to briefly introduce themselves and there followed a "tour de table", during which the participants introduced themselves. The list of participants is attached as Annex 1 to this report.

#### 2. ORGANISATION OF THE MEETING

#### 2.1 Election of Officers

- 2.1.1 The Senior Expert noted that the Rules of Procedure state that, the Regional Working Group on Coral Reefs shall elect, from amongst the members, a Chairperson, Vice-Chairperson and Rapporteur to serve for one year. The Rules further state that members shall be eligible for re-election no more than once.
- 2.1.2 Members were reminded that at the fifth meeting in Koh Chang, Thailand, 13<sup>th</sup> 16<sup>th</sup> September 2004, Dr. Thamasak Yeemin, Dr. Porfirio M. Aliño, and Mr. Kim Sour were elected as Chairperson, Vice-Chairperson and Rapporteur, respectively. During the sixth meeting in Masinloc, Philippines, 22<sup>nd</sup> 25<sup>th</sup> August 2005, Dr. Thamasak, and Dr. Aliño were re-elected as Chairperson and Vice-Chairperson respectively, and Mr. Abdul Rahim Bin Gor Yaman was elected as Rapporteur. In accordance with the rules of procedure, Dr. Thamasak and Dr. Aliño were not eligible for re-election as Chairperson and Vice-Chairperson respectively.

2.1.3 The Senior Expert called for nominations, and of, a Chairperson, Vice-Chairperson and Rapporteur to serve until the Eighth Meeting in 2007. Dr. Aliño nominated Dr. Suharsono as Chairperson, Dr. Thamasak and Professor Chou Loke Ming seconded this nomination. Mr. Vibol nominated Mr. Nguyen Van Long as Vice-Chairperson; and Mr. Long nominated Mr. Vibol as Rapporteur. There being no further nominations, Dr. Suharsono, Mr. Long, and Mr. Vibol were elected by acclamation as Chairperson, Vice-Chairperson and Rapporteur respectively.

#### 2.2 Documentation and Administrative Arrangements

- 2.2.1 The Chairperson invited the Secretary, Mr. Sour, to introduce the documentation available to the meeting and listed in document UNEP/GEF/SCS/RWG-CR.7/Inf.2. Mr. Sour briefly introduced the documents and highlighted the main substantive items for consideration and decision by the Working Group, which included the administrative reports, the status of substantive reports, the status of demonstration sites, framework for assessing the effects of fishing in the habitat demonstration sites, the finalisation and adoption of National Action Plans, finalisation of inputs to the Regional Strategic Action Programme, the project website and associated databases, the training activities, the outcomes of COBSEA Regional Workshop on Coral Reef Monitoring and Management, and the revision of the work plan and activities for the Working Group. He invited participants to table any additional materials. The list of documents is contained in Annex 2 of this report.
- 2.2.2 Mr. Sour briefed participants on the administrative arrangements for the conduct of the meeting, and the proposed organisation of work (UNEP/GEF/SCS/RWG-CR.7/Inf.3). He noted that formal sessions of the meeting would be conducted in English and in plenary although sessional working groups could be formed at the discretion of members to complete substantive agenda items as appropriate.

#### 3. ADOPTION OF THE MEETING AGENDA

- 3.1 The Chairperson introduced the provisional agenda prepared by the Project Co-ordinating Unit (PCU) as document UNEP/GEF/SCS/RWG-CR.7/1 and the annotated provisional agenda, document UNEP/GEF/SCS/RWG-CR.7/2, and invited members to propose any amendments or additional items for consideration, prior to the adoption of the agenda.
- 3.2 Dr. Thamasak requested that the preparation of scientific papers for the PEMSEA congress be discussed under Agenda Item 12, Any Other Business.
- 3.3 There being no further items proposed for inclusion, nor proposals for amendment, the meeting adopted the agenda as it appears in Annex 3 of this report.

# 4. STATUS OF ADMINISTRATIVE REPORTS, SUBSTANTIVE NATIONAL REPORTS AND NATIONAL ACTION PLANS

- 4.1 Status of the Administrative Reports for 2005: Progress Reports; Expenditure Reports; Audit Reports; and MoU Amendments
- 4.1.1 The Chairperson invited the Senior Expert to introduce the document UNEP/GEF/SCS/RWG-CR.7/4 "Current Status of Budgets and Reports from the Specialised Executing Agencies in the participating countries". Dr. Tuan drew to the attention of the meeting a number of outstanding issues and matters requiring the attention of the working group.
- 4.1.2 Dr. Tuan noted that the second amendment to the MoU with Malaysia had still not been signed and he expressed the hope that discussions regarding its finalisation could be conducted during the course of this meeting. He noted further that for the execution of three of the operational demonstration sites, addendums to existing MoUs had been issued. In the case of the Phu Quoc joint coral reef and seagrass site in Viet Nam a new tripartite MoU had been signed between UNEP, the Provincial Government and the Viet Nam Environmental Protection Agency.
- 4.1.3 The Senior Expert noted that the administrative reports from the Philippines for the period July to December 2005 were the only ones received by the due date. Cambodia, Thailand, and Viet

Nam had submitted the final sixth-month reports for the 2<sup>nd</sup> half of 2005, whilst that for Indonesia required some further clarification. The reports from the demonstration sites, Koh Chang, Phu Quoc and Masinloc had also been received.

- 4.1.4 Dr. Tuan noted that for the year 2005 only Thailand and Viet Nam had submitted the audit report, and no country had submitted the reports by the due date. He reminded members that 30<sup>th</sup> March is the deadline for submission of the audit report on expenditures for the preceding year.
- 4.1.5 Regarding co-financing the Senior Expert noted that the realised co-financing was higher than estimated over the period 2002 to 2005 and reminded members that the Project Steering Committee had agreed to increase co-financing from participating governments for national coordination activities and that such co-financing received by the SEAs should be reported by the Focal Points in their administrative reports.
- 4.1.6 Mr. Vibol raised a concern regarding the increase in auditing costs beyond what was in the planned budget line. Dr. Tuan suggested that Mr. Vibol use the invoice as the basis for requesting a budget revision. Due to the high cost of international auditing company services compared to the total budget for implementing activities, which was small, Mr. Rahim proposed to have auditing by Government authorities. It is noted that UNEP requires an annual audit of expenditure by a recognised firm of public accountants (for a Government, by Government auditors).
- 4.1.7 Dr. Tuan noted that where there were special issues the Focal Points should send a formal letter to the Project Director for advice.
- 4.1.8 The Malaysian Focal Point noted there had been internal problems resulting from the new structure of government departments and apologised for the delays in signing the second amendment. The Senior Expert noted that during the meeting he would take time to discuss these problems with the Malaysian Focal Point and try to finalise the second amendment of the MoU. He asked the Malaysian Focal Point to review the draft second amendment of the MoU before that discussion.

### 4.2 Reporting Procedure in the Demonstration Sites

- 4.2.1 The Senior Expert noted that four Coral Reef Demonstration Sites including Koh Chang (Thailand), Masinloc (Philippines), Belitung (Indonesia) and a transboundary (Viet Nam and Cambodia) and joint habitat (seagrass and coral reefs) demonstration site Phu Quoc/Kampot were now operational. It was recognised that almost all site managers had little experience in the United Nations reporting procedures and the first reports had not met the reporting requirements. He noted further that the PCU had provided some guidance to improve reporting from the demonstration sites in Appendix 2 to the document UNEP/GEF/SCS/RWG-CR.7/4. Dr. Tuan noted further that demonstration site reports have to be separated from sub-component reports on national activities.
- 4.2.2 Dr. Thamasak sought clarification concerning the reporting of expenditures in regard to sub-contracts. He noted that some sub-contracted activities had been largely completed on time but that final payments had not yet been made. In this case should the contractual obligations be reported in the expenditure report? In response Dr. Tuan noted that only actual expenditures should be reported but that in making a request for a cash advance such obligations should be taken into account.
- 4.2.3 The Chairperson requested clarification from the Senior Expert regarding the reporting requirements and suggested that a simple table of requirements be prepared to clarify the details of the requirements. Dr. Tuan prepared such a table, which is attached as Annex 4 to this report.

#### 4.3 Status of Publication of National Reports in English and Local Languages

4.3.1 The Chairperson invited, the Senior Expert to present the document UNEP/GEF/SCS/RWG-CR.7/5 "Status of Substantive Reports of the Specialized Executing Agencies for the Coral Reefs Sub-component from the Participating Countries" and highlighted the national publications that had been received by the PCU. He pointed out that in the case of Indonesia and the Philippines, national publications covered the entire countries rather than being restricted to the South China Sea geographic region.

- 4.3.2 Regarding publication of the national reports in English, Dr. Tuan noted that additional inputs following the agreed contents had been received from all participating countries; and these inputs had been re-arranged and compiled into a draft version entitled "Coral Reefs in the Coastal Waters Bordering the South China Sea (Cambodia, Indonesia, Malaysia, Philippines, Thailand and Viet Nam)" with more than 200 pages including overview and the national reports of participating countries. He noted further that the PCU would contact several members during the course of the meeting to improve some areas of weakness in the current document.
- 4.3.3 Members were invited to inform the meeting of the updated status of publication of the National Reports and to provide additional information needed for finalisation of the prepared draft of the publication for regional dissemination.
- 4.3.4 Mr. Rahim informed the meeting that the Malaysian National Report had been finalised and it was planned to publish this in English by 15<sup>th</sup> September 2006. In response to a question from Mr. Rahim, Dr. Tuan noted that publications in National Language should carry the three logos of the GEF, UNEP and the SCS project and the standard United Nations disclaimer. He noted that there was no required format, which was dependent upon the national committee concerned, and noted further that at least 12 copies should be supplied to the PCU. The Senior Expert informed the meeting that the front pages of the national reports in local languages were featured on the front page of the website and each cover served as a link to the document on the SEAs website.
- 4.3.5 Dr. Aliño informed the meeting that the National Coral Reef Report for the Philippines was published in English only, and Dr. Thamasak noted that Thailand's Coral Reef Sub-component had published in Thai language the GIS database, National Acton Plan, and that the national report entitled "Status of Coral Reefs in Thailand" would be published soon.
- 4.3.6 Mr. Long noted that the National Action Plan in Viet Nam would be publicised through production of a poster and brochure for dissemination to local government and communities.

