



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**

**Eighth Meeting of the Regional Scientific and Technical Committee**

***Trat Province, Thailand, 11<sup>th</sup> – 14<sup>th</sup> December 2007***



First published in Thailand in 2008 by the United Nations Environment Programme.

Copyright © 2008, United Nations Environment Programme

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose without prior permission in writing from the United Nations Environment Programme.

UNEP/GEF  
Project Co-ordinating Unit,  
United Nations Environment Programme,  
UN Building, 2<sup>nd</sup> Floor Block B, Rajdamnern Avenue,  
Bangkok 10200, Thailand  
Tel. +66 2 288 1886  
Fax. +66 2 288 1094  
<http://www.unepscs.org>

**DISCLAIMER:**

The contents of this report do not necessarily reflect the views and policies of UNEP or the GEF. The designations employed and the presentations do not imply the expression of any opinion whatsoever on the part of UNEP, of the GEF, or of any cooperating organisation concerning the legal status of any country, territory, city or area, of its authorities, or of the delineation of its territories or boundaries.

Cover Photo:

**For citation purposes this document may be cited as:**

*UNEP, 2008. Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. Report of the Eighth Meeting of the Regional Scientific and Technical Committee. UNEP/GEF/SCS/RSTC.8/3.*

## Table of Contents

<b>1.</b>	<b>OPENING OF THE MEETING .....</b>	<b>1</b>
1.1	WELCOME ON BEHALF OF UNEP .....	1
1.2	WELCOME ADDRESS ON BEHALF OF THE GOVERNMENT OF THAILAND .....	1
1.3	INTRODUCTION OF MEMBERS .....	1
<b>2.</b>	<b>ORGANISATION OF THE MEETING.....</b>	<b>2</b>
2.1	ELECTION OF OFFICERS.....	2
2.2	DOCUMENTATION AVAILABLE TO THE MEETING .....	2
2.3	PROGRAMME OF WORK AND ADMINISTRATIVE ARRANGEMENTS FOR THE CONDUCT OF THE MEETING.....	2
<b>3.</b>	<b>ADOPTION OF THE MEETING AGENDA .....</b>	<b>3</b>
<b>4.</b>	<b>ADMINISTRATIVE AND FINANCIAL MATTERS .....</b>	<b>3</b>
4.1	STATUS OF ADMINISTRATIVE REPORTS FOR THE YEAR 2006 AND FIRST HALF OF 2007 .....	3
4.2	CALCULATION OF ACTUAL CO-FINANCING.....	6
4.3	PROCEDURES FOR CLOSURE OF THE MEMORANDA OF UNDERSTANDING .....	6
<b>5.</b>	<b>REPORTS FROM THE NATIONAL TECHNICAL FOCAL POINTS REGARDING NATIONAL CO-ORDINATION AND ACTIVITIES AT THE NATIONAL LEVEL .....</b>	<b>7</b>
5.1	VIET NAM .....	7
5.2	THAILAND – MS. NIRAWAN PIPITSOMBAT .....	7
5.3	PHILIPPINES – MR. FLORENDO BARANGAN .....	7
5.4	MALAYSIA – MR. LEE HENG KENG .....	8
5.5	INDONESIA – MR. DASMINTO .....	8
5.6	CHINA – PROFESSOR HUANG ZHENGQUANG .....	8
5.7	CAMBODIA – MR. KOCH SAVATH .....	9
<b>6.</b>	<b>REPORTS FROM THE REGIONAL WORKING GROUPS AND REGIONAL TASK FORCES ON PROGRESS AND ACHIEVEMENTS TO DATE.....</b>	<b>10</b>
6.1	REGIONAL WORKING GROUP ON MANGROVES.....	10
6.2	REGIONAL WORKING GROUPS ON CORAL REEFS.....	11
6.3	REGIONAL WORKING GROUP ON SEAGRASS.....	12
6.4	REGIONAL WORKING GROUP ON WETLANDS .....	13
6.5	REGIONAL WORKING GROUP ON FISHERIES .....	14
6.6	REGIONAL WORKING GROUP ON LAND-BASED POLLUTION .....	14
6.7	REGIONAL TASK FORCE ON LEGAL MATTERS .....	15
6.8	REGIONAL TASK FORCE ON ECONOMIC VALUATION .....	15
<b>7.</b>	<b>CONSIDERATION OF ACTIVITIES AND ACHIEVEMENTS OF THE DEMONSTRATION SITES AND PILOT ACTIVITIES.....</b>	<b>16</b>
7.1	STATUS OF THE DEMONSTRATION SITE AND PILOT PROJECTS IN THE MID-TERM EVALUATION .....	16
7.2	ACHIEVEMENTS AND LESSONS LEARNT FROM THE DEMONSTRATION SITE AND PILOT PROJECTS .....	17
<b>8.</b>	<b>STATUS OF THE REGIONAL TRAINING PROGRAMME.....</b>	<b>18</b>
<b>9.</b>	<b>OPERATION AND MAINTENANCE OF THE PROJECT WEBSITE, AND REGIONAL GIS AND META-DATABASES .....</b>	<b>20</b>
<b>10.</b>	<b>REPORT OF THE PROJECT CO-ORDINATING UNIT ON PROJECT IMPLEMENTATION AND OUTPUTS 2002-2007 .....</b>	<b>21</b>
<b>11.</b>	<b>FINAL REVIEW OF THE REVISED DRAFT STRATEGIC ACTION PROGRAMME (SAP) AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE REGARDING ITS' APPROVAL .....</b>	<b>22</b>
11.1	CONSIDERATION OF NATIONAL RECOMMENDATIONS REGARDING THE CONTENT AND IMPLEMENTATION OF THE SAP .....	22

11.2	REVIEW OF COST – BENEFIT ANALYSIS OF PROGRAMME ACTIVITIES .....	23
11.3	RE-CONSIDERATION OF CONTENTS AND FINAL REVISION OF THE STRATEGIC ACTION PROGRAMME .....	23
11.4	REGIONAL PARTNERSHIPS, CO-OPERATION AND COORDINATION MECHANISM, AND REVIEW OF DRAFT MEMORANDUM OF UNDERSTANDING AMONG THE COUNTRIES BORDERING THE SOUTH CHINA SEA FOR THE COORDINATION OF ACTIONS TO IMPLEMENT THE STRATEGIC ACTION PROGRAMME .....	23
11.5	RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE REGARDING THE PROCEDURES FOR APPROVAL OF THE SAP AND ITS IMPLEMENTATION .....	24
<b>12.</b>	<b>IMPLEMENTING THE STRATEGIC ACTION PROGRAMME: OPERATIONAL CONSIDERATIONS .....</b>	<b>25</b>
12.1	BUILDING COMMUNITY CAPACITY THROUGH A REGIONAL NETWORK OF NON-GOVERNMENT ORGANISATIONS WITH THE COLLABORATION OF GEF SMALL GRANT PROGRAMME .....	25
12.2	PROPOSED GEF PROJECT ON DEVELOPMENT AND OPERATION OF THE REGIONAL FISHERIES <i>REFUGIA</i> SYSTEM .....	25
12.3	MECHANISMS AND ACTIONS AT THE REGIONAL, NATIONAL AND LOCAL LEVELS IN ORDER TO ACHIEVE THE TARGETS OF THE STRATEGIC ACTION PROGRAMME.....	26
<b>13.</b>	<b>WORK PLAN AND TIMETABLE FOR THE REGIONAL SCIENTIFIC AND TECHNICAL COMMITTEE .....</b>	<b>27</b>
<b>14.</b>	<b>ANY OTHER BUSINESS .....</b>	<b>27</b>
<b>15.</b>	<b>ADOPTION OF THE REPORT OF THE MEETING.....</b>	<b>27</b>
<b>16.</b>	<b>CLOSURE OF THE MEETING.....</b>	<b>27</b>

### List of Annexes

<b>ANNEX 1</b>	<b>List of Participants</b>
<b>ANNEX 2</b>	<b>List of Documents</b>
<b>ANNEX 3</b>	<b>Agenda</b>
<b>ANNEX 4</b>	<b>Additional Activities to be Included Under Existing MoUs</b>
<b>ANNEX 5</b>	<b>Amendments and Revisions to the Strategic Action Programme (SAP - Draft 4)</b>
<b>ANNEX 6</b>	<b>Possible Roles for the COBSEA/COBSEA Secretariat in the Implementation of the Strategic Action Programme (SAP) for the South China Sea</b>
<b>ANNEX 7</b>	<b>Work Plan and Timetable for the Regional Scientific and Technical Committee for 2008</b>

## **Report of the Meeting**

### **1. OPENING OF THE MEETING**

#### **1.1 Welcome on behalf of UNEP**

1.1.1 The Project Director, Dr. John C. Pernetta opened the meeting, at 8.30am on 11<sup>th</sup> December 2007, and welcomed participants on behalf of the Executive Director of UNEP, Dr. Achim Steiner; and the Director of the UNEP Division of Global Environment Facility Co-ordination, Ms. Maryam Niamir-Fuller.

1.1.2 Dr. Pernetta noted that there were a wide range of substantive matters requiring attention from the RSTC, including consideration of activities at the national level to review the revised Strategic Action Programme (SAP), and recommendations to the Project Steering Committee regarding the establishment of mechanisms for SAP implementation. In addition, progress in implementation of demonstration sites needed to be reviewed, the latest revision of the SAP finalised, and plans for 2008 activities finalised. He noted that as usual the agenda was very full and apologised to the Committee for the late delivery of some documents.

1.1.3 Dr. Pernetta reminded participants that the project was entering its last year and that the RSTC had an important role in providing guidance to the Project Steering Committee with regard to the closure of the Memoranda of Understanding and the reallocation of funds to activities that could guarantee an output prior to the closure of the project.

1.1.4 Finally, Dr. Pernetta noted that the meeting would demand a considerable amount of work from the members both individually and collectively. He expressed the hope that despite the work load the meeting would be both enjoyable and productive and wished the members well in their deliberations.

#### **1.2 Welcome Address on behalf of the Government of Thailand**

1.2.1 Dr. Pernetta invited Ms. Nirawan Pipitsombat of Thailand's Office of Natural Resources and Environmental Policy and Planning to address the committee on behalf of the Royal Government of Thailand.

1.2.2 Ms. Nirawan welcomed participants to Thailand and noted that Trat Province was home to the Trat Mangrove Habitat Demonstration Site established within the framework of the UNEP/GEF South China Sea Project. Ms. Nirawan expressed the hope that the committee would find the time to visit this site during the final day of the meeting, highlighting that the site was located in an important transboundary area with Cambodia.

1.2.3 Ms. Nirawan noted with regret that due to Thai Government elections scheduled for 23<sup>rd</sup> December 2007, the National Technical Focal Point for Thailand, Dr. Sirikul Bunpapong would be unable to participate in the meeting. Ms. Nirawan noted further that she was acting as alternate for Dr. Sirikul.

#### **1.3 Introduction of Members**

1.3.1 The Project Director warmly welcomed the new members and alternates and invited participants to introduce themselves to the meeting. Members proceeded to introduce themselves, indicating their institutional affiliations and role in the project. The list of participants is provided in Annex 1 of this report.

1.3.2 Dr. Pernetta noted that the Chairperson of the Regional Task Force on Legal Matters, Dr. Amnat Wongbandit was unable to attend the meeting and no other members of the Task Force were available. He explained that it would be necessary for him to represent this Task Force during the meeting.

1.3.3 The Committee noted that the National Technical Focal Point for Viet Nam, Dr. Mai Trong Nhuan would also be unable to attend the meeting. Dr. Pernetta informed the meeting that the PCU had made arrangements for Mr. Vu Tan Phuong to participate in the meeting as Dr. Mai's alternate. He noted with deep regret that Mr. Phuong was unable to travel to the meeting due to his not having received authorisation as the alternate.

## **2. ORGANISATION OF THE MEETING**

### **2.1 Election of Officers**

2.1.1 Members were reminded that Dr. Vo Si Tuan, Mr. Koch Savath, and Professor Huang Zhenguang, were elected and served as Chairperson, Vice-Chairperson and Rapporteur for the committee during 2002 and 2003. It was noted that at the fourth meeting held in Pattaya, Thailand in January 2004, members agreed that the officers originally elected in 2003 would continue to serve for the duration of the meeting and would be replaced immediately thereafter by newly elected officers.

2.1.2 At the end of the fourth meeting Dr. Gil Jacinto, Mr. Heru Waluyo, and Dr. Tuan were elected as Chairperson, Vice-Chairperson, and Rapporteur, respectively. These officers continued to serve during the fifth meeting of the Committee convened in Fangchenggang, China in December 2004.

2.1.3 Members recalled that at the sixth meeting of the Committee convened in Batam in December 2005, Mr. Savath, Professor Huang and Mrs. Wahyu Indraningsih were elected as Chairperson, Vice-Chairperson and Rapporteur respectively. Mr. Savath and Professor Huang were re-elected to the same Office during the seventh meeting in Siem Reap in November 2006, and Dr. Mai was elected as the Rapporteur for that meeting.

2.1.4 Members were further reminded that the Rules of Procedure state that the Committee shall elect officers from amongst the members at the commencement of each meeting and that, such officers may be elected no more than once. As Mr. Savath and Professor Huang had been re-elected once, they were ineligible for re-election to the same office. It was noted that it would be necessary also to elect a new Rapporteur. Dr. Pernetta then called for nominations for Chairperson, Vice-Chairperson, and Rapporteur.

2.1.5 Mr. Savath nominated Professor Huang as Chairperson, and this was seconded by Mr. Lee Heng Keng. Mr. Lee nominated Ms. Nirawan as Vice-Chairperson, and this was seconded by Professor Huang. Dr. Ong Jin-Eong nominated Mr. Florendo Barangan as the Rapporteur for the meeting, and this was seconded by Professor Huang. There being no further nominations, Professor Huang, Ms. Nirawan, and Mr. Barangan were duly elected by acclamation.

### **2.2 Documentation Available to the Meeting**

2.2.1 The Chairperson invited Dr. Tuan, the Secretary of the Committee to introduce the documentation available to the meeting. Dr. Tuan reviewed the documents listed in document UNEP/GEF/SCS/RSTC.8/Inf.2 and noted that these had been lodged on the project website and were also available to participants in electronic format. He briefly highlighted the items on the list of the discussion documents indicating the key issues requiring discussion and decision by the Committee. He noted that members were invited to table any additional documents, and the full list of documents made available to the meeting is contained in Annex 2 of this report.

### **2.3 Programme of Work and Administrative Arrangements for the Conduct of the Meeting**

2.3.1 The Chairperson then invited Dr. Tuan to introduce the draft programme for the conduct of business contained in document UNEP/GEF/SCS/RSTC.8/Inf.3. Dr. Tuan briefed participants on the administrative arrangements for the conduct of the meeting, noting that the meeting was scheduled to take place over four days and that the Committee could form small working groups to elaborate on specific matters if required. He expressed his hope that the business of the meeting could be completed in three days, in order that the Committee could visit the Trat Mangrove Habitat Demonstration Site on the final day of the meeting.

### **3. ADOPTION OF THE MEETING AGENDA**

3.1 The Chairperson, Professor Huang, introduced the Provisional Agenda prepared by the Project Co-ordinating Unit (PCU) for the meeting as document UNEP/GEF/SCS/RSTC.8/1, and the Annotated Provisional Agenda, document UNEP/GEF/SCS/RSTC.8/2 and invited members to propose any amendments or additional items for consideration by the committee.

3.2 There being no amendments or additional items proposed, the draft agenda was adopted as tabled and is attached as Annex 3 to this report.

### **4. ADMINISTRATIVE AND FINANCIAL MATTERS**

#### **4.1 Status of Administrative Reports for the Year 2006 and First half of 2007**

4.1.1 The Chairperson invited the Project Director to introduce document UNEP/GEF/SCS/RSTC.8/4 "*Status of the Six Month Progress and Expenditure Reports, and Annual Audit Reports from the Focal Points*" and to highlight any matters requiring attention of, or decision by the Committee.

4.1.2 Dr. Pernetta drew the attention of the Committee to Tables 1 and 2 in document UNEP/GEF/SCS/RSTC.8/4. He noted that Table 1 indicates that for the first three years of project operation signed progress and expenditure reports had now been received from all focal ministries and specialised executing agencies with the exception of expenditure reports from the Malaysian Coral Reefs and Indonesian Fisheries focal points.

4.1.3 Dr. Pernetta noted that in the case of Malaysia restructuring of the Government resulted in the transfer of the Coral Reef Focal Point responsibilities from the Marine Parks Authority within the Ministry of Agriculture to the newly created Ministry of Natural Resources and Environment. Draft progress reports have now been received covering the period to June 2007 and final signed reports are anticipated in the near future. In the case of Indonesia an expenditure report was not received for the first half of 2004 but subsequent reports were received for the second half of 2004 and 2005, which covered expenditures during the period of the missing report.

4.1.4 He noted that overall compliance was high during the preparatory phase of the project: of the 253 progress reports anticipated between 2002 and 2004, 248 (98%) had been received; three of the missing reports were combined with the subsequent period and two had been received as unsigned drafts. He noted that the status with regard to the expenditure reports is similar, although delays in submissions have been excessive in some instances.

4.1.5 Dr. Pernetta noted that Table 2 contained the same information for 2005, 2006 and the first half of 2007. It can be seen that of the 86 progress reports due for 2005, 84 (98%) have been received in draft and 79 (92%) have been received as final signed originals. Of the 86 progress reports due in 2006, 81 (94%) have been received in draft and 75 (87%) in final signed form. For the first half of 2007, 43 progress and expenditure reports were anticipated of which 8 progress and expenditure reports have yet to be received in draft (compliance 81%). Seven of the sets of reports cleared in draft have yet to be received in signed original.

4.1.6 In relation to Table 3, Dr. Pernetta noted that of the ten progress and ten expenditure reports due for the Task Forces in 2005 all have been received in signed original. Of the 28 progress and expenditure reports due in 2006 all have been received in draft and 27 (96%) have been received in signed original. He advised the Committee that Thailand had decided to discontinue the MoU for legal matters and that the Memorandum was closed in 2007. For the remaining MoUs a total of 13 progress and expenditure reports were due no later than 31st July 2007. Of these, ten progress reports and ten expenditure reports have been received in draft but only three of each in the signed original.

4.1.7 In the case of the demonstration sites and pilot activities 7 sets of progress and expenditure reports were due at the end of January 2006 in respect of expenditures during the second half of 2005. All have been received in signed original. Similarly, in the case of the 11 sets of mid-year reports for 2006, all have been received in signed original. Of the 13 sets of end year reports for 2006 all have been received in draft and twelve sets in the signed original. With respect to the 13 progress and expenditure reports for the first half of 2007 only one set is outstanding (92% compliance) that from the Lingdingyang pilot activity.

4.1.8 With regard to the current status of cash advances to the Inter-Ministry Committees and Specialised Executing Agencies, Dr. Pernetta noted that Table 4 presents the status of the cash advances and reported expenditures of the IMCs and SEAs in the participating countries, during the period January 2002 to October 2006. The total amount of cash advanced to SEAs at the national level since 2002 is US\$6.62 million of which US\$1.15 million (17%) is presently unaccounted for. A substantial proportion of these funds (US\$763,356 or 66%) have been transferred since June 30<sup>th</sup> 2007 in respect of the demonstration site activities. In addition US\$62,769 (6%) has been advanced in the last quarter in respect of training courses. He explained that it is not expected that these sums would be accounted for before January 31<sup>st</sup> 2008.

4.1.9 Dr. Pernetta noted that the greatest concern at the present time are the sums, which have been held for two or more years, and these are as follows:

- China – Land-based Pollution/Lindingyang (-15,650+18,000)<sup>1</sup>;
- Indonesia – IMC (6,923); Wetlands (11,850)
- Malaysia – IMC (8,140); Coral reefs (8,333); Seagrass (28,431); Wetlands (31,298)
- Philippines – Mangroves (7,700)
- Thailand – Mangroves (17,966); Fisheries (10,905)

4.1.10 With regard to the status of audit reports, Dr. Pernetta noted that no audit report for funds advanced in 2002 remains outstanding, whilst one, for Coral reefs in Malaysia, remains outstanding for 2003. In this case no audit report has been received for the subsequent years but the PCU has been informed that an audit report covering the period January 2003 to June 2007 will be forthcoming in the immediate future. In addition to the Malaysian reports for coral reefs no audit report has been received for the years 2004, 2005 and 2006 in respect of the mangrove component in Thailand. A total of 41 reports have been received from the anticipated total of 43 (95% compliance) for 2004 and 2005. In the case of 2006 fewer audit reports were required since the requirement for an annual audit of sums less than 10,000 US dollars or where the fee exceeds 5% of the sum transferred has been waived by the Fund Management Bureau in Nairobi. The total number required was 36 of which 32 have been received to date (89%).

4.1.11 Finally, Dr. Pernetta informed the meeting that an important task of the Committee would be to provide guidance to the Project Steering Committee regarding the closure of the Project, including the re-allocation of funds that, had not yet been released for the execution of activities, which it was clear would not now take place, to activities that could guarantee an output prior to the closure of the project. He informed the meeting that approximately US\$1.5 million was available for re-allocation.

4.1.12 Mr. Lee informed the Committee that he had communicated with the coral reef focal point in Malaysia and was hopeful that expenditures would be reported on in the immediate future. He also noted that the Memorandum of Understanding covering the land-based pollution component in Malaysia was closed in 2007, and sought clarification regarding whether the remaining funds of US\$673 transferred to the SEA could be spent on obtaining an external audit since the government auditors would take longer due to their work load. Dr. Pernetta noted that the money could be spent on an external audit, although the focal point must write to him directly requesting the use of the funds and that he would respond formally advising that the money could be spent.

4.1.13 With regard to the lack of progress and expenditure reports for the wetlands sub-component in Indonesia, Dr. Tuan noted that he had discussed the matter with the National Technical Focal Point for Indonesia. He informed the meeting that the Project Director had subsequently sent a letter to Wetlands International requesting that the required reports be submitted to the PCU. He noted further that many of the anticipated outputs from Wetlands International had not been delivered.

4.1.14 Mr. Dasminto informed the meeting that this matter had proven difficult to resolve at the national level. In this connection, the Chairperson of the Regional Working Group on Wetlands, Mr. Narong Veeravaitaya noted that Mr. Antung Dedy had informed the Eighth Meeting of the Regional Working Group on Wetlands convened in Shantou, China from 8<sup>th</sup> - 11<sup>th</sup> May 2007 that a meeting would be convened within one month of his return to Jakarta to complete all outstanding progress and financial reports.

---

<sup>1</sup> -15,650 represents a recently reported over-expenditure on the SEA account; 18,000 represents the unaccounted cash balance for the Lindingyang Pilot activity.

4.1.15 Regarding the need to re-allocate the approximate US\$1.5 million of project funds. Mr. Lee asked the Project Director if this amount included the unspent cash balances held by the Inter-Ministry Committees and Specialised Executing Agencies. Dr. Pernetta noted that this amount represented funds, which had been allocated for activities but had not yet been disbursed. He informed the meeting that it was estimated that at the national level approximately 13% of the unaccounted cash balances remained unspent by the SEAs.

