



**United Nations  
Environment Programme**



**UNEP/GEF South China Sea  
Project**



**Global Environment  
Facility**

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

**REPORT**

**Seventh Meeting of the Regional Working Group for  
the Wetlands Sub-component**

***Manila, Philippines, 19<sup>th</sup> – 21<sup>st</sup> June 2006***



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Cover Photo: Peat swamp forest in U Minh Thong, Viet Nam, by Ms. Nguyen Thi Thu Ha.

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## **Report of the Meeting**

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

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

1.1.1 Dr. John Pernetta, Project Director officially opened the meeting on behalf of Dr. Achim Steiner, Executive Director of the United Nations Environment Programme (UNEP), and Mr. Olivier Deleuze, Director, Division of Global Environment Facility Co-ordination (UNEP/DGEF) and welcomed participants to the Seventh Meeting of the Working Group on Wetlands. He noted with regret the absence of representatives from Indonesia and Malaysia, noting further that Mr. Dibjo had been advised not to travel on medical grounds.

1.1.2 Dr. Pernetta noted that the main item of business before the group was a consideration of the wetland elements to be included in the Strategic Action Programme and in particular, elaboration of the actions and their associated costs. He noted further that this would require a review of the National Action Plans and their current status.

1.1.3 Dr. Pernetta informed the meeting that a number of the wetlands medium sized project proposals had been submitted to the GEF Secretariat and would be forwarded for final clearance by the Chief Executive Officer (CEO) following minor revisions in line, with Secretariat comments already received. One item on the agenda was a consideration of the status of all the Medium Sized Project proposals; the required actions to finalise those that were outstanding; and consideration of the execution arrangements.

1.1.4 Dr. Pernetta welcomed Dr. Theresa Mundita S. Lim, Assistant Director of the Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources of the Philippines and invited her to address the meeting on behalf of the Director, and the host Government.

1.1.5 Dr. Lim, welcomed participants to the meeting and to Manila and noted that some of the meeting agenda items were of particular relevance to the Philippines, and that some relevant activities were already being undertaken at the national level. She expressed the hope that the project outcomes and experiences would be replicated both nationally and regionally beyond the completion of the project.

1.1.6 Dr. Lim noted that the project requires regional cooperation between countries bordering the South China Sea and Gulf of Thailand. She noted that other regional and sub-regional programmes and centres also encouraged and supported such co-operation, and expressed the hope that there would be in turn co-operation and collaboration between the South China Sea project and the activities of these programmes and centres.

#### **1.2 Introduction of Participants**

1.2.1 Dr. Pernetta noted that unfortunately neither Indonesia, nor Malaysia were represented in the meeting and that in the case of Malaysia the PCU had only recently discovered that the previous focal point had left government service over twelve months ago and that no replacement had been nominated. He noted further that Dr. Mai Trong Nhuan focal point for wetlands in Viet Nam, was unable to be present but that he had nominated as an alternate Ms. Nguyen Thi Thu Ha, whom members would recall had attended the previous meeting whilst serving as an intern in the PCU. Dr. Pernetta welcomed Ms. Thu Ha and invited participants to introduce themselves to the meeting. The list of participants is contained in Annex 1 of this document.

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

#### **2.1 Election of Officers**

2.1.1 Dr. Pernetta reminded participants that the Rules of Procedure state that, the Regional Working Group shall elect, from amongst the members, a Chairperson, Vice-Chairperson and Rapporteur to serve for one year. The rules state further that, officers shall be eligible for re-election no more than once.

2.1.2 Members recalled that, during the sixth meeting in Sihanoukville, Cambodia, 12<sup>th</sup> – 15<sup>th</sup> September 2005, Dr. Mai Trong Nhuan, Mr. Koch Savath and Mr. Narong Veeravaitaya were elected as Chairperson, Vice-Chairperson, and Rapporteur respectively. Since Dr. Mai was unable to attend Dr. Pernetta proposed that members elect new officers to serve until the convening of the next meeting in 2007.

2.1.3 Ms. Marlynn Mendoza, focal point for the Philippines nominated Mr. Narong, focal point for wetlands in Thailand as Chairperson, and this nomination was seconded by Mr. Savath, focal point for wetlands in Cambodia. Mr. Narong nominated Mr. Savath as the Vice-Chairperson, and this nomination was seconded by, Ms. Mendoza. Ms. Mendoza nominated Ms. Thu Ha as rapporteur for the meeting, and this nomination was seconded by, Mr. Savath. There being no further nominations, Mr. Narong, Mr. Savath and Ms. Thu Ha were elected by acclamation.

## **2.2 Documents Available to the Meeting**

2.2.1 Mr. Narong, the Chairperson invited Dr. Sulan Chen, the PCU member to introduce the documentation available to the meeting and listed in document UNEP/GEF/SCS/RWG-W.7/Inf.2 Amend.1. Dr. Chen briefly introduced the documents and highlighted the main substantive items for consideration and decision by the working group; which included the administrative reports; the status of the demonstration sites; finalisation of the National Action Plans; the project website and associated databases; the training activities; finalisation of inputs to the Regional Strategic Action Programme; and revision of the work plan and activities for the working group. She invited participants to table any additional materials and the list of documents is contained in Annex 2 of this report.

2.2.2 Dr. Chen noted that participants were also provided with a CD containing various manuals regarding the project website, GIS and Meta-databases and models, and electronic copies of all the meeting reports held to date.

## **2.3 Organisation of Work**

2.3.1 Dr. Chen briefed participants on the administrative arrangements for the conduct of the meeting, and the proposed organisation of work (UNEP/GEF/SCS/RWG-W.7/Inf.3.Amend.1). She noted that formal sessions of the meeting would be conducted in English and in plenary although sessional working groups might need to be formed, to further develop and elaborate elements related to the wetland sub-component of the regional Strategic Action Programme (SAP).

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

3.1 The Chairperson introduced the amended provisional agenda prepared by the PCU as document UNEP/GEF/SCS/RWG-W.7/1.Amend.2, and the amended annotated agenda UNEP/GEF/SCS/RWG-W.7/2.Amend.1 and invited members to propose any amendments or additional items for consideration, prior to the adoption of the agenda.

3.2 The Chairperson proposed that participation of the working group in the PEMSEA East Asian Seas Congress be included as an additional item under any other business. There being no further proposals for amendment or addition the agenda was adopted as it appears in Annex 3 of this report.

## **4. STATUS OF ADMINISTRATIVE REPORTS, SUBSTANTIVE NATIONAL REPORTS AND DEMONSTRATION SITE PROPOSALS**

### **4.1 Status of the Administrative Reports**

4.1.1 The Chairperson invited Dr. Chen to introduce document UNEP/GEF/SCS/RWG-W.7/4, which outlined the current status of the administrative reports, including progress reports; expenditure reports, audit reports, and MoU amendments.

4.1.2 Dr. Chen drew the attention of members to the current situation with respect to receipt of routine 6 monthly progress and expenditure reports and the audit reports for expenditures during 2005. She noted that Table 1 indicated the status of the Memoranda of Understanding and noted further that with the exception of Malaysia all MoUs were operational under the second amendments.

She noted with respect to the contents of Table 2 that no reports had been received from Malaysia since first January 2005 and that, three countries: Cambodia, Indonesia and Malaysia had not submitted their reports for the second half of 2005. Concerning the annual audit reports she highlighted the fact that only one country, Thailand, had submitted an audit report for 2005 expenditures and that in the absence of such a report no further funds could be transferred to the SEA's by UNEP.

4.1.3 Dr. Chen highlighted the main points regarding the history of Malaysia's involvement in the wetlands component of the project noting that despite the lack of direct access by the SEA to the funds transferred to Malaysia in 2002 the focal point had submitted various substantive outputs during the first half of 2005. However, despite some intensive communication it had been impossible to finalise the budget associated with the second amendment to the Memorandum and subsequently the PCU had learned one week before the present meeting that Dr. Ebil Yusuf had left government service over one year ago and no new focal point had been identified in Malaysia.

4.1.4 Dr. Lim, queried what would be the situation in the event that Malaysia failed to provide expenditure reports or withdrew from participation in the component. Dr. Pernetta indicated that following the restructuring of the Ministries in Malaysia, responsibility for the South China Sea Project had been transferred to the new Ministry of Environment and Natural Resources and that, participation at the level of the Project Steering Committee had in fact been strengthened. He indicated also that Malaysia had strongly supported the development of the regional guidelines for the development of a regional system of fisheries *refugia* and inclusion of these guidelines in the ASEAN SEAFDEC Regional Guidelines for the application of the Code of Conduct for Responsible Fisheries in the ASEAN region. He indicated that the PCU had only been informed of the current situation during the previous week and that he would be writing to the National Focal Point and National Technical Focal Point to apprise them of the situation and to seek their support in clarifying and resolving the situation.

4.1.5 The Chairperson invited members to brief the meeting on the situation with respect to outstanding reports. Mr. Savath noted that in the case of Cambodia the KPMG audit company had quoted a cost for the audit that would exceed 10% of the total grant received and that he was attempting to have the company discount this amount. He noted further that the overdue progress reports would be submitted during the planned joint meeting between Trat and Kampot Provinces in early July.

4.1.6 Ms. Mendoza indicated that the outstanding reports were already finalised and submitted to the Secretary of DENR for clearance and signature prior to being dispatched to UNEP. Professor Chen indicated that she had this morning delivered the audit report for expenditures in China in 2005. Ms. Thu Ha indicated that the proposal from Dr. Mai was to combine the audits for 2005 and 2006 to reduce the percentage cost associated with the audit.