#### 4.4 Finalisation, Adoption and Implementation of National Action Plans

- 4.4.1 Dr. Tuan reminded members that the deadlines for completion of the final draft of the National Action Plans (NAPs) for Coral Reefs in each of the participating countries had been agreed by the sixth meeting of the RWG-CR and were contained in the published work plan. National Action Plans had not been received by the PCU from Malaysia and the Philippines. The PCU had received before the seventh meeting version 3.0 "National Policy, Strategy, Programs, Action Plan and Activities of Coral Reef Management in Indonesia", in which the portion of "Action Plan and Project Activities, 2004 2009" contains actions for four districts bordering the South China Sea. Dr. Tuan noted further that a number of participating countries were behind the work plan, which had resulted in delays in the review and analysis by the PCU of their contents as inputs to the further development of the regional Strategic Action Programme.
- 4.4.2 Dr. Tuan noted that in the case of Indonesia and Philippines where the NAPs were of broader geographic scope the activities focussed on the South China Sea should be the ones used in further developing the SAP. He noted that in the case of Thailand, the activities of the NAP showed a clear focus on the Gulf of Thailand.
- 4.4.3 Dr. Aliño noted that he had submitted a revised NAP on September 30<sup>th</sup> 2005 with activities focused on the South China Sea Geographic region, and promised to provide an electronic copy of this revised version to the PCU during the meeting. Dr. Tuan suggested that when Focal Points send documents to the PCU and if they do not receive any acknowledgment from the PCU within five working days, then they should contact the PCU to check that the document has indeed been received.
- 4.4.4 Dr. Suharsono noted that in Indonesia, the government has already adopted what is called "*The National Strategy and Policy and Acton Plan*", which focuses on 6 administrative provinces, and 12 districts. For the South China Sea geographic region, the plan focuses on 4 districts. The time frame of the plan is 2009, and it would be possible to extend this for an additional 5 years.

- 4.4.5 The Senior Expert concluded that all revised NAPs, except that for Malaysia had been received. He noted that Malaysia had delivered a draft NAP during the meeting and noted further that the Cambodian NAP was in the process of approval by the Ministry of Agriculture, Forestry and Fisheries (MAFF), Viet Nam's Coral Reef National Action Plan together with NAPs of other Sub-components had been submitted to the Viet Nam Environment Protection Agency for adoption. The Philippine's NAP was in the process of consideration by the Department of Environment and Natural Resource (DENR).
- 4.4.6 The meeting noted that Cambodia planned to publish the National Action Plan in September, and the Philippines and Malaysia would print their National Action Plans in December 2006. Dr. Suharsono suggested that the reasons for the delay in the adoption of the NAPs by national government should be reported to the RSTC and PSC.
- 4.4.7 Dr. Aliño informed the meeting of the problems in adopting the NAP in the Philippines that reflected recent personnel changes at the Ministerial and Permanent Secretary levels. A further difficulty was that the local government has a high degree of autonomy, and implementation of the NAP would depend on local government budget allocations, as counterpart funds to the national programme. He added that at local level there were separate activities for coastal environment management but that plans for coastal resource management were generally very short-term, due to the fact that local governments change every three years.
- 4.4.8 Dr. Thamasak noted that he had submitted the NAP for Thailand Coral Reef to the National government, and expected to get approval by the cabinet by mid 2006. However, the current political uncertainty in Thailand is causing delays in the approval of the plan.
- 4.4.9 Mr. Long noted that although the Viet Nam government has not approved the NAP it was in the process of approval and one project in the ongoing restoration programmes, focused on coral reefs in central Viet Nam would contribute towards implementation of the Action Plan.
- 4.4.10 Mr. Vibol informed the meeting that the Cambodian NAP had been submitted to the Ministry of Agriculture, Forestry and Fisheries (MAFF) for formal approval, he hoped that the NAP would be signed by August 2006. He further informed the meeting that the Cambodian government has launched a new fisheries law, in which some articles were related to coral reef management and conservation.
- 4.4.11 Mr. Rahim informed the meeting that although the NAP was not yet finalised and approved the Government recognised the importance of coral reefs and had stopped all development activities in the islands of Terengganu.

#### 5. CONSIDERATION OF DEMONSTRATION SITE ACTIVITIES

# 5.1 Status of Implementation of Activities at the Operational Demonstration Sites

- 5.1.1 The Senior Expert remarked that activities at four Demonstration Sites had commenced during 2005 and early 2006. The proposal for Ninh Hai Medium Sized Project had been submitted to the GEF Secretariat through the DGEF in Nairobi. He noted that the operational plan for the Tun Mustapha Park (Malaysia) has not yet been finalised.
- 5.1.2 The Focal Points for Coral Reefs from the four countries were invited by the Chairperson to brief the meeting on the status of the implementation of activities at Koch Chang, Phu Quoc, Masinloc, and Belitung.
- 5.1.3 Dr. Thamasak briefly reported on the activities in Mu Koh Chang, which: included building public awareness (designing and updating website in Thai language); training courses on marine ecosystems and sustainable use; sustainable tourism development; networking among agencies; capacity building; and the improvement of site management to support coral reef rehabilitation. He noted some problems including changes in key staff at central and provincial governments and the bureaucratic system of sub-contracting.

- 5.1.4 Mr. Long informed the meeting regarding activities at the Phu Quoc demonstration site, which had been operating for almost a year. The first joint meeting between the management teams of Phu Quoc and Kampot demonstration sites had been held, which had developed a cooperative framework and discussed various transboundary issues. The Management Board, Management Advisory Group and the Project Steering Committee had been established. Data on Economic Valuation at the site level had been collected and fieldwork as part of the assessment had provided data on biodiversity, water quality and sediment. Another important activity was the restoration of some species of coral within an area of  $2000 \, \text{m}^2$ . Mr. Long added that a local training-workshop on both ecosystems had been conducted and that a planned activity was the establishment of different use zones for management purposes.
- 5.1.5 Mr. Vibol added that the joint meeting had reached an agreement to develop a joint GIS database and guidelines for resource assessment and monitoring and that although the Kampot site was designed to focus on seagrass, coral habitat is also found at the site.
- 5.1.6 The Senior Expert suggested Mr. Vibol should organise a local training workshop in Kampot in order to discuss and select key species for local people as indicators for monitoring. Mr. Long noted that both ecological and economic species should be selected as indicators. Dr. Tuan advised that the guidelines should be developed based on the knowledge of local people and Mr. Vibol noted that the Focal Points of the two demonstration sites should work closely to discuss the guidelines.
- 5.1.7 Mr. Long in responding to a question from Dr. Suharsono regarding the management framework of the Phu Quoc demonstration site, explained that activities started through development at the lowest level of the structure, namely the management board, which would then bring the draft to a higher level advisory group for discussion. Finally, the Steering Committee was the superior body that makes the final decision.
- 5.1.8 Dr. Aliño briefed the meeting on the activities at Masinloc where participatory coastal resource assessments (PCRA) had been undertaken. The establishment of two additional marine sanctuaries had also been initiated. Other activities focused on the development of a revised integrated management plan with consultation among various stakeholder, working groups. Some training of stakeholders on resource assessment had been undertaken. He provided details of other activities including initial baseline monitoring of selected marine sanctuaries, the development of a glossary of scientific and local names for organisms, development of a framework for zoning, resource mapping, and clustering of village groups for planning and community consultations, guideline formulation and law enforcement together with initiation of a credit or incentive system for local enforcers. Dr. Aliño noted some problems regarding regulation of aquarium fish capture and conflicts between some groups regarding fish cages and pens.
- 5.1.9 Dr. Suharsono reported to the meeting the activities at Belitung. He noted that the proposal had only recently been signed and that not many activities had been executed to date. A project office had been established and various activities had been conducted in co-operation with local government. Dr. Suharsono raised concerns regarding the unspent funds during the first six months. Dr. Tuan suggested that Dr. Suharsono should carry forward the unspent funds to the next reporting period following which a budget revision could be undertaken at the end of the year.
- 5.1.10 Dr. Tuan reported to the meeting that the process of developing the operational plan for the Tun Mustapha Park was seriously delayed. Only very draft inputs had been received by the PCU following detailed comments from the PCU made in December 2005. It was agreed that the absolute deadline for finalisation of an operational plan for the Tun Mustapha Park was 31<sup>st</sup> August 2005.

# 5.2 Consideration of Preliminary Framework for Assessing the Effects of Fishing in the Habitat Demonstration Sites

5.2.1 The Chairperson invited, the Senior Expert to introduce document UNEP/GEF/SCS/RWG-CR.7/6 "Preliminary Framework for Assessing the Effects of Fishing in the Habitat Demonstration Sites". He highlighted the consensus view that there was a need for a clearer definition of the difference between the "threats from fisheries" and the "threats to fisheries". Dr. Tuan summarised the preliminary efforts of the PCU and the Regional Working Group on Fisheries to develop a framework for: assessing the effects of fishing on the environment; the effects of the environment on fisheries; and addressing key issues in the study and management of the linkages between fisheries and habitats.

- 5.2.2 Dr. Tuan noted further that the RWG-F had development not merely the framework for assessing the Effects of Fishing in the Habitat Demonstration Sites, but also guidelines for Fisheries *refugia* which had been accepted as part of the ASEAN/SEAFDEC Guidelines for sustainable fisheries in Southeast Asia.
- 5.2.3 The Senior Expert pointed out that the designed framework attempts to integrate the fisheries and environment management issues in the demonstration sites. The framework could assist demonstration site managers develop their own management plans. He invited members of the RWG-CR to: review and revise this framework; to provide comment on any elements that required consideration in the context of the coral reef demonstration sites; and to propose any possible initiatives for improving the integration of fisheries and habitat management in the coral reef demonstration sites.
- 5.2.4 The Chairperson suggested, and the meeting agreed, to discuss the contents of Table 2 of document UNEP/GEF/SCS/RWG-CR.7/6, line by line. During a lengthy discussion, the table was amended and revised as it appears in Annex 5. The meeting noted that focal points should consider the elements of the framework and apply the approach at the coral reef demonstration sites.

# 5.3 Provision of Additional Empirical Data of Economic Values at the Site Level Using the Procedures Recommended by the Regional Task Force on Economic Valuation

- 5.3.1 The Chairperson invited, the Senior Expert to introduce document UNEP/GEF/SCS/RWG-CR.7/7 "Valuing the Coral Reef Demonstration Sites". Dr. Tuan reminded members that the work plan of the group included an undertaking to provide data regarding economic valuations at the demonstration sites, and that during the 6<sup>th</sup> meeting of the RWG-CR the Focal Points of Phu Quoc, Tun Mustapha Park, Belitung, Mu Koh Chang, and Masinloc, had all agreed to provide the data on economic value of the demonstration sites during 2006. No data have been received to date by the PCU. He noted that the RTF-E needs support from the habitat Sub-components with respect to these data if they are to develop regional values for use in the Strategic Action Programme and the sites needed such data to develop their business plans at the demonstration sites.
- 5.3.2 The Senior Expert invited members to review the data provided in Table 1 of the document UNEP/GEF/SCS/RWG-CR.7/7. It was further requested that valuation data be provided according to the columns in Table 2 of the document. The meeting noted that the row headings of Table 2 referred to mangroves and that the uses of coral reefs in Table 3 should be used as the row titles.
- 5.3.3 Dr. Suharsono noted that data on economic values had already been submitted to the PCU along with national reports. He sought clarification regarding the required data on economic values of other sites. Dr. Tuan responded that the information contained in the national reports was too broad and too general to be of any value to the RTF-E. The 5<sup>th</sup> meeting of the RTF-E would be conducted in the future, and Dr. Tuan requested Focal Points to send the demonstration site data as rapidly as possible.
- 5.3.4 Dr. Thamasak noted that data on the economic values would be obtained through an evaluation of tourism related statistics collected from various agencies by the Mu Koh Chang demonstration site.
- 5.3.5 The meeting agreed to provide data on economic values from the demonstration sites in the formatted table at site level to Dr. Tuan by 7<sup>th</sup> August 2006. Economic values from other coral reef sites bordering the South China Sea were also requested, if available these would be provided at the same time.