4.1.16 Dr. Ong suggested that the unspent funds could be allocated to the development of the project's network of habitat demonstration sites. Mr. Lee agreed and suggested that funds could be used to expand activities at sites, which had demonstrated they were capable of producing outputs within the desired timeframe, i.e., before the end of June 2008. In this connection, Dr. Pernetta reminded the Committee that a large number of coastal habitat sites had been ranked as part of the site selection process and suggested that funds might also be used to initiate interventions at a selection of these sites.

4.1.17 Dr. Pernetta reminded the Committee that the South China Sea project had established a partnership with the GEF Small Grants Programme (SGP) in order to facilitate NGO and community involvement in the implementation of the regional Strategic Action Programme (SAP) at the local level. He suggested that unallocated funds might be transferred to the SGP in support of SAP implementation activities at the community level. In this connection he informed the meeting that informal discussions held with the SGP suggest that UNDP/UNOPs would not be able to accept a transfer of funds of less than US\$500,000 and that such a transfer would attract a 6% administration fee.

4.1.18 Ms. Chee Phaik Ean informed the meeting that the Specialised Executing Agencies for the fisheries component had planned the establishment of pilot fisheries *refugia* sites in their respective countries. Ms. Chee suggested that funds could be used in support of the development of these sites. It was noted also that the Regional Working Group on Fisheries and the Southeast Asian Fisheries Development Center (SEAFDEC) had identified that an advanced training course on larval fish identification could be convened during the first half of 2008.

4.1.19 Dr. Pernetta informed the meeting that the Senior Expert had conducted mid-term reviews of habitat demonstration sites and pilot activities during 2007, and suggested that Dr. Tuan may be able to advise the Committee regarding sites and activities that could utilise the funds within the desired time-frame. Dr. Tuan identified such activities as: eco-farming at the Fanchenggang Demonstration Site; creation of alternative livelihoods at the Batu Ampar Demonstration Site; implementation of the plan for sustainable coral reef based tourism at the Koh Chang Demonstration Site; improvement of mechanisms to integrate habitat and fisheries management via the use of fisheries *refugia* at the Phu Quoc Demonstration Site; linking fisheries *refugia* and the network of small-scale MPAs in the area of the Masinloc Demonstration Site; and the enhancement of mechanisms established for transboundary management in relation to the Phu Quoc – Kampot, and Peam Krasop – Trat, demonstration sites.

4.1.20 Mr. Barangan noted that there was concern for the effectiveness of many Marine Protected Areas in the Philippines. He suggested that funds could be used to explore procedures for improved selection and management of such sites. With regard to Cambodia, Mr. Savath suggested that there was an urgent need for capacity building, particularly with regard to the management of transboundary areas.

4.1.21 Given the wide range of concrete recommendations provided by members of the Committee, Dr. Pernetta suggested and the meeting agreed that a small inter-sessional working group be formed to formulate a programme of activities to be implemented during the first half of 2008 for consideration of the Committee. It was agreed further that this group would be comprised of Dr. Tuan, Dr. Hutomo, Ms. Chee, and Dr. Ong.

4.1.22 The proposed actions were presented by the small group, considered, and amended by the Committee for recommendation to the PSC as contained in Annex 4 of this document.<sup>2</sup>

---

<sup>2</sup> Further discussion took place following the field visit and is recorded under Agenda Item 14.

## 4.2 Calculation of Actual Co-financing

4.2.1 The Chairperson invited Dr. Pernetta to introduce document UNEP/GEF/SCS/RSTC.8/5 "*Co-financing of the Project to Date and Comparison with Original Agreed Estimates*". Dr. Pernetta reminded members that participating countries had agreed to in-kind co-financing commitments at the time of consideration of the project document by the first meeting of the Project Steering Committee.

4.2.2 Dr. Pernetta noted that the original estimates were based on agreement that; the cost of time given to the project by all nationals from the participating countries would be estimated and costed using a uniform coefficient of US\$70 per person per day. He reminded the Committee that this was to be an inclusive costing of salary and benefits, plus office support costs that was to be applied to all individuals, from all countries.

4.2.3 Dr. Pernetta noted that the government co-financing realised for the preparatory phase of the project had exceeded the anticipated amounts by approximately 25 percent overall, reflecting in part the extension of this phase to June 2004, due to the SARS outbreak and some major unanticipated contributions on behalf of central and provincial governments. He reported that co-financing commitments for the operational phase of the project had not been realised to date, and noted that this reflects in part the fact that approximately 15 reports are outstanding. He noted that the unique procedure for the tracking of co-financing adopted in the South China Sea project provides a suitable basis for the estimation of government co-financing in future projects.

4.2.4 Mr. Narong queried if the co-financing estimates presented in the tables included activities at the demonstration sites and participation of members of the project network in the regional and national level training events conducted. Dr. Pernetta noted that demonstration site co-financing had been calculated separately and would be presented by Dr. Tuan during the course of the meeting. He noted that the participation of individuals in training events had not been costed to date but would be included in the final co-financing estimates, for the whole project.

## 4.3 Procedures for Closure of the Memoranda of Understanding

4.3.1 The Project Director proceeded to present the proposals of the Project Co-ordinating Unit with regard to the procedures to be adopted for the closure of all Memoranda of Understanding and the Project Document by the due date of 30<sup>th</sup> December 2008. These proposals were outlined in document UNEP/GEF/SCS/RSTC.8/6 "*Proposed Procedures and Timetable for Closure of Project Activities, Memoranda of Understanding and the Project Document by December 31<sup>st</sup> 2008*".

4.3.2 Dr. Pernetta reminded the Committee that all project activities, and hence expenditures are planned to be completed by June 30<sup>th</sup> 2008. He noted that under the terms of the MoU's an expenditure report is due no later than the 31<sup>st</sup> July, and informed the meeting that what is therefore required by 31<sup>st</sup> July, on the part of the partner agency are the following documents:

- A six month progress report on activities between January and June 30<sup>th</sup>; where the prior six month report has not been submitted a combined report for both periods will be accepted;
- An expenditure report encompassing all expenditures between the time of the last accepted expenditure report and June 30<sup>th</sup> 2008; and,
- An inventory report of all non-expendable equipment purchased under the agreement.
- A terminal audit report covering all expenditures not covered by previously submitted audit reports.

4.3.3 Dr. Pernetta informed the Committee that once these documents were been received and accepted by the Project Co-ordinating Unit a letter would be issued by UNEP formally closing the agreement and stating that the equipment purchased would remain the property of the Institution concerned.

4.3.4 He suggested that the RSTC and PSC convene final meetings in the period late July to end August in order to: review progress with respect to closure of the Memoranda of Understanding; review the Terminal Evaluation Report, and make corrections of fact, or recommendations for change if necessary; and review progress with respect to the activities approved in the 7<sup>th</sup> PSC meeting.

4.3.5 Dr. Pernetta noted that with the exception of the demonstration sites and a few problematic MoUs that are currently being dealt with there is no reason why the project cannot be closed according to this schedule. He noted however, that this is likely to result in a substantial volume of unspent funds and depending upon the decisions of the Project Steering Committee regarding the use of these funds, this schedule may have to be varied.

4.3.6 Mr. Lee asked the Project Director about the procedure for returning unspent funds to UNEP. Dr. Pernetta explained that bank account details for the return of funds were included in each of the MoUs, but urged the Committee to encourage the full utilisation of funds that have been disbursed to the national level for activities rather than return the funds to UNEP. Mr. Narong queried whether it was possible to spend income earned on cash held by the SEAs. Dr. Pernetta explained that the SEAs could spend interest on project related activities, but the SEA must report the interest as income in their financial reports.

## **5. REPORTS FROM THE NATIONAL TECHNICAL FOCAL POINTS REGARDING NATIONAL CO-ORDINATION AND ACTIVITIES AT THE NATIONAL LEVEL**

### **5.1 Viet Nam**

5.1.1 As the National Technical Focal Point for Viet Nam was neither present nor represented by an alternate, no report regarding national co-ordination and activities was delivered to the Committee. The meeting noted with regret that this was the first time in the implementation of the project that a National Technical Focal Point was not present or represented in a meeting of the Committee.

### **5.2 Thailand – Ms. Nirawan Pipitsombat**

5.2.1 Ms. Nirawan briefly reviewed document UNEP/GEF/SCS/RSTC.8/7-Thai “*Report of the National Technical Focal Point of Thailand*”. It was noted that unfortunately no Inter-Ministry Committee meeting or meeting of the NTWG had been convened in Thailand during 2007, and that no consultation had yet been conducted to review the revised Strategic Action Programme.

5.2.2 With regard to the adoption of the National Action Plans, it was noted that the NAPs for the habitat sub-components had been incorporated into the National Biodiversity Strategic Action Plan (NBSAP) for the 5-year period (2008-2012). Plans for the conduct of echo-seminars were outlined, and summary reports of the status of the Mu Koh Chang and Trat demonstration were annexed to the report.

5.2.3 The Committee noted with concern that no National Technical Working Group meeting had been convened during the year. Dr. Pernetta noted that this had serious implications in terms of there being no forum for exchange between component focal points, and that consequently it had not been possible for the SAP to have been collectively reviewed. He noted an additional implication related to Thailand’s co-financing of project activities during 2007.

### **5.3 Philippines – Mr. Florendo Barangan**

5.3.1 Mr. Barangan briefly reviewed document UNEP/GEF/SCS/RSTC.8/7-Phi “*Report of the National Technical Focal Point of the Philippines*”. It was noted that unfortunately no Inter-Ministry Committee meeting had been convened in the Philippines during 2007. It was explained that the Philippines are currently combining individual NAPs for project components into an Integrated National Action Plan (INAP), and that due to delays in the completion of this the IMC had not met as planned.

5.3.2 Mr. Barangan informed the meeting that NAPs had only been completed for the coral reef and seagrass components of the project to date, and that neither of these NAPs has been formally adopted by government. He informed the meeting that the INAP would be the plan approved by the IMC for formal government adoption. It was noted that a National Technical Working Group meeting was convened during the year to discuss the status of component implementation, possible linkages between and among components, and to comment on and provide inputs to the revised SAP.

5.3.3 Dr. Pernetta sought clarification as to why in section 8 of the report, Mr. Barangan had noted wetlands as being amongst the least known coastal habitats when in fact much more is known about wetlands than other critical habitats such as seagrass. Mr. Barangan noted that “wetlands” had been used in the report to refer to estuaries, lagoons, and tidal flats. It was noted by the meeting that no national level stakeholder consultation had been convened in the Philippines to consider the SAP during 2007.

#### **5.4 Malaysia – Mr. Lee Heng Keng**

5.4.1 Mr. Lee introduced document UNEP/GEF/SCS/RSTC.8/7-Mal “*Report of the National Technical Focal Point of Malaysia*”. Mr. Lee noted that a meeting of the Inter-Ministry Committee was convened on 10<sup>th</sup> July 2007. This meeting was participated in by all SEAs, including the Marine Parks Section, Department of Environment, Department of Wildlife and National Parks Peninsular Malaysia, and Universiti Putra Malaysia. The IMC agreed during this meeting to conduct a national workshop involving all relevant stakeholders to review and comment on the revised regional Strategic Action Programme.

5.4.2 Mr. Lee noted that the national consultation to consider the SAP was coordinated by the Ministry of Natural Resources and Environment as the Focal Ministry of the project in Malaysia. It was convened from 24<sup>th</sup> - 25<sup>th</sup> July 2007 at Cherating, Pahang Darul Makmur and stakeholders were particularly supportive of the training, capacity building, and information sharing sections of the various SAP components. It was noted that further consultations are required at various levels of government, particularly regarding the mode for SAP implementation.

5.4.3 Regarding the completion and adoption of NAPs, Mr. Lee informed the meeting that the NAPs for the wetlands, coral reefs, and seagrass components were still being developed. He noted that the NAP for land-based pollution had been completed and was being implemented as part of the 9<sup>th</sup> Malaysian Plan (2006 - 2010).

#### **5.5 Indonesia – Mr. Dasminto**

5.5.1 Mr. Dasminto presented document UNEP/GEF/SCS/RSTC.8/7-Ind “*Report of the National Technical Focal Point of Indonesia*”. Mr. Dasminto highlighted the current institutional arrangements for the implementation of the project in Indonesia, noting that the Ministry of Environment functions as the Focal Ministry with responsibility for convening meetings of Inter-Ministry Committee and NTWG. He reviewed activities of each component of the project, the status of the habitat demonstration sites, and plans for the conduct of national “echo-seminars”.

5.5.2 Dr. Pernetta noted a number of inaccuracies in the report which were subsequently revised with the assistance of the PCU in order for the report to be published via the project website. Dr. Tuan asked Mr. Dasminto if a meeting of the IMC had been convened during 2007, and Mr. Dasminto noted that no meeting had taken place, the SAP had not been reviewed but that plans were in hand to conduct a consultation meeting in January 2008 .

#### **5.6 China – Professor Huang Zhengguang**

5.6.1 Professor Huang introduced document UNEP/GEF/SCS/RSTC.8/7-Chn “*Report of the National Technical Focal Point of China*”. He provided a detailed overview of the institutional arrangements established in China for the implementation of the project from 2002 - 2007, and the outcomes of the meetings of the National Technical Working Group and Inter-Ministry Committee during this period.

5.6.2 Regarding the adoption of the National Action Plans, Professor Huang informed the meeting that the sixth meeting of China’s Inter-Ministry Committee convened in December 2005 had approved the NAPs in principle, and recommended that all relevant government agencies review the plans in detail. He noted that the NAPs were considered by four meetings of the National Technical Working Group during the period 2005 - 2007.

5.6.3 Professor Huang highlighted that the seventh meeting of the Inter-Ministry Committee convened in Beihai from 10<sup>th</sup> - 12<sup>th</sup> April 2007 formally approved the NAPs. He noted that the IMC had requested the relevant Specialised Executing Agencies to conduct a final review of the NAPs to ensure that they align with existing long-term plans and programmes and clearly defined the roles and responsibilities of the various government ministries and agencies involved in NAP implementation. He noted further that the final versions of the four NAPs were agreed in the 11<sup>th</sup> meeting of the National Technical Working Group, and were subsequently printed for implementation.

5.6.4 Professor Huang informed the meeting that a national stakeholder consultation was convened in Beijing from 11<sup>th</sup> - 12<sup>th</sup> November to consider the revised Strategic Action Programme. Representatives of the IMC ministries and agencies, provincial governments, and focal points of the project components participated in the workshop. Professor Huang noted that the consultation agreed in principle with the revised Strategic Action Programme and that he would make suggestions for the revision of the SAP under a later agenda item.

5.6.5 Mr. Narong asked Professor Huang where the funds for NAP implementation came from. Professor Huang noted that the costs of NAP implementation in China were shared by central and provincial governments. He noted that the IMC was responsible for approval of all plans and associated expenditures. Mr. Lee asked if funds are made available before or after the plan was developed. Professor Huang noted that the plan must come first and be accepted by the IMC prior to funds being allocated for activities.

5.6.6 The Project Director reminded the Committee that the development and adoption of the National Action Plans in China had relied on a high level of national co-ordination, particularly the interaction between the Inter-Ministry Committees, National Technical Working Groups, and the Specialised Executing Agencies. He explained that this is how the management framework for the project was intended to work, and noted that similar success had been achieved in Cambodia.

5.6.7 Professor Huang noted that at least 10 billion<sup>3</sup> Yuan (approximately 133 million US dollars) is available for coastal and marine ecosystem management in China for the period 2005 - 2020 and that good national plans are required to access these funds. He informed the Committee that the South China Sea project had assisted in building capacity for national action planning in China

## **5.7 Cambodia – Mr. Koch Savath**

5.7.1 Mr. Savath presented document UNEP/GEF/SCS/RSTC.8/7-Cam "*Report of the National Technical Focal Point of Cambodia*". Mr. Savath outlined the institutional arrangements for project implementation in Cambodia. He noted that the Inter-Ministry Committee (also known as the Cambodian National Coastal Zone Steering Committee) is chaired by His Excellency the Senior Minister, Minister for Environment, Dr. Mok Mareth, with the support of 11 senior representatives from the relevant ministries, and the Governors of the four coastal provinces and municipalities of Cambodia.

5.7.2 Mr. Savath explained that Cambodia's Inter-Ministry Committee is responsible for the overall coordination, policy development, and decision-making relating to the coastal and marine management, and receives scientific and technical advice from the National Technical Working Group and the Specialised Executing Agencies. He informed the meeting that the National Technical Working Group meets four times per year in order to generate advice for the Inter-Ministry Committee, which meets three times per year.

5.7.3 Regarding the adoption of the National Action Plans, Mr. Savath noted that the NAPs for coral reefs and seagrass and land-based pollution in Cambodia had been formally adopted by the Royal Government of Cambodia. He informed the meeting further that the NAPs for mangroves, and wetlands, are currently being revised. He noted that two joint meetings, one each with Viet Nam and Thailand, on the development of joint policy frameworks for cooperation in ecosystem and resource management for the two transboundary demonstration sites in Cambodia had been convened during 2007.

---

<sup>3</sup> American billion i.e. 1,000,000,000.

5.7.4 Mr. Savath noted that a national consultation on the SAP content and implementation of the SAP and NAPs was conducted during 2007. He informed the meeting that the main input received related to the economic valuation component of the SAP. The Cambodian consultation recommended that the introductory text place greater emphasis on the economic values of coastal habitat goods and services versus the costs of action proposed in the SAP.

5.7.5 Mr. Nguyen Van Long asked Mr. Savath how the Inter-Ministry Committee will be sustained beyond the end of the South China Sea project. Mr. Savath responded by informing the meeting that the Inter-Ministry Committee established through the project had since been instituted as a formal government body known as the Cambodian National Coastal Zone Steering Committee, which will continue to function in the long-term.

## **6. REPORTS FROM THE REGIONAL WORKING GROUPS AND REGIONAL TASK FORCES ON PROGRESS AND ACHIEVEMENTS TO DATE**

### **6.1 Regional Working Group on Mangroves**

6.1.1 The Chairperson invited Mr. Ke Vongwattana to present the report of the Regional Working Group on Mangroves concerning activities over the last year including *inter alia*: the conduct of the eighth meeting; the status of administrative reports, MoUs, and substantive outputs; matters relating to the SAP and the economic valuation of mangrove goods and services; and mangrove component inputs to the Third Mayors' Round-Table and Regional Scientific Conference.

6.1.2 Mr. Vongwattana noted that the eighth meeting of the RWG-M was convened in Koh Kong Province, Cambodia from the 19<sup>th</sup> - 22<sup>nd</sup> April 2007. Following the retirement of the mangrove focal point for Viet Nam, a new focal point for Viet Nam had not been officially designated, resulting in no mangrove specialist from Viet Nam being present in the meeting. The two regional experts, Dr. Sanit Aksornkoae and Dr. Nguyen Hoang Tri were unable to attend the meeting.

6.1.3 Mr. Vongwattana informed the Committee that six-month progress and expenditure reports have been received from all mangrove SEAs and all mangrove demonstration sites (Peam Krasop, Batu Ampar, Fangchenggang, and Trat) for the period 1<sup>st</sup> January – 30<sup>th</sup> June 2007. Audit reports covering the year 2006 have been received from the Specialised Executing Agencies in Cambodia, Thailand, Viet Nam, and all four mangrove demonstration sites. Third amendments to the MoUs between UNEP and all mangrove SEAs have been signed, with the exception of SEA for mangroves in Thailand. The outstanding administrative matters for the mangrove sub-component include: audit reports covering the year 2006 for Indonesia and the Philippines; and finalisation of the third MoU amendment for Thailand's mangrove sub-component.

6.1.4 Mr. Vongwattana noted that national language reports on mangroves have been published by all countries with the exception of the Philippines. The English language national reports have been combined and reviewed, and will be published in the first quarter of 2008. All Specialised Executing Agencies have developed National Action Plans on Mangroves, although only China's NAP has been formally adopted by government to date. Mangrove related meta-data and GIS data has been received from all countries and incorporated in the regional databases.

6.1.5 Mr. Vongwattana noted that the eighth meeting of the RWG-M discussed the text of the mangrove component of the revised Strategic Action Programme. Minor changes were made to the section to include sesamid crab abundance in the ecological/environmental indicator matrix. The meeting also considered the use of "*Scylla spp.*" instead of "*Scylla serrata*" since there is some uncertainty regarding the number of species of *Scylla* present in the Gulf of Thailand. It was also recommended that "*lack of experiences and techniques for multi-species replanting (in all countries)*" should be removed from the text as in some areas multi-species replanting may not be viable.

6.1.6 The eighth meeting of the RWG-M reviewed the Weighted Mean National and Regional Values calculated for the goods and services. The group also considered the costs of implementing national activities, and noted that the costs of national level actions for the mangrove sub-component of the SAP might reach as much US\$300 million if the targets of the regional SAP are to be met.

6.1.7 Mr. Vongwattana informed the Committee that the following mangrove related presentations were made during the Third Mayors' Round-Table and Third Regional Scientific Conference: Public-private partnerships in mangrove conservation in Fangchenggang, China; Current uses and alternative livelihoods in mangroves in Batu Ampar, Indonesia; Development of cross-sectorial management and stakeholder capacity for the sustainable use of mangroves at Fangchenggang, China; and Use of mangroves for the control of effluent from intensive fish and shrimp culture in artificial wetlands, Shantou, China.

6.1.8 Dr. Pernetta noted that an interesting outcome of the eighth meeting of the RWG-M was the establishment and successful operation of an electronic forum discussion on the project website. He informed the Committee that the RWG-M had agreed to expand the core base of participants in the mangrove related electronic forums by including individuals from the Regional Training Course on mangroves in the group. He noted that this strategy had been successful in attracting a relatively large number of contributions to the mangrove forum and this may reflect the fact that a critical mass for a successful e-forum was a minimum of 30 people.

## **6.2 Regional Working Groups on Coral Reefs**

6.2.1 The Chairperson invited Mr. Long to present the report of the Regional Working Group on Coral Reefs (RWG-CR). Mr. Long informed the group that the eighth meeting of the RWG-CR was convened on Phu Quoc Island from 4<sup>th</sup> – 7<sup>th</sup> June 2007. He noted that all focal points, except that for Malaysia participated in the meeting. The meeting benefited from the participation of the regional expert Professor Chou Loke Ming.

6.2.2 In terms of the administrative and financial matters it was noted that the most serious concern of the group was that no reports have been received from Malaysia for the operational phase of the project and it had now reached the stage where action must be taken for funds to be returned to UNEP. All 2<sup>nd</sup> and 3<sup>rd</sup> MoU amendments have been signed by UNEP and the SEAs for the coral reefs component, except for Malaysia, since the final signed expenditure reports have not been received and consequently no budget revision can be processed.

6.2.3 The English language versions of the national reports on coral reefs were compiled into a technical publication entitled "*Coral Reefs in the Coastal Waters Bordering the South China Sea*" which was published in November 2007 for regional dissemination during the Third Regional Scientific Conference. Coral reef related meta-data and GIS data have been received from all countries and included in the regional online databases.

6.2.4 The Specialised Executing Agencies from all countries produced a total of 18 outputs, including national language reports, databases, and National Action Plans for dissemination at the national level. The key substantive outputs required from the focal points include: updated GIS (in the format agreed during the eighth meeting) and meta-data; and adoption of the National Action Plans. Only Cambodia has formally adopted its NAP to date. An outstanding task for the focal point from Malaysia is the publication and dissemination of a national report at the national level.