4.1.7 Noting that no representatives of Malaysia and Indonesia were present in the meeting the Chairperson reminded members present that, no further funds could be transferred by UNEP to the SEAs, hence there was a need for members to submit their outstanding audit reports as soon as possible.

4.1.8 The Chairperson invited members to propose a course of action to the PCU regarding the situation with respect to Malaysia. Mr. Savath suggested that the PCU should communicate formally with the National Focal Point and National Technical Focal Point advising them of the situation and requesting them to resolve the issues as soon as possible. In the event this could not be resolved satisfactorily then UNEP should attempt to recover the funds transferred in 2002.

4.1.9 Ms. Mendoza agreed with this proposal but suggested that a deadline should be included for action by the Malaysian Focal Points, Ms. Thu Ha agreed with this suggestion and indicated that in the case of Viet Nam it was considered the role of the National Focal Points to ensure that such problems did not arise, but to assist in their resolution if, and when, they did.

4.1.10 Mr. Narong noted that this matter would need to be raised at the Regional Scientific and Technical Committee since the regional coverage would be incomplete in the event that Malaysia did not continue to be involved in the wetlands sub-component.

4.1.11 Dr. Pernetta agreed with Mr. Narong that the RSTC would have to consider the scientific and technical implications of a situation where Malaysia did not participate further and that the Project Steering Committee would need to review the financial aspects. He further agreed that he would write to the National Focal Point and National Technical Focal Points advising them of the situation and requesting their assistance in resolving the matter; he would indicate also that in the event the situation could not be resolved by the end of August he would be forced to initiate actions to secure repayment of the funds transferred in 2002.

#### **4.2 Status of the Publication of National Reports in English and National Languages**

4.2.1 In introducing this agenda item the Chairperson noted that the PCU had now received copies of the final national reports in English, which had been edited and formatted for final publication and regional distribution by UNEP. Members recalled that the timetable for publication of national reports in national languages has been adjusted several times, and the latest agreed deadline to publish these reports was during the last quarter of 2005. Published national reports have been received by the PCU only from Cambodia, China, Philippines, and Thailand.

4.2.2 Mr. Narong indicated that he had brought to the meeting copies of the GIS report in Thai Language, and that the national report was already with the printer and would be returned for final copy editing and checking next month prior to finalisation and final printing. The National Action Plan would be printed next year following the completion of the three meetings for public hearings.

4.2.3 In the case of Viet Nam Ms. Thu Ha indicated that the national report was with the printer and would be available next month and would be distributed to all coastal provinces and appropriate departments of Government including ministries and academic institutions.

4.2.4 Professor Chen indicated that the China National Report had been submitted to the PCU during the Regional Scientific Conference, that it had been printed and distributed in the three coastal provinces of China bordering the South China Sea and to government institutions and agencies having interests in and involvement in wetlands management.

4.2.5 Mr. Savath indicated that the Cambodian national report, had been submitted in Khmer and English during the 6<sup>th</sup> meeting.

4.2.6 Ms. Mendoza indicated that in the case of the Philippines, three wetlands reports had been produced and submitted to the PCU in hard copy and on CD including one on legislation and policies, the wetlands national report, and the data-base which would soon be available online via the PAWB-DENR website.

#### **4.3 Status of the Demonstration Site Proposals for Approved Sites**

4.3.1 Mr. Narong reminded members that during the third meeting of the Project Steering Committee, three wetland sites and one wetland/mangrove site had been selected as demonstration sites to be funded under the GEF Medium-sized Project (MSP) mechanism. These wetlands sites were:

- (i) Shantou (China)
- (ii) Malampaya sound (Philippines)
- (iii) Thale Noi (Thailand)
- (iv) Xuan Thuy mangrove site combined with Balat Estuary (Viet Nam)

4.3.2 Mr. Narong noted that the Thale Noi proposal had been finalised and submitted through the UNEP/DGEF for review and forwarding to the GEF Secretariat. Mr. Narong noted that he was now being pressured by local stakeholders as to a possible starting date for the activities in Thale Noi since this had been submitted for informal review by the GEF Secretariat in November last year and no further information had been received since that time.

4.3.3 Professor Chen noted that the Shantou proposal has been finalised and approved by UNEP/DGEF, but it lacked the endorsement letter from the GEF national focal point since the GEF Operational Focal Point in China is now insisting that all GEF Projects be executed nationally either

by a central government ministry or a Provincial Government. It had been agreed last week between all parties that the Executing Agency would now be the State Environmental Protection Administration with Sun Yat Sen University and Shantou City Government as sub-contracted Specialised Executing Agencies and she anticipated that following revision of the administrative arrangements to conform with this agreement, an endorsement letter would be issued by mid-July.

4.3.4 The Chairperson noted that the Malampaya Sound proposal was still being revised by Ms. Marlynn Mendoza and UNEP/DGEF. Dr. Pernetta noted that the PCU had recently received a communication from Nairobi indicating that in view of the lack of progress in finalising this proposal UNEP/DGEF proposed to delete it from the Divisions' Work Programme. Dr. Pernetta noted that he found this quite surprising and suggested that Ms. Mendoza provide him with copies of all correspondence between herself and Mr. Otsuka subsequent to the meeting in Bangkok in February. He expressed the hope that during this meeting it would prove possible to clarify the situation and finalise a work plan for completion of the proposal. Ms. Mendoza indicated that the proposal was undergoing final revision.

4.3.5 Dr. Pernetta requested that Mr. Narong provide him with copies of all correspondence received from Nairobi regarding the Thale Noi site since he had recently been informed that the GEF Secretariat Programme Manager had indicated that he would not recommend the proposal for CEO clearance since it was, in his view less well written than the three other proposals which would be submitted for final CEO clearance following minor revisions by UNEP/DGEF. The three proposals, which will be submitted for clearance are the Xuan Thuy/Balat mangrove wetland site in Viet Nam, the Ninh Hai coral reef proposal in Viet Nam and the East Bintan seagrass site, in Indonesia.

## **5. FINALISATION, ADOPTION AND IMPLEMENTATION OF NATIONAL ACTION PLANS**

5.1 The Chairperson introduced this agenda item by noting that the sixth meeting of the RWG-W had reviewed the national action plans (NAPs) submitted to the PCU prior to the meeting. The meeting had discussed the purpose of the national action plans, their relationship to the regional Strategic Action Programme, and the reasons for failures of previously adopted "Action Plans". During that meeting, it was pointed out that some of the NAPs still needed revision, specifically:

- NAPs were still formulated more as policy statements and statements of principle rather than providing operational level guidance to managers in executing agreed activities;
- Such operational guidance required the inclusion of information regarding what should be done, where and when it should be done, and who would do it, together with the estimated costs;
- There was also a need to consider priority locations for implementation of the activities prioritised under the NAPs; and
- NAPs should focus on the South China Sea coastline.

5.2 Mr. Narong noted that according to the work plan and timetable for the RWG-W, as agreed in its' sixth meeting, public and stakeholder meetings for the revision of the NAPs should have been convened, and revised NAPs should have been submitted to the PCU and RWG-W during the first quarter of 2006. It was noted that none have been received by the PCU to date.

5.3 Mr. Savath indicated that the Cambodia Steering Committee for the Coastal Areas would review and adopt the NAP before the end of the year for subsequent implementation in 2007. Ms. Mendoza indicated that the NAP for the Philippines had already been finalised for national endorsement by the Secretary of the Department of Environment and Natural Resources.

5.4 Ms. Thu Ha tabled a revised draft of the NAP and noted that in Viet Nam the NAP had been revised and was in the process of adoption by the Government. In response to a query regarding the previous plan to consolidate all NAPs in Viet Nam, Ms. Thu Ha noted that delays in finalising other component NAPs had resulted in the Wetland Focal Point deciding to proceed independently and the plan had been submitted to VEPA for finalisation and adoption.



5.5 Professor Chen, tabled a revised NAP for coastal wetlands in China and noted that three revisions of the NAP had taken place and that development of three plans one for each of the three coastal Provinces bordering the South China Sea had been completed and agreed with the three provincial governments.

5.6 Mr. Narong, submitted a revised draft NAP for Thailand wetlands that represented revisions following a third meeting convened in May to consider and revise the National Action Plan. He noted that last week the NTWG in Thailand had held a meeting and it had been agreed that the Office of Environmental Policy and Planning, as the National Technical Focal Point would integrate all component action plans into a single coastal action plan.

5.7 Dr. Chen noted that the latest version of the Indonesian Action plan had not been revised since 2004 and what was drafted was a simple table. She noted further that Indonesia had apparently spent funds on the National Action Plan since that time but no revised text had been received by the PCU.

5.8 Dr. Pernetta reminded members of the process of development of the NAPs noting that he had prepared in advance of the fifth meeting of the group specific guidance on the optimum contents for operational action plans, that the fifth meeting had reviewed the first drafts and agreed a minimum set of contents for such plans and that the sixth meeting had reviewed the revised plans in terms of analysing their contents for inputs to the regional Strategic Action Programme. He expressed disappointment that the plans were still far from operational level documents lacking sufficient detail regarding what was to be done; when and where it was to be done; who was to do it; and what the estimated costs were.