# 6. FINALISATION OF INPUTS FROM THE CORAL REEF SUB-COMPONENT TO THE REGIONAL STRATEGIC ACTION PROGRAMME

6.1 The Chairperson invited the Senior Expert to introduce document UNEP/GEF/SCS/RWG-CR.7/8 "Inputs from the Coral Reef Sub-component for Updating the Regional Strategic Action Programme". Dr. Tuan noted that the development of the Strategic Action Programme (SAP) is one of the key project activities during the operational phase. During the Sixth Meeting of the RWG-CR, members had discussed the SAP targets, and activities subsequently the RSTC had provided recommendations regarding the targets for coral reef Sub-component.

- 6.2 The Senior Expert suggested that members of the RWG-CR review the entire contents of Annex 1 of document UNEP/GEF/SCS/RWG-CR.7/8 focusing initially on Table 1 (Status of Coral Reef Management), then on regional threats, goal, targets, and activities, and costs of action.
- 6.3 Members of the RWG-CR discussed the contents of Table 1 "Status of Coral Reef Management at the Country and Site Levels in the South China Sea". Dr. Suharsono noted that members might not have the data at hand in the meeting and Mr. Long suggested that a deadline be set for completing the table and dispatching it to the PCU. In Viet Nam for example, not all MPAs were fully managed and some areas were designated as multiple use areas, in which some zones were established for both small and large-scale fishing.
- 6.4 Professor Chou noted that as long as an area was under some form of legal management it should be listed as being under management. He proposed and the meeting agreed to add one more column headed, "management effectiveness", and to change the column title from "status of management" to "management type".
- 6.5 The meeting discussed the possible addition of a table for ranking the management effectiveness by means of the "sustainable management indicator matrix" developed in the Sixth Meeting of the RWG-CR for prioritising management effectiveness.
- 6.6 Dr. Aliño briefed the meeting on the rating of management effectiveness, including the criteria, which was used for MPAs in the Philippines, and suggested that the meeting could modify the checklist for evaluating management effectiveness. The Senior Expert pointed out that the meeting needs information on the existing management effectiveness at site level only. Dr. Aliño noted that there was a prioritisation scheme for management intervention in the Philippines that used biological diversity values and economic values based on expert's opinion.
- 6.7 Mr. Rahim proposed five categories for ranking the management effectiveness:
  - 1. Area declared or proposed to be declared/management plan developed;
  - 2. Existing management framework is implemented;
  - 3. Enough trained manpower;
  - 4. Enough facilities and equipment for management;
  - 5. Sustainable financing implemented proposed for declaration.
- 6.8 Dr. Suharsono noted that given the complexity of the situation the group should try to simplify the rating for management effectiveness. Dr. Aliño noted that a simple tool should meet the objectives; and should evaluate all the functions over a defined time frame.
- 6.9 It was finally agreed that ranking of management effectiveness should be included in the revised Table 1 and that it should be categorised as None (for areas not under any form of legal management), low, medium, and high. The meeting agreed to submit to the PCU the revised information by 30<sup>th</sup> August 2006.
- 6.10 The meeting then proceeded with a discussion of the threats from national to regional levels in the South China Sea. The meeting agreed that the following were the regional threats to coral reefs:
  - Overfishing
  - Destructive fishing,
  - Pollution (Eutrophication)
  - Sedimentation
  - Unsustainable fisheries and aquaculture
  - Deforestation on upland areas
  - Coastal development
  - Unsustainable tourism
  - Coral bleaching
- 6.11 The meeting further agreed that the threats should be ranked overnight from 1 to 9 in decreasing order of importance. The inputs from all members were compiled by, Dr. Tuan and are presented in Table 3 of Annex 6, which also contains a regional priority based on the summation of the national values.

- 6.12 The meeting proceeded to discuss the regional activities for coral reef that should be included in the SAP. The Chairperson proposed and the meeting agreed to discuss these line by line. Dr. Tuan suggested that the meeting should consider the activities in relation to the threats and corresponding objectives in each component.
- 6.13 The Senior Expert responded to Dr. Suharsono's query regarding the costing of the SAP, noting that the cost estimates used in the National Action Plans would be one basis for a determination of the costs of the SAP.
- 6.14 During discussion numerous points were raised including the fact that: the regional activities provided the opportunity for reporting and facilitating exchange of information: that regional activities would not include fieldwork and primary data collection which should be undertaken in the framework of the NAPs; and that sub-component 2.2, *Monitoring the SAP* should encompass monitoring of both the SAP and the NAPs.
- 6.15 Professor Chou pointed out the need for guidelines under the activities relating to laws and policies and the meeting agreed to change the activity of 2.31 to "synthesis of laws that contribute effectively to sustainable coral reef management". Dr. Aliño proposed and the meeting agreed to change the Sub-component 2.4 to "Regional co-ordinating mechanism for coral reef management", and to add activity 2.4.1 "Regional harmonisation forum to facilitate convergence of NAPs and SAP.
- 6.16 Regarding the estimation of costing for regional activities, the members of the RWG-CR sought advice from Professor Chou and Mr. Pachaimuthu who had experiences in organising regional activities. Professor Chou provided experience of cost estimation for organising regional workshops by GCRMN; and Mr. Pachaimuthu provided experience of estimating costs of regional activities organised by the East Asian Seas/Regional Co-ordinating Unit (EAS/RCU).
- 6.17 Following this lengthy discussion, of the activities and their costs, these were finalised and are itemised in Table 4 of Annex 6 of this report.
- 7. UPDATE OF THE REGIONAL GIS DATABASE AND META-DATABASE AND EFFICIENT USE OF THE PROJECT WEBSITE
- 7.1 Status of the Regional South China Sea Meta-Database and GIS database, and use of the Project Website for Updating these Databases
- 7.1.1 The Chairperson welcomed the Project Director, Dr. Pernetta and Ms. Zarinah Waheed, Lecturer of the Universiti Malaysia Sabah (UMS) to the meeting.
- 7.1.2 The Chairperson invited Dr. Tuan to introduce document UNEP/GEF/SCS/RWG-CR.7/9, "Status of the UNEP/GEF South China Sea Project Website, Online Tools, and Activities to Promote the Coral Reef Sub-component of the Project". Dr. Tuan reminded the meeting that it was the Focal Points' responsibility to ensure that they present new coral reef related GIS and metadata sets to the Project Co-ordinating Unit as the data became available at the national level. He reminded them also of the agreements made during the sixth meeting regarding revisions and updating of national data for inclusion in the regional databases almost none of which have been implemented.
- 7.1.3 The Senior Expert noted further that the PCU had received meta-database entries from Cambodia, Viet Nam, Thailand, Indonesia, and the Philippines but no meta-data from Malaysia. He informed the meeting that the PCU had prepared a CD containing the website user manual and guidance regarding the editing and updating of the meta-database on-line. He noted that Site managers could update information regarding demonstration site activities and that an e-forum for the coral reef group could be formed if they so wished. He noted also that the CD's contained the reports of the working group meetings and the documents for the seventh meeting of the RWG-CR.
- 7.1.4 The Senior Expert responded to a query from Dr. Suharsono regarding the process of submission and/or updating of meta-data online and Dr Tuan noted that direct access by the focal points obviated the need for them to send meta-data to the PCU since entries could be made directly. Dr. Tuan noted further that the Focal Points were responsible for ensuring the quality of the data on the website and noted in this regard that Mr. Christopher Paterson, had conducted an analysis of the

meta-data entries submitted to date and highlighted a number of problems with existing entries that required attention from the focal points. The Senior Expert noted further that the PCU had recently received an extensive set of entries from Indonesia, and they had not yet been analysed. He noted also that the PCU had recently obtained a set of metadata from Indonesia via another source that were being screened for possible inclusion in the meta-database.

- 7.1.5 The Chairperson invited members to review the contents of the document, and to revise the existing entries and if there were new available data at national level, to add these to the meta-database. The Senior Expert responded to Mr. Rahim that the PCU had not received any meta-data from the former Focal Point, and suggested that Mr. Rahim might wish to contact him regarding this matter.
- 7.1.6 The Members participated in a short demonstration session online concerning access to and editing data entries on the website conducted by Dr. Tuan. He focussed on how to revise existing metadata entries, delete incorrect ones, and input new data. All focal points agreed that they understood the procedure regarding updating the meta-database online and agreed to revise and update the Metadatabase by 31<sup>st</sup> August 2006.

# 7.2 Consideration of Initiatives to Promote the Activities of the Coral Reef Sub-component of the Project

- 7.2.1 Dr. Tuan noted that document UNEP/GEF/SCS/RWG-CR.7/9, contained suggestions for various initiatives developed by the PCU that could support the substantive work of the RWG-CR in using the project website more effectively for the exchange of information and experiences through, for example, e-fora.
- 7.2.2 Members were invited to consider how to use the project website to improve communication between members of the RWG-CR, and for extending information about the coral reef sub-component activities to the wider SCS Project Network and other interested parties.
- 7.2.3 Dr. Tuan suggested two items for consideration: the first was the use of the demonstration site web-pages which appeared to be attractive to visitors accessing the site; the second was developing an e-forum, which involved all members of the RWG-CR in discussing topics of mutual interest. Dr. Pernetta noted that the e-fora on the site were intended for members of the project network hence participants would be restricted until more experience had been gained by all members. Only members of the RWG-CR would be able to post topics on the e-forum, however, everybody could read the articles and contribute by provision of information through working group members.
- 7.2.4 Dr. Suharsono noted that his institutional website had been developed and maintained in order to raise public awareness among local people and Dr. Thamasak noted that the Koh Chang website using Thai language was developed for use by local authorities and communities. Dr. Pernetta suggested that both websites should be linked to the SCS website and invited members to note the guidance in the manual about how to add a link to the SCS site.
- 7.2.5 Dr. Suharsono proposed as an initial topic for discussion the issue of Napoleon wrasse which had recently been added to the CITES appendix since there were serious threats to this species in ASEAN member countries. Professor Chou supported the proposal for exchanging experience and information from the participating countries via this kind of e-forum. Dr. Suharsono volunteered to make the first posting.