6.2.5 Mr. Long noted that the eighth meeting reviewed the text of the coral reef sub-component of the revised Strategic Action Programme. The group identified several anomalies with the area of coral reef under existing management and the target area to be added for management from Koh Tang (439ha), Koh Pouh (53ha), and 50 percent of the Prek Ampil site (476.5ha) in Cambodia and Balabac coral reef site (2,500ha) in the Philippines by 2015. The addition of these sites and changes to the Cambodian plan necessitated revision of Target 1 of the coral reef component the Strategic Action Programme as follows:

*Target 1. By 2015, at least 70% of the existing area of coral reefs in the 83 target coral reef sites (153,000ha) to be put under an appropriate form of sustainable management.*

6.2.6 It was further agreed that the text of paragraph 7 of the coral reef sub-component of the Strategic Action Programme should be revised as follows:

*Table 2 presents general status of coral reef management in the South China Sea geographic region of the six countries based on information assembled for 83 individual coral reef areas. The area of coral reefs in the 83 target coral reef sites is 217,407ha*

*(29% of the total area in the South China Sea), of which 100,243ha (13% of the total area) is under management at the present time. In term of management effectiveness only around 5% of this area is considered as being under successful management. For 29% of the sites management effectiveness is considered low, whilst around 13% is not under any form of management. The area to be added to the total area managed sustainably by the year 2015 is 53,577ha, thereby increasing the total area under sustainable management to 153,820ha which represents 20% of the total reef area of the South China Sea or 71% of the area of the target sites.*

6.2.7 The eighth meeting of the RWG-CR also considered the economic valuation of coral reef goods and services determined by the Regional Task Force on Economic Valuation. It was noted by the group that in relation to the valuation of capture fisheries production, it is often difficult to link fisheries landings to a known area of coral reefs. This is made more complex by the fact that fisheries departments often group landings into categories such as “demersal fish” when collecting production data, making it impossible to determine what proportion of the landings are coral reef dependent species.

6.2.8 Dr. Tuan informed the Committee that the coral reef focal points, except that for Cambodia, were experiencing difficulties in securing formal NAP adoption. He noted that the focal point for Indonesia, Dr. Suharsono had agreed to send adopted plans to the PCU for three Indonesian districts bordering the South China Sea during the second half of 2007 but these had not yet been received. Mr. Dasminto was not aware of these plans nor the status of their adoption. Mr. Lee informed the meeting that the coral reef focal point for Malaysia had experienced some difficulties with the consultant used to prepare the NAP and it had recently been decided to prepare this plan in-house. He noted that it was hoped this plan would be completed and adopted by June 2008.

6.2.9 Mr. Barangan noted that in the case of the Philippines delays in completion of the Integrated National Action Plan had led to subsequent delays in adoption at the national level of the coral reef NAP. Ms. Nirawan noted that Thailand's coral reef NAP had been included in Thailand National Biodiversity Strategic Action Plan, which was formally adopted on 14<sup>th</sup> November 2007. In the case of Viet Nam, Mr. Long informed the meeting that the coral reef NAP had been with the focal ministry, namely the Vietnam Environment Protection Agency (VEPA) for 3 years. He has sought clarification from the National Technical Focal Point but is yet to receive a reply.

### **6.3 Regional Working Group on Seagrass**

6.3.1 The Chairperson invited Dr. Hutomo Malikusworo to present the report of the Regional Working Group on Seagrass concerning activities over the last year including *inter alia*: the conduct of the eighth meeting; the status of administrative reports, MoUs, and substantive outputs; matters relating to the SAP and the economic valuation of seagrass goods and services; and seagrass component inputs to the Third Mayors' Round-Table and Regional Scientific Conference.

6.3.2 Dr. Hutomo informed the Committee that the eighth meeting of the RWG-SG was successfully convened in Sihanoukville, Cambodia from 21<sup>st</sup> - 24<sup>th</sup> May 2007. He noted that all seagrass sub-component focal points attended the meeting, and that he and Dr. Chittima Aryuthaka had participated as regional experts. Mr. Ouk Vibol, Dr. Hutomo, and Dr. Miguel Fortes and Dr. Suvaluck Satumanatpan were elected to serve the meeting as Chairperson, Vice-Chairperson, and Co-Rapporteurs respectively.

6.3.3 Regarding the status of administrative reports and MoUs for the seagrass sub-component, Dr. Hutomo noted that third MoU amendments had been signed by all Specialised Executing Agencies. Similarly all progress and expenditure reports for the reporting period 1<sup>st</sup> January - 30<sup>th</sup> June 2007 had been received from the SEAs. He noted further that audit reports covering the calendar year, 2006 have been received from all SEAs, and that Viet Nam had requested to combine the audit reports for 2006 and 2007. Six-month progress and expenditure reports had been received for all four seagrass demonstration sites for the period 2006 and 1st half of 2007. Audit reports have also been received for the year 2006 from all demonstration sites, except Phu Quoc.

6.3.4 Dr. Hutomo noted that all Specialised Executing Agencies have published the National seagrass reports in national languages. The English language versions of the National reports have been compiled and edited, and will be published during the first quarter of 2008. Similarly the National Action Plans on seagrass have been revised by all countries, and the NAPs for Cambodia and China have been formally adopted. Seagrass related meta-data and GIS data have been received from all countries and incorporated in the regional databases.

6.3.5 Dr. Hutomo noted that the text of the seagrass sub-component of the revised Strategic Action Programme had been revised during the meeting of the group in 2007. He noted further that the RWG-SG had re-identified and re-ranked six regional threats to seagrass, and had prepared sustainable management indicators for seagrass sites. The meeting also reviewed the Weighted Mean National and Regional Values calculated for the goods and services of seagrass by the RTF-E, and had revised the costs of seagrass actions proposed in the seagrass sub-component of the revised SAP.

6.3.6 Dr. Hutomo informed the Committee that the following seagrass related presentations were made during the Third Mayors' Round-Table and Third Regional Scientific Conference: Cross-sectorial management in the Hepu seagrass site, China; "Bantay Dagat" – local law enforcement in habitat management in Bolinao, Philippines; Development of the Action Plan for Management of Seagrass and Dugong (NSAP) in Thailand; The use of scientific information for seagrass planning and management at Kampot, Cambodia; Science to Action - Research Results Useful in Managing Seagrass in the Philippines; Transboundary Ecosystem Management in the Kampot and Phu Quoc Demonstration Sites; and Public Awareness and Education as a tool to support Seagrass Conservation in China.

6.3.7 Dr. Tuan noted that in reviewing the SAP at the PCU he had identified several inconsistencies with regard to the target areas to be brought under management and the information regarding the management status of sites discussed during the eighth meeting. He noted that the target had subsequently been amended, and that a target relating to NAP adoption initially proposed by the group had been deleted as this task should be completed within the framework of the South China Sea Project.

#### **6.4 Regional Working Group on Wetlands**

6.4.1 The Chairperson invited Mr. Narong to present the report of the Regional Working Group on Wetlands. Mr. Narong informed the Committee that the eighth meeting of the RWG-W was convened in Shantou, China from 8<sup>th</sup> - 11<sup>th</sup> May 2007. He noted that the meeting was attended by a large number of alternates and new focal points, and that the focal point for Viet Nam, Dr. Mai was not able to participate in the meeting and was not represented by an alternate.

6.4.2 Regarding the status of the administrative reports and MoUs for the wetlands sub-component, Mr. Narong noted that original signed six-month progress and expenditure reports had been received from all SEAs, except Indonesia and Philippines, for the first half of 2007. He noted further that all wetland SEAs had submitted audit reports for year 2005; however, only China, Cambodia and Viet Nam had submitted audit reports of expenditures for the year of 2006. Third amendments to the MoUs have been completed for all countries except Indonesia.

6.4.3 Mr. Narong highlighted the urgent need to resolve outstanding administrative matters relating to the Specialised Executing Agency for Indonesia. It was noted that there are inconsistencies with the expenditure report and audit report submitted by the Specialised Executing Agency for the year 2005. Similarly, no administrative reports for the period July 2005 to June 2007 had been received.

6.4.4 Regarding substantive outputs from the wetlands sub-component, Mr. Narong noted that national reports on wetlands have been published in national languages in all countries, with the exception of Malaysia. He noted further that the English language versions of the national reports on wetlands have been prepared for publication during the first quarter of 2007. Revised National Action Plans have been received from China and Thailand. China's NAP was formally adopted during 2007, and the NAP for Thailand was submitted to the National Technical Focal Point at the end of 2006. Revised NAPs are outstanding for Cambodia, Indonesia, Malaysia, Philippines and Viet Nam. The focal points for Indonesia and Malaysia have not yet submitted wetlands GIS data for inclusion in the regional GIS database.

6.4.5 Mr. Narong noted that the text of the wetland component of the Strategic Action Programme was revised during the meeting of the group in 2007. He noted that the meeting had also reviewed the Weighted Mean National and Regional Values calculated for the goods and services of wetlands by the RTF-E, and had revised the costs of wetland actions proposed in the wetlands component of the revised SAP. He informed the meeting that the group had met during the Third Regional Scientific Conference to revise the second target as follows:

*“By the year 2012, to increase the number of sites or specified wetland areas at least 7 sites with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites, etc).”*

6.4.6 Mr. Narong informed the Committee that the group felt they should meet during 2008 in order to discuss progress in relation to the wetlands MSP sites, and to review new and additional data on the goods and services of coastal habitats being collected by members.

## **6.5 Regional Working Group on Fisheries**

6.5.1 The Chairperson invited Ms. Chee Phaik Ean to present the report of the Regional Working Group on Fisheries. Ms. Chee noted that the Ninth Meeting of the Regional Working Group on Fisheries was convened from 10<sup>th</sup> - 13<sup>th</sup> July 2007 on Phu Quoc Island, Viet Nam, and that the focal points from Cambodia, Indonesia, and Thailand were represented in the meeting by alternatives. She noted further that the regional fisheries experts, Mr. Somsak Chullasorn and Professor Nygiel Armada, and 5 participants supported by SEAFDEC had also participated in the meeting.

6.5.2 Regarding the substantive outputs of the fisheries component, Ms. Chee noted that the national GIS and meta-databases, national reports on fish stocks and habitats of transboundary significance in local and national languages, and public awareness materials on sustainable fisheries have been finalised in Cambodia, Philippines, Thailand, and Viet Nam. The final published Bahasa language version of the national report on fisheries for Indonesia remains outstanding.

6.5.3 Ms. Chee noted that the key achievements of the group in its efforts to establish a regional system of fisheries *refugia* included: a listing of demersal species of fish, crustacean and molluscs of transboundary significance in the region; a list of 52 known spawning and nursery areas of which 14 are currently under development as the initial set of *refugia* and a further 9 which have been accorded high priority for development once the initial set have been approved; criteria for defining fisheries *refugia*; inter-governmentally approved guidelines for the establishment of fisheries *refugia* that constitute part of the ASEAN-SEAFDEC Regional Guidelines for Responsible Fisheries in Southeast Asia; and a fisheries *refugia* information portal at <<http://refugia.unepscs.org>>.

6.5.4 Ms. Chee informed the Committee that further development and operation of the regional system of fisheries *refugia* was the basis of the fisheries component of the SAP. It was noted that the group had developed a project proposal in consultation with SEAFDEC aimed at enabling the implementation of proposed fisheries actions under the SAP. Ms. Chee informed the meeting that the following two regional training events had been undertaken in support of the *refugia* activity during 2007: the Regional Training Workshop on Larval Fish Identification and Fish Early Life History Science (16<sup>th</sup> - 31<sup>st</sup> May 2007) and the Regional Training Workshop on the Establishment and Management of Fisheries *Refugia* (28<sup>th</sup> October - 9<sup>th</sup> November 2007).

6.5.5 Dr. Pernetta informed the Committee that the work of the RWG-F had received high praise from the Senior International Waters Specialist of the GEF Secretariat during the Third Mayors Round-Table Meeting. He noted also that the Scientific Committee of the Western and Central Pacific Tuna Commission was currently using the “*refugia*” concept to develop management measures relating to the capture of juvenile tuna in the Western Pacific Ocean. The Committee acknowledged the achievements of the RWG-F, and commended the Chair and members for their hard work.

## **6.6 Regional Working Group on Land-Based Pollution**

6.6.1 The Chairperson invited Dr. Gullaya Wattayakorn to present the report of the Regional Working Group on Land-Based Pollution. Dr. Gullaya informed the Committee that the eighth meeting of the RWG-LbP was convened in Masinloc, Philippines from 6<sup>th</sup> - 9<sup>th</sup> August 2007. It was noted that all focal points or their alternates attended the meeting, and that Dr. Law Ah Theem and herself had participated in their capacity as regional experts.

6.6.2 Regarding the status of administrative matters, Dr. Gullaya noted that there had been significant delays in reporting on behalf of China and the Philippines. Specifically, signed copies of the six-month progress and expenditure reports had not been received from China since the 2nd half of 2005, and from the Philippines since the 1<sup>st</sup> half of 2005 until August 2007. Dr. Gullaya noted further that the Specialised Executing Agencies for Malaysia and Thailand had decided to close their MoUs as they were close to completing all major substantive outputs.

6.6.3 Dr. Gullaya noted that the following substantive outputs had not yet been completed: Cambodia (publication and adoption of the National Action Plan); Indonesia (provision of GIS data and adoption of the National Action Plan); Malaysia (provision of GIS/meta-data and adoption of the National Action Plan); Philippines (submission of national reports to the PCU, publication of National Report for National dissemination); Thailand (adoption of the National Action Plan); Viet Nam (adoption of the National Action Plan).

6.6.4 Regarding the land-based pollution pilot activities, Dr. Gullaya noted that the Batam site was being implemented successfully in Indonesia. In contrast, Dr. Gullaya informed the Committee that the focal point for China had informed the eighth meeting of the RWG-LbP that it was unlikely the Lindingyang site would become operational. It was noted that plans were in hand to close this pilot project and for funds to be returned to UNEP.

6.6.5 Plans of the RWG-LbP to model the carrying capacity of the South China Sea with respect to heavy metals were discussed by the RSTC. It was agreed that there was insufficient time for this activity to be completed within the remaining time for the South China Sea project, and that this activity should be part of the land-based pollution component of the SAP. In this regard it was agreed that there was no need for the RWG-LbP to meet again before the closure of the project.

## **6.7 Regional Task Force on Legal Matters**

6.7.1 The Chairperson invited the Project Director to present the report of the Regional Task Force on Legal Matters. Dr. Pernetta noted that the sixth meeting of the Regional Task Force on Legal Matters was convened from 25<sup>th</sup> - 27<sup>th</sup> June 2007 in Sihanouville, Cambodia. He noted that all government designated members, except for the member from the Philippines, had participated in the meeting. He informed the Committee that several observers had attended the meeting including: the First Secretary of the Asian Department of China's Ministry of Foreign Affairs, Dr. Zhang Liangfu; and the Deputy Director of Planning and Legal Affairs of Cambodia's Ministry of Environment.

6.7.2 Dr. Pernetta proceeded to review the main outputs of the Task Force during 2007: the report of the sixth meeting of the Task Force; and the review of the legal matters of environmental management in the South China Sea published during November 2007. Dr. Pernetta reminded the meeting that a key activity of the Regional Task Force on Legal Matters was the conduct of reviews of legal matters at global, regional and national levels and informed the meeting that the review publication was a key output of this task.

6.7.3 Dr. Pernetta noted that several national activities had been conducted during 2007 to seek informal perspectives on possible modes for regional cooperation in the South China Sea and mechanisms for SAP implementation. He informed the Committee that the view amongst some members of the Task Force was that a hard law instrument such as a Convention would be required to enable the achievement of SAP targets.

6.7.4 Dr. Pernetta informed the Committee that the sixth meeting of the Task Force had discussed at length what kind of instrument, should be used as the political instrument under which the SAP is implemented. He noted that whilst the view of the Task Force was that a legal instrument such as a convention would be most desirable, the sixth meeting agreed that a non-legally binding MoU was probably the most pragmatic and uncontentious approach at this stage in terms of providing a mechanism for SAP implementation. A draft MoU prepared by the Task Force was presented to the members, for their consideration under agenda item 11.

## **6.8 Regional Task Force on Economic Valuation**

6.8.1 The Chairperson invited Dr. Khalid Abdul Rahim to present the report of the Regional Task Force on Economic Valuation. Dr. Khalid informed the Committee that the sixth meeting of the Regional Task Force on Economic Valuation was convened in Indonesia (Batam Island) from 22<sup>nd</sup> - 25<sup>th</sup> January 2007.

6.8.2 Dr. Khalid noted that the sixth meeting of the Task Force identified that much of the data contained in the empirical dataset of economic values of habitat goods and services could not be used in calculating weighted mean national values and regional values for habitats due to a number of problems. It was agreed during that meeting that it would be necessary for the members of the Task Force to spend 6-8 weeks checking data against original sources before the Task Force could proceed. Dr. Khalid noted that the Task Force agreed to convene a seventh meeting in March 2007.

6.8.3 Dr. Khalid noted that the seventh meeting of the Regional Task Force on Economic Valuation was convened in Beihai, China from 12<sup>th</sup> - 15<sup>th</sup> March 2007 and enabled the Task Force to: examine the corrected and updated data; calculate weighted mean national and regional values for the annual production of goods and services of coastal habitats; estimate the value of total annual production of goods and services by the four habitats from areas bordering the South China Sea; and conduct a preliminary cost-benefit analysis of the costs of action versus non-action in the framework of the revised Strategic Action Programme.

6.8.4 Dr. Khalid noted that other substantive outputs of the Task Force during 2007 included the publication of a knowledge document entitled "*Procedure for Determination of National and Regional Economic Values for Ecotone Goods and Services and Total Economic Values of Coastal Habitats*" and a technical publication entitled "*Guidelines for Conducting Economic Valuation of Coastal Ecosystem Goods and Services*".

6.8.5 The Committee acknowledged the substantial contributions of the Task Force to the work of the South China Sea project during 2007 and commended the Task Force on their achievements that represent significant intellectual inputs to the project. Dr. Ong suggested, and the meeting agreed, that the Task Force should compare and contrast the valuation procedures and outcomes from the work of the Task Force with those of Costanza *et al.* and publish the results in a journal such as *Nature*. Dr. Ong offered his assistance to the group in co-ordinating the necessary natural science inputs to such a paper.

## **7. CONSIDERATION OF ACTIVITIES AND ACHIEVEMENTS OF THE DEMONSTRATION SITES AND PILOT ACTIVITIES**

### **7.1 Status of the Demonstration Site and Pilot Projects in the Mid-term Evaluation**

7.1.1 The Chairperson invited the Senior Expert, Dr. Vo Si Tuan to present the document UNEP/GEF/SCS/RSTC.8/9 "*Status of the Demonstration Site and Pilot Activities and Work Plan for Completion of Planned Activities*". Dr. Tuan briefed the meeting on the status of activities at the eleven operational demonstration sites and the two pilot activities funded through the GEF South China Sea Project grant.

7.1.2 Dr. Tuan noted that due to delays in the development of the habitat demonstration site documents, the timeline for the completion of activities at all demonstration sites was extended to June 2008, except in the case of the Bolinao seagrass site that will complete activities in December 2007. He noted that due to delays in the commencement of the Lingdingyang land-based pollution pilot activity it was agreed that this activity be terminated and funds returned to UNEP. He reminded members that the Project Steering Committee had decided during its sixth meeting to re-allocate funds for the Tun Mustapha Park demonstration site to other project activities.

7.1.3 Dr. Tuan noted that demonstration site expenditures reflect progress in the implementation of activities at the sites. At the end of June 2007, only 55% of the total budget allocated to demonstration activities had been spent. Demonstration sites were urged during the mid-term evaluations and the 2007 round of Regional Working Group to improve the rate at which activities were implemented. This required a revision of work plan and budgets for some sites, and it is anticipated that a large amount of the unspent budget would be spent during the 2<sup>nd</sup> half of 2007 and 1<sup>st</sup> half of 2008, especially at the Trat, Batu Ampar, Belitung, Phu Quoc, and Peam Krasop demonstration sites. Professor Huang stated that some co-financing of activities at the Chinese demonstration sites had been under-reported and that he would urge focal points to provide the PCU with additional information.

7.1.4 Professor Huang suggested, and the meeting agreed, that the National Technical Focal Points should make periodic contact with focal points to ensure the timely completion of demonstration site activities. National Technical Focal Points were informed that the demonstration sites are required to submit reports on the status of implementation to the PCU by 15<sup>th</sup> January 2008.

It was also recommended that progress and financial reports for the period July-December 2007 be submitted in January 2008 to enable the PCU to evaluate the status of activities at all sites.

7.1.5 Dr. Anond asked what plans were in hand to re-allocate funds that were unspent by the demonstration sites at the end of December 2007. Dr. Pernetta noted that the PSC would require advice from the RSTC in this regard, and it was suggested that funds could be allocated to sites, which have demonstrated effective implementation of activities and have generated some examples of good practice.

7.1.6 Dr. Tuan proceeded to brief the committee on the status of the demonstration sites being established via the Medium Sized Project (MSP) mechanism. He noted that the Shantou wetland and East Bintan seagrass demonstration sites had been approved by the GEF Secretariat and funds for the first period of the implementation of these projects were transferred in the fourth quarter of 2007. The Ninh Hai coral reef site has finalised the revised Project Identification Form as required and it is ready for re-submission by UNEP to GEF Secretariat.

7.1.7 He noted that the other MSPs, including Thale Noi, Malampaya Sound, Balat Estuary and the Busuanga mangrove demonstration site still required supporting documentation to finalise the proposals. Only the Malampaya MSP has provided the PCU with revised commitment letters indicating what activities will be co-financed by governments and the total amount of co-financing. It was noted that the proposals for the Busuanga, Balat Estuary, and Thale Noi demonstration sites contain only in-kind co-finance but no cash co-funding as required by GEF.

7.1.8 Dr. Tuan informed the Committee that four self-funded demonstration site projects: the Local Area Coastal Resources Management Community Project (Cambodia); the Coastal Habitats and Resources Management Project (Thailand); the Thi Nai Lagoon Sanctuary; and Cham Islands Marine Protected Area (Viet Nam) had continued their involvement in the South China Sea Project's network of habitat demonstration sites.

## **7.2 Achievements and Lessons Learnt from the Demonstration Site and Pilot Projects**

7.2.1 The Senior Expert was invited by the Chairperson to present the contents of document UNEP/GEF/SCS/RSTC.8/10 "*Activities and Achievements of Demonstration Site and Pilot Projects*" and to highlight lessons learned during the last three years. The attention of members was also drawn to the South China Sea Technical Publications Nos. 5, 6 and 7, which provide overviews of the coral reef, seagrass and mangrove demonstration sites respectively.

7.2.2 Dr. Tuan noted that a number of activities are common to all demonstration sites and pilot activities, including: the creation of inter-sectorial management boards; preparation of management plans and business plans; economic valuation of resources; enhancement of public awareness; and close liaison with and involvement of local communities and stakeholders in interventions.