5.9 Dr. Pernetta, noted that as presently written the action plans lacked sufficient specificity to contribute in detail to the development of a regional Strategic Action Programme; in some cases funds were included for activities already undertaken under the current project, and in others there was insufficient detail to enable easy identification of specific activities, their locations, and costs.

5.10 Ms. Thu Ha noted that the revised Viet Nam plan contained details for the implementation arrangements and responsible agencies and that the action plan components had details of the budget requirements. In response Dr. Pernetta noted that although the tabulation contained costs as "highest estimated budgets" these referred in the case of the first component for example to seven different activities under the general objective of capacity building for government officers. Dr. Pernetta noted that there was no breakdown of the costs, or detail of how many workshops were planned. In addition there was no indication of the locations where the workshops would take place, nor the numbers of participants, nor the time frame over which they would be executed. Hence the agency responsible for government budgets had no way of knowing what was actually planned. Ideally this budget should be broken down into costs of each activity such as individual workshops, production of training materials etc.

5.11 Mr. Narong noted that in the case of the Thailand NAP under the first strategy concerning management, preservation, and conservation, five master plans were to be produced at a cost of 15 million baht; together with a review on monitoring change of wetlands in the Gulf of Thailand and determining hotspot areas at a cost of 10 million baht. Dr. Pernetta noted that this latter activity was scheduled for implementation in 2011 and 2012 and requested clarification regarding whether this was an activity to design a monitoring system or, a periodic assessment of the state of wetlands. He further requested clarification regarding why there were five areas specified for the development of master plans but only three were included in the revised SAP targets. In response Mr. Narong noted that three of the five master plans in the NAP were included in the SAP targets and following discussion it was noted that there needed to be congruence between the targets of the National Action Plans and the SAP. It was agreed that the SAP targets would be revised in line with the NAPs under agenda item 8. Mr. Narong indicated that he would amend the tables in the NAP to indicate the locations in which activities would be undertaken following the meeting.

5.12 Dr. Chen requested clarification from the representatives of Cambodia and the Philippines regarding the status of the current texts of the NAPs. Mr. Savath and Ms. Mendoza indicated that the Cambodian and Philippines NAPs were currently undergoing revision, but new texts had not yet been finalised.

5.13 Professor Chen indicated that the NAPs for each coastal province in China contained site-specific actions, which had been aggregated into the "National" Action Plan that was therefore not truly "national" in the sense that it covered only the three Provinces of China bordering the South China Sea. There followed an intensive discussion during which it was clarified that the Beilun Estuary was already a National Reserve with an existing management plan and that the five state reserves listed in the NAP corresponded to the remaining five sites (Wenchang; Pearl River; Shantou; Hepu mudflat<sup>1</sup>; and Zhangzhou.

5.14 Mr. Narong sought clarification regarding whether or not any revised NAP had been received by the PCU for Indonesia to which Dr. Chen indicated that nothing had been received subsequent to 2004 and that the version tabled during the fifth working group meeting contained none of the required information. Mr. Narong requested that the PCU contact Mr. Dibjo informing him of the outcome of these discussions and requesting that he send a revised version within the next month. He indicated that he would re-submit the Thai report and additional information required by the PCU by the end of this month.

5.15 During the discussion it was agreed that Cambodia, Philippines and Viet Nam would re-submit before the end of July in order to ensure that the PCU had time to consolidate these into a revision of the Strategic Action Programme for circulation to the RSTC and PSC no later than the 1<sup>st</sup> October. It was agreed that Dr. Chen would communicate this deadline to Mr. Dibjo following the meeting.

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

6.1 Mr. Narong invited Dr. Chen to introduce this agenda item and document UNEP/GEF/SCS/RWG-W.7/5, which contained a report on the status of the Project Website, the regional GIS database and meta-database and guidance regarding the use of the website. Dr. Chen reminded members of their obligations under the Memoranda of Understanding to constantly up-date data and information at the regional level. She noted that Mr. Paterson of the PCU was routinely up-dating and improving the services of the project website and noted that manuals for the website and databases and up-dating the entries online were available on the website and had also been provided during this meeting on CD-ROM. It was therefore comparatively easy for individual members to log on to the website and up-load new data as they became available.

6.2 Members of the Working Group were invited to review the document and to discuss the form of the new website and how this might be used to improve communication amongst the members of the working group or a wider group, and how up-dating of data and information can be facilitated through the website. Dr. Sansanee Choowaew noted that the website would be very useful to the members and indicated that she was prepared to up-load photographs of wetland sites bordering the South China Sea and relevant articles. Its' value would depend however, on how active members were, in posting information and or participating in the e-fora discussions.

6.3 Ms. Thu Ha requested information regarding how she could be listed as a participant in the e-fora of the group and it was suggested that she could use Dr. Mai's name and user password when posting on his behalf but that if she wished to post independently then she would need to be given a separate user name and password. It was agreed that Dr. Chen would ensure that Ms. Thu Ha was issued with an independent user name and password to enable her to contribute to the discussions. Ms. Mendoza suggested that similar rights be accorded Mr. Pete Valasco the site manager for the Malampaya site and Professor Chen suggested the addition of Mr. Lan Zhuhong, Mr. Peng Yisheng and Mr. Chen Xiaoxiang to the discussion group.

6.4 There followed a discussion of up-loading web-links and it was noted that where existing data and information was already posted on an agency website, links could be loaded to the South China Sea Project website to allow direct access by other members of the SCS network. Professor Chen indicated her willingness to post articles produced through the wetland component work in China and tabled a copy of an article entitled Research on Eco-environmental water requirement for coastal

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<sup>1</sup> It was noted that this mudflat was a different area from the Hepu Seagrass demonstration site and associated Dugong reserve.

wetland in Shantou United Nations Demonstration Site. It was agreed that other members would post relevant news items and articles on the wetlands page as they became available.

6.5 During the discussion Mr. Narong raised the issue of the future sustainability of the website after the project was completed. Dr. Pernetta indicated that the website was currently hosted on the SEA START RC server in Chulalongkorn University and that provided the focal points and others in the network used the site regularly then it would be automatically self-sustaining in terms of content, with management rights gradually being turned over to individual members of the network over the next two years. Therefore if the site proved useful there was every likelihood of its continued existence following completion of the project.

6.6 It was suggested and agreed that an initial discussion via e-fora should focus on the establishment of a wetland monitoring system for the South China Sea and Mr. Narong agreed to moderate this discussion. He requested members to have an initial discussion during this meeting to set the scope for the electronic discussion. Ms. Mendoza suggested that the landscape features, habitat and species should figure in the system and that an initial discussion would need to focus on indicator species. Ms. Thu Ha suggested that environmental quality, including water quality should be included and that specific parameters should be agreed, together with the frequency of monitoring, she further indicated that the choice of biological parameters should be limited to key indicator species.

6.7 Mr. Narong noted that perhaps the best approach would be to focus on a single representative site in each country as an example of the network requirements. There followed a lengthy discussion of how to initiate the discussion and it was agreed that initially the discussion should focus on estuaries followed by consideration of the other habitats; the starting point would be the physical environmental characteristics followed by indicator species. Further discussion suggested that the initial electronic discussion should be limited to the aquatic communities of estuarine waters in the first instance, and the need to include socio-economic indicators that could also be used as indicators of environmental health and productivity.

6.8 Dr. Pernetta noted the importance of agreeing on the purpose for which the monitoring system was to be established. He noted that in cases where pollution was a significant problem for example, one country might monitor a wide range of parameters at a high frequency but that in less polluted environments, governments might not monitor such a wide range of parameters, hence a regional system would need to consider the minimum set of parameters needed to define the status, or health of estuarine aquatic ecosystems. Finally it was agreed that the group would attempt to finalise an initial design for a regional monitoring system for estuarine waters by the end of August 2006.

## **7. CONSIDERATION OF PROPOSED TRAINING ACTIVITIES REGARDING THE WETLANDS SUB-COMPONENT**

7.1 The Chairperson invited the PCU member to introduce this agenda item and Dr. Chen drew members' attention to document UNEP/GEF/SCS/RWG-W.7/6, and document UNEP/GEF/SCS/RSTC/Sub-Comm.1/13, the meeting report of the first sub-committee meeting of the Regional Scientific and Technical Committee, which contains the regional training programme to be implemented under the framework of the UNEP/GEF South China Sea Project.

7.2 Dr. Chen noted that the regional training programme to be implemented under this project would consist of 7 regional training courses and 47 national "echo" seminars conducted over the next 18 months. While the organisations selected for the implementation of training courses will be responsible for the organisation and delivery of the regional training courses, the trainees in these courses will act as trainers in the national "echo" seminars with organisational support from in-country host organisations. Host organisations for the national "echo" seminars will be the Project's Specialised Executing Agencies or other organisations, as appropriate.

7.3 Dr. Chen further outlined the selection process for implementing entities for the regional training courses, potential participants, and the criteria to select potential participants. Participants in the regional training courses and national seminars may include:

- Demonstration site managers and associated staff;
- Community leaders at demonstration sites;
- Staff of the Specialized Executing Agencies; and
- Members of the national committees (excluding the Chairs as they would already have had opportunities to learn and benefit from the project).

7.4 Dr. Chen invited members to discuss the potential contents of the wetlands management course, the possible participants, implementing agencies and potential resource persons.

7.5 Mr. Narong noted that, members should bear in mind their discussions during the previous meeting regarding training needs when discussing the content of the document UNEP/GEF/SCS/RWG-W.7/6 and the report of the Regional Scientific and Technical Sub-Committee meeting which had developed the training programme.