# 8. CONSIDERATION OF PROPOSED SOUTH CHINA SEA PROJECT TRAINING ACTIVITIES REGARDING THE CORAL REEF SUB-COMPONENT

# 8.1 Consideration of the Training Programme Approved by the RSTC

8.1.1 The Chairperson invited, the Senior Expert, to introduce the document UNEP/GEF/SCS/RWG-CR.7/10, "The South China Sea Project Training Programme". Dr. Tuan outlined the aim and modus operandi of the South China Sea Project Training Programme, as well as the procedures proposed for the selection of Implementing entities and the conduct of training courses. He noted that the desired content for the training courses regarding coral reef and seagrass management as identified by the Regional Scientific and Technical Committee was not very detailed and invited the members to consider adding more detail to what was already there.

- 8.1.2 Dr. Tuan also drew members attention to the information document, entitled The first Sub-Committee of the Regional Scientific and Technical Committee, which contained the agreed outline of the training programme developed by the Sub-committee of the RSTC. He noted that the training programme was an important set of activities for the next two years and that courses were envisaged as being of two types: regional training courses followed by national "echo" seminars. The list of 6 training courses in the information document had been approved by the RSTC.
- 8.1.3 The Senior Expert noted further that the selection process for implementing entities had been uploaded on the website and that Table 2 provided a tentative timetable for the training programme. Any concrete proposals submitted by potential implementing entities would be subsequently reviewed by the RSTC.
- 8.1.4 Eligible participants included site managers, associated staff members of, local communities, and national committees (excluding the Chairperson of the Committee). The eligible participants must be able to use English and be willing to conduct a national "echo" seminar after returning from a regional training course.
- 8.1.5 In response to a query from Mr. Rahim, Dr. Tuan noted that potential participants should be identified and details sent to the National Technical Focal Point who would be responsible for nominating participating individuals to the PCU. Dr. Tuan clarified that the training course was for both coral reef and seagrass", therefore nominations would come from both coral reef and seagrass SEAs, hence the need for the National Technical Focal Point involvement.

#### 8.2 Implementation of the Coral Reef Training Programme

- 8.2.1 The Chairperson invited members to consider, and comment on: appropriate participants for the courses; suitable topics for inclusion in each course; potential implementing entities; and how materials developed for regional training could be utilised in national level training activities.
- 8.2.2 Dr. Tuan noted that coral reef related individuals were eligible to attend not only the training course on coral reefs and seagrass but also other courses such as those on economic valuation, and project management. Focal Points should seriously consider the most appropriate individual to attend each course since one person was not allowed by the RSTC to attend more than one course.
- 8.2.3 Dr. Suharsono expressed concern regarding the need for English. Professor Chou noted that the participant nominated to attend the training should be able to communicate in English since all materials developed would be in English. Dr. Pernetta added that the participant would need to be able to translate the English language materials used in the regional training into local languages for the national "echo" seminars.
- 8.2.4 Dr. Suharsono suggested members consult with senior members of their committees and site managers in order to select the right participants. Dr. Pernetta reminded the Focal Points to take a national perspective rather one focussed on their own institution's needs.
- 8.2.5 Regarding training materials, Dr. Tuan noted that some of the materials developed by the Regional Working Group would be useful; and the implementing agency responsible for the training would consider these materials during preparation of training materials. Documents from other Regional Working Groups and Regional Task Forces, could be extracted for training materials.
- 8.2.6 Regarding the management of the training courses the Senior Expert noted that the PCU would sign an MoU with the implementing entity and that entity would be responsible for running the course, using as appropriate, additional experts from the region. The Senior Expert noted further that all SEAs were eligible to apply to conduct a training course by submitting the proposal to the PCU; and that the tentative timeframe of the training programme could be slightly adjusted.
- 8.2.7 Dr. Aliño noted that the Marine Science Institute of the University of the Philippines, was interested in conducting the regional training course on coral reefs and seagrass; however he required some clarification regarding the deadline of the proposal submission and time of the training course. Following discussion, the meeting agreed the deadline to finalise the training proposal would be October 2006. Dr. Aliño noted that Professor Chou would be able to provide some case studies of habitat restoration.

8.2.8 Dr. Pernetta suggested that members elaborate the contents of the training course and there followed a lengthy discussion, during which the meeting agreed on the revised contents of the training course as detailed in Table 1.

#### Table 1 The Revised Training Course Content.

#### Training Course on Management Models and Strategies for Coral Reef and Seagrass Eco-systems

#### **Desired Content**

- Coral reefs/seagrass resource assessment and monitoring;
- Resource management models (e.g., marine parks, marine protected areas, fisheries refugia, community-based management);
- Socio-economic aspects of coral reef/seagrass management (economic valuation, cost revenue analysis, socio-cultural assessment);
- · Habitat rehabilitation (transplantation, restoration, artificial reefs and seagrass);
- Supplemental income generation (e.g., invertebrate and seaweed culture, sea ranching, eco-tourism development); and
- · Social marketing and Information, Education and Communication (IEC) initiatives (print, radio, TV).
- Institutional arrangement and management framework (policies & guidelines, local and national legislation)
- Training course assessment and further planning
- Incorporate threat evaluation as part of management framework formulation
- · Sustainable financing for management

Duration of Regional Training Course - 2 weeks (January 2007)

Duration of National Seminars 2-3 days (February 2007)

8.2.9 The meeting agreed to form a small group consisting of Professor Chou, Dr. Aliño, Dr. Thamasak and Mr. Rahim in order to discuss in detail the implementation of the coral reef/seagrass training course over lunch. The outputs of that group discussion were not discussed by the group but are contained in Annex 7.

# 9. CONSIDERATION OF THE OUTCOME OF THE COBSEA WORKSHOP ON CORAL REEF MONITORING AND MANAGEMENT

- 9.1 The Chairperson invited Mr. Vellayutham Pachaimuthu, Programme Officer of the East Asian Seas, Regional Co-ordinating Unit to present document UNEP/GEF/SCS/RWG-CR.7/11 entitled "COBSEA Workshop on Coral Reef Monitoring and Management". Mr. Pachaimuthu highlighted the outcomes of the workshop and the proposed COBSEA Coral Reef Facilitation Framework.
- 9.2 Mr. Pachaimuthu briefed the meeting on the nature of COBSEA as an inter-governmental body, its membership, objectives, activities, and strength and weakness of the organisation. He noted the outcomes of the recently organised workshop on coral reef monitoring and management that had involved participation of a wide range of entities including the SCS Project and ICRAN amongst others.
- 9.3 Regarding collaboration with the SCS project, Mr. Pachaimuthu noted that the SCS metadatabase could potentially be used as the basis for the meta-database component of the facilitation framework, and suggested that the members of RWG-CR could be resource persons to assist in the future elaboration of the facilitation framework.
- 9.4 Dr. Pernetta noted that the SCS project, co-ordinated by the PCU, had agreed to expand the meta-database to encompass a larger geographic region, and change the search functions such that SCS users could distinguish SCS entries from those relating to other seas in Southeast Asia. He requested clarification regarding what concrete actions the EAS/RCU was proposing that the members of the RWG-CR undertook.
- 9.5 Mr. Pachaimuthu responded that at this stage he hoped the members would agree in principle to contribute to the activities proposed in the framework but that since this was still in an early planning stage there were no concrete actions required at this time.

- 9.6 Dr. Tuan noted that on the basis of the outputs of the workshop the first thing was that the EAS/RCU should develop a concrete project proposal for consideration by potential donors and that until the details of that proposal were available it would be difficult to identify what support was expected from the RWG-CR members and how they would be involved in the network.
- 9.7 Professor Chou concluded that, no specific inputs need be provided to the EAS/RCU from the RWG-CR at the present time but that in principle, members of the working group would be willing to assist when called upon to do so.

# 10. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON CORAL REEFS 2006-2007

- 10.1 Based on the discussion and agreements reached under previous agenda items, and document UNEP/GEF/SCS/RWG-CR.7/12 "Proposed Work Plan and Timetable for the Regional Working Group on Coral Reefs to June 2007", the Chairperson invited members to consider, and agree, on the activities and work plan for the Coral Reef Sub-component.
- 10.2 Dr. Tuan pointed out key issues that required programming including updating the regional databases, the adoption of the NAPs, the elaboration of the SAP, the implementation of the approved demonstration sites, the finalisation of the Tun Mustapha Park, and the implementation of the training programme.
- 10.3 Regarding the Tun Mustapha Park demonstration site, Dr. Tuan raised two questions; who would take responsibility for finalising the proposal; and which institutions would sign the MoU with UNEP? He noted he had received a draft proposal from Mr. Rahim during the meeting and that it needed extensive revision. It seems there was no individual responsible for revising the proposal since Professor Ridzwan's illness. Mr. Rahim noted that he would discuss and seek approval from the National Focal Point to appoint a staff member to work on the proposal. Ms. Zarinah Waheed noted that she would contact people at the UMS and inform the PCU of the contact person by Friday. Dr. Tuan noted that given the overall timetable for the entire project there would be little time left to execute the project if it were not initiated within the next month.
- 10.4 It was agreed that Dr. Tuan would work with Mr. Rahim and Ms. Waheed to clarify what needed to be done to the existing draft in order to finalise the operational plan. He proposed that he would undertake such discussions on the morning of the 13<sup>th</sup> July 2006.
- 10.5 Following discussion, the meeting agreed on the work plan as contained in Annex 8 of this report.

# 11. DATE AND PLACE OF THE EIGHTH MEETING OF THE REGIONAL WORKING GROUP ON CORAL REEFS

- 11.1 Members were reminded of the decision of the PSC that all RWG meetings be convened at demonstration sites. It was noted that the rule did not specify that meetings must be held in the demonstration sites relating to the specific component or sub-component of the project, hence the working group was at liberty to propose a meeting at any demonstration site. The Chairperson invited members to consider and agree upon the proposed time and place for the eighth meeting of the RWG-CR.
- 11.2 Following some discussion the Regional Working Group decided that the Eighth Meeting of the RWG-CR would be held in Phu Quoc, Viet Nam, from  $4^{th} 7^{th}$  June 2007.

#### 12. ANY OTHER BUSINESS

12.1 The Chairperson invited Dr. Thamasak to brief the members on the status of abstracts for the PEMSEA congress in December. Dr Thamasak noted he had distributed information from the Sixth Meeting of the RTSC to members of the Regional Working Group and had received responses form Professor Chou and Mr. Long. Currently there were three abstracts, one from the RWG-CR, one from Mu Koh Chang and another from Masinloc. These three abstracts had already been submitted to the PCU and were duplicated and distributed for consideration of the members in the meeting.

- 12.2 The meeting agreed to review the three abstracts overnight and to provide comments directly to Dr. Thamasak, who, in his capacity as the former Chairperson of the RWG-CR would revise the abstracts and submit them to the PCU.
- 12.3 The Chairperson invited members to raise and further matters. No further issues were raised by members for consideration under this agenda item.

