

Implementing the Strategic Action Programme for the Yellow Sea Large Marine Ecosystem: Restoring Ecosystem Goods and Services and Consolidation of a Long-term Regional Environmental Governance Framework (UNDP/GEF YSLME Phase II Project)

# Proceedings of the 1st Meeting of the Regional Working Group on Habitat (RWG-H) of the UNDP/GEF YSLME Phase II Project

Incheon, RO Korea 5-6 September 2017

## Proceedings of the 1st Meeting of the Regional Working Group on Habitat (RWG-H) of the UNDP/GEF YSLME Phase II Project

Incheon, RO Korea 5-6 September 2017



## **Table of Contents**

Summary Report			
Conclusions and Decisions	4		
I. Opening of the Meeting	7		
2. Organization of the meeting	7		
3. Review and refine documents approved by the 1st Meeting of Interim YSLME	8		
Commission Council			
4. Review workplan for 2017 and activities, and working among RWG-H members			
5. Key elements of the YSLME Biodiversity Conservation Plan and process for adoption	9		
6. Review the draft YSLME Biodiversity Conservation Planning Workshop			
7. Budget for the workshop	11		
8. Review of Terms of Reference (TOR) of consultants to contribute to the workshop			
9. Review of TORs for regional activities	12		
0. Review of TORs for regional activities			
11. Other business			
12. Wrap-up and closure of the meeting	13		
Annex 1. List of Participants	14		
Annex 2. Agenda	15		
Annex 3. Terms of Reference	17		

### **Summary Report**

The 1st Meeting of the Regional Working Group on Habitat (RWG-H) of the UNDP/GEF YSLME Phase II Project was held in G-tower, Incheon, on 5-6 September 2017 organized by the Secretariat. Members of the RWG-H from RO Korea, Chair of National Working Group on Habitat, representatives from FIO/SOA from PR China, Korea Marine Environment Management Corporation (KOEM), Eco-Horizon Institute, EAAFP Secretariat and staff of the Secretariat participated in the Meeting. The Meeting was chaired by Chief Technical Adviser and Project Manager of YSLME Phase II Project Mr. Yinfeng GUO.

**Opening Remarks.** The Meeting started with brief introduction on outcomes of the 1st Meetings of MSTP and ICC held in July 2017 and expected outcomes of the Meeting in line with the directions of the first meeting of the Interim Commission Council and approved workplans and TORs of the RWG-H. The Project Manager highlighted the development of "YSLME Biodiversity Conservation Plan as the major deliverable of RWG-H in 2017 as a project result to preserve habitats including establishment of regional nature reserves/Marine Protected Areas (MPAs) for coastal wetlands, endangered and vulnerable species and spawning and nursery ground of critical species.

### **Conclusions and Decisions**

**Review of Terms of Reference (TOR) of RWGs and Chairs/Vice Chairs; TOR of RWG-H and RWG-H workplan (2017-2019):** The Meeting suggested to include a report on updated TDA and SAP as deliverable of the RWG-H in line with its tasks. In relation to tasks on conduct of YS cold water mass, the Meeting suggested to revise the last sentence of paragraph a) as "to coordinate with RWG-A in conduct of a study on the YS cold water mass in relation to threats to biodiversity, identification of causes and areas of improvements and feasibility of taking management measures". On the RWG-H workplan for 2017-2019, the Meeting suggested to include activities to enable the RWG to review and guide the design and development of communication products to enhance awareness of benefits of biodiversity conservation.

**Review workplan for 2017 and activities, and work arrangement among RWG-H members:** On the workplan for 2017, the Meeting expressed concerns of reaching targets described in the workplan due to significant delay of the second phase of the Project and delayed establishment of the RWG-Habitat group. By recognizing limited amounts of time allowed this year, the Meeting stressed on the significance of finding proper experts to carry out activities under given circumstances. Without revision made at the proposed workplan for 2017, the workplan for the year 2017 was adopted as it is, and further discussion on planned activities was made in the agenda dealing with several TORs that the Secretariat developed.