7.6 Members' attention was drawn to Table 1 of document UNEP/GEF/SCS/RSTC/Sub-Comm.1/13, and they were invited to consider which courses were appropriate for trainees from the wetland component, and for which it might be appropriate to nominate possible implementing agencies and experts. The Working Group discussed and agreed that courses No. 2, 3, 5, and 6 would be suitable for trainees from the wetland sub-component.

7.7 Members considered Table 2 of UNEP/GEF/SCS/RSTC/Sub-Comm.1/13, and discussed in detail the content of the regional training course for the "Mechanisms for sustainable production/use of mangroves and other wetlands." In view of the need to tailor the content for wetland management, the Chairperson invited Dr. Sansanee to brief the meeting on the training courses offered by Mahidol University in which she was personally involved. She outlined the content and mode of presentation of the courses offered through the Colombo Plan to participants from South and Southeast Asian countries noting that these involved field visits. In addition Mahidol University was involved in a joint series of wetland management courses with other Southeast Asian Universities and the Mekong River Commission.

7.8 Following this briefing, the Working Group noted that the contents as listed for the second training course were examples rather than a comprehensive listing of possible topics. There followed a detailed and extensive discussion on the purpose of such a course and of the items and issues that should be covered in any course on the sustainable management of wetlands and mangroves. The agreed list of minimum contents is contained in Annex 4 of this report.

7.9 In relation to the course on Project design, planning, and financial management Mr. Savath noted that he would wish the focal points in Cambodia to be eligible to participate in such a course due to the general lack of expertise in such matters at the national level. He further suggested that due to the limitations of trained manpower in Cambodia he felt that in some cases the same participant would benefit from participation in more than one course. Dr. Pernetta suggested that it would be appropriate for the National Technical Focal Point to write to the PCU requesting such exemptions on a case-by-case basis.

7.10 The meeting proceeded to consider the process of how to operationalise the training course, and call for nomination of participants. Mr. Savath proposed, and the meeting agreed, that the PCU would contact the National Technical Focal Points of the project, to coordinate the nomination of 3-4 participants from each country for each course. The deadline to send such nominations in the case of the wetlands course should be the end of July.

7.11 Dr. Sansanee indicated that depending upon the timing of the course she could be available to participate as a resource person and would be happy to cover any of the topics listed in Annex 4, she also felt that Mahidol University could potentially serve as the implementing agency for the course. Mr. Narong and Professor Chen also indicated an interest in participating as resource persons and Professor Chen suggested that Mr. Wang Shugong could serve as a resource person in the area of economic valuation and sustainable financing.

## **8. FINALISATION OF THE INPUTS FROM THE WETLANDS SUB-COMPONENT TO THE REGIONAL STRATEGIC ACTION PROGRAMME**

### **8.1 Review of the Empirical Data regarding the Economic Values of Goods and Services from Wetland Sites**

8.1.1 The Chairperson invited the PCU member to introduce document UNEP/GEF/SCS/RWG-W.7/7, which contained the empirical data regarding economic values of wetland goods and services collected by the Regional Task Force on Economic Valuation. She noted that one of the tasks of the Regional Task Force on Economic Valuation was to produce regionally applicable values for coastal goods and services that could be used in determining the costs and benefits of action as opposed to no action to reverse environmental degradation trends.

8.1.2 Dr. Chen drew the attention of members to the content of Table 1 in the discussion document which summarised the empirical data which the Task Force had assembled to date and requested that members review this and provide any new and additional information which they might have. She noted two documents had been tabled during the meeting, one from Thailand and one from China, which contained additional data that would be added to the table for consideration by the RTF-E.

8.1.3 Dr. Sansanee indicated that she was aware of additional data sets that she would send to the PCU on Friday following her return from this meeting. Ms. Mendoza indicated that she would also send additional data following the closure of the meeting.

### **8.2 Finalisation of the Proposed Elements on Wetland Management to be Included in the Updated Regional Strategic Action Programme**

8.2.1 The Chairperson invited the Project Director to introduce document, UNEP/GEF/SCS/RWG-W.7/8, *Inputs from the Wetland Sub-component for Updating the Regional Strategic Action Programme*. Dr. Pernetta reviewed the previous discussions of the RWG-W and RSTC concerning the elements required for inclusion in the Strategic Action Programme culminating in the identification of activities for inclusion in the SAP during the last meeting. He noted that the working group would need to review these various elements to ensure consistency that, the threats would need to be reviewed to ensure that these were actually reflective of the current situation; the targets required some revision to ensure consistency with the agreed milestone dates of 2012 and 2017; and in the case of the activities, these needed to be more precisely written and consistent with the objectives, components, and sub-components.

8.2.2 The Chairperson suggested that the members would need to review the contents of the document and consider any additional inputs (including further elaboration of the activities identified during the sixth meeting of the RWG-W), needed to finalise the document; determine what further work was needed to elaborate the other elements, including costing for inclusion in the document; and to agree upon a timetable and individual responsibilities for finalising the wetland elements to be included in the first complete draft of the SAP.

8.2.3 The group commenced with a consideration of Table 1 that listed the coastal wetland sites that had been included in the clustering and prioritisation exercise. It was suggested and agreed that the title of the table and the column headings should be changed to reflect the areas under protection, or sustainable use together with those for which no formal management plan existed. The table was reviewed in detail and the entries amended to reflect the legal and management status of each of, the areas, and the revised table is included as Table 1 of Annex 5.

8.2.4 In considering the threats to coastal wetlands the group discussed the relative importance of each threat to the coastal wetlands bordering the South China Sea in the light of the threats identified by each country that were listed in Table 2 of document, and agreed to accept the organisational arrangement proposed by the Project Co-ordinating Unit that was included in document UNEP/GEF/SCS/RWG-W.7/8.

8.2.5 In discussing the goal and targets it was agreed that the wording of the goal required revision and that the dates for the targets should also be revised to reflect the common dates used by the other components in setting milestones for the SAP. During the initial discussion of the Objectives and

Actions section of the document it was suggested that the order of the components should be changed, however the group agreed to leave them in the present order since this was the same as that used by the other working groups.

8.2.6 The contents of section 1 (Research and Monitoring) of Table 3 were then discussed in some detail and various amendments made in recognition of the fact that some actions were not defined in sufficient detail as to be clear regarding what was intended. Following this initial discussion and agreement of the amendments the RWG-W agreed that they would work over-night in two groups, each dealing with two other components and revising the contents for discussion in plenary during the following morning's session.

8.2.7 The outcome of the work of the small groups was presented to the plenary session, discussed in detail and amended as it appears in Annex 5 of this report. The working group agreed to further discuss certain elements in this table via the wetlands e-forum on the project website, and requested the PCU to contact Mr. Dibjo concerning the content of Table 1 with respect to the Indonesian sites.

8.2.8 Ms. Thu Ha agreed to develop the text related to section 1 and Ms. Mendoza agreed to develop the text relating to the threats. During the final discussion of the targets it was agreed that following clarification of the position of Indonesia and Malaysia an e-forum discussion would be initiated to quantify the second target. It was suggested and agreed that responsibility for moderating the e-forum discussions of each section would be as follows:

1. Research & Monitoring – Dr. Sansanee
2. National policy Legal and Institutional Arrangements and Co-ordination – Mr. Savath
3. Public Awareness, Communication & Education – Mr. Narong
4. Capacity Building & Sustainability – Ms. Mendoza
5. Resource & Habitat Management – Professor Chen

## **9. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON WETLANDS 2006 - 2007**

9.1 The Chairperson invited Dr. Chen to introduce document UNEP/GEF/SCS/RWG.7/9, "*Proposed Work Plan and Timetable for the Regional Working Group on Wetlands to June 2007*". Dr. Chen presented the work plan revised to include decisions and agreements reached during the course of the meeting. She noted that she had included the agreements regarding the finalisation of the outstanding MSP proposals.

9.2 The revised work plan and timetable was considered, discussed and amended as it appears in Annex 6 of this report.

## **10. DATE AND PLACE OF THE EIGHTH MEETING OF THE REGIONAL WORKING GROUP ON WETLANDS**

10.1 Members recalled that the Project Steering Committee had decided at its' second meeting that future Regional Working Group meetings should be convened at the demonstration sites, and noted with regret that it had proved impossible to convene the present meeting in Taytay, Palawan as originally planned, due to difficulties in securing flights to and from Manila.

10.2 Members were invited to consider and agree upon the proposed time and place for the eighth meeting of the RWG-W. Following some discussion of the difficulties encountered in convening the seventh meeting in Taytay it was agreed that the eighth meeting would be convened in Taytay, Palawan, the Philippines but in the event that it proved impossible to organise flights then the meeting would be convened at the Shantou wetland site in China.

10.3 It was further agreed that the next meeting would be convened from 7<sup>th</sup> to 10<sup>th</sup> May 2007 inclusive.

## **11. ANY OTHER BUSINESS**

11.1 Mr. Narong introduced the issue raised by the RSTC during its' sixth meeting in December 2005, namely that the project support the participation of one member from each working group to present an appropriate paper during a relevant session of the East Asian Seas Congress, and invited members to make proposals regarding possible contributions from the group to the Congress.

11.2 Professor Chen noted that she had tabled two papers prepared jointly by herself and two students one concerned with the evaluation and analysis of the economic value of land-based pollution on the Shantou wetlands and the second on the eco-environmental water requirements of coastal wetlands in Shantou.