### 13. ADOPTION OF THE REPORT OF THE MEETING

13.1 The Rapporteur, Mr. Vibol presented the draft report of the meeting prepared by the Secretariat during the meeting. The draft report was considered, amended and adopted as it appears in this document.

#### 14. CLOSURE OF THE MEETING

- 14.1 The Chairperson invited the Project Director to make some closing remarks. Dr. Pernetta thanked the members for their hard work, which had resulted in some further advances being made in developing the coral reef sub-component of the regional Strategic Action Programme. He thanked the Universiti Malaysia Sabah (UMS) for logistic support to the meeting, and in particular Ms. Siti Rahma for her assistance in organising the transport and accommodation.
- 14.2 The Chairperson thanked participants for their hard work and valuable contributions, the Universiti Malaysia Sabah for assistance in organising the meeting and the PCU for logistic and administrative support to the operation of the meeting, and welcomed the participation of the representative of Sabah Parks. The Chairperson closed the meeting at 1415 on 13<sup>th</sup> July 2006.

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#### **List of Documents**

**Discussion documents** 

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UNEP/GEF/SCS/RWG-CR.7/2 Annotated Agenda. UNEP/GEF/SCS/RWG-CR.7/3 Report of the Meeting.

UNEP/GEF/SCS/RWG-CR.7/4 Current Status of Budgets and Reports from the Specialised

Executing Agencies in the participating countries.

UNEP/GEF/SCS/RWG-CR.7/5 Status of Substantive Reports of the Specialized Executing

Agencies for the Coral Reefs Sub-component from the

Participating Countries.

UNEP/GEF/SCS/RWG-CR.7/6 Preliminary Framework for Assessing the Effects of Fishing

in the Habitat Demonstration Sites.

UNEP/GEF/SCS/RWG-CR.7/7 Valuing the Coral Reef Demonstration Sites.

UNEP/GEF/SCS/RWG-CR.7/8 Inputs from the Coral Reef Sub-component for Updating the

Regional Strategic Action Programme.

UNEP/GEF/SCS/RWG-CR.7/9 Status of the UNEP/GEF South China Sea Project Website,

Online Tools, and Activities to Promote the Coral Reef Sub-

component of the Project.

UNEP/GEF/SCS/RWG-CR.7/10 The South China Sea Project Training Programme.

UNEP/GEF/SCS/RWG-CR.7/11 COBSEA Workshop on Coral Reef Monitoring and

Management.

UNEP/GEF/SCS/RWG-CR.7/12 Proposed Work Plan and Timetable for the Regional Working

Group on Coral Reefs to June 2007.

#### Information documents

UNEP/GEF/SCS/RWG-CR.7/Inf.1 List of Participants. UNEP/GEF/SCS/RWG-CR.7/Inf.2 List of Documents. UNEP/GEF/SCS/RWG-CR.7/Inf.3 Programme.

UNEP/GEF/SCS/RSTC.6/Sub-Comm First Meeting of the Sub-committee of the Sixth Meeting of

the Regional Scientific and Technical Committee for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Bangkok, Thailand, 6<sup>th</sup> – 10<sup>th</sup> February 2006

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UNEP/GEF/SCS/PSC.5/3 Fifth Meeting of the Project Steering Committee for the

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2005 UNEP/GEF/SCS/PSC.5/3.

UNEP/GEF/SCS/RSTC.6/3 Sixth Meeting of the Regional Scientific and Technical

Committee for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Batam, Indonesia. 8<sup>th</sup> – 10<sup>th</sup> December 2005 UNEP/GEF/SCS/

RSTC.6/3.

UNEP/GEF/SCS/RWG-CR.7/3 Annex 2 Page 2

UNEP/GEF/SCS/RWG-SG.6/3

Sixth Meeting of the Regional Working Group on the Seagrass Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Bolinao, Philippines, 27<sup>th</sup> – 30<sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-SG.6/3.

UNEP/GEF/SCS/RWG-W.6/3

Sixth Meeting of the Regional Working Group on the Wetlands Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Sihanoukville, Cambodia, 12<sup>th</sup> – 15<sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-W 6/3.

UNEP/GEF/SCS/RWG-F.6/3

Sixth Meeting of the Regional Working Group on the Fisheries Component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Kudat, Sabah, Malaysia, 5<sup>th</sup> – 8<sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-F.6/3.

UNEP/GEF/SCS/RWG-CR.6/3

Sixth Meeting of the Regional Working Group on the Coral Reefs Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Masinloc, Philippines, 22<sup>nd</sup> – 25<sup>th</sup> August 2005 UNEP/GEF/SCS/RWG-CR.6/3.

UNEP/GEF/SCS/RWG-M.6/3

Sixth Meeting of the Regional Working Group on the Mangroves Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Busuanga Island, Palawan, Philippines, 1<sup>st</sup> – 5<sup>th</sup> August 2005 UNEP/GEF/SCS/RWG-M.6/3.

UNEP/GEF/SCS/RWG-LbP.6/3

Sixth Meeting of the Regional Working Group on the Landbased Pollution Component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Ninh Hai, Ninh Thuan, Viet Nam, 18<sup>th</sup> – 21<sup>st</sup> July 2005 UNEP/GEF/SCS/RWG-LbP.6/3.

UNEP/GEF/SCS/RTF-E.4/3

Fourth Meeting of the Regional Task Force on Economic Valuation for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Xuan Thuy, Nam Dinh Province, Viet Nam, 27<sup>th</sup> – 30<sup>th</sup> March 2006 UNEP/GEF/SCS/RTF-E.4/3.

### Document received during the RWG-CR-7 meeting, in Kudat, Sabah, Malaysia, 10-13 July 2006.

Malaysia: National Corals and Coral Reef Report for Malaysia, 61 pp, 1 hard copy.

Malaysia – National Coral and Coral Reefs Action Plan, 26 pp, 1 hard copy.

1 CD – Cover Coral Reef (Portrait) National Report.
1 CD – Cover Coral 2 (Landscape) National Action Plan.
1 CD – Text of National Report and National Action Plan.

Philippines: Table revised version for National Action Plan cost of action 3 pages updated

30/09/2005.

#### Agenda

#### 1. OPENING OF THE MEETING

- 1.1 Welcome Address on behalf of UNEP
- 1.2 Opening Statement by a Representative of the Sabah Government
- 1.3 Introduction of Participants

#### 2. ORGANISATION OF THE MEETING

- 2.1 Election of Officers
- 2.2 Documentation and Administrative Arrangements
- 3. ADOPTION OF THE MEETING AGENDA

# 4. STATUS OF ADMINISTRATIVE REPORTS, SUBSTANTIVE NATIONAL REPORTS AND NATIONAL ACTION PLANS

- 4.1 Status of the Administrative Reports for 2005: Progress Reports; Expenditure Reports; Audit Reports; and MoU Amendments
- 4.2 Reporting Procedure in the Demonstration Sites
- 4.3 Status of Publication of National Reports in English and Local Languages
- 4.4 Finalisation, Adoption and Implementation of National Action Plans

#### 5. CONSIDERATION OF DEMONSTRATION SITE ACTIVITIES

- 5.1 Status of Implementation of Activities at the Operational Demonstration Sites
- 5.2 Consideration of Preliminary Framework for Assessing the Effects of Fishing in the Habitat Demonstration Sites
- 5.3 Provision of Additional Empirical Data of Economic Values at the Site Level Using the Procedures Recommended by the Regional Task Force on Economic Valuation

# 6. FINALISATION OF INPUTS FROM THE CORAL REEF SUB-COMPONENT TO THE REGIONAL STRATEGIC ACTION PROGRAMME

# 7. UPDATE OF THE REGIONAL GIS DATABASE AND META-DATABASE AND EFFICIENT USE OF THE PROJECT WEBSITE

- 7.1 Status of the Regional South China Sea Meta-Database and GIS database, and use of the Project Website for Updating these Databases
- 7.2 Consideration of Initiatives to Promote the Activities of the Coral Reef Sub-component of the Project

# 8. CONSIDERATION OF PROPOSED SOUTH CHINA SEA PROJECT TRAINING ACTIVITIES REGARDING THE CORAL REEF SUB-COMPONENT

- 8.1 Consideration of the Training Programme Approved by the RSTC
- 8.2 Implementation of the Coral Reef Training Programme

# 9. CONSIDERATION OF THE OUTCOME OF THE COBSEA WORKSHOP ON CORAL REEF MONITORING AND MANAGEMENT

- 10. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON CORAL REEFS 2006 2007
- 11. DATE AND PLACE OF THE EIGHTH MEETING OF THE REGIONAL WORKING GROUP ON CORAL REEFS
- 12. ANY OTHER BUSINESS
- 13. ADOPTION OF THE REPORT OF THE MEETING
- 14. CLOSURE OF THE MEETING

# **Summary of Required Contents of the Six Monthly Progress and Expenditure Reports** from the Specialised Executing Agencies

#### Due date

**Sixth monthly reports** (Progress report, Expenditure report and Cash advance request) 31<sup>st</sup> January for period 1<sup>st</sup> July to 31<sup>st</sup> December 31<sup>st</sup> July for period from 1<sup>st</sup> January to 30<sup>th</sup> June

### Audit report:

30<sup>th</sup> March of the year following reporting year

#### Expected contents of the 6 monthly progress and expenditure reports. Table 1

Content included	Progress report	Expenditure report for national activities	Expenditure report for Demo sites
	Meeting	Budget component 3000	Budget component 3000
Participation without receipt of DSA Number of participants and days		Not included (co-funding calculation by the PCU)	Should be included as in – kind co-funding from government
Others co-funding in – kind for meeting	Number of participants and days (working time)	Included in co-funding column (in – kind)	Included in co-funding column (in – kind)
Other co-funding in-cash	Payment for national coordination as the PSC agreement	Included in co-funding column (in – cash)	Included in co-funding column (in – cash)
Annexes	List of participants, meeting report summary		
	Printed Materials	Budget component 5000	Budget component 5000
Project reports, technical publications, technical reports and others. Publication means the materials are published formally by a publisher.	Titles and type of printing Producer and/or Publisher Publishing number Print date	Co-funding included in the expenditure report, in cash when printing is paid for by government or non-UNEP/GEF int'l organisations and in-kind reflects working time to produce the report.	Co-funding included in the expenditure report, in cash when printing is paid for by government or non-UNEP/GEF int'l organisations and in-kind reflects working time to produce the report.
	Information, Service And Other Outputs	Budget components 5000/2000/1000	Budget components 5000/ 2000/1000
Outputs obtained during the period	Materials for public awareness, environment education; service for project execution and others	Co-financing including cash and in-kind	Co-financing including cash and in-kind
	Other In-kind and Cash Co-financing	(Only used to report co-financing not listed in other items above)	(Only used to report co-financing not listed in other items above)
Other substantive outputs	Summary, as annexes to the progress report, on for surveys, monitoring activities, public awareness propaganda, activities by local people to promote demonstration site project or to improve environment quality etc.  Note in progress report if activity has not pre-planned in the project document.	No reported in expenditure report  (In-kind contribution by expert time to work for the project and in-cash co-financing by payment of governments or non-UNEP/GEF International Organisation)	Reported in expenditure report if activity was planned (space available)  (In-kind contribution by expert time to work for the project and in-cash co-financing supported by payment of governments or non-UNEP/GEF Int'l Organisation)

# Proposed Amendments to the RWG-F Framework for Assessing the Effects of Fishing and Aquaculture in the Context of the Habitat Demonstration Sites (Amendments are in bold text).

