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## UNDP/GEF PROJECT ENTITLED “REDUCING ENVIRONMENTAL STRESS IN THE YELLOW SEA LARGE MARINE ECOSYSTEM”

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English only

### **Fourth Meeting of the Regional Working Group for the Ecosystem Component** *Ningbo, China, 3-5 October 2007*

#### **Strategic Action Programme (SAP) Preparation**

1. According to the overall workplan, the Project has begun developing the SAP. The “TDA/SAP Training Module” developed by UN’s TRAINSEACOAST network gives the definition of SAP as:

“a negotiated policy document which should identify policy, legal and institutional reforms and investments needed to address the priority transboundary problems. Endorsed at the highest level, it establishes clear priorities for action to resolve the priority problems which were identified in the TDA. The preparation of a SAP is a cooperative process among the countries of the region.”
2. Given the definition, the Project has now focused its activities over the next two years on those that will be relevant to the development of the SAP, including the regional and national SAPs, i.e. activities that will eventually lead to formation of management actions, some of which will be included in the pilot implementation phase during Project Year 5, for their feasibilities, efficiency and effectiveness in addressing Yellow Sea’s transboundary problems.
3. During the SAP Consultation Meeting, “Carrying Capacity of the Ecosystem” was adopted as the central linkage in the SAP and was defined as, “the Services delivered by the Yellow Sea Large Marine Ecosystem in terms of Provisioning Services (fisheries, mariculture and other extractive goods), Supporting/Regulating Services (carbon sink, nutrient balance, ecosystem stability) and Cultural Services (tourism, education and religion).”
4. A three-step approach was proposed: a) identify environmental problems; b) set regional environmental targets; and c) propose management actions. While it was suggested that these three steps should be taken to develop the ecosystem section of the SAP, all steps should be considered simultaneously, if possible:
  - a) Identification of ecosystem-related problems and the associated technical and management issues (already done during TDA phase);

- b) Recommend realistic and achievable regional targets for ecosystem management (already done through SAP Consultation and two Ad-hoc Working Group Meetings); and
- c) Suggest suitable and sustainable actions for execution by political, technical, feasible, and legal bodies to address the causes of the ecosystem problems as identified in the Causal Chain Analysis (also done as in point b).

#### Ecosystem Quality Objectives or Regional Targets (to achieve by Year 2020)

5. During the First SAP Ad-hoc Working Group Meeting, experts outlined regional targets for all components.
6. For Ecosystem, the following were listed as possible targets that management actions should aim for:
  - Diatom dominated community (1980's) that will drive a healthy ecosystem
  - Supporting/regulating Ecosystem Change in abundance/biomass and species diversity of benthic community. High species diversity in benthos (1992).
  - Provision of better scientific understanding for adaptive management
  - HABs historical reference year of 1990's; < 5 events on each coast
7. At the Second SAP Ad-hoc Working Group Meeting, the regional targets were reviewed and condensed into the following:
  - Provide relevant information to understand and predict ecosystem status
  - < 5 HAB events on each coast (HAB includes high biomass algal bloom)

Members are invited to review the suggested regional targets and suggest possible improvements that may facilitate either the understanding or the measurement of achievement.

#### Proposed Management Actions

8. During the Second SAP Ad-Hoc Working Group Meeting, a small group of experts reviewed the regional targets and outlined the management actions that are needed in order to achieve the previously mentioned regional targets. The group began with listing the ideal management actions, then listing the existing or already planned actions, and finally, based on their expertise, generally determining what management actions might be feasible to achieve the targets.
9. For Ecosystem, some of these actions included:
  - Assess and monitor the impact of N:P:Si change
  - Assess and monitor the impact of climate change
  - Monitor the transboundary impact of jellyfish blooms
  - Predict ecosystem change in the long run
  - Monitor HAB occurrences

The detailed table of management actions is available in [Annex 1](#).

Because the SAP Ad-hoc Working Group consists of a limited number of experts, input from additional experts are needed, i.e. the RWG members.