11.3 It was agreed that members would review the two papers overnight and provide comments regarding their suitability for submission either as posters or as presentations during the PEMSEA East Asian Seas Congress.

11.4 Following the over-night review members provided comments on the documents noting that both papers needed to have reference lists added and to be English edited. One member had marked suggested changes on hard copies of the documents, which were provided to Professor Chen to take into account in revising the documents. It was suggested that a clear statement of conclusions be added to the paper on eco-environmental aspects of wetlands and that further justification was required in this paper for the choice of the various equations. One member also noted that the correlation between increased land-based pollution and reduced tourism value did not necessarily reflect a causal relationship and hence further justification regarding this conclusion was required.

11.5 Overall it was agreed by the members that the papers were good outputs that could be presented to the PEMSEA Congress as representative outputs from the work of the wetlands sub-component of the project, provided that they were revised and edited to an acceptable standard.

11.6 No further matters were raised by, members for consideration under this agenda item.

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

12.1 Ms. Thu Ha, the Rapporteur for the meeting presented the draft report of the meeting prepared by the Secretariat during the meeting. The draft report was considered discussed and approved as it appears in this document.

## **13. CLOSURE OF THE MEETING**

13.1 The Chairperson invited the Project Director to make some closing remarks. Dr. Pernetta thanked the members for their hard work particularly during the evening session, which had resulted in significant advances being made in developing the wetland component of the regional Strategic Action Programme and Ms Mendoza and PAWB for their excellent logistic support to the meeting.

13.2 Mr. Narong thanked participants for their hard work and valuable contributions; the Government of the Philippines in general and the PAWB of the DENR in particular, for hosting the meeting and their excellent support to the administration and organisation of the meeting, and the PCU for their logistic support to the operation of the meeting. Mr. Narong formally closed the meeting at 1600 on Wednesday 21<sup>st</sup> June 2006.

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## ANNEX 2

### List of Documents

#### Discussion documents

UNEP/GEF/SCS/RWG-W.7/1 Amend. 2	Agenda.
UNEP/GEF/SCS/RWG-W.7/2 Amend. 1	Annotated Agenda.
UNEP/GEF/SCS/RWG-W.7/3	Report of the Meeting
UNEP/GEF/SCS/RWG-W.7/4	Current Status of the Administrative Reports: Progress Reports; Expenditure Reports; Audit Reports; and MoU Amendments.
UNEP/GEF/SCS/RWG-W.7/5	Status of the UNEP/GEF South China Sea Project Website, Online Tools, and Activities to Promote the Wetlands Sub-component of the Project.
UNEP/GEF/SCS/RWG-W.7/6	Regional Training Programme of the UNEP/GEF South China Sea Project.
UNEP/GEF/SCS/RWG-W.7/7	Valuing Wetland Sites bordering the South China Sea.
UNEP/GEF/SCS/RWG-W.7/8	Inputs from the Wetland Sub-component for Updating the Regional Strategic Action Programme.
UNEP/GEF/SCS/RWG-W.7/9	Proposed Work Plan and Timetable for the Regional Working Group on Wetlands to June 2007.

#### Information documents

UNEP/GEF/SCS/RWG-W.7/Inf.1	List of Participants.
UNEP/GEF/SCS/RWG-W.7/Inf.2 Amend. 1	List of Documents.
UNEP/GEF/SCS/RWG-W.7/Inf.3 Amend. 1	Programme.
UNEP/GEF/SCS/RSTC.6/Sub-Comm	First Meeting of the Sub-committee of the Sixth Meeting of the Regional Scientific and Technical Committee for the UNEP/GEF Project " <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ". Report of the Meeting. Bangkok, Thailand, 6 <sup>th</sup> – 10 <sup>th</sup> February 2006 UNEP/GEF/SCS/RSTC.6/Sub-Comm.

#### ***Published Reports supplied in hard copy (available on the Project Website [www.unepscs.org](http://www.unepscs.org))***

UNEP/GEF/SCS/PSC.5/3	Fifth Meeting of the Project Steering Committee for the UNEP/GEF Project " <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ". Report of the Meeting. Batam, Indonesia, 12 <sup>th</sup> – 14 <sup>th</sup> December 2005 UNEP/GEF/SCS/PSC.5/3.
UNEP/GEF/SCS/RSTC.6/3	Sixth Meeting of the Regional Scientific and Technical Committee for the UNEP/GEF Project " <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ". Report of the Meeting. Batam, Indonesia, 8 <sup>th</sup> – 10 <sup>th</sup> December 2005 UNEP/GEF/SCS/RSTC.6/3.
UNEP/GEF/SCS/RWG-SG.6/3	Sixth Meeting of the Regional Working Group on the Seagrass Sub-component for the UNEP/GEF Project " <i>Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand</i> ". Report of the Meeting. Bolinao, Philippines, 27 <sup>th</sup> – 30 <sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-SG.6/3.

UNEP/GEF/SCS/RWG-W.6/3	Sixth Meeting of the Regional Working Group on the Wetlands Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Sihanoukville, Cambodia, 12 <sup>th</sup> – 15 <sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-W.6/3.
UNEP/GEF/SCS/RWG-F.6/3	Sixth Meeting of the Regional Working Group on the Fisheries Component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Kudat, Sabah, Malaysia, 5 <sup>th</sup> – 8 <sup>th</sup> September 2005 UNEP/GEF/SCS/RWG-F.6/3.
UNEP/GEF/SCS/RWG-CR.6/3	Sixth Meeting of the Regional Working Group on the Coral Reefs Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Masinloc, Philippines, 22 <sup>nd</sup> – 25 <sup>th</sup> August 2005 UNEP/GEF/SCS/RWG-CR.6/3.
UNEP/GEF/SCS/RWG-M.6/3	Sixth Meeting of the Regional Working Group on the Mangroves Sub-component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Busuanga Island, Palawan, Philippines, 1 <sup>st</sup> – 5 <sup>th</sup> August 2005 UNEP/GEF/SCS/RWG-M.6/3.
UNEP/GEF/SCS/RWG-LbP.6/3	Sixth Meeting of the Regional Working Group on the Land-based Pollution Component for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Ninh Hai, Ninh Thuan, Viet Nam, 18 <sup>th</sup> – 21 <sup>st</sup> July 2005 UNEP/GEF/SCS/RWG-LbP.6/3.
UNEP/GEF/SCS/RTF-E.4/3	Fourth Meeting of the Regional Task Force on Economic Valuation for the UNEP/GEF Project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand". Report of the Meeting. Xuan Thuy, Nam Dinh Province, Viet Nam, 27 <sup>th</sup> – 30 <sup>th</sup> March 2006 UNEP/GEF/SCS/RTF-E.4/3.

**Document received during the RWG-W-7 meeting in Manila, Philippines, 19-21 June 2006.**

**China:**

1. National Action Plan of China on Wetlands, June 2006, hard copy, 19 pages.
2. The Value of the Ecological Services of the Shantou Wetland Demonstration Area. 2 pages in hard copy.
3. Evaluation and Analysis for Economic Valuing Impacts of Land-based Pollution on Shantou Wetland, 6 pages in hard copy.
4. Current status of National Action Plan for UNEP/GEF SCS Project, 1 page, hard copy.
5. Cash advance request, 1 copy, hard copy.
6. Six Monthly Project Expenditure Account for Supporting Organization, June-Dec. 2005, 1 copy, hard copy.
7. Six Monthly Progress Report, July-December 2005, 5 pages, 1 copy, hard copy.
8. 38-42 Meeting report of the national working group for wetland sub-component in China, 5 pages.
9. Audit Report for 2005 report dated 31 May 2006.
10. Research on Eco-Environmental Water Requirement for Coastal Wetland in Shantou United Nations Demonstration Site, 12 pages, hard copy.

**Thailand:**

1. Presentation: Valuing benefits from crops cultivation and fisheries of Thale Noi. 6 pages in hard copy.
2. Publication for GIS database for Wetlands document no. 4/6 in Thai language, hard copies and CDs, 5 copies.
3. Draft National Action Plan on Wetland Management in the Gulf of Thailand under the UNEP/GEF SCS Project, June 2006. 19 pages.

**Philippines:**

1. Philippines National Report on Wetlands, 2005. 104 pages, 4 copies, hard copy.
2. Philippine Wetlands in the South China Sea: Conservation Priorities, 42 pages, hard copy, 4 copies.
3. Review of Legislation and Policies on Philippine Wetlands, 16 pages, hard copy, 4 copies.
4. Philippine Wetlands Sub-component (CD-Rom) 2 copies:
  - a. Philippines National Report on Wetlands
  - b. Philippine Wetlands in the South China Sea: Conservation Priorities
  - c. Review of Legislation and Policies on Philippine Wetlands.

**Viet Nam:**

1. National Strategic Action Plan for Conservation and Sustainable Development of Viet Nam Coastal Wetlands in Period of 2006-2015. Hanoi-2006, 32 pages, hard copy, 1 copy.