Effects of fishing and Related Activities on:	Reported problem in relation to the habitat demonstration sites
Fish populations and communities	Declining availability and biomass of important species
	Size at first capture of important species low relative to historic average
	Change in the age structure of catches of important species
	Changes in the species composition of catches
	Number of species in the catch low relative to historic average
	Changes in community structure due to direct reduction of populations representing specific trophic levels of the community (e.g., predator or prey)
	Indirect changes in community structure caused by habitat changes or provision of additional food or nutrients as a result of fishing
	Capture/mortality of large vertebrates/rare and endangered species
Functions of Coastal Habitats (Nursery/spawning/feeding)	Fishing in nursery areas and the targeting of juveniles
	Large incidental captures of juveniles
Habitat/Eco-system	Removal and alteration of habitats as a result of fishing
	Coral reefs damaged by fishing gears
Water quality (how to measure?)	Pollution of coastal waters by fishing vessels
	Release of wastewater and organic pollutants into coastal waters from fish processing facilities
	Localised and short-term changes in turbidity, oxygen levels, and changes in water chemistry due to fishing
Human Environment	User group conflicts (e.g., commercial v. small-scale fishers)
	Fishing gear conflicts (e.g., push netters v. gill netters)
	- Too many fishers/over capacity
	- Inequitable allocation of resources/fishing areas
	- Changing lifestyle (culture,)
Effects of Aquaculture and Related Activities on:	Reported problem in relation to the habitat demonstration sites
Water Quality – solid waste pollution	Smothering of coastal habitats (e.g., seagrass) and shellfish
	Increased turbidity of the water quality
	Using antibiotic
Water Quality – Increased dissolved nutrient inputs	Algal blooms as a result of increased nutrient inputs to coastal waters
	Fish kills due to low dissolved oxygen concentrations caused by eutrophic conditions
	Removal of oxygen from deep water and sediments as a consequence of the biological oxygen demand created by the sinking and decay of blooming algae
Habitat	Conversion of coastal habitats for construction of farms and onshore facilities
	Introduction of invasive species
Human Environment	Littering of coastal waters and inter-tidal area with aquaculture materials
	User group conflicts (e.g., aquaculturalists v. fishers)
	Reduced aesthetics as a result of the development of aquaculture infrastructure
	Changing of life style (culture,)

# First Draft of the SAP from the Coral Reef Sub-Component

#### THE MANAGEMENT STATUS OF CORAL REEFS BORDERING THE SOUTH CHINA SEA

Southeast Asian is recognised as the global centre of coral reefs, both in terms of extent and species diversity. An estimated 34% of the earth's coral reefs are located in the seas of Southeast Asia (Burke et al., in UNEP, 2004).

In the sixth meeting of the RWG-CR, a total area of 1,084,544 ha was listed in six countries bordering the South China Sea, including Cambodia (2,800 ha), Indonesia (37,170 ha), Malaysia (380,570 ha), Philippines (464,000 ha), Thailand (90,000 ha), and Viet Nam (110,000 ha). The total targeted area to be added for sustainable management by the year 2015 accounted for 168,516 ha (15.54%). Table 1 lists a total of 45 coral reef sites with live coral cover in the six countries.

Table 1 Status of Coral Reef Management at the Country and Site Levels in the South China Sea.

Country & Site Name	Area (ha)	Live Coral Cover (%)	Management type	Area under Management (ha)	Management Effectiveness	Target Area to be Added for Management by 2015 (ha)
Cambodia	2,800			1289.5		840
Koh Kong	72.5	47.4	Fisheries Management Area (FMA)		Low	
Koh Sdach	529.0	29.3	Proposed MPA	529.0	Low	
Koh Rong	468.0	23.1	Proposed MPA	468.0	Low	
Koh Takiev	292.5	58.1	National Park	292.5	Medium	
Koh Tang	439.0	38.3	FMA		Low	
Prek Ampil	953.0	53.8	FMA		Low	
Koh Pouh	52.5	41.0	FMA		Low	
Indonesia	371,700			39,287.4		5,580
Anambas	6,255.0	21.7 - 82.7	Marine Management Area (MMA)	6,255.00	Low	
Bangka	2,934.4	28.0 - 51.0	MMA	2,934.4	Medium	
Belitung	2,271.1	38.5 - 65.6	MMA	2,271.1	Low	
Karimata	1,041.3	31.3 - 76.2	Marine Reserve	1,041.3	Medium	
Senayang Lingga	4,735.3	15.0 - 60.0		4,735.3		
Barelang dan Bintan	6,145.3	20.3 - 69.2		6,145.3		
Natuna	15,905.0	14.0 - 49.0		15,905.0		
Malaysia						
Batu Malang, Pulau Tioman	T.B.A. <sup>2</sup>	62.6	Marine Park	T.B.A.	Medium	
Pulau Lang Tengah	T.B.A.	41.3	Marine Park	T.B.A.	Medium	
Pulau Lima, Pulau Redang	T.B.A.	46.3	Marine Park	T.B.A.	High	
Teluk Jawa, Palau Dayang	T.B.A.	38.4	Marine Park	T.B.A.	Medium	
Tun Mustapha, Sabah	1.02 million		Proposed MP	1.02 million	Low	

Categories of Management Effectiveness: Low: Area declared or proposed to be declared for management; Management Plan developed and approved. Medium: Existing Management Framework is implemented with inadequacy of manpower, finance and/or equipment: High: Existing Management Framework is implemented with enough trained manpower, equipment, facilities and sustainable finance.

Information to be provided by 31<sup>st</sup> August 2006.

Table 1 cont. Status of Coral Reef Management at the Country and Site Levels in the South China Sea.

Country & Site Name	Area (ha)	Coral Cover (%)	Management type	Area under Management (ha)	Management Effectiveness	Target Area to be Added for Management by 2015 (ha)
Philippines	464,000			39,700		7,600
	T.B.A.		Protected		Medium	
Batanes, Basco		55.0	Land/Seascape	40		
			Municipal Coastal		Medium	
Bolinao/Lingayen Gulf	9,560	40.0	Development Plan	750		
			Protected		Medium	
Masinloc, Zambales	7,568	33.0	Land/Seascape	120	N 4 1'	
Batangas	T.B.A.	40.0	Marine Tourism	T.B.A.	Medium	
bay/Maricaban	T.B.A.	48.0	Reserve Man & Biosphere	T.B.A.	Medium	
Puerto Galera, Mindoro	I.D.A.	33.0	Reserve	I.D.A.	Medium	
i derto Galera, Milidoro	T.B.A.	33.0	Protected	T.B.A.	Medium	
El Nido, Palawan	1.5.7.	40.0	Lan/Seascape	1.5.7.	Wicalam	
Thailand	90,000		24.1100400440	54,000		18,000
Mu Koh Chumporn	649.0	55.0	National Park	480	Medium	10,000
ma ron onamponi	0.0.0	00.0	Marine National		Medium	
Mu Koh Chang	1,556.0	40.0	Park	800		
	, = = = =		Marine National		Medium	
Mu Koh Ang Thong	426	55.0	Park	426		
			Marine National		Low	
Mu Koh Samui	3249	40.0	Park	600		
			Marine National		Medium	
Mu Koh Samet	350.0	35.0	Park	300		
Sichang Group	63.0	20.0	None			
Sattaheep Group	139.0	33.0	Navy Control Area	110	Low	
Lan and Phai Group	326.0	18.0	Navy Control Area	100	Low	
Chao Lao	72.0	30.0	None			
			Marine National		Low	
Prachuab	204	40.0	Park	40		
Koh Tao Group	192.0	45.0	None			
Song Khla	100	20.0	None			
Koh Kra	56	40.0	None			
Losin	79.0	40.0	Navy Control Area	79	Low	
Viet Nam	110,000			2,200		3,300
Cu Lao Cham	200.0	33.9	MPA	100	Medium	
Nha Trang bay	570.0	26.4	MPA	100	Medium	
Con Dao	1,000.0	23.3	National Park	1,000	Medium	
Phu Quoc	600.0	42.2	Proposed MPA	Not Available	Low	
			Proposed MPA & Community-based		Medium	
Ninh Hai	1,070.0	36.9	Management	1,070		
Ca Na bay	2,270.0	40.5	Proposed MPA	None	Low	
ou iva bay	T.B.A.	70.0	World Heritage &	140116	Medium	
Ha Long - Cat Ba	1.5.4.	43.0	National Park	No Available	Mediam	
Hai Van - Son Tra	T.B.A.	50.5	Proposed MPA	None	Low	
Bach Long Vi	T.B.A.	21.7	Proposed MPA	None	Low	
Grand Total	1,084,544			320,760		168,516

### **THREATS**

Major threats to the Coral Reefs bordering the South China Sea were identified by the RWG-CR during it's six meeting, including:

- Overfishing
- Destructive fishing
- Pollution (Eutrophication)
- Sedimentation
- Unsustainable fisheries and aquaculture
- Deforestation on upland areas
- Coastal development
- Unsustainable tourism
- Coral bleaching

Table 2 summarises the threats to Coral Reef at the national level that were derived from draft national action plans and national reports received by the PCU from National Focal Points. While Table 3 presents the prioritisation of the threats from a national perspective.

#### **GOAL**

In the fifth meeting of the RWG-CR, there was a discussion of the goal of the SAP, which was amended in paragraph 7.2.10:

"The goal of the Strategic Action Programme is to foster regional cooperation and collaboration in order to halt or slow the current rate of environmental degradation and assist participating states in taking actions within their respective policies, priorities and resources, thereby contributing to human well-being; promotion of the sustainable use of marine living resources; and contributing to the maintenance of globally significant biological diversity, for the benefit of present and future generations."

#### **TARGETS**

The specific targets for Coral Reef management are:

- By 2015, at least 50% of the existing area of coral reefs would be put under an appropriate form of sustainable management.
- By 2015, reduce the regional decadal rate of degradation in live coral cover from the present rate of 16% to 5%.

#### **OBJECTIVES AND ACTIONS**

The proposed regional activities to promote sustainable management and use of the Coral Reef ecosystems are categorised into five main components; namely:

Component 1 – Research and Monitoring:

Component 2 – National Policy, Legal and Institutional Arrangement and Co-ordination:

Component 3 – Public awareness, Communication and Education:

Component 4 - Capacity Building and Sustainability:

Component 5 – Resource and Habitat Management.