7.2.3 Dr. Tuan proceeded to review the key achievements of the demonstration site and pilot projects discussed during the Third Mayors' Round-Table convened in Bangkok, Thailand, 26<sup>th</sup> - 27<sup>th</sup> November 2007. These include: establishment and operation of a regional network to ensure information and experience exchange in the region; establishment of an effective mechanism for local coordination of planning and management of environment and resources; capacity building for long-term management of coastal resources and the environment; provision of sound scientific information and data as a baseline for habitat and resource management; planning for long term, multi-sectorial coordination and management for the multiple use of resources; promotion of knowledge and awareness for consensus and support to sustainable management practices; support for supplementary or alternative livelihoods for local communities; encouragement of transboundary management of resources and environment between Kampot – Phu Quoc and Trat – Peam Krasop demonstration sites; rehabilitation and initial improvement of habitat state; promotion of linkages between fisheries and habitat management; and pilot activities to reduce waste discharge to the marine environment.

7.2.4 The mid-term evaluations of the habitat demonstration sites and pollution pilot projects indicated some weaknesses that should be addressed, including: delays in approvals of management plans at a number of the demonstration projects; inadequacies and/or delays of practical actions to

improve enforcement, rehabilitation and ecological monitoring at a few sites; inadequate ecosystem and resource management, and community involvement in monitoring strategies at some sites; and delays in expenditures.

7.2.5 Dr. Tuan drew the attention of members to the lessons learnt through implementation of the demonstration site and pilot projects during the past three years. It was noted that these lesson learnt and best practices had been presented by Mayors/Governors or Site Managers in the Third Mayors' Round-table and a synthesized summary had been presented in the Third Regional Scientific Conference at the end of November 2007. Regional networking of the demonstration sites had operated efficiently through the periodic Mayors' Round-table, information exchange through the project website, site visits among members, and meetings of the regional working groups at the demonstration sites.

7.2.6 Some lessons learned included the value of involving local communities to provide insight into the location of potential *refugia* sites (Phu Quoc); the value of cross-sectorial management from the Hapu administrative committee which has wide participation from local government at the city and provincial levels to coordinate successfully a series of activities for improvement of sustainable development; involvement of the private sector in habitat management with clear identification of the roles for each partner at Fangchenggang demonstration site; law enforcement through support of local government and participation of communities at Bolinao Demonstration Site, so-called "Bantay Daggat"; changes in awareness and habits of coastal communities regarding waste disposal practices, Batam pilot activity; integration of traditional wisdom into management plans being carried out at the Belitung coral reef demonstration site; supplementary and alternative livelihoods as a tool for improvement of habitat and resource management being practiced at Batu Ampar demonstration site with production of charcoal from coconut shell to reduce mangrove cutting and developing new aquaculture of soft-shell crabs; and sustainable tourism based on coastal habitats through provision of sound scientific information required for planning; enhancement of consensus and awareness on sustainable management, development of appropriate mechanism for enforcement; and encouraging responsiveness of tourist sectors at Koh Chang coral reef demonstration site

7.2.7 The Chairperson invited members to advise on mechanisms for disseminating information regarding successful experiences and lessons learned in the demonstration sites. Professor Huang suggested to disseminate good practices through specially prepared documentation; Mr. Narong recommended selection and translation of achievements and good practices for dissemination at the national level. Dr. Pernetta noted that publication, at the regional level, of knowledge documents on good practices at selected sites would be good to provide information to other sites but that this would necessitate contributions from focal points and site managers.

7.2.8 Following a length discussion, the meeting agreed that the PCU would provide templates for preparation of good practice and lessons learnt notes by 15<sup>th</sup> January 2008. The Chairperson suggested and members agreed that National Technical Focal Points (NTFP) and Focal Points (FP) would prepare draft documents and submit to the PCU by 31<sup>st</sup> March 2008. The PCU would consult with the NTFPs and FPs to finalise these technical document by 30<sup>th</sup> May 2008.

7.2.9 Dr. Srisuda noted that the COBSEA white paper included actions for synthesis and dissemination of lessons learnt in the region. COBSEA could analyse good practices from the SCS Project for dissemination and inclusion in the knowledge-base of COBSEA.

7.2.10 Ms. Nirawan informed participants that a regional meeting of the Ramsar Convention would be held in Bangkok, 14<sup>th</sup> – 18<sup>th</sup> January 2008 and this might be an opportunity for presentation of achievements and lessons learnt of the South China Sea Project. In addition, the National Workshop on Coastal Management of Thailand, would meet on 28th and 29th January, and this would also provide a chance for dissemination of outcomes of the South China Sea Project in Thailand. Dr. Pernetta supported these ideas and committed to send representatives of the Project to attend both events.

## **8. STATUS OF THE REGIONAL TRAINING PROGRAMME**

8.1 The Chairperson invited Mr. Christopher Paterson to present document UNEP/GEF/SCS/RSTC.8/11 "Status of the Regional Training Programme" and to highlight the programme of training courses, site visits and exchanges since approval of the programme by the Project Steering Committee.

8.2 Mr. Paterson noted that following the review of the training programme by the seventh meeting of the RSTC, the PCU made a call for nominations of training course participants in December 2006. He noted that all nominations were received at the PCU by 28<sup>th</sup> February 2007. A total of six Memoranda of Understanding were agreed between the United Nations Environment Programme and implementing entities for the conduct of regional training courses on: Sustainable Use and Management of Mangrove Ecosystems; Larval Fish Identification and Fish Early Life History Science; Management Models and Strategies for Coral Reef and Seagrass Ecosystems; Establishing and Managing Fisheries Refugia in the South China Sea; Sustainable Use of Coastal Wetlands Bordering the South China Sea; and Economic Valuation of Goods and Services of Coastal Habitats of the South China Sea.

8.3 Mr. Paterson informed the Committee that the first five of these courses have been completed, and that Kasetsart University's Center for Applied Economic Research will convene the training course on economic valuation from 23<sup>rd</sup> - 29<sup>th</sup> March 2008. He noted that proposals have been received for the regional training workshop on community-based management and an advanced training workshop on the identification of larval fish. He noted that these proposals would require the review of the RSTC.

8.4 Summary reports for the regional training workshops on the "Sustainable Use and Management of Mangrove Ecosystems" and "Larval Fish Identification and Fish Early Life History Science" were considered by the group, and it was noted that since the courses on coral reefs and seagrass, wetlands, and fisheries *refugia* management had only been concluded during the month prior to the meeting, the implementing entities had not yet submitted final reports of the courses and compilations of training materials used to the PCU.

8.5 Regarding the study tour and personnel exchange component of the training programme, Mr. Paterson noted that despite regular promotion on the South China Sea Project website, in meetings of the Regional Working Groups, and in e-newsletters, interest in this aspect of the regional training programme had been modest. He noted that only three study tours have been conducted. These included: a visit of a group from the Phu Quoc Coral Reef and Seagrass habitat demonstration site in Viet Nam to the Mu Koh Chang habitat demonstration site in Thailand; a study tour to the Mu Koh Chang Coral Reef demonstration site conducted in association with the Third Mayors' Roundtable meeting; and a study tour of a group from the Ninh Hai and Cu Lao Cham self-funded demonstration site to Mu Koh Chang.

8.6 Mr. Paterson noted that the organisers of each training course had identified several problems with regard to the selection of participants for the training events, including English language ability, familiarity and prior involvement in the South China Sea project; and the availability of participants to travel to the training workshops. He noted that the key concern in this regard was the participation of several individuals in each of the training events who had no previous involvement in the South China Sea project at any level. National Technical Focal Points were reminded that it was their responsibility to nominate participants who met the selection criteria contained in the training programme document as developed by the RSTC, and approved by the Project Steering Committee.

8.7 Regarding the proposal for the community-based management course, Dr. Anond Snidvongs suggested that the proponents be encouraged to shift the focus of the course from the theoretical basis of Integrated Coastal Management to the importance of and procedures for engaging communities in management actions at the local level. It was noted that suitable participants for this course would be local government officials, staff of provincial environment and fisheries departments, and demonstration site managers. It was agreed that given the problems identified with the nominees for several past courses that National Technical Focal Points would review the list of participants for each future course planned, and re-nominate participants where appropriate.

8.8 Mr. Long noted that participants in the regional coral reef and seagrass training event had received PowerPoint presentations saved as PDF files which made it difficult for them to edit the materials for use in the national "echo" seminars. It was agreed that Mr. Paterson would contact the training course organisers to ensure that the full PowerPoint presentations be submitted to the PCU and that he would make these available for download from the project website.

## **9. OPERATION AND MAINTENANCE OF THE PROJECT WEBSITE, AND REGIONAL GIS AND META-DATABASES**

9.1 The Chairperson invited Mr. Paterson to present an overview of the operation of the project website over the past 12 months. Mr. Paterson drew the attention of the group to the South China Sea Knowledge Document No. 6 entitled "*Establishing an Online Collaborative Information Base in the Context of the UNEP/GEF Project Entitled: Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand*".

9.2 Mr. Paterson noted that the South China Sea project has developed a wide range of outputs, that include databases, models, meeting reports and discussion documents, English and national language reviews of science and management, an extensive range of community education and awareness materials, national action plans, regional guidelines and reviews and knowledge documents on practices in the implementation of the project. He noted further that efforts have been made by the PCU during 2007 to ensure that all of these are available online and are easy to access for members of the project network.

9.3 Mr. Paterson informed the meeting that the website had grown during 2007 to include the following features:

- South China Sea Document Repository of approximately 1,400 project documents,
- Online South China Sea Meta-Database,
- Online South China Sea Geographical Information System,
- Online Nutrient Carrying Capacity Model for the South China Sea,
- Online South China Sea Projects Database,
- South China Sea Multi-Media Centre of Project Videos,
- Catalogue of South China Sea Public Awareness Materials,
- South China Sea Photo Album,
- Fisheries *Refugia* Information Portal,
- South China Sea Training Portal, and
- South China Sea Project Google Earth Map Files.

9.4 In terms of usage of the project website and online databases, Mr. Paterson noted that during the period October 2006 – September 2007 the total number of visits to the project website was 242,400 from 119 countries. The average number of pages accessed per visit was 5 - 6, and approximately 20% of visitors spent more than 15 minutes browsing content on the website. Mr. Paterson informed the meeting that the most popular pages on the site were those relating to the habitat demonstration sites and the GIS database. He noted that the project website has featured in the top 10 of approximately 40 million pages indexed by Google for the search term "South China Sea".

9.5 Mr. Paterson noted that the project website appears to have been highly effective in disseminating general information about the goals, interventions, and outputs of the South China Sea project. In terms of the use of the website as a tool for the sharing of information between and amongst project partners, use of the website's "blog" and e-forum had been modest over the past year. He noted for example that 105 entries had been posted in the e-forum from a total of 38 members of the project network over a one year period to 30<sup>th</sup> September 2007, the majority of which were associated with the mangrove e-forum discussion.

9.6 There followed a discussion regarding how to ensure the longer-term sustainability of the project website and associated information tools. It was agreed that efforts should be made to keep the website operational and updated following the conclusion of the project, although the RSTC was unable to identify an appropriate mechanism for the management of the site beyond the completion of the South China Sea project. Mr. Lee suggested, and the meeting agreed, that this matter could be considered during the 19<sup>th</sup> meeting of COBSEA to be convened in Siem Reap, Cambodia from 22<sup>nd</sup> – 23<sup>rd</sup> January 2008 and may provide some indication of the interest of the participating countries in sustaining the information resources developed through the South China Sea project in the longer-term.

9.7 It was agreed that a workshop aimed at identifying a mechanism for sustaining the project website and databases should be convened during 2008. Dr. Anond offered the support of SEA START RC in organisation of this workshop. It was further agreed that participants should be individuals capable of coordinating and managing information inputs to the website and databases, as well as information management specialists from the participating countries.

## **10. REPORT OF THE PROJECT CO-ORDINATING UNIT ON PROJECT IMPLEMENTATION AND OUTPUTS 2002-2007**

10.1 The Chairperson invited the Project Director to present document UNEP/GEF/SCS/RSTC.8/12 "*Report of the Project Co-ordinating Unit on Project Implementation 2002-2007*". Dr. Pernetta noted that his presentation was effectively a preliminary terminal report of project operations to date.

10.2 Dr. Pernetta outlined the South China Sea project's institutional network in the seven participating countries. He highlighted the effectiveness of the management framework developed for the project in co-ordinating actions across the project's six components and seven countries, and in ensuring that the project funds were efficiently transferred to individuals doing the work on the ground. He informed the Committee that the PCU had organised a total of 87 regional meetings in six years, and had prepared and published more than 1,400 documents and reports.

10.3 Dr. Pernetta outlined the innovative project management and scientific achievements of the project, including: the procedure adopted for tracking co-financing; the integration of local governments in project activities through the Mayors' Round-Table Meeting; the procedure adopted for demonstration site selection; the procedure adopted for the valuation of the goods and services of South China Sea habitats; development of the fisheries *refugia* concept as a basis for improved fish stock and habitat management; development of a nutrient assimilative capacity model for the South China Sea; and the enhancement of information and data flow and exchange via the development of an interactive website.

10.4 Dr. Pernetta noted that the main achievements of the project to date included: improved data and information exchange; the use of regional science for local management at the demonstration sites; the planning for future actions in reversing environmental degradation trends in the South China Sea through the revised Strategic Action Programme and National Action Plans; and a proposed framework for co-operation in the management of the marine environment of the South China Sea and Gulf of Thailand.

10.5 Dr. Pernetta concluded that the positive outcomes of the South China Sea Project need to be sustained through activities at the national and regional levels with coordination between, and involvement of, all related stakeholders at all levels. He suggested that the maintenance and expansion of the network of demonstration sites is required for wider application of science to management at the local level and integration of local governments and communities in managing the marine environment in a sustainable manner.

10.6 Mr. Lee reminded the Committee of the closing remarks made by Dr. Alfred Duda of the GEF Secretariat during the closing session of the Third Regional Scientific Conference, in which he had rated the South China Sea project amongst the best of all GEF International Water's projects. Mr. Lee suggested and the meeting agreed that there is a need for the region to build on the achievements presented by Dr. Pernetta.

10.7 Dr. Pernetta informed the Committee that it is a requirement of both UNEP and the GEF that a terminal evaluation of projects such as the South China Sea Project be undertaken prior to closure of the project document. He noted that such evaluations are independent and are commissioned by the Oversight and Evaluation Unit, of the Office of the Executive Director of UNEP. He noted that plans are in hand for the hiring of two consultants, one from within and one from outside the region to conduct the terminal evaluation during 2008. He noted further that a key component of this evaluation is expected to be country visits such as those conducted by the SMPR in 2004.

10.8 The tentative programme for the review was presented to the Committee and the Chairperson invited the members to comment on any foreseeable problems with the timing of evaluation activities. Ms. Nirawan noted that Thailand's National Focal Point and National Technical Focal Point would be

participating in RAMSAR and CBD meetings during the planned first visit, and from mid-May – 6<sup>th</sup> June 2008, and would therefore be unavailable to meet with evaluators during these periods. Mr. Barangan noted that relevant staff of the Department of Environment and Natural Resources in the Philippines would not be available from 9<sup>th</sup> - 11<sup>th</sup> June 2008. Professor Huang recommended that a detailed schedule be sent to SEPA and his office well in advance of the proposed visits by the reviewers in order that appropriate arrangements can be made for their visits.

10.9 Dr. Pernetta noted that this was a preliminary timetable and that he would keep everyone advised as the programme become more definite.

## **11. FINAL REVIEW OF THE REVISED DRAFT STRATEGIC ACTION PROGRAMME (SAP) AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE REGARDING ITS' APPROVAL**

### **11.1 Consideration of National Recommendations regarding the content and implementation of the SAP**

11.1.1 The Chairperson invited the National Technical Focal Points and alternates to present the outcome of the national workshops and deliberations, including any recommendations, regarding the adoption of the Strategic Action Programme.

11.1.2 Mr. Savath noted that the Cambodian NTWG and IMC members had been consulted via e-mail regarding the SAP and noted that the only comments on the SAP received to date related to the sections on economic valuation. He noted that Senior Minister, His Excellency Dr. Mok Mareth would chair a national consultation on 24 - 25<sup>th</sup> December on the SAP which he was confident would result in adoption of the SAP and associated Memorandum of Understanding.

11.1.3 Professor Huang noted that China had convened a 2 day national consultation workshop in November in SEPA which also involved officials from the Ministry of Foreign Affairs, Local Government representatives and a total of 21 participants. He noted that the outcome had been the approval of the SAP subject to some minor amendments including the inclusion of the footnote from the project document stating that no activities would be conducted in disputed areas of the South China Sea. He noted that the area of the Wetland Park in the Pearl River estuary was 200 hectares and that some miscalculations appeared to have been made in the economic valuations.

11.1.4 Dr. Pernetta thanked Professor Huang and indicated that he had already passed the queries regarding the economic values to Professor Khalid for checking; that there was no difficulty in including the footnote and adding the area of the Pearl River Wetland Park to the draft.

11.1.5 Mr. Dasminto indicated that Indonesia, had no final position regarding the SAP, but there were plans for a workshop in mid January to consider its adoption, and that this would be preceded by meetings of the component committees the NTWG and the IMC.

11.1.6 Mr. Lee indicated that Malaysia, had undertaken a national consultation on 24 - 25<sup>th</sup> July involving all focal points and members of Task Forces together with representatives from States bordering the South China Sea. He noted that the outcomes had been generally in agreement with most components, but that the SAP would need agreement from state governments consequently it was proposed to convene a second consultation early in 2008.

11.1.7 In the case of the Philippines two of the NAPs had been finalized but the NTWG needed to meet to discuss the INAP and the SAP. He would recommend to the National Focal Point that meetings of the NTWG and IMC be convened as soon as possible within the first quarter of 2008 to finalise the views of the Philippines with regard to the SAP.

11.1.8 Ms. Nirawan indicated that in Thailand, the SAP had been sent for review by experts and that a national consultation was planned for April. During discussion Dr. Gullaya suggested that perhaps the Coastal and Marine Resources Meeting in January could be used as a national forum within which to review the SAP such that a position could be finalised in advance of the first visit of the evaluators in February. Dr. Pernetta expressed the hope that this could be done since timing was critical if all project deadlines were to be met.

11.1.9 The committee noted with regret that no information was available regarding the position of Viet Nam with respect to the SAP. During subsequent discussion Dr. Hutomo noted that in many cases despite the absence of formal approval the NAPs had been “adopted” within the line agencies and were already being implemented. He cited the example of East Bintan which had already been adopted as a management area thus meeting one aspect of the Indonesian targets for seagrass contained in the SAP.

## **11.2 Review of Cost – Benefit Analysis of Programme Activities**

11.2.1 The Committee noted that, following the completion of the cost benefit analysis by the Regional Task Force on Economic Valuation in March 2007, and based on the costs of the actions proposed by the regional working groups during their seventh meetings in 2006, and the economic values of the incremental benefits derived from achieving the targets stated in the draft SAP, the regional working groups reconsidered both the previously agreed targets and the proposed actions during their eighth meetings in the first half of 2007.

11.2.2 In the case of the mangroves component no further changes to either the targets or the actions were made, hence the cost-benefit analysis made in March stands. In all other cases quite substantial changes were made resulting in an improvement in the benefit/cost ratio through either expansion of the targets and hence an increase in the dollar value for the incremental benefit or, reduction in the scope and number of proposed actions with a consequent reduction in the overall costs.

11.2.3 The Chairperson of the RTF-E noted that he welcomed the views of the committee regarding the work of the Task Force and that he had already completed a recalculation based on the Chinese comments. He noted further that the Task Force was highly dependent upon the inputs from the regional working groups without which it would be impossible to conduct a cost benefit analysis.

11.2.4 Dr. Pernetta noted that the cost-benefit analysis had been useful in at least alerting the natural scientists to the relationships between the costs proposed and the potential benefits resulting from incurring those costs. He noted that this had resulted in a radical reduction in the scope and scale of the activities proposed in the wetlands component for example, resulting in a more favourable B/C ratio.

## **11.3 Re-consideration of Contents and Final Revision of the Strategic Action Programme**

11.3.1 The Chairperson invited the Senior Expert to present a review of the targets and their relationships to the proposed actions highlighting the amendments and changes made since the last meeting of the RSTC. Dr. Tuan outlined the nature of the targets and anticipated difficulties that might be encountered in achieving them. He noted that substantial action was required at the national level and that without this the targets could definitely not be achieved. He noted further that the regional actions outlined in the SAP constituted essentially service functions in support of the National actions.

11.3.2 There was an extensive and detailed discussion of the contents of the SAP during which the indicators for sustainable management were reviewed in great detail. These were amended and together with minor amendments to the body of the text, the proposed actions and targets are presented in Annex 5 of this document.

## **11.4 Regional Partnerships, Co-operation and Coordination mechanism, and review of Draft Memorandum of Understanding among the Countries Bordering the South China Sea for the Coordination of Actions to Implement the Strategic Action Programme**

11.4.1 The Chairperson invited the Project Director to present on behalf of the Regional Task Force on Legal Matters (RTF-L) the outcome of discussions during the seventh meeting of the RTF-L regarding the possible mechanisms for strengthening regional co-operation in the environmental management of the South China Sea marine basin.

11.4.2 Dr. Pernetta noted that the Task Force had commissioned an extensive review of possible mechanisms and instruments and whilst this review showed clearly that a legal agreement was both a stronger and more effective mechanism for regional co-ordination and collaboration the RTF-L had felt that a more pragmatic approach might be to adopt a Memorandum of Understanding to be co-signed by the Ministers of Environment of the countries bordering the South China Sea.

11.4.3 The Chairperson called for a round of views from all participants during which it became apparent that whilst the majority of the participants favoured the adoption of a legally binding agreement they would support the use of an MoU if that meant that the SAP was implemented in the region. Some participants noted that since the MoU could not be considered binding on the signatories it was unlikely to guarantee successful implementation of the SAP.

11.4.4 The committee agreed to recommend the MoU to the Project Steering Committee for adoption subject to review by the legal advisors to the Ministers concerned. It was agreed that if the Project Steering Committee agreed to adopt this approach that every attempt should be made to ensure that all comments were received by the PCU no later than the end of March 2008.

### **11.5 Recommendations to the Project Steering Committee Regarding the procedures for Approval of the SAP and its implementation**

11.5.1 In the light of discussions under agenda sub-items 11.1 to 11.4 the Committee considered the recommendations to the Project Steering Committee regarding the procedures to be used in finally approving the Strategic Action Programme and the mechanisms for its' subsequent implementation.

11.5.2 It was suggested and agreed that all consultations at the national level regarding the content and adoption of the SAP should be completed and the outcomes transmitted to the PCU by the end of March. This would then allow for consolidation of any suggested amendments and re-circulation of the final draft prior to the RSTC and PSC meetings in late July/August.

11.5.3 With regard to the implementation of the SAP the Project Director drew to the attention of members the fact that COBSEA had approved the original draft SAP produced in 1999 and that the present draft of the SAP was presented to the Special Intergovernmental Session of the Coordinating Body on the Seas of East Asia (COBSEA) on the East Asian Seas Action Plan convened in Kuala Lumpur, Malaysia, 5 – 6 September 2007. That meeting was concerned primarily with finalising a "white paper" on the future of the COBSEA and its' Secretariat and whilst a presentation regarding the outcomes of the SCS Project was made and the draft SAP presented as a formal meeting document it was not debated in full.