## **ANNEX 3**

### **Agenda**

- 1. OPENING OF THE MEETING**
  - 1.1 Welcome Address on behalf of UNEP
  - 1.2 Introduction of Participants
- 2. ORGANISATION OF THE MEETING**
  - 2.1 Election of Officers
  - 2.2 Documents Available to the Meeting
  - 2.3 Organisation of Work
- 3. ADOPTION OF THE MEETING AGENDA**
- 4. STATUS OF ADMINISTRATIVE REPORTS, SUBSTANTIVE NATIONAL REPORTS AND DEMONSTRATION SITE PROPOSALS**
  - 4.1 Status of the Administrative Reports
  - 4.2 Status of the Publication of National Reports in English and National Languages
  - 4.3 Status of the Demonstration Site Proposals for Approved Sites
- 5. FINALISATION, ADOPTION AND IMPLEMENTATION OF NATIONAL ACTION PLANS**
- 6. UPDATE OF THE REGIONAL GIS DATABASE AND META-DATABASE AND EFFICIENT USE OF THE PROJECT WEBSITE**
- 7. CONSIDERATION OF PROPOSED TRAINING ACTIVITIES REGARDING THE WETLANDS SUB-COMPONENT**
- 8. FINALISATION OF THE INPUTS FROM THE WETLANDS SUB-COMPONENT TO THE REGIONAL STRATEGIC ACTION PROGRAMME**
  - 8.1 Review of the Empirical Data regarding the Economic Values of Goods and Services from Wetland Sites
  - 8.2 Finalisation of the Proposed Elements on Wetland Management to be Included in the Updated Regional Strategic Action Programme
- 9. REVISION OF THE WORK PLAN AND ACTIVITIES FOR THE REGIONAL WORKING GROUP ON WETLANDS 2006-2007**
- 10. DATE AND PLACE OF THE EIGHTH MEETING OF THE REGIONAL WORKING GROUP ON WETLANDS**
- 11. ANY OTHER BUSINESS**
- 12. ADOPTION OF THE REPORT OF THE MEETING**
- 13. CLOSURE OF THE MEETING**

## ANNEX 4

### Inputs from the RWG-W Regarding the Regional Training Course on Sustainable Management of Mangroves and Tropical Coastal Wetlands

#### Course Objectives

- To introduce the concepts and principles of tropical coastal wetland ecology and management.
- To provide intensive academic and practical training on tropical coastal wetland ecosystems management.
- To provide in-situ training and hands-on experience in designing and conducting wetland surveys, inventory, assessment, and in wetland conservation and management practices by means of field visits carried out by course participants and comparative analysis on case studies on best practices region-wide.
- To share and exchange knowledge and experience in tropical coastal wetlands management.

#### Minimum Content to be included in the Course

- Wetland Definition and Classification
- Wetland Ecology
  - Physical (hydrology, soil and substrates)
  - Chemical (water and substrate characteristics and quality)
  - Biological (communities, processes, and productivity)
- Wetland Functions, Values, and Valuation
- Human Uses of Wetlands, Threats, and Degradation
- Resource Inventory, Assessment and Monitoring
  - GIS
  - Asian Wetland Inventory
  - Geo-informatics
- Management Approaches
  - Wetland management planning
  - Ecosystem approaches
  - Participatory approaches
  - Wise use/sustainable use concept
- Wetland Restoration
- Field Visits

## ANNEX 5

## First Draft of the SAP from the Wetlands Sub-Component

## THE MANAGEMENT STATUS OF WETLAND SITES BORDERING THE SOUTH CHINA SEA

Under the UNEP/GEF South China Sea Project, activities in the wetland sub-component focus on five specific types of wetlands, namely intertidal mudflats, estuaries, lagoons, peat swamps and non-peat swamp, excluding mangroves, coral reefs and seagrass beds which are the subjects of separate sub-components.

Table 1 summarises the legal and management status of major lagoons, estuaries, inter-tidal mudflats, peat swamps and non-peat swamps bordering the South China Sea. A total area of 4,201,145 ha of the five specific types of wetland sites has been identified, specifically lagoons (34,921 ha), estuaries (1,209,075 ha), inter-tidal flats (686,655 ha), non-peat swamps (1,623,567 ha), peat swamps (646,927 ha).

**Table 1 Legal and management status of Wetland Sites bordering the South China Sea.**

Name of site	Area (ha)	Legal and Management Status		
		Protected – Non-use (Subsistence/commercial)	Sustainable use	Non-sustainable use
<b>Estuaries</b>				
<b>Cambodia</b>				
Koh Kapik Ramsar in Koh Kong Province	12,000	National Park and RAMSAR site	N.A.	N.A.
<b>China</b>				
Pearl river	12,783	N.A.	Wetland Park (Area ??)	N.A.
Beilun river	1,083	National level nature reserve	N.A.	N.A.
<b>Indonesia</b>				
Bakau Selat Dumai	60,000	yes		
Pulau Padang dan Tanjung Pandan	111,500	–		√
Muara Sungai Guntung	26,000	–	Small part	√
Delta Banyuasin	200,000	yes		
Sembilang	387,500	yes	–	–
<b>Philippines</b>				
Malampaya Sound	24,500	N.A.	Protected seascape	N.A.
Pansipit River Estuary	15	N.A.	N.A.	√
<b>Thailand</b>				
Pattani Bay	6,149	N.A.	N.A.	√
Ban Don Bay	49,459	N.A.	N.A.	√
Welu River Estuary	10,400	N.A.	N.A.	√
Thung Kha Bay-Savi Bay	5,204	National Park	N.A.	N.A.
Pak Phanang Bay	13,597	N.A.	√	N.A.
<b>Viet Nam</b>				
Balat Estuary	26,397	National Park and National Nature Reserve	N.A.	N.A.
Tien River Estuary	100,691	N.A.	N.A.	√
Dong Nai River Estuary	49,711	N.A.	N.A.	√
Van Uc Estuary	6,990	N.A.	N.A.	√
Bach Dang Estuary	80,358	N.A.	N.A.	√
Tien Yen Estuary	24,738	N.A.	N.A.	√
<b>SUBTOTAL</b>	<b>1,209,075</b>	<b>692,184</b>	<b>38,097</b>	<b>328,511 [+137,500]</b>
<b>Peat Swamps</b>				
<b>Cambodia</b>				
Prek Kampong bay in Kampot Province	16,250	National Park	N.A.	N.A.
Prek Kampong Som in Shanouk Ville	10,800	National Park	N.A.	N.A.
<b>Indonesia</b>				
Berbak NP	162,700	yes		
SM Terusan Dalam	74,750	yes		
Way Kambas NP	130,000	yes		
Sungai Merang	150,000	yes		

**Table 1 cont. Legal and management status of Wetland Sites bordering the South China Sea.**

Name of site	Area (ha)	Legal and Management Status		
		Protected – Non-use (Subsistence/commercial)	Sustainable use	Non-sustainable use
<b>Thailand</b>				
Wetlands in Thale Noi Wildlife Non-hunting Area	45,700	N.A.	Non-hunting Area including a RAMSAR Site	N.A.
Phru To Daeng Wildlife Sanctuary	20,120	Wildlife Sanctuary and RAMSAR site	N.A.	N.A.
Wetlands in Thale Sap Wildlife Non-hunting Area	36,467	N.A.	Non-hunting Area	N.A.
Phru Kan Tulee	140	N.A.	√	N.A.
<b>SUBTOTAL</b>	<b>646,927</b>	<b>564,620</b>	<b>82,307</b>	<b>0</b>
<b>Non-peat Swamps</b>				
<b>Cambodia</b>				
Kampong Trach in Krong Kep	7,500	National Park	N.A.	N.A.
Prek Toek Sap	21,259	National Park	N.A.	N.A.
<b>Indonesia</b>				
Tulang Bawang	86,000	Partly		
Rawa-rawa Kubu Padang Tikar	1,499,000	–		
<b>Thailand</b>				
Khao Sam Roi Yot National Park	9,808	National Park	N.A.	N.A.
<b>SUBTOTAL</b>	<b>1,623,567</b>	<b>38,567 [86000]</b>	<b>0</b>	<b>[1,499,00]</b>
<b>Lagoons</b>				
<b>Cambodia</b>				
Beoung Ka Chang	4,503	National Park & RAMSAR site	N.A.	N.A.
<b>China</b>				
Wenchang	218	Provincial level nature reserve	N.A.	N.A.
<b>Viet Nam</b>				
Tam Giang-Cau Lagoon	21,600	N.A.	N.A.	√
Tra O Lagoon	2,000	N.A.	N.A.	√
Degi Lagoon (Binh Dinh Province)	1,600	N.A.	N.A.	√
Thi Nai lagoon (Binh Dinh Province)	5,000	N.A.	N.A.	√
<b>SUBTOTAL</b>	<b>34,921</b>	<b>4,721</b>	<b>0</b>	<b>30,200</b>
<b>Inter-tidal flats</b>				
<b>Cambodia</b>				
Ruer Sey Srock Toul Srav Gnamin Krong Kep	4,890	National Park	N.A.	N.A.
<b>China</b>				
Shantou	1,435	Municipal level nature reserve	N.A.	N.A.
Hepu	3,951	Municipal level nature reserve	N.A.	N.A.
Dan zhou lingao	806	Provincial level nature reverse	N.A.	N.A.
<b>Indonesia</b>				
CA Pulau Burung	200	yes		
Tanjung Datuk	25,000	–		
Tanjung Jabung	3,000	yes		
Paloh	176,548	yes		
Muara Kendawangan	150,000	yes		
CA Pulau Dua	30	yes		
Pualu Rambut	46	yes		
Muara Angke	25	yes		
CA Muara Gembong	10,481	yes		
<b>Philippines</b>				
Balayan Bay Tidal flats	75,000	N.A.	√	N.A.
Manila Bay Tidal Flat	30,000	N.A.	√	N.A.
El Nido, Palawan mudflats	54,303	N.A.	Protected Seascape	N.A.
<b>Thailand</b>				
Don Hoi Lot	2,409	N.A.	RAMSAR Site	N.A.
Wetlands in Mu Koh Chang National Park	65,000	National Park	N.A.	N.A.
Wetlands in Mu Koh Ang Thong National Park	10,200	National Park and RAMSAR Site	N.A.	N.A.
<b>Viet Nam</b>				
Ca Mau Southwest Tidal Flat	60,711	National Park	N.A.	N.A.
Kim Son Tidal Flat	12,620	N.A.	N.A.	√
<b>SUBTOTAL</b>	<b>686,655</b>	<b>487,323</b>	<b>161,712</b>	<b>37620</b>
<b>TOTAL</b>	<b>4,201,145</b>	<b>1,787,415</b>	<b>282,116</b>	<b>[2,032,831]</b>