**Key elements of the YSLME Biodiversity Conservation Plan and review of the draft YSLME Biodiversity Conservation Planning Workshop:** The Meeting reiterates the need to adopt ecosystem-based approach in implementing the YSLME SAP and project activities by taking the Yellow Sea in its entirety rather than segmented implementation of activities by participating countries. Regarding the elements of the regional biodiversity conservation plan, the Meeting suggested to include status of biodiversity of YS, challenges and difficulties, timeframe, principles, objectives and targets, priority areas and themes, actions and activities, expected benefits, as well as monitoring mechanisms as key elements of the plan. The Meeting felt appropriate to set objectives and targets at different stages, with the first stage overlapping with project duration, the second stage up until 2025 and third stage up to 2030 in alignment with the SDGs. Cognizant of the impracticality of conducting annual monitoring, the meeting suggested to report the progress of implementation at milestone stages.

Regarding the workshop program, the Meeting was informed that Ministry of Ocean and Fisheries of ROK could also be identified as a partner given the regional nature of the biodiversity conservation plan and agreed to set three sections in the workshop, i.e. 1) understanding the conservation status of the YSLME; 2) recalibrating response measures to degradation and loss of YSLME biodiversity and 3) action planning. In Section 1, it was suggested to consider Chinese Egret and Finless Porpoises as priority species as well. For the presentation to set the scene, Mr. Sadayoshi TOBAI from WWF Japan or Dr. Woong Seo KIM from KIOST who knew the Yellow Sea Ecoregion Project well should be invited. The meeting felt that Session 2 should consider strength of response measures in addition to identification of gaps and weakness, Eco-Horizon Institute confirmed to make a presentation on enhancing awareness of YSLME biodiversity through networking of MPA visitor centers.

The Meeting agreed to proceed the workshop as listed in the program. The Meeting underscored the need for the Secretariat to invite speakers who fit well to objectives of the workshop. It was expected that valuable and profound information applicable to the 23 PPAs would be shared to enhance understanding of priority areas of global and regional significance for designation of MPA in the YS. Also, the Meeting shared ideas on how to organize the workshop in systematic ways especially on communication tool, including possibly having a CKJORC to provide support in translation.

**Review of TOR of consultants to contribute to the workshop:** The Meeting reviewed and approved the following five proposed TORs subject to revisions taking into account the following suggestions:

- Biodiversity Planning Specialist for assessment of coastal and marine habitats and species of critical global and regional significance in the Yellow Sea and drafting of YSLME Biodiversity Conservation Plan and MPA Network, with the suggestion of hiring two national consultants, one from PR China and one from RO Korea, to work together to draft the background paper and YSLME Biodiversity Conservation Plan; and the MPA Network can have an international consultant.
- Natural Resource Specialist to Assess Coastal Reclamation and Impact to Critical Coastal Habitats of Yellow Sea Large Marine Ecosystem, with the understanding the further consultation with MOF/ROK is needed on the availability of data as required in the TOR.
- Legal Expert to Assist in Strengthening the Capacity of National and Local Government to Improve China's Compliance with International and Regional Treaties and Programs
- Consultant to synthesize progress with coastal and marine ecosystem and community impact assessment in YS region with reclassification of this post as international; and
- Consultant to harmonize valuation methodologies, standards and guidelines for evaluation of the effectiveness and impact of ecosystem-based restoration projects with reclassification of this post as international.

In brief, the Meeting agreed that: 1) all planned activities should be implemented immediately, and 2) progress status of implementation is advised to be shared with RWG members and 3) the outputs should be reflected with any suggestions and comments provided by RWG members. Due to characteristics of some activities which are interlinked with the mandate of other RWGs (e.g., climate change and monitoring activities on RWG-A, legal studies on RWG-G), the Meeting advised the Secretariat to consult with respective RWGs to enhance coordination among RWGs. The Meeting was informed by the representative of RO Korea that results of the Meeting will be reported to the respective Government for their consideration.

**Review of TORs for regional activities:** The Meeting had an opportunity to hear presentations on the four potential regional activities prepared by FIO of PR China and revised by the Secretariat as follows:

 Activity 4 of Output 4.1.1: Develop strategies and governance mechanisms to achieve regional habitat and species targets at 2 demonstration sites, including assessment of impacts of modification of areas of critical habitats and monitoring the effectiveness of management plans

- Activity 2 of Output 4.2.1: Analysis of country coastal management guidelines, identification of conservation areas according to planning zones;
- Activity 3 of Output 4.2.1: Survey and produce overlays to analyse gaps and conservation needs of critical species and habitats (i.e. seal, migratory birds, fish spawning and nursery sites, cold water mass, etc.) and make recommendations on new MPAs
- Activity 7 of Output 4.4.2: Prepare training modules on ecosystem-based management in LME 1) ecosystem carrying capacity (ECC) habitat-based and food-chain based approaches for habitat conservation; and 2) ECC: MPA networking