11.5.4 The Project Director noted that a significant number of delegates had expressed their appreciation for the outcomes of the South China Sea Project to date and a desire to see COBSEA involved in some way in the implementation of the Strategic Action Programme. The next full meeting of COBSEA was to be convened in January in Cambodia and it was anticipated that a fuller discussion of a possible role for COBSEA in the implementation of the SAP might be discussed during that meeting.

11.5.5 The Chairperson invited Dr. Srisuda to brief the meeting on a potential role for COBSEA and the COBSEA Secretariat in the implementation of the Strategic Action Programme. Dr. Srisuda outlined the history of COBSEA and the contents of the White Paper outlining further, the three thematic areas of: marine and land-based pollution; coastal and marine habitat conservation; and management and response to coastal disasters. These would be implemented through four inter-linked strategies, namely: information management; capacity building; strategic and emerging issues; and regional co-operation. She suggested that COBSEA could play a role in providing a forum for countries to report the implementation of NAPs and exchange lessons learned and experiences from the demonstration sites, in coordinating the work of the regional working groups and in the further development of the meta- and GIS-database.

11.5.6 During discussion it was suggested that the proposals were too broad and lacked sufficient detail to provide guidance regarding what exactly was envisaged. It was suggested that Dr. Srisuda work with Mr. Lee, the Chairperson and Mr. Savath to produce a more defined list of what could be done at no extra cost and what fitted with the COBSEA white paper directions if additional staff and/or funds could be provided. The revised list was presented to the meeting, amended and approved as it appears in Annex 6.

11.5.7 Dr. Srisuda presented the revised list of potential roles for COBSEA/COBSEA Secretariat in the implementation of the Strategic Action Programme. It was suggested by Dr. Srisuda that depending on the availability of funds, COBSEA had a potential role to play in the implementation of the habitat components of the SAP. There followed a lengthy discussion regarding the suitability of COBSEA for implementation of operational type activities contained in the habitat components.

11.5.8 It was suggested by the committee that an operational unit such as the PCU is more suitable for implementation of habitat related activities, but it was recognised that operation of such a unit would be dependent on funding. Dr. Pernetta reminded the members that the GEF secretariat representative had stated during the Regional Scientific Conference that a SAP implementation project would be dependent upon inclusion of a component in which the countries agree to initiate discussions regarding more formal and long-lasting arrangements for regional co-operation in the form of a legally binding instrument.

11.5.9 During discussion it was decided to pursue a multi-option approach but the Committee was of the view that implementing the SAP required an operational rather than a policy body. The optimum mode might be through a second PCU with some components being run by other bodies such as COBSEA.

## **12. IMPLEMENTING THE STRATEGIC ACTION PROGRAMME: OPERATIONAL CONSIDERATIONS**

### **12.1 Building Community Capacity through a Regional Network of Non-government Organisations with the Collaboration of GEF Small Grant Programme**

12.1.1 The Chairperson invited the Project Director to present document UNEP/GEF/SCS/RSTC.8/14 "*Plan for Building Community Capacity through the Regional Network of Non-Governmental Organisations with the Collaboration of the Small Grants Programme*". Dr. Pernetta informed the Committee that during the third quarter of 2007, he had discussed the possible establishment of a partnership with the GEF Small Grants Programme (GEF SGP) to promote community involvement in support of the SAP.

12.1.2 It was noted that an NGO Forum had been convened on the 26<sup>th</sup> November 2007 in conjunction with the Third Mayors' Round-Table to introduce NGO representatives and GEF SGP coordinators to the revised SAP and the suite of interventions being implemented at the project's network of habitat demonstration and pilot project sites. Similarly, a presentation on the GEF SGP was made by, Dr. Sulan Chen of UNDP, during the Third Regional Scientific Conference on 30<sup>th</sup> November 2007.

12.1.3 Dr. Pernetta informed the Committee that a joint communiqué had been signed between Dr. Delphin Ganapin on behalf of the GEF Small Grants Programme and himself on behalf of the South China Sea Project, to enable the further development of this partnership. The joint communiqué was reviewed by the members, and the RSTC agreed that this was an appropriate mechanism for involving communities and NGOs in SAP implementation at the local level.

12.1.4 During discussion members sought details regarding how this would operate and Dr. Pernetta noted that the SGP finances were managed by UNOPS who would operate a fund for the SCS of no less than US\$500,000 with a 6% administrative fee. This reduces the administrative burden for the PCU whilst at the same time the negotiation and finalisation of the project documents would be undertaken by the UNDP country Offices and national Small Grants Committees who would screen proposals in relation the SCS SAP activities and identified site priorities. This would result in the PCU serving as a check point for the applicability of the activities from the UNEP and SAP perspectives whilst the National Committee would report on progress jointly to the SGP and the National Focal Point for the South China Sea.

12.1.5 The Committee agreed that the Small Grants Programme was an appropriate mechanism to use to engage communities and local governments in implementing activities of the SAP and was strongly in support of engaging local communities in implementing the SAP. It was agreed to recommend to the Project Steering Committee that this mechanism be explored further and implemented as soon as possible.

### **12.2 Proposed GEF Project on Development and Operation of the Regional Fisheries Refugia System**

12.2.1 The Chairperson invited Mr. Paterson to present the outline and contents of document UNEP/GEF/SCS/RSTC.8/15 "*Proposed actions with respect to the adoption and submission of the Project Identification Form for a GEF Project entitled: "Establishment and operation of a regional system of fisheries refugia in the South China Sea and Gulf of Thailand"*".

12.2.2 Mr. Paterson proceeded to review the work of the project to establish a regional system of fisheries *refugia*. He noted that the initiative forms the basis of the fisheries component of the revised SAP, and that a project concept had been developed by, the Regional Working Group on Fisheries and SEAFDEC with the aim of securing funds for the implementation of the SAP fisheries component.

12.2.3 Mr. Paterson informed the meeting that a Project Identification Form had been prepared for consideration by the GEF, and the Committee proceeded to review this document. It was noted that the PIF now requires endorsement by the GEF Operational Focal Points in the participating countries; agreement from the GEF/OFP on the funds to be allocated from the National Resource Allocation to Biodiversity; and letters of commitment from the fisheries departments of participating countries regarding co-financing from the national departmental recurrent budgets.

12.2.4 Mr. Lee asked if this proposal had been considered by the GEF Operational Focal Points. It was explained that the document was a draft that had only been subject to internal review by the Fisheries working group to date.

12.2.5 Dr. Anond asked how many species were likely to benefit from the *refugia* being established. Mr. Paterson explained that the RWG-F had listed and ranked pelagic, demersal, and cephalopod and crustacean species of transboundary significance in the South China Sea and that the proposed *refugia* sites had been selected for the priority species. He noted that the selected sites were likely to act as *refugia* for approximately 60 different species, and the majority of species were of transboundary significance.

12.2.6 It was agreed by the Committee that the Project Co-ordinating Unit should proceed with development of this project and that it should be recommended to the PSC. It was further noted that in a number of cases the National Focal Point for the SCS Project was also the GEF Operational Focal Point.

### **12.3 Mechanisms and Actions at the Regional, National and Local Levels in Order to Achieve the Targets of the Strategic Action Programme**

12.3.1 The Chairperson invited Dr. Tuan to introduce document UNEP/GEF/SCS/RSTC.8/16 "*Suggested Responses at the Regional, National and Local Levels in Order to Achieve the Targets of the Strategic Action Programme*". Dr. Tuan proceeded to brief the committee on his review of regional actions, which were proposed by the working groups for inclusion in the SAP.

12.3.2 Dr. Tuan noted that the proposed regional actions could be categorised into: information and experience exchange; capacity building through training; applied research for sound science in sustainable management; development of guidelines and other tools for management; integration of research programmes with management and policy making; education and public awareness programmes; development of a regional system of fisheries *refugia*; and sustainability. Dr. Tuan noted that the regional actions of the SAP were aimed at providing a service function to management actions at the national and local levels.

12.3.3 Dr. Tuan summarised the targets of each component/sub-component and the proposed actions to meet the targets were presented for consideration of the meeting. The proposed actions for the habitat components include *inter alia*: the establishment of new areas under protection; improvement of existing habitat management; development innovative management models in habitat management and the dissemination of experiences; improvement of ecological monitoring systems; and cooperation between local governments and experts in management plan development.

12.3.4 Dr. Tuan noted that the fisheries component targets focus on improving the management of fish stock and critical habitat linkages. The key challenge in achieving this is ensuring effective collaboration between fisheries and environment departments and agencies, particularly at the local/operational level. The proposed actions include *inter alia*: capacity building for the identification and management of fisheries *refugia* by fisheries and environment departments; development and dissemination of examples of best practice in *refugia* management by the fisheries and environment sectors; development of national planning for fisheries *refugia*.

12.3.5 Dr. Tuan noted that the targets for the land-based pollution component were aimed at maintaining region-wide water quality standards to assist in maintaining coastal ecosystem health. He explained that the RWG-LbP has not developed any targets regarding management practice and the proposed regional actions provide only weak support to the minimisation of the impacts of land-based pollution on coastal habitats. He suggested that the following actions are required at the national and local levels in order to achieve the land-based pollution targets: cooperation of national experts and managers among countries for development/adoption of regional agreements; improvement of land-based pollution management through appropriate policies and management practice at the site level; improvement of monitoring systems at the national level; and provision of national monitoring data for regional synthesis.

12.3.6 There followed a lengthy discussion with regard to the potential of the proposed actions to achieve the SAP targets. The Committee expressed its view that the targets could be achieved provided: wide involvement of all related stakeholders in the implementation of SAP and NAP activities; maintenance of the existing coordination at the regional level developed and fostered through the South China Sea project; and the strong political commitment of all participating countries.

### **13. WORK PLAN AND TIMETABLE FOR THE REGIONAL SCIENTIFIC AND TECHNICAL COMMITTEE**

13.1 The Chairperson invited Dr. Tuan to introduce document UNEP/GEF/SCS/RSTC.8/17 *“Proposed Work Plan and Timetable for the Regional Scientific and Technical Committee”* containing the draft work plan and timetable for the Regional Scientific and Technical Committee to December 2008.

13.2 Dr. Tuan presented a revised work plan and schedule for the Regional Scientific and Technical Committee, based on the outcome of deliberations under preceding agenda items, which was discussed, amended and approved as it appears in Annex 7.

### **14. ANY OTHER BUSINESS**

14.1 Following the field trip to the Trat mangrove habitat demonstration site, the Committee reviewed the outcomes of the small working group discussions regarding activities to which the unallocated funds could be applied. The table of activities was presented and Dr. Pernetta pointed out that the table had been split into activities at the site, community and regional levels. It was suggested that funds could be allocated for the implementation of management plans at the Peam Krasop and Kampot demonstration sites. It was agreed that this activity would be implemented by the Ministry of Environment, Cambodia.

14.2 Mr. Lee suggested that funds could be used for an additional regional training course on mangroves. Dr. Ong responded by saying he was not sure there was sufficient demand for such a course, and that he would be reluctant to be involved unless he could be assured suitable participants would be selected. Dr. Pernetta indicated that he would solicit views from the mangrove focal points regarding demand for the conduct of a regional mangrove training course.

14.3 The Chairperson invited members to raise any additional items of business under this agenda item. No further items were tabled for consideration of the committee.

### **15. ADOPTION OF THE REPORT OF THE MEETING**

15.1 The Chairperson invited the Rapporteur to present the draft report of the meeting prepared by the Secretariat. Mr. Barangan presented the report, which was considered, amended and adopted by the meeting as it appears in this document.

### **16. CLOSURE OF THE MEETING**

16.1 The Chairperson thanked the host Government for their hospitality and supporting administrative arrangements. Professor Huang thanked the PCU members for their hard work in support of the meeting and the members of the committee for their hard work and the collegial atmosphere that had prevailed. He invited the Project Director to make a few remarks.

16.2 The Project Director, thanked the members for their hard work especially during the night session. He noted that the meeting had managed to complete the very full agenda in a satisfactory manner under the able chairmanship of Professor Huang. He noted that Mr. Kim Sour would leave the Project Co-ordinating Unit at the end of December and that Dr. Vo Si Tuan would leave at the end of January, he expressed appreciation for their services over the last three years and on behalf of the committee wished them well for the future.

16.3 The Chairperson closed the meeting at 1900 hrs on Friday 14<sup>th</sup> December 2007.

**ANNEX 1****List of Participants****National Technical Focal Points****Cambodia**

Mr. Koch Savath, Deputy Director General Technical  
Affaires, Ministry of Environment  
#48 Samdech Preah Sihanouk  
Tonle Bassac, Chamkarmon  
Phnom Penh, Cambodia  
Tel: (855) 12 787088  
Fax: (855 23) 215925  
E-mail: kochsavath@yahoo.com

**Indonesia**

Mr. Dasminto  
Staff of Coastal and Marine Ecosystem Unit  
Ministry of Environment  
Jalan DI. Panjaitan Kav.24  
A Building 5<sup>th</sup> Floor  
Kebon Nanas, Jakarta 13410, Indonesia  
Tel: (62 21)85905638  
Fax (62 21) 85904929  
Mobile: (62) 817 137890  
E-mail : dasminto@yahoo.com

**Philippines**

Mr. Florendo Barangan, Executive Director  
Coastal & Marine Management Office  
Department of Environment and Natural  
Resources, (CMMO-DENR)  
DENR Compound Visayas Avenue  
Diliman, Quezon City, Philippines  
Tel: (632) 926 1004; 926 0550  
Fax: (632) 926 1004  
Mobile: (63) 917 8405616  
E-mail: cmmo26@yahoo.com

**People's Republic of China**

Mr. Zhengguang Huang, Senior Engineer  
South China Institute of Environmental Sciences,  
SEPA, 7 West Street, Yuancun  
Guangzhou, 510655, China  
Tel: (86 20) 85528748  
Fax: (86 20) 85524439; 8552 8748  
Mobile: (86) 13 809771424  
E-mail: georgehuang@scies.com.cn

**Malaysia**

Mr. Lee Heng Keng  
Department of Environment (DOE)  
Level 1-4, Podium 2 & 3  
Wisma Sumber Asli,  
No. 25 Persiaran Perdana, Precinct 4  
62574 Putrajaya, Malaysia  
Tel: (603) 8871 2275  
Fax: (603) 8889 4020  
Mobile: (60) 19 212 3930  
E-mail: lee@doe.gov.my

**Thailand**

Mrs. Nirawan Pipitsombat  
Senior Environmental Officer  
Biological Diversity Division  
Office of Natural Resources and Environmental  
Policy and Planning  
60/1 Soi Phibunwattana 7, Rama VI Road  
Bangkok 10400, Thailand  
Tel: (66 2) 2656636  
Fax: (66 2) 265 6640; 2656638  
E-mail: nirawan\_p@hotmail.com

**Chairpersons of the Regional Task Forces**

Dr. Khalid Abdul Rahim, Professor  
**Chairperson RTF-E**  
Faculty of Economics and Management  
University Putra Malaysia  
43400 UPM, Serdang  
Selangor, Malaysia  
Tel: (603) 8946 7733  
Fax: (603) 8948 6188  
Mobile: (60) 012 942 9090  
E-mail: khalid@pop.jaring.my;  
khalid@econ.upm.edu.my

### Chairpersons of the Regional Working Groups

Mr. Ke Vongwattana  
**Vice-Chairperson RWG-M**  
Assistant to Minister in charge of Mangrove  
Department of Nature Conservation and Protection  
Ministry of Environment  
48 Samdech Preah Sihanouk  
Tonle Bassac, Chamkarmon, Cambodia  
Tel: (855 23) 213908  
Fax: (855 23) 212540, 215925  
Mobile: (855) 12 654 350  
E-mail: kewattana@yahoo.com

Dr. Hutomo Malikusworo  
**Vice-Chairperson RWG-SG**  
Indonesian Institute of Science  
Pasir Putih 1, Ancol Timur  
Jakarta 14330, Indonesia  
Tel: (62 21) 6471 3850  
Fax: (62 21) 6471 1948  
Mobile: (62) 0815 993 4841  
E-mail: malikusworo\_h@yahoo.com;  
mali001@lipi.go.id

Ms. Chee Phaik Ean  
**Vice-Chairperson RWG-F**  
Senior Research Officer  
Head of Aquatic Ecosystems Section  
Fisheries Research Institute  
11960 Batu Maung  
Penang, Malaysia  
Tel: (60 4) 626 5824; 626 3925  
Fax: (60 4) 626 2210  
Mobile: (60 16) 451 2838  
E-mail: chee@fri.gov.my;  
phaikEAN@hotmail.com

Mr. Nguyen Van Long  
**Chairperson RWG-CR**  
Master of Marine Biology and Deputy Head,  
Department of Marine Living Resources  
Institute of Oceanography  
01 Cau Da Street  
Nha Trang City, Viet Nam  
Tel: (84 58) 590 205  
Fax: (84 58) 590 698; (84 58) 590 034  
Mobile: (84) 90 5083332  
E-mail: nvanlong@dng.vnn.vn

Mr. Narong Veeravaitaya  
**Chairperson RWG-W**  
Department of Fishery Biology  
Faculty of Fisheries, Kasetsart University  
50 Phanolyothin Road, Bangkokhen,  
Bangkok 10900, Thailand  
Tel: (66 2) 942 8701 ext. 106  
Fax: (66 2) 940 5016  
Mobile: (66) 81 741 0024  
E-mail: ffnrv@ku.ac.th

Dr. Gullaya Wattayakorn  
**Chairperson RWG-LbP**  
Marine Science Department  
Chulalongkorn University  
Phayathai Road  
Bangkok 10330, Thailand  
Tel: (662) 218 5407; 218 5409  
Fax: (662) 255 0780  
Mobile: (66) 81 812 2112  
E-mail: gullaya@chula.ac.th;  
gullaya@gmail.com

### Regional Expert Members

Dr. Anond Snidvongs, Director  
Southeast Asia START Regional Centre  
Chulawich I Building, 5<sup>th</sup> Floor  
Henri Dunant Road, Bangkok 10330, Thailand  
Tel: (66 2) 218 9464-7  
Fax: (66 2) 251 9416  
Mobile: (66) 86 042 8915  
E-mail: anond@start.or.th

Dr. Ong Jin-Eong  
11 Lintang Delima 13  
11700 Penang, Malaysia  
Mobile: (60) 16 4836 240  
E-mail: mangroves@yahoo.com

### Project Co-ordinating Unit Member

Dr. John Pernetta, Project Director  
UNEP/GEF Project Co-ordinating Unit  
United Nations Environment Programme  
2<sup>nd</sup> Floor, Block B, United Nations Building  
Rajdamnern Nok Avenue  
Bangkok 10200, Thailand  
Tel: (66 2) 288 1886  
Fax: (66 2) 288 1094  
E-mail: pernetta@un.org

**Observers**

Dr. Srisuda Jarayabhand, Co-ordinator  
 United Nations Environment Programme  
 East Asian Seas Regional Coordinating Unit  
 (UNEP, EAS/RCU)  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (662) 288 1905  
 Fax: (662) 281 2428  
 E-mail: jarayabhand@un.org

Mr. Wanlop Preechamart, Environmental Officer  
 Ecosystem Management Sector  
 Biological Diversity Division  
 Office of Natural Resources and Environmental  
 Policy and Planning  
 60/1 Soi Phibunwattana 7, Rama VI Road  
 Bangkok 10400, Thailand  
 Tel: (66 2) 2656636  
 Fax: (66 2) 2656638  
 E-mail: preechamart@gmail.com

**UNEP/GEF Project Co-ordinating Unit**

Dr. Vo Si Tuan, Senior Expert  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 2084  
 Fax: (66 2) 288 1094  
 E-mail: vo@un.org

Mr. Christopher Paterson, Fisheries Expert  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 1116  
 Fax: (66 2) 288 1094  
 E-mail: patersonc@un.org

Mr. Kim Sour, Associate Expert  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 2609  
 Fax: (66 2) 288 1094  
 E-mail: kims@un.org

Ms. Nita Venturelli, Fund and Administration  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 2167  
 Fax: (66 2) 288 1094  
 E-mail: tangsujaritvichitn@un.org

Mr. Reynaldo Molina, Consultant  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 2606  
 Fax: (66 2) 288 1094  
 E-mail: molinar@un.org

Ms. Unchalee Pernetta, Programme Assistant  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 1670  
 Fax: (66 2) 288 1094  
 E-mail: kattachan.unescap@un.org

Ms. Saranya Rojananuangnit, Secretary  
 UNEP/GEF Project Co-ordinating Unit  
 United Nations Environment Programme  
 2<sup>nd</sup> Floor, Block B, United Nations Building  
 Rajdamnern Nok Avenue  
 Bangkok 10200, Thailand  
 Tel: (66 2) 288 2608  
 Fax: (66 2) 288 1094  
 E-mail: rojananuangnit@un.org

## ANNEX 2

### List of Documents

#### Discussion documents

UNEP/GEF/SCS/RSTC.8/1	Agenda.
UNEP/GEF/SCS/RSTC.8/2	Annotated Agenda.
UNEP/GEF/SCS/RSTC.8/3	Report of the Meeting.
UNEP/GEF/SCS/RSTC.8/4	Status of the Six Month Progress and Expenditure Reports and Annual Audit Reports from the Focal Points.
UNEP/GEF/SCS/RSTC.8/5	Co-financing of the Project to date and Comparison with Original Agreed Estimates.
UNEP/GEF/SCS/RSTC.8/6	Proposed Procedures and Timetable for Closure of Project Activities, Memoranda of Understanding and the Project Document by December 31 <sup>st</sup> 2008.
UNEP/GEF/SCS/RSTC.8/7-Vn	Report of the National Technical Focal Point of Viet Nam.
UNEP/GEF/SCS/RSTC.8/7-Thai	Report of the National Technical Focal Point of Thailand.
UNEP/GEF/SCS/RSTC.8/7-Ind	Report of the National Technical Focal Point of Indonesia.
UNEP/GEF/SCS/RSTC.8/7-Phi	Report of the National Technical Focal Point of Philippines.
UNEP/GEF/SCS/RSTC.8/7-Mal	Report of the National Technical Focal Point of Malaysia.
UNEP/GEF/SCS/RSTC.8/7-Chi	Report of the National Technical Focal Point of China.
UNEP/GEF/SCS/RSTC.8/7-Cam	Report of the National Technical Focal Point of Cambodia.
UNEP/GEF/SCS/RSTC.8/8-M	Report of the Chairperson for the Regional Working Group on Mangroves.
UNEP/GEF/SCS/RSTC.8/8-CR	Report of the Chairperson for the Regional Working Group on Coral Reefs.
UNEP/GEF/SCS/RSTC.8/8-SG	Report of the Chairperson for the Regional Working Group on Seagrass.
UNEP/GEF/SCS/RSTC.8/8-W	Report of the Chairperson for the Regional Working Group on Wetlands.
UNEP/GEF/SCS/RSTC.8/8-F	Report of the Chairperson for the Regional Working Group on Fisheries.
UNEP/GEF/SCS/RSTC.8/8-LbP	Report of the Chairperson for the Regional Working Group on Land-based Pollution.
UNEP/GEF/SCS/RSTC.8/8-RTF-E	Report of the Chairperson of the Regional Task Force on Economic Valuation.
UNEP/GEF/SCS/RSTC.8/8-RTF-L	Report of the Chairperson of the Regional Task Force on Legal Matters.
UNEP/GEF/SCS/RSTC.8/9	Status of the Demonstration Sites and Pilot Activities and Work Plan for Completion of Planned Activities.
UNEP/GEF/SCS/RSTC.8/10	Activities and Achievement of Demonstration Site and Pilot Project.
UNEP/GEF/SCS/RSTC.8/11	Status of the Regional Training Programme.
UNEP/GEF/SCS/RSTC.8/12	Report of the Project Co-ordinating Unit on Project Implementation 2002 – 2007.
UNEP/GEF/SCS/RSTC.8/13	Revised Strategic Action Programme. (Draft 4)
UNEP/GEF/SCS/RSTC.8/14	Plan for Building Community Capacity through Regional Network of Non-government Organisations with the Collaboration of GEF Small Grant Programme.