## THREATS

Population growth, urbanisation, and rapid economic growth in this region place tremendous pressure on coastal wetland ecosystems. Table 2 summarises the threats to wetland sites that are included in the national action plans and national reports. 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

### 2) Degradation of wetland ecosystems as a result of:

- Over-exploitation of living resources
- Use of inappropriate fishing techniques and gear
- Land-based pollution

## GOAL

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.*

## TARGETS

The specific targets for wetland management are:

- *By the year 2012, to set up or update management plans for at least four lagoons, nine estuaries, nine tidal flats and three peat swamps in the South China Sea (See Table 3).*
- *By the year 2012, to increase 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 monitoring scheme implemented in the seven participating countries of the UNEP/GEF South China Sea Project.<sup>2</sup>*

**Table 3 List of sites specified in the targets. N indicates no existing Management Plan, U indicates existing but out-dated plans requiring amendment and up-dating.**

	Lagoons	Estuaries	Tidal mudflats	Peat swamp	Non-peat swamp
<b>Cambodia</b>		Peam Krasop-N	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		Berbak NP-U	
<b>Philippines</b>		Malampaya sound-U; Pansipit-N	Manila Bay-N		
<b>Thailand</b>		Tapi-N	Thung Kha Bay - Savi Bay – U	Thale Noi non hunting area-U	
<b>Viet Nam</b>	Tamgiang-Cauhai-N; Tra O-N; Thi Nai-N	Bach Dang-N; Dong Nai-N; Balat-U	Thai Thuy-N, Nghia Hung-N, Southwest Ca Mau-N	U Minh Thuong – N	
<b>Total</b>	<b>4</b>	<b>10</b>	<b>9</b>	<b>3</b>	<b>???</b>

<sup>2</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.*

## **OBJECTIVES AND ACTIONS**

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

*Component 1 – Research and Monitoring:*

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

*Component 3 – Public awareness, Communication and Education:*

*Component 4 – Capacity Building and Sustainability:*

*Component 5 – Resource and Habitat Management.*

Each component contains specific objectives, activities and approximate costs as presented in Table 4.

**Table 2 Threats to Wetlands in the countries bordering the South China Sea.**

Cambodia <sup>3</sup>	China	Indonesia	Malaysia	Philippines	Thailand	Viet Nam
<b>In National Action Plans</b>						
<ul style="list-style-type: none"> <li>- Illegal Logging;</li> <li>- Mangrove Wetland Reclamation for Shrimp Farms;</li> <li>- Mangrove Wetland Reclamation for Salt Production;</li> <li>- Other Mangrove Destruction;</li> <li>- Illegal Fishing;</li> <li>- Charcoal Production;</li> <li>- Shrimp farming;</li> <li>- Salt Farming;</li> <li>- Pollution: Fertilizer and pesticides.</li> </ul>	<ul style="list-style-type: none"> <li>- Enclosing beaches for land reclamation to impact the sea-route and flood discharge, destroy the wetland plants, cause the sea coastal eroding and decrease the habitats (1);</li> <li>- Destruction outside the wetland reserve (2);</li> <li>- Pollution caused the water quality to deteriorate and negatively affected biodiversity (6);</li> <li>- There are some danger posed by introducing exotic species into wetlands (7).</li> </ul>	<ul style="list-style-type: none"> <li>- High bird poaching;</li> <li>- Sand mining;</li> <li>- Pollution;</li> <li>- Destructive fishing;</li> <li>- Illegal logging;</li> <li>- Land conversion;</li> <li>- Expansive settlement;</li> <li>- Industrial and port development;</li> <li>- Overexploitation;</li> <li>- Climate change.</li> </ul>		<ul style="list-style-type: none"> <li>- Conversion of wetlands agricultural purposes, fishponds, and human settlements;</li> <li>- Coastal development for tourism and shipping;</li> <li>- Cutting of mangroves for household use and charcoal production;</li> <li>- Open access fishery;</li> <li>- Unsustainable and destructive fishing practices (e.g., dynamite and cyanide);</li> <li>- Introduction of exotic species (invasive plant and animal species);</li> <li>- Erosion and siltation;</li> <li>- By-catch problem;</li> <li>- Water use conflict;</li> <li>- Wildlife poaching;</li> <li>- River bed quarrying;</li> <li>- Pollution from domestic waste and agricultural run-off.</li> </ul>	<ul style="list-style-type: none"> <li>- Loss of wetlands is generally a result from their conversion for development activities such as cultivation, housing and tourist business;</li> <li>- Loss of biodiversity, some species declined;</li> <li>- Use illegal and destructive fishing tools;</li> <li>- Introduction of invasive alien species;</li> <li>- Illegal hunting;</li> <li>- Eutrophication with rapid growth in vegetation and increase sedimentation from run-off;</li> <li>- Pollution problem with expansion of urban areas and tourism;</li> <li>- Logging, particularly in mangrove and swamp forests;</li> <li>- Forest fire;</li> <li>- Agricultural land use in adjacent areas has compounded the problem.</li> </ul>	<ul style="list-style-type: none"> <li>- Reclamation and sea encroachment;</li> <li>- Unplanned and uncontrolled aquaculture activities;</li> <li>- Over-exploitation of resources and unplanned coastal zone development;</li> <li>- Agricultural development and others cause the problems to wetlands;</li> <li>- Pollutants, toxic chemicals, wastes discharged from industries, mining municipal, and human activities;</li> <li>- The increase of environmental calamities.</li> </ul>

<sup>3</sup> Action is analysed at activity level of the Cambodian NAP, and all activities are implemented by DNCP and MoE.

**Table 2 cont. Threats to Wetlands in the countries bordering the South China Sea.**

Cambodia <sup>4</sup>	China	Indonesia	Malaysia	Philippines	Thailand	Viet Nam
<b>In National Reports</b>						
<ul style="list-style-type: none"> <li>- Mangrove cleared for firewood collection, cutting for charcoal production, aquaculture, expansion of salt pans, and wood chipping operations;</li> <li>- Clear mangrove for intensive aquaculture;</li> <li>- Pollution from a range of sources, e.g., construction activities;</li> <li>- Extraction and collection of corals domestic wastes, agricultural run-off, mining activities and detrimental fishing practices.</li> </ul>	<ul style="list-style-type: none"> <li>- Natural changes causing disturbances in the wetland, including climate change, flooding, drought, volcanoes, fires, earthquakes, and plant diseases and insect pests;</li> <li>- Man-made disturbances that affect the wetland ecosystem include such activities as agriculture, industry, tourism, and development;</li> <li>- Land reclamation is the primary cause of wetland loss;</li> <li>- Exploitation of wetlands to create land for agricultural fields and urban areas;</li> <li>- urbanization and sewage treatment;</li> <li>- polluted by oil from the petroleum survey, residences, and leaks or accidents.</li> </ul>	<ul style="list-style-type: none"> <li>- Massive development of settlement, industry, and agriculture; over exploitation of its living resources; and pollution;</li> <li>- Wildlife (Deer) hunters are threats to wildlife within the reserve;</li> <li>- Problems related to habitat loss (e.g., due to burnt area and mangrove conversion).</li> </ul>	<ul style="list-style-type: none"> <li>- Conversion to Agriculture use;</li> <li>- Industry and Urbanization;</li> <li>- Pollution arising from solid waste dumping, pesticide and herbicide residues from land and coastal based agricultural activities, untreated effluent or discharges from industries and domestic areas, silt, and oil spills;</li> <li>- Changes to wetland hydrology.</li> </ul>	<ul style="list-style-type: none"> <li>- Habitat Loss and Deterioration (Conversion of wetlands into other land uses, Diversion of rivers for irrigation and the construction);</li> <li>- Resource Use and Exploitation (Over fishing, Over harvesting of forest and freshwater products);</li> <li>- Pollution and Climate Change (from domestic industrial and agricultural sources);</li> <li>- Introduction of exotic species and disease.</li> </ul>	<ul style="list-style-type: none"> <li>- Encroachment and other development activities;</li> <li>- Increased the exploitation of wetland resources;</li> <li>- Conversion of natural wetlands for farming, marine aquaculture, industry, urban expansion and infrastructure development.</li> </ul>	<ul style="list-style-type: none"> <li>- Destructive exploitation and utilization of natural resources (the cultivation of shrimp and other marine products);</li> <li>- "reclamation" of estuarial and coastal wetlands for growing rice; cultivation of shrimps and crabs; expansion of residential and industrial areas, and construction of ports;</li> <li>- Diminishing mangrove forest area (for agriculture, shrimp farm, saltpan, industrial zone, urban areas, sea port);</li> <li>- Oil pollution;</li> <li>- Pollution due to fertilizers, pesticide, and other organic substances, conversion of mangrove to wastelands, industrial wastes, pathogenic micro organisms;</li> <li>- Overexploitation of Coastal wetlands(marine resources, forest resources, water birds);</li> <li>- Mining;</li> <li>- Alien species.</li> </ul>

<sup>4</sup> Action is analysed at activity level of the Cambodian NAP, and all activities are implemented by DNCP and MoE.