Thus, members are invited to:

1. review the entire table of suggested management actions ([Annex 1](#));
2. check that the “feasible management actions by 2020” really are technically feasible (See section below on Feasibility Studies); and
3. suggest possible improvements that may improve the clarity and ease of “feasible management actions” for implementation.

### Feasibility Studies

10. Before selecting and testing the management actions, each action's technical feasibility, and political and social acceptance must be assessed. **The RWG will be responsible for assessing the technical feasibility of the proposed management actions.**
11. Following the clarification of the actions from above, the RWG members should review the actions and conduct feasibility study for each proposed action.<sup>1</sup> One approach to accomplishing this may be:
  - The experts should consider whether there is or will be sufficient technical ability to perform the suggested action by 2020 (the target year).
  - The experts could score the actions based only on technical ability: (1) Not possible (2) Unlikely (3) Likely or (4) Very likely.
  - The experts should provide a rationale for their selection.
  - The experts should also comment on the action in terms of institutional and political obstacles.

### Proposed Actions for Demonstration

12. During the Second SAP Ad-Hoc Working Group Meeting, experts drew up some guidelines to select: firstly, which management actions should be selected for demonstration; and secondly, how to choose the demonstration site (See [Annex II](#)).
13. **\*\*\*Prior to the 4<sup>th</sup> RWG-P Meeting, members are requested to review Annex I and the agreed “Selection Criteria for Demonstration Projects and Sites (Annex II).”\*\*\***

Based on the criteria and management action table, members are requested to come prepared to the meeting to suggest some actions that should be demonstrated and provide guidance on possible activities to demonstrate each action. Some examples of possible demonstration activities for ecosystem-related management actions might be:

- activity to show successful co-ordination of regional monitoring;
- using current or newly acquired knowledge to improve monitoring/estimation of ecosystem health; or

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<sup>1</sup> Members need to review only the actions under “Feasible management actions by 2020” in Annex I.

- activity using co-operative monitoring mechanism to improve understanding of various ecosystem health issues (e.g. fisheries, marine litter, diatom:dinoflagellate ratio).
14. The proposed actions for demonstration will be advertised in a “Call for Proposals” that the PMO will put out in early 2008. The deadline for interested persons to submit proposal for demonstration activities is scheduled for end of May 2008. During June 2008, an external review panel will evaluate proposals and decide which ones to fund. Demonstration activities will then begin implementation soon after. Members are requested to suggest 3-5 neutral persons to serve as evaluators. PMO will contact the suggested persons, review their CVs, and form the evaluation panel.
15. The proposal submission format is attached as [Annex III](#). Members may provide comments on the format if they wish.

#### Schedule for SAP Preparation

16. The Second SAP Ad-Hoc Working Group Meeting agreed on the following schedule for SAP preparation:
- SAP Drafting Group Meetings will be held in December 2007, February 2008, and May 2008.
  - Special RSTP and PSC Meetings will be convened in April 2008 to review the final draft of the SAP. Comments from these meetings will be incorporated by the Drafting Group into the final SAP document for governments to approve in the middle of 2008.
  - Drafting of the National Yellow Sea Action Plans (NYSAPs) is a national responsibility and should be coordinated by the NPCs in their respective country. NYSAPs will be developed during 2008, and are expected to be ready for government approval sometime in 2008.

#### Expected Results

17. In summary, during the consideration of this Agenda, members should discuss and agree on:
- Regional ecosystem targets;
  - Ecosystem management actions;
  - Conduct technical feasibility study on the actions; and
  - Management actions to be demonstrated.