UNEP/GEF/SCS/RSTC.8/15	Proposed Actions with Respect to the Adoption and Submission of the Project Information Form for a GEF Project entitled: “ <i>Establishment and operation of a Regional System of Fisheries refugia in the South China Sea and Gulf of Thailand</i> ”.
UNEP/GEF/SCS/RSTC.8/16	Actions Required at the Regional, National and Local Levels in Order to Achieve the Targets of the Strategic Action Programme.
UNEP/GEF/SCS/RSTC.8/17	Proposed Work Plan and Timetable for the Regional Scientific and Technical Committee.

#### **Information documents**

UNEP/GEF/SCS/RSTC.8/Inf.1	List of Participants.
UNEP/GEF/SCS/RSTC.8/Inf.2	List of Documents.
UNEP/GEF/SCS/RSTC.8/Inf.3	Programme.

#### **The following documents are supplied in published form**

##### ***Meeting Reports***

UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on Land-based Pollution.</i> UNEP/GEF/SCS/RWG-LbP.8/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Ninth Meeting of the Regional Working Group on Fisheries.</i> UNEP/GEF/SCS/RWG-F.9/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Sixth Meeting of the Regional Task Force on Legal Matters.</i> UNEP/GEF/SCS/RTF-L.6/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on Coral Reefs.</i> UNEP/GEF/SCS/RWG-CR.8/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on Seagrass</i> UNEP/GEF/SCS/RWG-SG.8/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on Wetlands.</i> UNEP/GEF/SCS/RWG-W.8/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on Mangroves.</i> UNEP/GEF/SCS/RWG-M.8/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Seventh Meeting of the Regional Task Force on Economic Valuation.</i> UNEP/GEF/SCS/RTF-E.7/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Sixth Meeting of the Regional Task Force on Economic Valuation.</i> UNEP/GEF/SCS/RTF-E.6/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Sixth Meeting of the Project Steering Committee.</i> UNEP/GEF/SCS/PSC.6/3.
UNEP, 2007.	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Seventh Meeting of the Regional Scientific and Technical Committee.</i> UNEP/GEF/SCS/RSTC.7/3.
UNEP, 2007	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. <i>Report of the Eighth Meeting of the Regional Working Group on the Fisheries</i> UNEP/GEF/SCS/RWG-F.8/3.

**Technical Reports**

- UNEP. 2007 *Coral Reef Demonstration Sites in the South China Sea*. UNEP/GEF/SCS Technical Publication No. 5.
- UNEP. 2007 *Seagrass Demonstration Sites in the South China Sea*. UNEP/GEF/SCS Technical Publication No. 6.
- UNEP. 2007 *Mangrove Demonstration Sites in the South China Sea*. UNEP/GEF/SCS Technical Publication No. 7.
- UNEP. 2007 *Guidelines for Conducting Economic Valuation of Coastal Ecosystem Goods and Services*. UNEP/GEF/SCS Technical Publication No. 8.
- UNEP. 2007 *Review of the Legal Aspects of Environmental Management in the South China Sea and Gulf of Thailand*. UNEP/GEF/SCS Technical Publication No. 9.
- UNEP. 2007 *Land-Based Pollution in the South China Sea*. UNEP/GEF/SCS Technical Publication No. 10.
- UNEP. 2007 National Reports on Coral Reefs in the Coastal Waters of the South China Sea. UNEP/GEF/SCS Technical Publication No. 11.
- UNEP. 2007 National Reports on the Fish Stocks and Habitats of Regional, Global And Transboundary Significance In The South China Sea. UNEP/GEF/SCS Technical Publication No. 15.

**Knowledge Documents**

- UNEP, 2005 Managing Multi-Lateral, Intergovernmental projects and Programmes, the Case of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/ SCS/Inf.1. (Reprint)
- UNEP, 2007 Procedure of Selection of Demonstration Sites in the Context of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/SCS/Inf.2.
- UNEP, 2007 Procedure for Determination of National and Regional Economic Values for Ecotone Goods and Services and Total Economic Values of Coastal Habitats in the Context of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/ SCS/Inf.3.
- UNEP, 2007 Procedure for Establishing a Regional System of Fisheries *Refugia* in the South China Sea and Gulf of Thailand in the Context of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/SCS/Inf.4.
- UNEP, 2007 Modelling the Carrying Capacity of the South China Sea Marine Basin with Respect to Nutrient Loading from Land-Based Sources in the Context of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/SCS/Inf.5.
- UNEP, 2007 Establishing and Online Collaborative Information Base in the Context of the UNEP/GEF Project Entitled: *"Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand"*. South China Sea Knowledge Document UNEP/GEF/SCS/Inf.6.

## **ANNEX 3**

### **Agenda**

- 1. OPENING OF THE MEETING**
  - 1.1 Welcome on behalf of UNEP**
  - 1.2 Welcome Address on behalf of the Government of Thailand**
  - 1.3 Introduction of Members**
- 2. ORGANISATION OF THE MEETING**
  - 2.1 Election of Officers**
  - 2.2 Documentation Available to the Meeting**
  - 2.3 Programme of Work and Administrative Arrangements for the Conduct of the Meeting**
- 3. ADOPTION OF THE MEETING AGENDA**
- 4. ADMINISTRATIVE AND FINANCIAL MATTERS**
  - 4.1 Status of Administrative Reports for the Year 2006 and First half of 2007**
  - 4.2 Calculation of Actual Co-financing**
  - 4.3 Procedures for Closure of the Memoranda of Understanding**
- 5. REPORTS FROM THE NATIONAL TECHNICAL FOCAL POINTS REGARDING NATIONAL CO-ORDINATION AND ACTIVITIES AT THE NATIONAL LEVEL**
  - 5.1 Viet Nam**
  - 5.2 Thailand - Ms. Nirawan Pipitsombat**
  - 5.3 Philippines - Mr. Florendo Barangan**
  - 5.4 Malaysia - Mr. Lee Heng Keng**
  - 5.5 Indonesia - Mr. Dasminto**
  - 5.6 China - Professor Huang Zhengguang**
  - 5.7 Cambodia - Mr. Koch Savath**
- 6. REPORTS FROM THE REGIONAL WORKING GROUPS AND REGIONAL TASK FORCES ON PROGRESS AND ACHIEVEMENTS TO DATE**
  - 6.1 Regional Working Group on Mangroves**
  - 6.2 Regional Working Group on Coral Reefs**
  - 6.3 Regional Working Group on Seagrass**
  - 6.4 Regional Working Group on Wetlands**
  - 6.5 Regional Working Group on Fisheries**
  - 6.6 Regional Working Group on Land-based Pollution**
  - 6.7 Regional Task Force on Legal Matters**
  - 6.8 Regional Task Force on Economic Valuation**
- 7. CONSIDERATION OF ACTIVITIES AND ACHIEVEMENTS OF THE DEMONSTRATION SITES AND PILOT ACTIVITIES**
  - 7.1 Status of the Demonstration Site and Pilot Projects in the Mid-term Evaluation**
  - 7.2 Achievements and Lessons Learnt from the Demonstration Site and Pilot Projects**
- 8. STATUS OF THE REGIONAL TRAINING PROGRAMME**
- 9. OPERATION AND MAINTENANCE OF THE PROJECT WEBSITE, AND REGIONAL GIS AND META DATABASES**
- 10. REPORT OF THE PROJECT CO-ORDINATING UNIT ON PROJECT IMPLEMENTATION AND OUTPUTS 2002 - 2007**

11. **FINAL REVIEW OF THE REVISED DRAFT STRATEGIC ACTION PROGRAMME (SAP) AND RECOMMENDATIONS TO THE PROJECT STEERING COMMITTEE REGARDING ITS' APPROVAL**
  - 11.1 **Consideration of National Recommendations regarding the content and implementation of the SAP**
  - 11.2 **Review of Cost – Benefit Analysis of Programme Activities**
  - 11.3 **Re-consideration of Contents and Final Revision of the Strategic Action Programme**
  - 11.4 **Regional Partnerships, Co-operation and Coordination mechanism, and review of Draft Memorandum of Understanding among the Countries Bordering the South China Sea for the Coordination of Actions to Implement the Strategic Action Programme**
  - 11.5 **Recommendations to the Project Steering Committee Regarding the procedures for Approval of the SAP and its implementation.**
12. **IMPLEMENTING THE STRATEGIC ACTION PROGRAMME: OPERATIONAL CONSIDERATIONS**
  - 12.1 **Building Community Capacity through a Regional Network of Non-government Organisations with the Collaboration of GEF Small Grant Programme**
  - 12.2 **Proposed GEF Project on Development and Operation of the Regional Fisheries *Refugia* System**
  - 12.3 **Mechanisms and Actions at the Regional, National and Local Levels in Order to Achieve the Targets of the Strategic Action Programme**
13. **WORK PLAN AND TIMETABLE FOR THE REGIONAL SCIENTIFIC AND TECHNICAL COMMITTEE**
14. **ANY OTHER BUSINESS**
15. **ADOPTION OF THE REPORT OF THE MEETING**
16. **CLOSURE OF THE MEETING**

## ANNEX 4

### Additional Activities to be Included Under Existing MoUs

#### BACKGROUND

The committee was advised by the Project Director that disbursements during 2007 had been very low such that a substantial amount of funding would need to be re-phased into 2008. He noted that under normal circumstances this would simply be carried forward under the same budget lines but, the circumstances were different this year since the plans for project closure included the cessation of activities (and hence expenditures) at the national level, by June 30<sup>th</sup> 2008 to allow sufficient time for orderly closure of the Memoranda of Understanding.

#### CONCLUSIONS AND RECOMMENDATIONS FOR THE PROJECT STEERING COMMITTEE

This matter was discussed at length under agenda items 4 (paragraphs 4.1.11 *et seq.*) and 14 (paragraphs 14.1 and 14.2) and a list of potential additional activities to be included under existing Memoranda of Understanding prepared, discussed and agreed as presented in Table 1.

During discussion it was agreed that if the Project Steering Committee accepted the recommendation of the RSTC to include these activities in the budget for 2008 then the following criteria should be applied:

- The activities should be based on existing MoUs;
- Finalisation of the proposal by the Site Manager or Focal Point no later than 31<sup>st</sup> January 2007; and,
- Completion of proposed activities in time (July 2008).

Table 1 List of activities for potential funding in 2008.

	Site		Community		Regional	
Fangchengang Demo Site	Improvement of mangrove eco-farming	40,000	Mangrove Friendly Association	50,000	Dissemination of this practice in the region	30,000
Batu Ampar	Improvement of management plan for production forest	40,000			Dissemination of good practice on alternative livelihood	30,000
Koh Chang	Implementation of management plan for coral reef sustainable tourism	40,000			Dissemination of experience on sound scientific information for tourism development	30,000
Phu Quoc	Implementation of management plan of coral reef sub-site in Phu Quoc	40,000				
SEAFDEC	Advance training for larvae fish identification					45000
	Pilot fisheries refugia 5 sites * 40,000	200,000				
Ministry of Environment, Cambodia	Development of guideline for sustainable use of coastal habitats in the transboundary waters					
Peam Krasop	Implementation of management plan for mangroves and wetlands	50,000				
Kampot	Implementation of management plan for seagrass	40,000				
	<b>Total</b>	<b>450,000</b>		<b>50,000</b>		<b>135,000</b>

## ANNEX 5

### Amendments and Revisions to the Strategic Action Programme (SAP - DRAFT 4)

#### BACKGROUND

The Regional Scientific and Technical Committee considered the text of the fourth draft of the Strategic Action Programme under Agenda Item 11. National level responses to the draft, where available were taken into account. The work of the Regional Task Force on Economic Valuation was presented in detail together with the outcomes of the cost-benefit analysis of the actions contained in the SAP. It was noted that the initial cost-benefit analysis had resulted in amendment of the proposed actions by some regional working groups and all these changes had been incorporated into the present draft.

#### DISCUSSION AND PROPOSED AMENDMENTS

The only country to submit a formal response to the document was China which recommended inclusion of the statement:

*No activities shall be undertaken under this Strategic Action Programme in disputed areas of the South China Sea, nor shall issues of sovereignty be addressed directly or indirectly through project activities.*

as a footnote to the title as had been done for the GEF Project document.

Both China and Cambodia had raised questions regarding the economic valuation work and cost-benefit analysis and consequently a recalculation of the costs and benefits of the coral reef and wetland components of the SAP was undertaken during the meeting.

Very extensive discussions of the criteria for evaluating whether or not a given management regime was resulting in sustainable use of the coastal ecosystem took place during the meeting resulting in amendment and revision of these tables of indicators in all sections of the report.

The following pages 2 to 19 of this Annex contain the agreed changes.

## THE DEVELOPMENT OF THE STRATEGIC ACTION PROGRAMME<sup>4</sup> FOR THE SOUTH CHINA SEA<sup>5</sup>

One of the anticipated outputs from the UNEP/GEF Project entitled “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand” is an up-dated Strategic Action Programme, and the present document contains the current draft currently under consideration by the governments of the participating countries<sup>6</sup>. It is anticipated that national discussions of this document will be completed over the next six months and that the countries will commence implementation of the envisaged actions in 2008/2009.

The South China Sea is a semi-enclosed sea, which supports a number of unique habitats and ecosystems that are amongst the most biologically diverse shallow water marine ecosystems globally. The countries surrounding the South China Sea have undergone very rapid economic development and rapid population increase in coastal areas over the past two decades resulting in degradation and loss of coastal habitats and resources.

Recognising that actions were urgently needed to halt degradation of the environment of this marine basin, the countries of the region sought the assistance of UNEP and the Global Environment Facility (GEF) in preparing a Transboundary Diagnostic Analysis of the issues and problems and their societal root causes as the basis for development of a Strategic Action Programme. A proposal was endorsed by the twelfth intergovernmental meeting of the Coordinating Body for the Seas of East Asia (COBSEA) in December 1996 and the GEF financially supported this initiative.

During the Project Development Phase from 1996 to 2001 and in accordance with the GEF Operational Strategy activities were undertaken at the national and regional level to prepare national reports of water-related environmental issues and problems; a Transboundary Diagnostic Analysis (TDA) (UNEP SCS/TDA ver. 3); and a Strategic Action Programme (SAP). These documents were submitted to the Thirteenth Intergovernmental Meeting of COBSEA (UNEP/(WATER)/EAS IG9/3), which endorsed the draft SAP. This Strategic Action Programme was prepared in collaboration and cooperation with other regional institutions, organisations and bodies including: Food and Agricultural Organisation of the UN; South East Asia (START) Regional Centre; The South China Sea Informal Working Group at the University of British Columbia; the IOC Sub-Commission for the Western Pacific (WESTPAC); and the GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas.

The TDA identified the priorities among water-related problems and concerns, their socio-economic root causes, the sectorial implications of actions needed to mitigate them and the extent to which the problems were transboundary in either origin or effect. The draft Strategic Action Programme based on the findings of the regional Transboundary Diagnostic Analysis (TDA) was used as the basis for preparing the full GEF Project document, which entered the work programme of the GEF in December 2000. Due to the geopolitical sensitivity of the South China Sea marine basin the countries expressed the wish that no international or regional entities, other than UNEP be involved in the management of the project.

The actions proposed in the framework of the draft Strategic Action Programme were wide ranging in both context and proposed areas for action and the key elements of the project included actions that would lead to the further elaboration and development of the draft Strategic Action Programme. Experiences over the period 2002 to 2006 in managing appropriate activities at both the national and regional levels have been utilised in the drafting of the present revised SAP that has been developed through an iterative process with activities at the national level feeding into the regional review process which in turn provided advice and guidance to the national entities in finalising their draft inputs to the regional SAP.

---

<sup>4</sup> No activities shall be undertaken under this Strategic Action Programme in disputed areas of the South China Sea, nor shall issues of sovereignty be addressed directly or indirectly through project activities.

<sup>5</sup> The term “South China Sea” is used in its geographic sense and does not imply recognition of any territorial claims within the area.

<sup>6</sup> Cambodia, People’s Republic of China, Indonesia, Malaysia, Philippines, Thailand and Viet Nam.

REPLACES PAGE 5 OF SAP DRAFT NUMBER 4

access to and use of this area is restricted the management is sustainable. In contrast, 58,792 hectares in Cambodia are currently not regulated under the law, and are subject to extractive resource use other than the mangroves themselves and of this area only 8,820 are considered as being exploited in a sustainable manner. The target for Cambodia is therefore to ensure that all 49,972 hectares of mangrove outside the legally protected Parks and protected areas are used in a sustainable manner by 2012. Targets for the six countries are presented in Table 3 below.

Table 3 Targets [Proposed areas in hectares to be subject to changes in designation and/or management regime] for Future Mangrove Management.

	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	Total	% of total area of mangrove
Area to be transferred to National Parks and Protected Area status	0	5,330	20,000	631	1,400	30,000	57,361	4.49
Non-conversion of mangrove but sustainable use	0	0	165,000	0	1,600	0	166,600	13.05
Improved management relating to sustainable use	49,972	0	490,800	2,000	10,000	50,000	602,772	47.20
Replanting of deforested mangrove land	2,500	500	0	2,000	8,000	8,000	21,000	1.64
Enrichment planting to increase mangrove biodiversity	0	5,000	0	1,000	3,200	2,000	11,200	0.88

Recognising that the existence of a management regime and legal protection do not necessarily reflect the effectiveness of management the RWG-M developed a set of indicators of the sustainability of current management. Table 4 presents the indicators of sustainability discussed and agreed during the seventh meeting of the Regional Working Group. The indicators are grouped into three classes, which in the case of the management indicators are divided into three sub-groups. In the case of both "management capacity" and "management tools" if all the indicators are met there is a higher likelihood that management is more sustainable than if only a few, or none are present.

Table 4 Sustainable Management Indicator Matrix. [A baseline, mid-term and end of first phase of SAP implementation assessment of these indicators is required to indicate whether or not the targets have been met.]

Management Indicators	Ecological/Environmental Indicators	Socio-Economic Indicators
<b>MANAGEMENT CAPACITY</b> <ul style="list-style-type: none"> <li>Formal Management framework</li> <li>Trained Man-power (No./levels)</li> <li>Facilities and equipment</li> <li>Sustainable Financing</li> </ul>	<ul style="list-style-type: none"> <li>Forest Cover</li> <li>Tree density (trees over 1.5 metres high)</li> <li>Number of True Mangrove species</li> <li><i>Scylla spp</i> (size and abundance)</li> <li><i>Sesarma spp</i> (size and abundance)</li> </ul>	<b>FISHERIES</b> <ul style="list-style-type: none"> <li>Catch per unit effort</li> <li>Total landing from mangrove area</li> <li>Income</li> <li>Nos people directly involved</li> </ul>
<b>MANAGEMENT APPROACH</b> <ul style="list-style-type: none"> <li>Sectorial</li> <li>Integrated</li> <li>Community-based</li> <li>Multiple-use</li> </ul>		<b>TOURISM</b> <ul style="list-style-type: none"> <li>Number of visitors</li> <li>Number of tourism operators</li> <li>Income</li> <li>Nos people directly involved</li> </ul>
<b>MANAGEMENT TOOLS</b> <ul style="list-style-type: none"> <li>Licensing and permits</li> <li>Seasonal closure</li> <li>Zoning</li> </ul>		<b>FORESTRY</b> <ul style="list-style-type: none"> <li>Volume of timber</li> <li>Weight of charcoal product</li> <li>Income</li> <li>Nos people directly involved</li> </ul>

REPLACES PAGE 7 OF SAP DRAFT NUMBER 4

Table 5 Proposed Regional Actions for the Mangrove Component of the Regional Strategic Action Programme.

Component	Sub-Component	Activity	2008	2009	2010	2011	2012	Total
1.	Building Capacity to ensure long-term sustainable use of mangrove habitats and resources	1.1.1 Maintain and expand the existing regional website as a mechanism for programmed exchange of information and experience between managers, government officials, teachers, research students, and community leaders	20,000	20,000	20,000	20,000	20,000	100,000
		1.1.2 Organise programme of study visits for government officials, community leaders, and mangrove managers to demonstration sites to study on-going practices in rehabilitation, management and conservation in the region.	40,000	40,000	40,000	40,000	40,000	200,000
		1.1.3 Organize regional forum every two years to share knowledge and experiences on how to improve government services in managing mangroves in Marine Parks and MPAs		30,000		30,000		60,000
		1.1.4 Meeting to secure Regional exchange of experience on how to enforce the laws in practice	18,000	18,000	18,000	18,000	18,000	90,000
		1.1.5 Regional training programme for country trainers on effective monitoring the state of mangrove ecosystems.	35,000					35,000
		1.1.6 Regional workshop every two years for exchange of experiences of developing livelihood and other income generation activities		30,000		30,000		60,000
		1.1.7 To Establish a network of environmental journalists and educators, and provide them materials of awareness on mangroves.						0
	Materials for use at all levels in promoting knowledge and awareness of sustainable management practices	1.2.1 Develop regional guidelines on establishment of community based micro-credit schemes	24,000					24,000
		1.2.2 To establish a regional bibliography			148,000			148,000
		1.2.3 Produce guide books for mangrove rehabilitation, management and conservation in the region	144,000					144,000
		1.2.4 To translate relevant national publications to English for regional use	140,000	140,000	140,000	140,000		560,000
		1.2.5 Development of curricular and materials for use in training programmes relating to sustainable use and management of mangroves, offered by educational institutions in the region.		97,000				97,000

## REPLACES PAGE 8 &amp; 9 OF SAP DRAFT NUMBER 4

Table 5 cont. Proposed Regional Actions for the Mangrove Sub-component of the Regional Strategic Action Programme.