**Table 4 Proposed Actions for Coastal Wetland Management and Conservation.**

Objective	Sub-components	Regional Activities
<b>1. Research and Monitoring</b>		
To maintain and update Regional Wetlands GIS database and meta-database.	1.1 <i>Resource Assessment</i>	1.1.1 Develop the guidelines for standardisation of techniques for wetlands resource assessment
To strengthen research for regional co-operation.	1.2 <i>Mapping</i>	1.2.1 Develop the guidelines on wetland classification and mapping 1.2.2 Conduct the regional wetland map of peat-swamps, non-peat swamp, tidal flat
	1.3 <i>Socio-economic and Cultural Assessment</i>	1.3.1 Develop the regional guideline of social and cultural assessment in wetlands
		1.3.2 Conduct and update economic valuation data of wetlands
	1.4 <i>Management Information System</i>	1.4.1 Maintain and update GIS and meta-databases
	1.5 <i>Regional Monitoring Scheme</i>	1.5.1 Develop a regional monitoring scheme 1.5.2 Implement the regional monitoring scheme
	1.6 <i>Integration of Research Programme with Management and Policy Making</i>	1.6.1 Identify research needs and priorities in the region (2 times for 10 years; \$ 50,000 for the first time, and \$ 20,000 for the second time)  1.6.2 Conduct joint research which may include joint surveys to support the information for policy making (minimum 5 programmes based on five wetland types, ~\$ 500,000 per programme)
<b>2. National Policy, Legal and Institutional Arrangement and Co-ordination</b>		
To improve the effectiveness of national policy, legal and institutional arrangement and co-ordination	2.1 <i>Monitoring Implementation of the NAPs</i>	2.1.1 Review the implementation of the NAPs at regional level (2 meetings; 1 in the middle of the SAP, and 1 the end of the SAP, \$ 50,000 per time).
	2.2 <i>Review and Improve Existing Laws and Policies</i>	2.2.1 Review and update the existing framework of wetland policy and regulation in the region (2 meetings; 1 in the middle of SAP and 1 in the end of SAP, each \$ 20,000).
		2.2.2 Maintain and strengthen the Regional Working Group on Wetlands to provide policy, scientific and technical advice on coastal wetland management to the participating countries (1 regional meeting/year, \$ 20,000/meeting)
	2.3 <i>Stakeholder Analysis and Involvement</i>	2.3.1 Undertake a stakeholder analysis, including stakeholders' roles in wetland management (~\$ 20,000)
		2.3.2 Identify good practices on community empowerment and promote the replication of these good practices at the regional level (\$ 40,000 per type of wetland)
	2.4 <i>Strengthening Traditional Value and Management System</i>	2.4.1 Compile and analyse traditional knowledge and practices and to evaluate their utility in modern context. (~\$ 50,000)
2.5 <i>Establish an Incentive System for Good Governance</i>	2.5.1 Develop incentive mechanism models (e.g., eco-labeling) to recognise outstanding accomplishment of sustainable wetland use.  <b>Note: The incentive mechanism models will be identified via e-forum discussions.</b>	
2.6 <i>Enhance International and Regional Co-operation</i>	2.6.1 Strengthen international and regional exchange of legal and policy information in the region. 2.6.2 Organize international conference on wetland management among countries in region and international agency.	

**Table 4 cont. Proposed Actions for Coastal Wetland Management and Conservation.**

Objective	Sub-components	Regional Activities
<b>3. Public Awareness, Communication and Education</b>		
To develop programmes to strengthen knowledge and public awareness on wise use of wetland management in the region. To develop tools and media for communication, education, and public awareness.	<i>3.1 Develop and Disseminate a Plan</i>	3.1.1 Develop regional education on public awareness plan (2 times, \$ 50,000 per time) 3.1.2 Disseminate the regional education on public awareness plan to stakeholders in participating countries (2 times, \$ 20,000, by CD, hard copy). 3.1.3 Translate all tools into national languages. 3.1.4 Produce national newsletters to disseminate among countries in this region
<b>4. Capacity Building and Sustainability</b>		
To enhance and sustain the capacity of wetland management agencies.	<i>4.1 Human Resource Development</i>	4.1.1 Training needs assessment (forms of training, target audiences, places of training, time frame, existing course programmes...) (2 times in 10 years, ~\$ 50,000 first time of assessment, ~\$ 20,000 for the updating of the assessment) 4.1.2 Training programme may include elements for example on basic ecology, law enforcement, monitoring. The programme may include study tours, and field visit for wetland managers, communities, students, and NGOs (it is anticipated that the programme will involve a minimum of 3 courses per year, 25 participants/course, 10 years, 3-4 weeks/course, \$ 3,000 x 25 x 10 x 3 = \$ 2,250,000, travel, accommodation, food. Plus \$ 100/head for materials) 4.1.3 Regional inter-country training (1 person/country/year, up to 3 months, 5 years, \$ 5,000 x 7 x 5 = \$ 175,000) 4.1.4 Develop and produce the education and training materials and tools for three courses per year (\$ 5,000/course to develop the materials)
	<i>4.2 Institutional Network Building and Strengthening</i>	4.2.1 Organise annual meetings/workshops for wetland management professionals (1 meeting/year, 10 years, 3 days per meeting, 5 participants per country plus 5 resource persons/meeting organizers (40 x \$ 1,000 + \$ 5,000) x 10 = \$ 450,000) 4.2.2 Establish the linkages among wetland management institutes or agencies in the region and maintain the communities (e-forum and website) (10 years for administration cost: 10 x 12 x \$ 200 = 24,000) <b>Note: The responsibility for networking needs to be assigned to a defined institution or a group of institutions.</b>
	<i>4.3 Financial Sustainability</i>	4.3.1 Strengthen bilateral cooperation between the countries bordering the South China Sea through high-level meetings that include representatives of potential donor countries (meetings/workshops) (3 meetings in ten years, 50 participants, \$ 60,000 x 3 = \$ 180,000)
<b>5. Resource and Habitat Management</b>		
To improve the management and restore coastal wetlands in the region.	<i>5.1 Wetland Conservation</i>	5.1.1 Develop or update wetland management plans of the important coastal wetland sites in the region (24 sites x \$ 50,000 = \$ 1,200,000); <b>Note 1: Specific sites to be identified and named.</b> <b>Note 2: Cost for these plans should be costed under the national action plans.</b>
	<i>5.2 Promote the Sustainable Use of Coastal Wetland</i>	5.2.1 Develop manuals/handbooks for sustainable use, incl. restoration, of estuaries, coastal lagoons, inter-tidal mudflats, peat swamp forest, and non-peat swamp forest. (involve a series of meetings, editing, and publishing) (~\$ 100,000 per manual/handbook).
	<i>5.3 Wetland Restoration</i>	5.3.1 Restore degraded coastal wetlands (1 site/country) for demonstration (\$ 2,000,000 x 7 sites = \$ 14,000,000)

## ANNEX 6

## Work Plan (2006-2007) and Schedule of Meetings for 2006 and 2007

Table 1 Preliminary Work plan for 2006-2007.

	2006				2007			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>National Wetlands Committee meetings</b>								
<b>National Technical Working Group meetings</b>								
<b>Meetings of RWG-W</b>								
<b>Complete outstanding tasks of the original MoU</b>								
Publication of national wetland reports in national languages								
Publication of the full set of national reports (English)								
Maintain and update GIS data and information								
Maintain and update national and regional meta-databases								
<b>Finalisation and implementation of demonstration site proposals</b>								
Revise and finalise the Malampaya demonstration site proposal			15 July					
Implement demonstration site activities								
<b>Adoption and implementation of national action plans</b>								
Finalisation of national action plans			31 <sup>st</sup> July					
Public and stakeholder meetings for the publicity of the national action plans								
Adoption of national action plans								
Implementation of national action plans								
<b>Finalise Strategic Action Programme</b>								
Draft revised SAP outline								
Provision of data and information on economic value of coastal wetlands		1 <sup>st</sup> July						
Input from members to the Regional Expert for the 1 <sup>st</sup> draft SAP			31 <sup>st</sup> July					
E-forum discussion on the further elaboration of the SAP								
The regional expert compile and submit the 1 <sup>st</sup> draft to the PCU the end of August 2006			31 <sup>st</sup> Aug.					
PCU edit and format the final draft for the consideration of the seventh meeting of the RSTC (14-17 Nov. 2006)								
<b>Implementation of the regional training programme</b>								
Selection of implementing agency/institute								
Finalisation of the syllabus and training materials								
Finalisation and signing of the MoU between UNEP and the selected implementing agency								
PCU send a letter to the national technical focal point regarding the regional training programme								
Nomination of trainees			31 July					
Conduct the regional training course					Feb.07			
Conduct the national echo seminars					Mar 07			