Each component contains specific objectives and activities, which are detailed in Table 4.

#### **COST OF ACTIONS**

The costs of the Regional Actions are included in Table 4.

Table 2 Threats to Coral Reefs.

Cambodia	Indonesia	Malaysia	Philippines	Thailand	Viet Nam	Region
- Overfishing - Unsustainable fishing and illegal fishing - Pollution/ Sedimentation and Waste dumping - Seaweed cultivation on Coral Reefs - Coastal development, Construction of ports, dredging, etc Coral Bleaching	- Over fishing and damage to the ecosystem  - Destructive fishing practices by using explosives and toxic chemicals  - Natural disturbances such as, climate change and the out-break of crown-of-thorn  - Land-based and marine-based pollutions and sedimentation and run-off  - Tourist development	- Fishing: Destructive fishing methods in East Malaysia using poison and blast fishing - Coastal Development: Sedimentation on fringing coral in the coastal area of Peninsular Malaysia due to coastal development, and influx of sediment from river discharge - Land base sources of pollution: Discharges of partially treated sewerage causes euthrophication of water in the vicinity of resort and village areas on the island due to - Coral Bleaching - Crown-of-thorns infestation - Fishing: Overfishing - Tourism: Coastal and island development for tourism infrastructure - Tourism: Boating activities that anchor on coral reef and beaching of boat on shallow fringing reef area - Tourism: Visitor activities that trample coral in shallow areas during snorkelling activities - Pollution (solid waste); Marine debris discharged from resort and settlement on the islands and discarded from fishing boat	<ul> <li>Overfishing and destructive fishing are the most prevalent threats</li> <li>Siltation from unwise land uses causing considerable coral reef alteration of fringing reefs</li> <li>Natural disturbances such as storm have profound effects on reefs especially when these are exacerbated by anthropogenic activities</li> </ul>	- Coral bleaching phenomenon  - Extreme low tides and freshwater  - Storms and monsoons  - Tourism and recreation: anchoring of boats on corals, accumulation of garbage, coral damaged by divers, wastewater from hotels and resorts  - Fisheries-related uses: ornamental fish collection by using chemicals  - Land-based pollution, Development impact: Sedimentation and wastewater pollution associated with rapid coastal development	<ul> <li>Over fishing</li> <li>Destructive fishing</li> <li>Tourism</li> <li>Coastal development and sedimentation</li> <li>Pollution</li> <li>Coral exploitation</li> <li>Storms</li> <li>Coral bleaching</li> <li>Crown of Thorns outbreaks</li> <li>Expansion of Sponges</li> </ul>	- Overfishing - Destructive fishing - Pollution (Eutrophication) - Sedimentation - Deforestation - Coastal development - Unsustainable tourism - Coral bleaching

The working group developed a regional ranking of the threats based on score from 1 to 9 (1 means the most serious threats and 9 means the least serious). The inputs provided from the participating countries were presented in Table 3. Regional threats from the most serious to the least serious are (1) Destructive fishing; (2) Overfishing (3) Sedimentation; (4) Pollution, (5) Coral Bleaching; (6) Coastal development; (7) Unsustainable tourism and Unsustainable fisheries and aquaculture; and (9) Deforestation

Table 3 Prioritisation of regional threats to coral reefs bordering the South China Sea.

Threats	Cambodia	Indonesia	Malaysia	Philippines	Thailand	Viet Nam	Regional
Direct threats							
Overfishing	1	1	5	1	7	1	16
Destructive fishing	2	2	2	2	5	2	15
Pollution (Eutrophication)	4	5	4	5	6	4	28
Sedimentation	5	4	1	3	4	3	20
Coral bleaching	8	3	7	9	1	5	33
Immediate threats							
Unsustainable fisheries and aquaculture	3	8	9	4	8	8	40
Deforestation on upland areas	7	6	8	7	9	7	44
Coastal development	6	7	6	6	3	6	34
Unsustainable tourism	9	9	3	8	2	9	40

 Table 4
 Proposed Regional Actions and cost for Coral Reef Management and Conservation.

Objectives	Sub-components	Regional Activities
1. Research and Monitorin	•	.5
To provide relevant scientific data and information for sustainable management decision of coral reefs.	1.1 Resource Assessment	1.1.1 Facilitation of and support to assess baseline information and status of coral reefs.     National workshop:     6 countries, 10,000 USD/ws, 2 times = 120,000 USD Regional workshop:     (15 pers): 3 workshop, 20,000 USD/ws = 60,000 USD Printing (2 publications): 10,000 USD
	1.2 Resource Monitoring	1.2.1 Facilitation of and support to regular biological and socio-economic monitoring Regional workshop: (15 pers): 3 workshop, 20,000 USD/ws = 60,000 USD Financial support for target sites: 2 times, 6 sites, 10,000 USD = 120,000 USD
	1.3 Mapping	1.3.1 Prepare a base map of coral reefs in SCS and overlays to reflect indicators of sustainable management.     Consultant:     2 times, 2 pers/month, 8,000/month = 32,000 USD
	1.4 Socio-economic and Cultural Assessment	1.4.1 Analysis of regional socio-economic status and culture significance of coral reefs, to provide vital information for sustainable management and use of coral reefs Regional workshop:     (15 pers): 3 workshop, 20,000 USD/ws = 60,000 USD
	1.5 Database Management	1.5.1 Management and update of coral reef GIS and other databases by SEA START RC.     Payment for maintenance of website and database: (to be added)
		1.5.2 Financial support to SEA START RC for sustainable management of the databases.     Payment for maintenance of website and database: (to be added)
	1.6 Information System	1.6.1 Regular analysis, synthesis and update of databases, and dissemination of information to general public, decision makers, governments, potential partners.     Writing workshop:     (15 pers): 3 workshop, 20,000 USD/ws = 60,000 USD Material production and dissemination: 20,000 USD

Table 4 cont. Proposed Regional Actions and cost for Coral Reef Management and Conservation.

Objectives	Sub-components	Regional Activities
	1.7 Decision Support System	1.7.1 Develop mechanism for analysis of impacts of different development scenarios on coral reef environment.
		Consultancy:
	1.9 Environmental Impact	3 pers/month, 4 months, 2 times, 8,000 = 192,000 USD  1.8.1 Develop mechanism for multi-countries participation in
	1.8 Environmental Impact Assessment	EIA in transboundary areas.
		Bilateral workshops (5 area):
2. National Policy, Legal	l and Institutional Arrangement and (	5 workshops, 20,000 USD/ws = 100,000 USD  Co-ordination
To maintain the SCS Project Management Framework to ensure	2.1 Integration of Research Programme with Management and Policy Making	2.1.1 Regional coral reef expert group maintained to integrate research programmes and data and information used for coral reef management.
sound regional scientific advise for coral reef	and roney maning	Working group meetings:
sustainable management	2.2 Monitoring the SAP	(15 pers): 9 workshops, 20,000 USD/ws = 180,000 USD  2.2.1 Monitor achievement of SAP targets and NAP
in the SCS.	and NAPs	objectives every 5 year period. Consultancy for external evaluation: 2 pers, 2 month, 10,000 USD, 2 times = 80,000 USD
	2.3 Review and Improve Existing Laws and Policies	2.3.1 Synthesis of laws that contribute effectively to sustainable coral reef management, emphasizing on rule and regulation for good management practices.     Consultancy:     1 per., 3 months, 10,000 USD, 2 times = 60,000 USD
		Workshop for dissemination of lessons learnt to the national level: 2 workshops, 20,000 USD = 40,000 USD
	2.4 Common Understanding of National and Regional Policies	2.4.1 Regional coordinating mechanism to facilitate     convergence of national and regional action plans.     Workshop for agreement of coordinating mechanism:     2 workshops, 20,000 = 40,000 USD
	2.5 Stakeholder Analysis and Improvement	Review of existing management models involving stakeholders and synthesis factors contributing to successes.  Consultancy:
		1 per., 3 months, 8,000 USD, 2 times = 48,000 USD     Workshop for dissemination of lessons learnt to the     national level: 2 workshops, 20,000 USD = 40,000 USD      2.5.2 Information exchange for promotion of stakeholder     involvement in sustaining management.     Material production:     6 count. 2 times, 10,000 USD = 120,000 USD
	2.6 Community Empowerment	2.6.1 Review of existing management models regarding community empowerment and synthesis factors contributing to successes, focusing on ownership of local people.  Consultancy:  1 per., 3 months, 8,000 USD, 2 times = 48,000 USD
	2.7 Strengthening Traditional Value and Management System	2.7.1 Review of traditional value, knowledge and good management practices of coral reefs in the region.     Consultancy:     1 per., 3 months, 8,000 USD, 2 times = 48,000 USD
	2.8 Establish an Incentive System for Good Governance	2.8.1 Establishment of recognition and award system     for good management of coral reefs.     Workshop to setup criteria:     1 time = 20,000 USD     Cost for coral reef management award:     9 times, 6,000 USD = 54,000 USD
	2.9 Linkage to International Obligations	2.9.1 Review of level of compliance to various int'l obligations and conventions pertaining coral reefs.     Consultancy:     1 per., 3 months, 8,000 USD, 2 times = 48,000 USD
	2.10 International and Regional Co-operation	2.10.1 Exchange and sharing experience between nations on coral reef research and management.     Workshop:     2 workshops, 20,000 USD = 40,000 USD

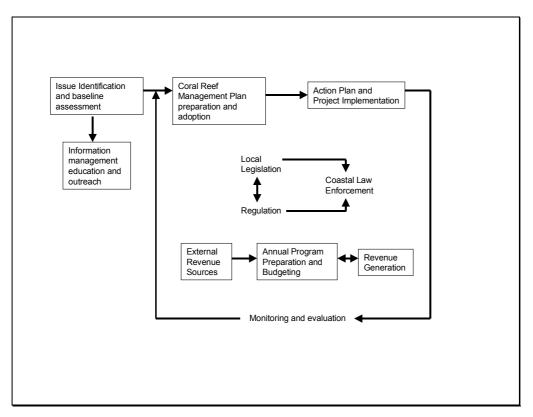
Table 4 cont. Proposed Regional Actions and cost for Coral Reef Management and Conservation.