Component	Sub-Component	Activity	2008	2009	2010	2011	2012	Total
2. Enhancing mangrove management skills through development and dissemination of regionally applicable tools	2.1 Develop guidelines and other tools as information resources, and facilitate their regional dissemination and adoption for mangrove managers	2.1.1 To develop regionally applicable standards and criteria for defining sustainability of mangrove management system.	41,000	30,000				71,000
		2.1.2 Document models for sustainable use of mangrove ecosystem	30,000	18,000				48,000
		2.1.3 Identify and encourage the use of environmental friendly technologies for timber harvesting, fishing and shrimp farming	30,000	36,000				66,000
		2.1.4 Promote multiple-use of mangrove resources and alternative livelihood	23,000	46,000				69,000
		2.1.5 Establish criteria and guidelines for zoning of mangrove ecosystem	29,000	27,000	15,000			71,000
		2.1.6 Develop and design standardized methodology and guideline for inventory and assessment, using skilled managers and community volunteers	27,000	18,000				45,000
	2.2 Applied research, knowledge management, and monitoring of mangroves for sustainable management	2.2.1 Establish a regional system to Periodically Monitor the state of Mangrove Ecosystem in the region	27,000	27,000	15,000			69,000
		2.2.2 Study the potential impacts of sea level rise, climate change, and episode events on mangrove ecosystems bordering the South China Sea	27,000	66,600	15,000			108,600
		2.2.3 Quantification of mangrove as a carbon sink	27,000	114,200	15,000			156,200
		2.2.4 Develop algorithms for interpretation of remotely sense images of mangrove associations and zonation.	27,000	36,800	15,000			78,800
		2.2.5 Build on the work of the RTF-E of economic value of mangrove goods and services in order to determine total economic value of mangrove ecosystems						
		2.2.6 To establish a mechanism for collection and exchange of regional mangrove data and information	29,000	15,000	15,000			59,000
		2.2.7 Establish a web-based regional mangrove information centre				27,000	15,000	42,000
		2.2.8 Test and elaborate the criteria and indicators of sustainable mangrove management				63,500	63,500	127,000
3. Policy, Legal and Institutional Arrangement	3.1 Integration of Research Programme with Management and Policy Making	3.1.1 To maintain the network of communication between policy makers managers, and scientists as established under the UNEP/GEF/SCS Project, to ensure the inclusion of new research findings in management and policy making				72,500	72,500	145,000
		3.1.2 Establish an expert group to assist participating countries in meeting their obligations under international conventions relating to biological diversity and RAMSAR conventions				25,000	25,000	50,000
	3.2 International and Regional Co-operation	3.2.1 To maintain the network of mangrove specialists established under the UNEP/GEF/SCS Project, to advise the governments on sustainable management of mangroves				72,500	72,500	145,000
		3.2.2 Organise periodic regional conference to facilitate cross-sectoral discussion of issues and problems relating to mangrove management.			25,000	25,000	25,000	75,000
		3.2.3 Establishment of formal mechanism for cooperation in managing the marine environment in the south China Sea.			20,000	20,000		40,000
		3.2.4 Establish an appropriate mechanism to monitor and evaluate the implementation of SAP			27,000		18,000	45,000
<b>GRAND TOTAL</b>			<b>765,000</b>	<b>827,600</b>	<b>655,000</b>	<b>710,500</b>	<b>369,500</b>	<b>3,327,600</b>

**TO BE ADDED ON PAGE 14 OF SAP DRAFT NUMBER 4 (following the targets)**

Many of the coral reefs in the region are under existing management with low effectiveness and criteria for effective management have not identified or applied. The working group developed a sustainable management indicator matrix on the assumption that sustainable management of coral reefs means management of the ecosystem in such a way that the resource(s) can be used continuously in a cost effective and ecologically friendly manner.

Such a management regime would normally have a formal management framework, clearly understood at every level by all stakeholders. One approach to assessing management sustainability is to use indicator(s) and three categories are proposed; namely: management, ecological-environmental, and socio-economic indicator(s) (Table 9).

The purpose of the defining these indicators is to provide a means of assessing whether an area is or, is not, under sustainable management in the context of the targets of the SAP, which states that by the year 2015, 70% of the coral reef area in 83 target sites of the South China Sea shall be under sustainable management. Depending on the objective(s), management input(s) (column 1) are expected to produce measurable output(s) which should be reflected through ecological indicator(s) (column 2) and/or socio-economic indicator(s) (column 3).

Table 9 Sustainable Management Indicator Matrix.

Management Indicators	Ecological/Environmental Indicators	Socio-Economic Indicators
<b>MANAGEMENT CAPACITY</b> <ul style="list-style-type: none"> <li>• Formal Management framework</li> <li>• Trained Man-power (nos/levels)</li> <li>• Facilities and equipment</li> <li>• Sustainable Financing</li> </ul>	<ul style="list-style-type: none"> <li>• Live Coral Cover</li> <li>• Butterflyfish (density)</li> <li>• Grouper (number of fish larger than 30cm)</li> <li>• Sea Urchin <i>Diadema</i></li> <li>• Giant clam <i>Tridacna squamosa</i></li> </ul>	<b>FISHERIES</b> <ul style="list-style-type: none"> <li>• Catch per unit effort</li> <li>• Total landing</li> <li>• Income</li> <li>• Number of people involved</li> </ul>
<b>MANAGEMENT APPROACH</b> <ul style="list-style-type: none"> <li>• Sectoral</li> <li>• Integrated</li> <li>• Community-based</li> <li>• Multiple-use</li> </ul>		<b>TOURISM</b> <ul style="list-style-type: none"> <li>• Number of visitors</li> <li>• Number of tourism operators</li> <li>• Income</li> <li>• Number of people involved</li> </ul>
<b>MANAGEMENT TOOLS</b> <ul style="list-style-type: none"> <li>• Licensing and permits</li> <li>• Seasonal closure</li> <li>• Zoning</li> </ul>		

## REPLACES PAGE 16 OF SAP DRAFT NUMBER 4

Table 9 Proposed Regional Actions for the Coral Reef Component of the Strategic Action Programme.

Component	Sub-Component	Activity	Description	2008	2009	2010	2011	2012	2013	2014	2015	Total	
1. Enhancement of Resource and Habitat Management	1.1 To promote good environmental governance and sustainable management of coral reef ecosystem	1.1.1 Review, synthesis and formulation of good practices in coral reef sustainable management	2 workshops, 5 days, 2 times; consultancy, printing and distribution				44,500			44,500		89,000	
		1.1.2 Assessment and advice of technique on enhancement and rehabilitation of coral reefs.	Workshops, 3 days, 2 times; consultancy, printing and distribution					37,600				37,600	
		1.1.3 Review and formulation of good practices in community - based management activities at the region	Workshops, 3 days, 2 times; consultancy, printing and distribution					37,600				37,600	
		1.1.4 Introduction of cost effective waste management and environment friendly systems	Workshops, 3 days, 2 times; consultancy				34,600					34,600	
		1.1.5 Synthesis of successes on alternative livelihood programme, including funding mobilisation & technical support	Workshops, 3 days, 2 times; consultancy, printing and distribution				18,800			18,800		37,600	
		1.1.6 Review of existing transboundary management practices and identification of priorities in transboundary management zones	Workshops, 3 days, 2 times; consultancy, printing and distribution					37,600				37,600	
	1.2 To maintain of regional management framework to ensure the sue of sound science in the sustainable management of coral reefs in the South China Sea	1.2.1 Regional coral reef expert group maintained to integrate research programmes and data and information used for coral reef management.	6 workshops, 3 days, consultancy		13,950	13,950	13,950	13,950	13,950	13,950	13,950		83,700
		1.2.2 Monitor achievement of SAP targets and NAP objectives every 5 year period.	Consultancy						18,000			18,000	36,000
		1.2.3 Synthesis of laws that contribute effectively to sustainable coral reef management, emphasizing on rule and regulation for good management practices	Workshop, 3 days & consultancy							37,950			37,950
		1.2.4 Regional coordinating mechanism to facilitate convergence of national and regional action plans.	2 workshop, 3 days & consultancy			37,950				37,950			75,900
		1.2.5 Information exchange for promotion of stakeholder involvement in sustaining management.	Printing, distribution & consultancy							14,000			14,000
		1.2.6 Review of traditional value and knowledge, and application in coral reef management in the region	Printing, distribution & consultancy						27,000				27,000
		1.2.7 Establishment of recognition and award system for good management of coral reefs.	Workshop & Award		45,300								45,300
		1.2.8 Review of level of compliance to various int'l obligations and conventions pertaining coral reefs	Consultancy				8,000						8,000
		1.2.9 Exchange and sharing experience between nations on coral reef research and management.	2 workshop			13,950					13,950		27,900

REPLACES PAGE 17 OF SAP DRAFT NUMBER 4

Table 9 cont. Proposed Regional Actions for the Coral Reef Component of the Strategic Action Programme.

Component	Sub-Component	Activity	Description	2008	2009	2010	2011	2012	2013	2014	2015	Total	
<b>2. Public Awareness, Communication and Education</b>	2.1 Increase awareness of stakeholders on the ecological roles, economic values of coral reefs, and need for sustainable management	2.1.1 Facilitation of mainstreaming of regional coral reef information and education programme	Development, printing, distribution & national workshop		14,000	25,000			25,000			64,000	
		2.1.2 Development and launching of regional information campaigns for sustainable use of coral reefs.	Consultancy, printing & 2 seminars				24,160				24,160	48,320	
		2.1.3 Sharing training materials among the countries by dissemination through regional website.	No cost										
<b>3. Research and Monitoring</b>	3.1 To provide relevant scientific data and information for sustainable management of coral reefs	3.1.1 Facilitation of and support to assess baseline information and status of coral reefs	Data collection, 6 countries, 2 time, 3 workshop, printing and distribution		55,300			55,300			55,300	165,900	
		3.1.2 Facilitation of and support to regular biological and socio-economic monitoring	3 workshops & support to target sites		33,950			33,950			33,950	101,850	
		3.1.3 Analysis of regional socio-economic status and culture significance of coral reefs, to provide vital information for sustainable management and use of coral reefs	2 workshops, 3 days				13,950				13,950	27,900	
		3.1.4 Management and update of coral reef GIS and other databases by SEA START RC.	Technical staff one month/year * 8 years	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	8,000
		3.1.5 Prepare a base map of coral reefs in SCS and overlays to reflect indicators of sustainable management	Consultancy				14,000					14,000	28,000
		3.1.6 Regular analysis, synthesis and update of databases, and dissemination of information to general public, decision makers, governments, potential partners	2 workshops & printing, distribution				16,950					16,950	33,900
		3.1.7 Develop mechanism for analysis of impacts of different development scenarios on coral reef environment.	Consultancy			16,000					16,000		32,000
		3.1.8 Develop a research project regarding economic valuation of coral reefs in the South China Sea, focusing on indirect values	2 workshops, in-country surveys, 30 sites		38,680					38,680			77,360

## REPLACES PAGE 18 OF SAP DRAFT NUMBER 4

Table 9 *cont.* Proposed Regional Actions for the Coral Reef Component of the Strategic Action Programme.

Component	Sub-Component	Activity	Description	2008	2009	2010	2011	2012	2013	2014	2015	Total	
4. Sustainability and Capacity Building	4.1 To improve regional capacity in management of transboundary issues regarding coral reefs	4.1.1 Exchange of experts for human resource development in coral reef management.	Experts, training course, administrative cost	12,835	12,835	12,835	12,835	12,835	12,835			77,010	
		4.1.2 Conduct of training of trainers for coral reef management at regional level	2 training courses, payments for trainers, administrative cost	64,614			64,614						129,228
		4.1.3 Exchange of experiences regarding skill of law enforcement and exchange of information, compliance and effectiveness of enforcement	Workshop					18,600					18,600
		4.1.4 Review and formulation of mechanism for financial sustainability for application in the region.	Workshop and consultancy						34,600				34,600
		4.1.5 Development of capacity in fund raising and implementation of financial scheme for coordination of coral reef management	Workshop, payment for trainers	29,100									29,100
		4.1.6 Maintenance of demonstration site network through forum of local government officials, project management personnel from demonstration sites	2 fora	27,900			27,900						55,800
		4.1.7 Forum of research centres and reef management agencies	2 fora		27,900			27,900					55,800
		4.1.8 Development of guideline for sustainable use of coral reefs	Consultancy, printing & distribution			20,500							20,500
		4.1.9 Provision of information on value added benefit of enhancement of sustainable use derived from transboundary management of reefs	Workshop & consultancy			34,600							34,600
<b>Total</b>				<b>135,449</b>	<b>242,915</b>	<b>175,785</b>	<b>295,259</b>	<b>321,335</b>	<b>229,915</b>	<b>94,250</b>	<b>177,310</b>	<b>1,672,218</b>	

The specific targets for management and conservation of seagrass ecosystems in the SCS are as follows:

- *Twenty-three managed areas totalling 26,576 hectares (approximately 34% of the 78,332 hectares identified as seagrass sites) in the South China Sea, to be brought under sustainable management by the year 2012.*
- *Government recognition of the ecological importance of seagrass through amendment of the management plans for seven existing MPAs with significant areas of seagrass habitat, to include specific seagrass-related management actions by the year 2012.*
- *Adoption of 7 new Marine Protected Areas specifically focussing on seagrass habitats identified in the prioritised listings of the SCS Project, by the year 2012.*

Table 12 Sustainable Management Indicator Matrix. [A baseline, mid-term and end of first phase of SAP implementation assessment of these indicators is required to indicate whether or not the targets have been met.]

Management Indicators	Ecological/Environmental Indicators	Socio-Economic Indicators
<b>MANAGEMENT CAPACITY</b> <ul style="list-style-type: none"> <li>• Formal Management framework</li> <li>• Trained Man-power (No./levels)</li> <li>• Facilities and equipment</li> <li>• Sustainable Financing</li> </ul>	<ul style="list-style-type: none"> <li>• Percent seagrass cover</li> <li>• Shoot density per sq m</li> <li>• Abundance of sea urchin, <i>Tripneustes gratilla</i></li> <li>• Abundance of sea cucumber, <i>Stichopus chloronotus</i></li> </ul>	<b>FISHERIES</b> <ul style="list-style-type: none"> <li>• Catch per unit effort</li> <li>• Total landing from the seagrass area</li> <li>• Proportion of rabbitfish (siganids) in total landing</li> <li>• Income</li> <li>• No. people involved</li> </ul>
<b>MANAGEMENT APPROACH</b> <ul style="list-style-type: none"> <li>• Sectorial</li> <li>• Integrated</li> <li>• Community-based</li> <li>• Multiple-use</li> </ul>		<b>TOURISM</b> <ul style="list-style-type: none"> <li>• Number of visitors</li> <li>• Number of tourism operators</li> <li>• Income</li> <li>• No. people involved</li> </ul>
<b>MANAGEMENT TOOLS</b> <ul style="list-style-type: none"> <li>• Zoning</li> </ul>		<b>AWARENESS</b> <ul style="list-style-type: none"> <li>• Proportion of local people that are aware of seagrass ecosystems functions and values</li> </ul>

### **REGIONAL ACTIONS AND COST ESTIMATES**

The overall goal of the proposed regional activities is to enhance the sustainable use and management of seagrass resources and ecosystems in the region. The activities were elaborated during the seventh meeting of the Regional Working Group on Seagrass and are presented in Annex 6 of that meeting report. Table 13 of this document itemises the actions and includes preliminary cost estimates prepared by the regional working group during the seventh meeting. There are 15 actions proposed, which are grouped into three components.

#### **1. BUILDING CAPACITY AND AWARENESS AT ALL LEVELS TO ENSURE LONG-TERM SUSTAINABLE USES OF SEAGRASS HABITATS AND RESOURCES**

The aim of this component is to increase the knowledge of government officials, managers, and stakeholders concerning the importance and value, of seagrass resources and ecosystems in the region. This component is divided into two sub-components; the first of which provides details of the actions required to maintain and elaborate regional mechanisms for knowledge and information exchange through training, site visits, meetings, regional symposia, a South China Sea website, and

## REPLACES PAGE 24 OF SAP DRAFT NUMBER 4

Table 13 Proposed Regional Actions for the Seagrass Sub-component of the Regional Strategic Action Programme.

Components	Sub-components	Activities	Description	Total Costs	Costs by Year				
					2008	2009	2010	2011	2012
<b>1. Building capacity and awareness at all levels to ensure long-term sustainable uses of seagrass habitats and resources</b>	1.1 Mechanisms for knowledge and information exchange	1.1.1 Exchange of personnel among seagrass sites.	3 pers/country, 7 countries, 2 times, 30 days. Costs: air fare: \$500, Stipend: \$15/per/day	39,900		19,950		19,950	
		1.1.2 Regional Training on seagrass management models and National Echo-seminars.	Biennial Trainings: (4 pers/country, 7 countries/course) + (National echo-seminars: 7 countries, \$5,000 x 2 seminars)	210,000	70,000	35,000	70,000	35,000	
		1.1.3 Maintain the SCS Website and input new data and information.	In-kind contribution from the network						
		1.1.4 Bi-annual seagrass "YALAMUN" publication. For example the outputs from 2.1.4.	Translation into 7 languages from in-kind contribution. English text to be prepared by a coordinating entity						
		1.1.5 Biennial Regional Conference on seagrass management.	2 conferences, 100 pers./conference, 3 days/conference	186,000	93,000				93,000
	1.2 Materials for use at all levels in promoting knowledge and awareness of sustainable management practices	1.2.1 National echo-seminars to incorporate seagrass into primary and secondary school curricula.	1 seminar, US\$5000/country, 7 countries	35,000	35,000				
		1.2.2 Compilation, selection, production and dissemination of general awareness materials of seagrass through national media.	In-kind contribution from the national government						
<b>2. Enhancing management skills through development and dissemination of regionally applicable tools</b>	2.1 Develop and enhance guidelines and other tools as information resources and facilitate their regional dissemination and adoption for seagrass management	2.1.1 Further enhance the regional seagrass GIS database (e.g. finer resolutions, using standardized methods, technology).	Updating the GIS database to the regional database by SEAs as in-kind contribution. Maintaining the regional GIS database by a coordinating entity: 20% of staff of SEA START RC (US\$200/month, 12 months, 5 years)	12,000	2,400	2,400	2,400	2,400	2,400
		2.1.2 More assessment of baseline information on seagrass from unstudied areas to find the seagrass distribution.	National activities as in-kind contribution from the national governments						
		2.1.3 Expand and up-date the regional seagrass meta-database.	Updating the meta database to the regional database by SEAs as in-kind contribution. Maintaining the regional meta database by a coordinating entity: 20% of staff of SEA START RC (US\$200/month, 12 months, 5 years)	12,000	2,400	2,400	2,400	2,400	2,400
		2.1.4 Regional synthesis of experiences and lessons learnt at UNEP/GEF/SCS demonstration and other sites; and replicate models useful in other areas.	A 3-day workshop for participants from national echo-seminar and demo-site, 2 per/country, 7 countries	13,020			13,020		
		2.1.5 Development of criteria and award system for successful seagrass management.	It will be discussed during regular meetings of the RWG-SG. Award after 5 years: Total three prizes: US\$10,000	10,000					10,000

REPLACES PAGE 25 OF SAP DRAFT NUMBER 4

Table 13 *cont.* Proposed Regional Actions for the Seagrass Sub-component of the Regional Strategic Action Programme.

Components	Sub-components	Activities	Description	Total Costs	Costs by Year				
					2008	2009	2010	2011	2012
<b>3. Policy, legal and institutional arrangement and regional coordination</b>	3.1 Integration of research results into Management and policy making	3.1.1 Develop guidelines to integrate research results into management and policy making	These guidelines will be discussed during the regular the RWG-SG meetings. A workshop with participation of the RWG-SG, policy makers, invited scientists and legal experts: 3 days, 7 countries, 3 pers/country, 3 invited speakers	22,320		22,320			
	3.2 International and regional cooperation, and coordination	3.2.1 Annual Meetings of the Regional Working Group on Seagrass (RWG-SG)	1 meeting/year, 5 years, 1 per/country, 7 countries, 5 days	54,250	10,850	10,850	10,850	10,850	10,850
		3.2.2 Promote transboundary management of seagrass for sustainable fisheries and the protection of endangered species (dugongs and turtles)	Five 3-day workshops for the development of management plans. 1 Cambodia-Viet Nam (\$6,000*5=30,000), 2.Philippine-Malaysia-Indonesia (\$10,000*5=50,000), 3.Viet Nam-China (10,000*5=50,000). 10 pers/workshop	130,000	26,000	26,000	26,000	26,000	26,000
	3.3. Improvement of the management plans of current seven prioritised MPAs	3.3.1 Review of existing data and information, legislations and regulations related to the establishment of MPA	In-kind co-financing from the government						
		3.3.2 Amend the existing management plans to include specific seagrass related management actions based on results of the legal review.	In-kind co-financing from the government						
	<b>4. Strengthening managed seagrass areas and establishment of new MPAs with focussing on seagrass habitat.</b>	4.1. Put 23 managed areas into sustainable management	4.1.1 Review and update existing data and information on the 23 seagrass areas	In-kind co-financing from the government					
4.1.2. Develop sustainable management plans based existing data and information			In-kind co-financing from the government						
4.1.3 Implement the management plans			Beyond the target time (after 2012)						
4.2 Establishment of 7 new MPAs focussing on seagrass habitat		4.2.1. Development criteria for selecting the MPAs focussing on seagrass	Regional Working Group Meetings.						
		4.2.2 From the prioritised listings of seagrass areas, select 7 sites for the establishment of 7 new MPAs (in regional working meetings)	Regional Working Group Meetings						
		4.2.3 Development and adoption of management plans for the 7 MPAs	In-kind co-financing from the government						
		4.2.4 Implement the 7 MPAs	Beyond the target (after 2012)						
<b>Total</b>				<b>724,490</b>	<b>239,650</b>	<b>118,920</b>	<b>124,670</b>	<b>96,600</b>	<b>144,650</b>

REPLACES PAGE 29 OF SAP DRAFT NUMBER 4

**THREATS TO COASTAL WETLANDS**

Population growth, and urbanisation of the coastal fringe, combined with rapid economic growth in this region places tremendous pressure on coastal wetland ecosystems. Major threats to the coastal wetlands bordering the South China Sea can be grouped as follows:

1. **LOSS OF WETLAND AREAS THROUGH CONVERSION FOR:**
  - Agriculture
  - Aquaculture
  - Port and harbour development
  - Human settlement
  - Tourist development
  - Urbanization
  - Industrialization
2. **DEGRADATION OF WETLAND ECOSYSTEMS AS A RESULT OF:**
  - Over-exploitation of living resources
  - Use of inappropriate fishing techniques and gear
  - Pollution
  - Deforestation in upland area
  - Invasive species
  - Global trends and natural episodic events such as sea level rise, typhoons and tsunami

Overall it has been estimated that around 30% of coastal wetlands are lost in Southeast Asia each decade giving an approximate annual loss in value of 3% per annum.

**GOAL AND TARGETS**

The ultimate goal of the SAP for wetland management and use is to:

*Promote the sustainable use of coastal wetland resources by developing integrated management plans and enhancing conservation and restoration of coastal wetlands bordering the South China Sea and the Gulf of Thailand, specifically lagoons, estuaries, mudflats, peat swamps, and non-peat swamps.*

The specific targets for wetland management are:

- *By the year 2012, to set up or update management plans for at least three lagoons, nine estuaries, five tidal flats, one peat swamp and one non-peat swamp in the South China Sea (See Table 15).*
- *By the year 2012, to increase by at least 7 wetland areas, the number of sites or specified wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites, etc).*
- *By the year 2017, to have a regional estuary monitoring scheme implemented in the participating countries .<sup>7</sup>*

Table 15 List of Sites Specified in the Targets. N = No Existing Management Plan; U = Existing but Out-Dated Plans Requiring Amendment and Up-Dating.