### Annex I - Table of Management Actions

A later version will be inserted once the Ad-hoc members reply to comments (by 7<sup>th</sup> September).

| Problems and Targets |   |                 |   | Preparation of Management Actions              |  |  |                         |   |   |             |  |  |  |            |
|----------------------|---|-----------------|---|--|--|--|-------------------------|---|---|-------------|--|--|--|------------|
| Services             | Problems identified in CCA                          | "Problem Issue" | Regional target (2020)  | general action                                 | Ideal Management Actions                         |  |                         | Analysis of Planned & On-going Management Actions   |   |             | Feasible Management Actions by 2020              |  |  |            |
|                      |   |                 |   |  | Technical  | Institutional                            | Legislative             | Technical   | Institutional   | Legislative | Technical  | Institutional                            | Legislative  | CC Remarks |
|                      | Ecosystem changes (lower trophic level and benthos) |                 | Provide relevant information to understand and predict ecosystem status | Assess and monitor the impact of N/P/Si change | harmonized and coherent monitoring methodologies | Establish cross-basin monitoring network | [note: noting needed??? | countries have different sampling methods and seasons; regular survey only cover limited area; not designed to reveal basin-scale changes | no cross-basin monitoring due to lack of co-ordination among different agencies;[note: is this institutional?? ?] |             | harmonized and coherent monitoring methodologies | Establish cross-basin monitoring network | [note: noting needed???] regional agreements for joint monitoring? |            |

| Problems and Targets |                            |                 |                        | general action                                       | Preparation of Management Actions                                      |  |   |  |  |             |  |  |   | CC Remarks |
|----------------------|----------------------------|-----------------|------------------------|--|--|--|---|--|--|-------------|--|--|---|------------|
| Services             | Problems identified in CCA | "Problem Issue" | Regional target (2020) |  | Ideal Management Actions   |  |   | Analysis of Planned & On-going Management Actions                            |  |             | Feasible Management Actions by 2020                                    |  |   |            |
|                      |                            |                 |                        |  | Technical  | Institutional                                    | Legislative                                       | Technical  | Institutional  | Legislative | Technical  | Institutional                                    | Legislative                                       |            |
|                      |                            |                 |                        | Assess and monitor the impact of climate change      | harmonized and coherent monitoring methodologies                       | Establish cross-basin monitoring network         | [note: noting needed???                           | ditto  | lack of taxonomists [note: did not understand] seems misplaced for impact of climate change; move to technical? Unless it's a need for more funding to train taxonomists |             | harmonized and coherent monitoring methodologies                       | Establish cross-basin monitoring network         | [note: noting needed???                           |            |
|                      |                            |                 |                        | Monitor the transboundary impact of jellyfish blooms | develop monitoring methodologies                                       | Establish monitoring network                     | [note: noting needed???                           | ditto  |  |             | develop monitoring methodologies                                       | Establish monitoring network                     | [note: noting needed???                           |            |
|                      |                            |                 |                        | Predict ecosystem change in the long run             | develop models to predict ecosystem change and its impact on fisheries | establish regional science committee to do what? | incorporate the prediction into management policy | no activities [delete] keep, so reader knows no current efforts are in place | no activities [delete] keep, so reader knows no current efforts are in place   |             | develop models to predict ecosystem change and its impact on fisheries | establish regional science committee to do what? | incorporate the prediction into management policy |            |







## **Annex II - Agreed Guidelines for Demonstration Project and Site Selection**

- **Timing of Demonstration Activities**

Start September 2008 to December 2009

- **Selection Criteria for Demonstration Projects and Sites**

1. Selection of management actions to demonstrate (criteria are listed in order of importance; actions should satisfy at least some criteria)

- Effectiveness – easily obtainable results
- Ease of demonstrability of action - results are easily understood by general public, ease of dissemination
- Results that help raise public awareness
- Combination of technical and institutional actions should both be demonstrated
- Cross component action
- Transboundary nature of actions
- Opportunity to cooperate with other projects/organizations
- Co-financing

2. Site selection

- Appropriateness of site to demonstrate management actions
- Political willingness
- Stakeholder willingness to participate
- Replicability in other areas around the region

- **Procedure**

1. Proposal – to be submitted to the RWG
2. 2007 RWG - will propose candidate actions and sites considering the criteria above. Justification should be provided.
3. RSTP – will review and make recommendations
4. PSC - will decide.
5. PMO – will draw up contracts in consultation with NPCs



## **Annex III - Proposed Format for Demonstration Activity Proposal Submission**

Will be added before RWG-E meeting.