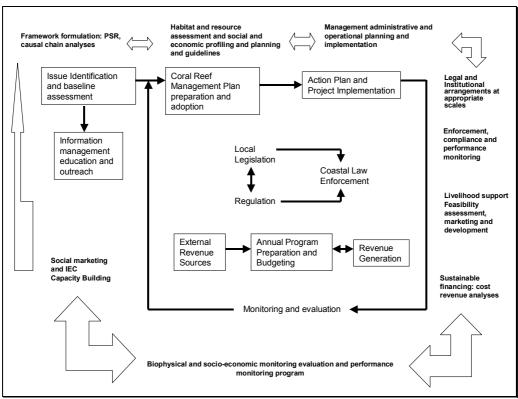
Objectives	Sub-components	Regional Activities
	mmunication and Education	
To increase awareness of all stakeholders on the ecological roles and economic values of coral reefs to gain support for coral reef conservation and management in the SCS.	3.1 Improve Government Services  3.2 Development, Improvement, and Dissemination of Awareness Materials	3.1.1 Facilitation of mainstreaming of regional coral reef information and education programme.  Material supports to the national levels: 6 countries, 10,000 USD = 60,000  National workshop: 2 times, 6 countries, 2,000 USD = 24,000 USD  3.2.1 Development and launching of regional information campaigns for sustainable use of coral reefs. Strategic meeting to launch information: 4 times, 15,000 USD = 60,000 USD  3.2.2 Sharing training materials among the countries
		by dissemination through regional website. (free of charge).
4. Capacity Building and	Sustainability	
To improve regional capacity in management of transboundary issues regarding coral reefs.	4.1 Human Resource Development	4.1.1 Exchange of experts for human resource development in coral reef management.  Payment for experts' visits and site training cost:  5 areas, 2 times, 10,000 = 100,000 USD
	4.2 Immediate Training Activities	<ul> <li>4.2.1 Conduct of training of trainers for coral reef management at regional level.</li> <li>2 times, 25,000 = 50,000 USD</li> <li>4.2.2 Conduct of special training requested by the national level.</li> <li>6 countries, 2 times, 10,000 = 120,000 USD</li> </ul>
	4.3 Law Enforcement	4.3.1 Exchange of experiences regarding skill of law enforcement. National workshops: 6 countries, 2 times, 10,000 = 120,000 USD Regional workshop: 2 workshops, 25,000 = 50,000 USD
	4.4 Monitoring, Controlling and Surveillance	4.4.1 Exchange of information, compliance and effectiveness of enforcement.     (combined with activity 4.3.1)
	4.5 Financial Sustainability	4.5.1 Review and formulation of mechanism for financial sustainability for application in the region. Regional workshop: 2 workshops, 25,000 = 50,000 USD Consultancy: 1 per., 2 months, 8,000 USD, 2 times = 32,000 USD  4.5.2 Development of capacity in fund raising and implementation of financial scheme for coordination of coral reef management. Training: 2 times, 25,000 = 50,000
	4.6 Infrastructure Development	
	4.7 Institutional Building and Strengthening	<ul> <li>4.7.1 Strengthening network of marine research stations. Provision of directory of marine research station to the website (free of charge).</li> <li>4.7.2 Maintenance and enhancement of SCS facility for coordinating unit. (to be added)</li> <li>4.7.3 Maintenance of demonstration site network. Forum of local government officials, project management personnel from demonstration sites: 4 for a, 10 sites, 4,000/site = 160,000 USD</li> <li>4.7.4 Strengthening of network of research centres and reef management agencies in the region. Provision of directory of research centres and reef management agencies to the website (free of charge). Forum of research centres and reef management agencies: 2 fora, 5 utilities, 10,000/country, 6 countries = 120,000 USD</li> </ul>

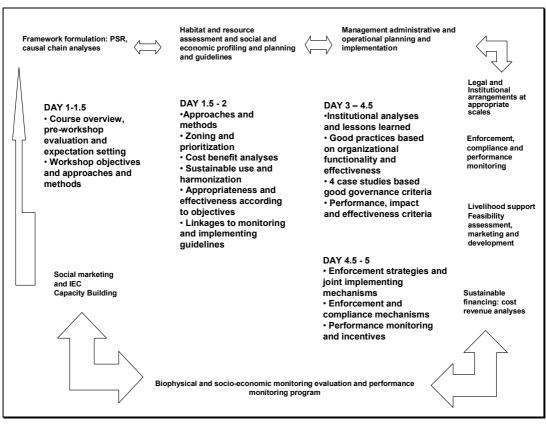
Objectives	Sub-components	Regional Activities
5. Resource and Habitat	Management	
To promote good environmental governance to sustainable management of coral reefs and	5.1 Develop Guidelines for Sustainable Use  5.2 Strengthen Management	5.1.1 Development of guideline for sustainable use of coral reefs. Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Dissemination of results: 10,000 USD  5.2.1 Review and formulation of good practices
their associated ecosystem.  2. To sustainably	Component	in sustainable management.  Workshop: 2 times, 25,000 = 50,000 USD Dissemination of results: 10,000 USD
manage to meet the targets.	5.3 Establish/Enhance Habitat System	5.3.1 Assessment and advice of technique on enhancement and rehabilitation of coral reefs.  Workshop: 2 times, 25,000 = 50,000 USD Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Dissemination of results: 10,000 USD
	5.4 Community-based Management	5.4.1 Review and formulation of good practices in community-based management activities at the region.  Workshop: 2 times, 25,000 = 50,000 USD Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Dissemination of results: 10,000 USD
	5.5 Sustainable Use of Coastal Systems	5.5.1 Provision of information on value added benefit of enhancement of sustainable use derived from transboundary management of reefs.  Workshop: 2 times, 25,000 = 50,000 USD  Consultancy: 1 per., 2 months, 8,000 = 16,000 USD
	5.6 Environmentally Friendly Technologies	5.6.1 Introduction of cost effective waste management and environment friendly systems.  Consultancy: 1 per., 2 months, 8,000 = 16,000 USD  Workshop: 2 times, 25,000 = 50,000 USD
	5.7 Types of Management Regimes, Development of Models	5.7.1 Synthesis of successes from models developed for coral reef management.  Workshop: 2 times, 25,000 = 50,000 USD Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Dissemination of results: 10,000 USD
	5.8 Alternative Livelihood	5.8.1 Synthesis of successes on alternative livelihood programmes. (Combined with activity 5.7.1) 5.8.2 Review of good practices of appropriate technologies in the region. Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Workshop: 2 times, 25,000 = 50,000 USD
	5.9 Establishment of Transboundary Management Zones	5.9.1 Review of existing transboundary management practices and Identification of priorities in transboundary management zones.  Consultancy: 1 per., 2 months, 8,000 = 16,000 USD Workshop: 2 times, 25,000 = 50,000 USD

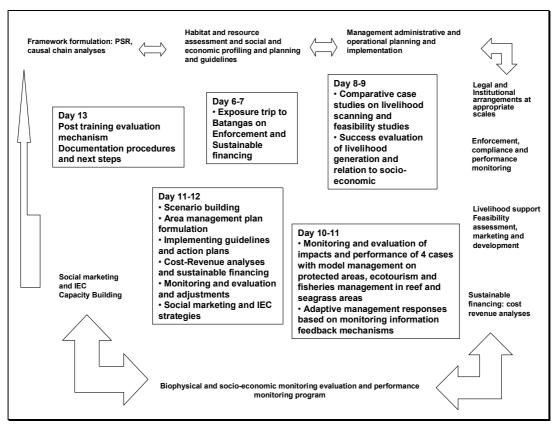
ANNEX 7

Draft Framework for the Implementation of the Coral Reef/Seagrass Training Course









# Work Plan (2004-2007) and Schedule of Meetings for 2007

**Table 1 Work Plan and Timetable for Coral Reef Sub-component to 2007.** [Cam = Cambodia; Ind = Indonesia; Mal = Malaysia; Phi = Philippines; Tha = Thailand; Vie = Viet Nam.]

	20	04		2	005		I		2006			2	007	
Quarto		1	4	_		1	4	_	1	4	4	_		4
Quarter		4 0 N D	I F M	2 ^ M I	JAS	4 0 N D	I F M	2 A M -J	3 J A -S	4 0- N D	JFM	2 A M -J	3 1 A- S	0 N- D
National Committee meetings	y 7 3	X	x		X	X	y	X W -5	X X	-	x	X W -5	3 A- 3	X
National Technical Working Group	^	Y	<del>^</del>	X	^	X	<del>r</del>	X	^	X	^			<del>  ^</del> ,
RWG-CR meetings	Х	^		^	Х	X		^	X	<u> </u>				<del>                                     </del>
Provide information to RWG-CR and RSTC									,					-
Maintain of national metadata base														+
Regional Databases														1
National revisions & updates of meta-data and									30 Aug					
GIS GIS data submitted									30 Aug					+
Up-loading to data-bases and presentation on Line in interactive mode						х			х					
Publication of National Reports in local language									Mal, Tha - Sep					
Publication of NAPs									Cam-Sep	Vie, Phi Mal-Dec				
Regional Publication of Nat. Rpts. in English														
PCU draft for focal pt review (10 days)						Draft								
Printing and distribution										Х				
Regional synthesis of data and information regarding the distribution and status of coral reefs (see UNEP/GEF/SCS/RSTC/ExComm.2/3)					х				х					
National Action Plans and SAP														
Complete second draft of NAP									Mal					1
Final draft of NAP				Vie	Cam Tha	Phi			Phi					
Submission for adoption of NAPs (contributing to SAP targets)						Vie	•	Tha, Cam, Phi		Mal				
National public meetings and workshops for NAP						Mal	Tha	Cam Ma Ph		Cam Mai	Phi	Ind		
Provide guidance to NTWG & IMC on the Coral Reef component input to SAP						х								

Table 1 cont. Work Plan and Time Table for the Coral Reef Sub-component to 2007.

	2	004				20	05			20	06					
Quarter	3	4	ļ	1	2		3	4	1	2	3	4	1	2	3	4
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Preparation by PCU of draft SAP for RSTC and PSC review								1 <sup>st</sup>								
National Review of SAP components – NCC																
National review of entire SAP – NTWG																
Submission of status of management for the site levels											15 Aug					
Second draft prepared by PCU												Oct				
Review of the second draft SAP by the RSTC												Nov				
Demonstration site																
Execution of demonstration sites																
Finalisation of Tun Mustapha Park Demonstration Site											30 Aug					
Submission of empirical data on economic value of coral reef sites bordering the South China Sea											7 Aug					
Implementation of the training programme																
Finalisation of proposal by MSI, UP	-											15 Oct				
Training course on coral reefs and seagrass													Feb			
Prepare concrete proposals to IMC concerning actions at national level, to meet SAP targets amendments to NAPs											х					

**Table 2**Schedule of Meetings for 2007. (RWG = Regional Working Group; -M = Mangroves; -CR = Coral reefs; -SG = Seagrass; -W = Wetlands; -F= Fisheries; LbP = Land-based Pollution; RTF-E = Regional Task Force on Economic Valuation; RTF-L = Regional Task Force on Legal Matters; RSTC = Regional Scientific and Technical Committee; RSTC-SC = RSTC Sub-Committee; PSC = Project Steering Committee; (H = United Nations Holidays).

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January		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
		Н																						RTF	-E-6											
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August				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
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December							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31
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