	Lagoons	Estuaries	Tidal mudflats	Peat swamp	Non-peat swamp
<b>Cambodia</b>		Koh Kapik-N			
<b>China</b>	Wenchang -N	Pearl river-N; Beilun river-U	Shantou-N; Hepu-N; Zhanzhou-N		
<b>Indonesia</b>		Sembilang NP-U			
<b>Philippines</b>		Malampaya sound-U; Pansipit-N	Manila Bay-N		
<b>Thailand</b>				Thale Noi non hunting area – U	Khao Sam Roi Yot National Park-U
<b>Viet Nam</b> <sup>8</sup>	Tamgiang-Cauhai-N; Thi Nai-N	Tien River Estuary; Dong Nai-U; Balat-U	Southwest Ca Mau-U		
<b>Total</b>	<b>3</b>	<b>9</b>	<b>5</b>	<b>1</b>	<b>1</b>

<sup>7</sup> UNEP, 2005. Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. Report of the Fifth Meeting of the Regional Working Group on Wetlands. UNEP/GEF/SCS/ RWG-W.5/3.

<sup>8</sup> Amendments provided by the Viet Nam Focal Point on 29<sup>th</sup> May following the 8<sup>th</sup> meeting of the RWG-W.

Table 16 Sustainable Management Indicator Matrix. [A baseline, mid-term and end of first phase of SAP implementation assessment of these indicators is required to indicate whether or not the targets have been met.]

Management Indicators	Ecological/Environmental Indicators	Socio-Economic Indicators
<b>MANAGEMENT CAPACITY</b> <ul style="list-style-type: none"> <li>Formal Management framework</li> <li>Trained Man-power (No./levels)</li> <li>Facilities and equipment</li> <li>Sustainable Financing</li> </ul>	<u>Estuaries:</u> <ul style="list-style-type: none"> <li>Turbidity</li> <li>Water colour</li> <li>Absence or presence of oil contamination</li> </ul> <u>Intertidal Mudflat:</u> <ul style="list-style-type: none"> <li>Mudflat area (ha)</li> <li>Abundance of cockle or clam</li> <li>Abundance of shore bird</li> <li>Amount of litters</li> <li>Erosion/deposit (progression/regression)</li> </ul> <u>Coastal Lagoon:</u> <ul style="list-style-type: none"> <li>Water area (ha)</li> <li>Plants reflect salinity change such as <i>Nipa</i> sp. and <i>Metroxylon sagu</i></li> <li>Area of associated habitats (seagrass, mangroves)</li> </ul>	<b>FISHERIES</b> (Estuaries, Intertidal mudflats, lagoons.) <ul style="list-style-type: none"> <li>Catch per unit effort</li> <li>Total landing</li> <li>Catch composition</li> <li>Income</li> <li>No people directly involved</li> </ul>
<b>MANAGEMENT APPROACH</b> <ul style="list-style-type: none"> <li>Sectorial</li> <li>Integrated</li> <li>Community-based</li> <li>Multiple-use</li> </ul>	<u>Peat Swamp:</u> <ul style="list-style-type: none"> <li>Abundance of primary trees</li> <li>Freshwater supply (inundation mark)</li> <li>Amount of litters</li> <li>Abundance of water birds</li> </ul> <u>Non-peat Swamp:</u> <ul style="list-style-type: none"> <li>Land and water area (ha)</li> <li>Turbidity</li> <li>Abundance of water birds</li> </ul>	<b>TOURISM</b> <ul style="list-style-type: none"> <li>Number of visitors</li> <li>Number of tourism operators</li> <li>Income</li> <li>No people directly involved</li> </ul>
<b>MANAGEMENT TOOLS</b> <ul style="list-style-type: none"> <li>Zoning</li> <li>Regulations and agreements (e.g. seasonal closures, licensing, and permits)</li> </ul>		<b>FORESTRY</b> (Peat Swamp & Non Peat Swamp) <ul style="list-style-type: none"> <li>Volume of timber</li> <li>Income</li> <li>No. people directly involved</li> </ul>

### **REGIONAL ACTIONS AND COSTING**

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

*Component 1* – Capacity development to enhance sustainable wetland management.

*Component 2* – Legal aspects, Institutional arrangement and international collaboration.

*Component 3* – Participatory wetlands management and monitoring mechanism.

There are in total 22 actions proposed and these are grouped into three components each of which contains specific objectives, and activities, while the approximate costs are presented in Table 17.

#### **COMPONENT 1. CAPACITY DEVELOPMENT TO ENHANCE SUSTAINABLE WETLAND MANAGEMENT**

The main objective of this component is to enhance and sustain the capacity of wetland management agencies and strengthen knowledge and public awareness on the wise use of wetlands in the region. This component is divided into two sub-components; the first of which focuses on the required regional mechanisms for human resource development through a training programme including study tours and field visits for wetland managers, community representatives, students, and NGO members. The second sub-component encompasses the production and dissemination of materials for public awareness, the development of an educational centre, the development of curricula, and the production of national newsletters.

#### **COMPONENT 2. LEGAL ASPECTS, INSTITUTIONAL ARRANGEMENT AND INTERNATIONAL COLLABORATION**

This component aims to improve the effectiveness of national policy, legal and institutional arrangements and co-ordination. It is divided into two sub-components, the first of which involves the maintenance and strengthening the Regional Working Group on Wetlands, as the regional policy, legal, scientific and technical advisory body on coastal wetland management. The second sub-component focuses on establishment of linkages among wetland management institutes or agencies.

REPLACES PAGE 34 OF SAP DRAFT NUMBER 4

Table 17 cont. Proposed Actions for Coastal Wetland Management and Conservation.

Components Objectives	Sub-components	Regional Activities	Basis for estimation	ESTIMATED COST (US\$)					Total
				Years					
				2008	2009	2010	2011	2012	
<p><b>3. Participatory wetlands management and monitoring mechanism</b></p> <p><i>To maintain and update Regional Wetlands GIS database and meta-database including scientific baseline for wetland conservation and sustainable use</i></p>	3.1 <i>Develop, maintain information system and disseminate products</i>	3.1.1 Develop a regional handbook/manual for standardization of techniques for wetland resource assessment and the conduct of socio-economic surveys economic valuation studies and cultural assessments.	(1 consultant X 4 months X 10,000) + (1 Mtg/country 4 days, 10,000 X 7) 110,000 I regional meeting 35,000 and publication costs (3,000 copies at 10\$/copy)	0	0	110,000	30,000	0	140,000
		3.1.2 Develop guidelines on wetland classification and mapping for estuaries and mudflats area and develop a regional map of peat-swamps, non-peat swamp and coastal lagoons.	(1 consultants X 3 months X 10,000) + ( 2 Mtgs. X 25,000) = 80,000	35,000	45,000	0	0	0	80,000
		3.1.3 Regional Wetland data and information compilation	(1consultant x 2 weeks per year) = 15,000	3,000	3,000	3,000	3,000	3,000	15,000
		3.1.4 Develop guidelines for and implement a regional estuarine monitoring scheme.	(1 consultant x 6months x 8,000) (1 regional expert meeting 25 participants 5 days coordination 35,000)	0	0	48,000	35,000	0	83,000
	3.2 <i>Wetland conservation and restoration</i>	3.2.1 Develop or update wetland management plans for the important priority coastal wetland sites in the region.	National Focal Points and National Committees x 7 countries 25 days In-Kind contribution Plans to be reviewed regionally during meetings under 2.1.2	0	0	0	0	0	0
		3.2.2 Establish criteria and guidelines for zoning of wetland ecosystem use for management and conservation.	1 consultant x 2 months x 10,000 I regional meeting 35,000	0	0	55,000	0	0	55,000
		3.2.3 Conduct, pilot tests to elaborate the criteria and indicators of sustainable wetlands use.	National Focal Points and National Committees x 7 countries 25 days In-Kind contribution 1 research assistant per country 1 year (7 x 10,000) (1 regional mgt x 25,000) = 120,000	70,000	25,000	0		0	95,000
		3.2.4 Disseminate environmental friendly methods and good practices in the region.	Via regional website, loaded by National Committee members	0	0	0	0	0	0
<b>TOTAL COSTS</b>				<b>248,000</b>	<b>616,000</b>	<b>506,000</b>	<b>298,000</b>	<b>153,000</b>	<b>1,821,000</b>

### **CURRENT MANAGEMENT OF LAND-BASED POLLUTION AND CHALLENGES TO FUTURE MANAGEMENT**

Most countries have environmental laws or acts under which environmental standards are in place with mechanisms for approved enforcement procedures to ensure compliance. In order to meet with standards and regulations stipulated under the law, structural facilities like waste water treatment plants are one way to treat waste water before discharging it to the environment. In addition to enforcement of existing laws and regulations only and building treatment facilities, environment planning, a part of the development process may prevent and mitigate potential impacts. In line with this, most countries in the region have Environmental Impact Assessment (EIA) prior to development. Countries are also working on environmental awareness, communication and education to enhance public understanding of pollution problem and practices at the individual level that may reduce contaminant loads to the environment. In addition, monitoring of pollution sites and water quality is currently undertaken by all countries while some countries include monitoring programmes for sediment quality and bio-parameters as well.

Although these management practices are in place in most countries, there are many problems in their implementation. Some countries lack the capacity to enforce the Environmental Acts due to limited budgets and lack of collaboration with waste producers. The waste producers, are not equipped with the necessary treatment facilities or have limited facilities resulting in low levels of compliance with regard to the standards stipulated under the law. Although environment assessment is incorporated into development planning in most countries, the effectiveness of the plans is questionable. Monitoring programmes for some countries although extensive as regards the number of sites, and the data collected, are not used effectively in pollution management. The data is often only used for the publication and dissemination of annual and environment quality reports. In some countries, the data obtained from the monitoring programmes are not reliable for decision making. The following regional challenges were identified from the available National Action Plans and discussions of the Regional Working Group:

- High population pressure and industrialization causing increased contaminant load;
- Lack of treatment facilities;
- Lack of cooperation and coordination among related sectors at the national level and weak linkage between central and lower levels of the governments;
- Lack of appropriate legislation and weak law enforcement;
- Low public awareness and lack of (responsible) committed of citizens;
- Lack of government commitment in balancing economic growth and environmental protection and low priority given to environment protection
- Lack of research and monitoring resources (man power, facilities);
- Lack of regionally comparable monitoring and analytical methodology; and
- Lack of criteria for sediment quality

### **GOAL AND TARGETS**

The main goal of the land-based pollution component is to foster regional co-operation in the identification of sensitive ecosystems, land-based contamination problems, evaluation of their significance and development of standards for national level adoption within a regional context in order to develop an appropriate precautionary approach to discharges to the South China Sea marine basin. The targets for the land-based pollution component are to set and maintain region-wide water quality standards and water quality objectives which will assist in maintaining health of the coastal ecosystems. The specific targets for Land-based Pollution management are:

1. By the year 2012, estimate total contaminant loading to the South China Sea.
2. By the year 2012, agree and adopt regional criteria for contaminants in sediment and biota.
3. By the year 2012, characterise and prioritise all hot spots surrounding the South China Sea.
4. By the year 2012, review and amend national legislation in support of all Land-based Pollution targets of the SAP.
5. By the year 2017, to meet ASEAN seawater quality (14 parameters) criteria (except pollutants from scientifically identified natural sources, if any) for:

### **Insert on Page 53**

In broad terms the total costs over five years are quite modest when compared with the value of annual production from each habitat:

- Mangroves 2.99 million US dollars compared with 5.1 billion US dollars of annual production;
- Coral reefs 1.67 million US dollars compared with 1.1 billion US dollars of annual production;
- Seagrass 1.58 million US dollars compared with 87.2 million US dollars of annual production;
- Wetlands 1.82 million US dollars compared with 1.2 billion dollars of annual production.

In place of the existing text above the heading “costs and benefits of mangrove interventions

**Replace the final paragraph before Table 26 on page 56, with the following text:**

Table 25 provides details of the costs and benefits to be derived from implementing the coral reef actions outlined in the SAP as in the case of mangroves it should be noted that the costs do not include national level costs. Table 26 presents a summary with the benefits for management, i.e. the first target separated from those for the second target and for the two targets combined (all benefits). It can be seen that placing a further 50,000 hectares of coral reefs under sustainable management is not as cost effective as successful achievement of the target to reduce the regional rate of degradation. The costs expressed as a percentage of benefits are somewhat high which is likely explained by the low valuation for coral reef goods and services determined during the present study.

REPLACES PAGE 57 OF SAP DRAFT NUMBER 4

Table 25 Summary of the Costs and Benefits of successful implementation of the Coral Reef Activities in the SAP to meet the Coral Reef Targets

	2008	2009	2010	2011	2012	2013	2014	2015	Total
Total accumulated new area under management (ha)	6,244	12,488	18,732	24,976	31,220	37,464	43,708	49,952	
Coral reef value 1,542.56 US\$ per hectare 2005 prices adjusted 4% per annum	1,735	1,805	1,877	1,952	2,030	2,111	2,196	2,283	
<b>Benefit expected from coral reef management if value increased by 16% under management</b>	<b>173,333</b>	<b>360,653</b>	<b>562,559</b>	<b>780,050</b>	<b>1,014,026</b>	<b>1,265,384</b>	<b>1,535,724</b>	<b>1,824,647</b>	
Costs (at 2006 prices) costs for the last three years estimated at 5% increase per annum on 2012 costs.	135,449	242,916	175,785	295,259	321,335	229,915	94,250	177,310	
Discount factor (NPV for 2006) i=4%	0.9246	0.889	0.8548	0.8219	0.7903	0.7599	0.7307	0.7026	
Costs 2006 value	125,236	215,952	150,261	242,673	253,951	174,712	68,868	124,578	<b>1,356,233</b>
Compound factor (NPV for 2007) i=4%	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	
<b>Costs 2007 values</b>	<b>130,246</b>	<b>224,590</b>	<b>156,271</b>	<b>252,380</b>	<b>264,109</b>	<b>181,701</b>	<b>71,623</b>	<b>129,561</b>	<b>1,410,482</b>
Benefits at 2005 prices 16% of total value saved	173,333	360,653	562,559	780,050	1,014,026	1,265,384	1,535,724	1,824,647	
Discount factor for NPV 2005 (i=4%)	0.889	0.8548	0.82193	0.79031	0.75992	0.73069	0.70259	0.67556	
Benefits 2005 values	154,093	308,287	462,384	616,482	770,578	924,603	1,078,985	1,232,658	<b>5,548,071</b>
Compound factor for NPV 2007 (i=4%)	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	
<b>Benefits 2007 values</b>	<b>166,667</b>	<b>333,443</b>	<b>500,115</b>	<b>666,787</b>	<b>833,458</b>	<b>1,000,051</b>	<b>1,167,030</b>	<b>1,333,243</b>	<b>6,000,793</b>
Cumulative benefits at 2005 prices of reducing the decadal rate of decline from 16% of live coral cover to 5% by 2015. Equals decline in loss of 1.375% per annum	15,314,711	15,777,627	16,245,834	16,727,386	17,221,510	17,727,434	18,252,696	18,779,815	
Discount factor for NPV 2005 (i=4%)	0.889	0.8548	0.82193	0.79031	0.75992	0.73069	0.70259	0.67556	
Benefits 2005 values	13,614,778	13,486,715	13,352,938	13,219,820	13,086,970	12,953,259	12,824,162	12,686,892	
Compound factor for NPV 2007 (i=4%)	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	1.0816	
<b>Benefits 2007 values</b>	<b>14,725,744</b>	<b>14,587,231</b>	<b>14,442,538</b>	<b>14,298,558</b>	<b>14,154,867</b>	<b>14,010,245</b>	<b>13,870,614</b>	<b>13,722,142</b>	<b>113,811,938</b>
<b>Total Benefits</b>	<b>14,892,411</b>	<b>14,920,674</b>	<b>14,942,653</b>	<b>14,965,344</b>	<b>14,988,324</b>	<b>15,010,296</b>	<b>15,037,643</b>	<b>15,055,386</b>	<b>119,812,731</b>
<b>Net Benefits</b>	<b>14,762,165</b>	<b>14,696,084</b>	<b>14,786,382</b>	<b>14,712,964</b>	<b>14,724,215</b>	<b>14,828,595</b>	<b>14,966,020</b>	<b>14,925,825</b>	<b>118,402,249</b>

Table 26 Summary of Costs and Benefits of Coral reef Interventions

	Management	All Benefits
Present Value of Benefits	6,000,793	119,812,731
Present Value of Costs	1,410,482	1,410,482
NPV	4,590,311	118,402,249
Benefit-Cost Ratio	4.254	84.94
Cost as percentage of Benefit	23.5	1.18

REPLACES PAGE 59 OF SAP DRAFT NUMBER 4

### Costs and Benefits of Wetland Interventions

As in the case of seagrass some difficulties arise in the case of the information assembled by the Regional Working Group on Wetlands. Initially this group was to have focussed on coastal lagoons, estuaries and inter-tidal mudflats. Subsequently coastal freshwater, peat and non-peat swamp forests were added to the range of habitats under consideration. Unfortunately the range of data available for the economic values of goods and services from these habitats was far less extensive than for the other habitats resulting in a regional value for annual production of US\$295.15 per hectare, which is absurdly low. This results in a total value of US\$1.2 billion for the estimated 4,201,145 hectares of these habitats bordering the South China Sea. Further work is needed to refine and improve the estimates of value.

Table 29 provides an analysis of the costs and benefits of the actions proposed in the wetlands component of the SAP whilst Table 30 provides a summary of the costs and benefits. These tables suggest that less economic benefit is derived from investing in coastal wetlands than in coral reefs and mangroves and approximately the same benefit as in the case of seagrass.

Table 29 Costs and Benefits of the Wetlands interventions in the SAP.

Years	2008	2009	2010	2011	2012	Total
Total costs of proposed actions (USD\$)	248,000	616,000	506,000	298,000	153,000	1,821,000
Discount factor (NPV for 2006) i=4%	0.92	0.89	0.85	0.82	0.79	1
Costs 2006 value	229,290	547,622	432,531	244,934	120,918	1,575,295
Compound factor (NPV for 2007) i=4%	1.04	1.04	1.04	1.04	1.04	
<b>Costs 2007 values</b>	<b>238,462</b>	<b>569,527</b>	<b>449,832</b>	<b>254,732</b>	<b>125,755</b>	<b>1,638,307</b>
Total value per hectare of annual production of wetland goods and services 2005 values	<b>295 US dollars</b>					
Total area to be brought under sustainable management within five years	<b>938,261 hectares</b>					
Total benefits derived from avoiding the annual losses(USD\$) 2005 values	830,783	534,694	802,041	1,069,393	1,336,740	4,573,651
Discount Factor	0.889	0.855	0.822	0.790	0.760	
Benefits 2005 values discounted	738,563	457,059	659,219	845,157	1,015,813	3,715,810
Compound factor (NPV for 2007) i=4%	1.082	1.082	1.082	1.082	1.082	
<b>Benefits 2007 values (Compound factor i=4%)</b>	<b>798,830</b>	<b>494,355</b>	<b>713,012</b>	<b>914,122</b>	<b>1,098,703</b>	<b>4,019,020</b>
Benefit-Cost (USD\$)	560,368	-75,172	263,179	659,390	972,948	2,380,714
Rate of loss assumed as 30% per century = 0.3% per annum or 0.003 per annum	2,815	5,630	8,444	11,259	14,074	<b>42,222</b>
<b>Costs as percentage of benefits</b>	<b>41%</b>					

Table 30 Summary of Costs and Benefits of Wetland Interventions.

Total Benefits	4,019,020
Total Costs	1,638,307
Total Net Benefits	2,380,714
Benefit-Cost Ratio	2.45
Costs as percentage of Benefits	40.76

## ANNEX 6

### Possible Roles for the COBSEA/COBSEA Secretariat in the Implementation of the Strategic Action Programme (SAP) for the South China Sea

#### BACKGROUND

The Regional Scientific and Technical Committee considered a proposal regarding a possible role for the COBSEA Secretariat in the implementation of the Strategic Action Programme. This was considered and discussed under Agenda Item 11.5 (paragraphs 11.5.5 to 11.5.8).

#### AMENDED PROPOSAL

Following the initial discussion a small group reviewed the original proposal and amended it as follows:

##### Can be done within existing financial and human resources:

- Provide a forum for SCS countries to report the implementation of NAPs and share the lessons learned and experiences on demonstration sites;
- Further development of the South China Sea meta-database and GIS Database as part of COBSEA EAS Knowledgebase

##### Subject to the availability of funds

- Provide a coordinating role for the implementation of the following components of the SAP:
  - Land based pollution
  - Mangroves
  - Coral reefs
  - Seagrass
  - Coastal wetlands
- Maintain SCS Website.

#### RECOMMENDATION

No specific recommendation was made to the Project Steering Committee regarding these proposals since the Regional Scientific and Technical Committee was of the view that a multi-option approach should be pursued at this time although the committee was of the view that implementing the SAP required an operational rather than a policy body.

## ANNEX 7

## Work Plan and Timetable for the Regional Scientific and Technical Committee for 2008

## BACKGROUND

The Regional Scientific and Technical Committee reviewed the work plans and schedules for the regional working groups and task forces and on the basis of decisions made during the eighth meeting of the committee prepared a work plan and timetable for 2008 as presented in Table 1 below.

Table 1 Work Plan and timetable for the year of 2008.

Month	1	2	3	4	5	6	7	8	9	10	11	12
<b>1. Implementation and completion of demonstration site and pilot projects</b>												
Review of status in implementing designated tasks	x											
Submission of administrative reports	x											
Revision of work plan and budget	x											
Re-allocation of budget for other activities		x										
Submission of self-assessment report						x						
Submission of all administrative and technical reports									x			
Site visits for the final evaluation												
Submission of proposal for additional activities at successful demonstration sites	x											
Finalisation of additional activities							x					
<b>2. Organisation of 3 training courses</b>												
<b>3. IT workshop</b>				x								
<b>4. Finalisation and approval of the National Action Plans and Strategic Action Programme</b>												
Adoption of National Action Plans												
Organisation of remaining national consultation to the SAP (Indonesia, Philippines, Thailand, Viet Nam)												
Revision of the SAP by the PCU				x								
Submission of draft MoU to legal advisors and receipt of comments				x								
Amendment of the MoU as required by RTF-L and PCU and resubmission for national review				x								
Finalisation of the SAP and MoU for submission to the PSC							x					
Approval of the SAP and signing MoUs by environment ministers								x				
<b>5. Final evaluation of the Project</b>												
First visit of evaluators (18 <sup>th</sup> – 29 <sup>th</sup> February)		x										
Second visit of evaluators (15 <sup>th</sup> May – 23 <sup>rd</sup> June)												
Production of evaluators' report (24 <sup>th</sup> July)						x						
Comments from DGEF, EOU and PCU to evaluators (23 <sup>rd</sup> August)												
Comments from RSTC and PSC 18 <sup>th</sup> September												
Finalisation of evaluation report (3 <sup>rd</sup> October)										x		

**Table 2 Schedule of Meetings for 2008.** (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; PSC = Project Steering Committee; RSC = Regional Scientific Conference; MR = Mayor Roundtable) (H = United Nations Holidays)

	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S									
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					
				H																																			
February							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				
March	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								
April				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						
May						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			
June	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									
July				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					
August																																							
September				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						
October					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				
November	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									
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					

Q = Questionnaires distributed to the network; QR1 = Response anticipated from network to questionnaire; Rpt = Evaluation Report produced 24<sup>th</sup> July; RR1 = Comments from DGEF, EOU, PCU to evaluators.