The Meeting suggested to consider studies on avenues to mainstream the concept of "connectivity" in marine spatial plan or other zoning schemes as far as species migration is concerned in addition to its integration at MPA or site level. Developing protected areas or conservation areas with areas-based management measures in areas beyond national jurisdiction such as the Yellow Sea Cold Water Mass could also be explored by the Project. With scientific findings explaining the needs of extending MPA and/or any conservation areas (e.g., Activities 2 and 3), policy makers from governmental sectors could be better informed of the needs of protection and conservation. The Meeting also suggested to develop training module tailoring to the needs of different target stakeholder groups to maximize results. Also, the Meeting shared views on suggested activities and stressed on the quality of outcomes since the activities are planned to be conducted in a given timeframe. Recognizing the necessity of information sharing, the Meeting expected more close collaboration from both countries. As TORs were not shared before the Meeting, it was suggested that further efforts are needed to detail the TORs.

**Agenda of next RWG meeting and other business:** The Meeting agreed to have next RWG-H meeting on April or June 2018 in PR China, and more detailed information will be shared when it will be available. As for adoption process of Biodiversity Conservation Plan, RWG members recognized the need for acceptance by participating countries and suggested to seek guidance from the 2nd ICC. PR China Invited the Secretariat to participate in the MPA training course held in October 2017 and invited YSLME Project to consider organizing a joint MPA workshop with NEAMPAN to be held in PR China.

In the wrap-up, the representatives of RWG from PR China and RO Korea expressed their appreciation to the Secretariat for organizing this Meeting. The Chair expressed his appreciation to all participants for their active participation and friendship in the discussions and to the Chair of NWG-H in RO Korea for the warm hospitality in hosting a dinner to all participants.



### I. Opening of the Meeting

- The 1st Meeting of the Regional Working Group on Habitat (RWG-H) of the UNDP/GEF YSLME Phase II Project was held in G-tower, Incheon, on 5-6 September 2017 organized by the Secretariat. Members of the RWG-H from RO Korea, Chair of National Working Group on Habitat, representatives from FIO/SOA from PR China, Korea Marine Environment Management Corporation (KOEM), Eco-Horizon Institute, EAAFP Secretariat and staff of the Secretariat participated in the Meeting. The Meeting was chaired by Chief Technical Adviser and Project Manager of YSLME Phase II Project Mr. Yinfeng GUO.
- 2. Mr. GUO opened the meeting and welcomed all participants to Incheon, RO Korea. He introduced briefly outcomes from the 1st Meetings of the MSTP and the interim YSLME Commission Council which launched the 2nd Phase of the Project and the expected outcomes of the meeting in line with the directions of the first meeting of the Interim Commission Council and approved workplans and TORs of the RWG-H. He highlighted the development of "YSLME Biodiversity Conservation Plan as the major deliverable of RWG-H in 2017 for the preservation of habitats including establishment of regional nature reserves/Marine Protected Areas (MPAs) for coastal wetlands, endangered and vulnerable species and spawning and nursery ground of critical species. He also invited the participants to give a self-introduction of the name and organization they represent.
- 3. Participants were invited to introduce themselves and then each gave a brief description of their organizations and expertise related to the mandate of the RWG-H. The list of participants is attached to this report as Annex I.

### 2. Organization of the meeting

#### 2.1. Election of Chair and designation of rapporteurs

4. Mr. Yinfeng GUO invited the representatives of PR China and RO Korea to nominate the Chair and Vice Chair for the meeting. In the absence of Chairs and Vice Chairs of any RWG, the meeting suggested Mr. Yinfeng GUO, CTA of the Secretariat, to serve as an interim Chair and designated the Secretariat as rapporteur respectively.

#### 2.2. Adoption of agenda

- 5. The Chair introduced the agenda and the list of meeting documents, and invited comments from the participating countries. The Chair also introduced three objectives of the meeting 1) understand duties and responsibilities described in the TOR of RWG; 2) find ways to contribute to the development of YSLME Biodiversity Conservation Plan; and 3) help to implement projects through review of the TORs prepared.
- 6. Ms. CHAE from RO Korea suggested to review project activities relevant to works for "Habitat" group prior to having discussion on the TOR of RWG-H. The meeting adopted the agenda with addition of one more agenda namely, "Review of activities in annual workplan 2017 in relation to mandate of RWG-Habitat group". The revised agenda is attached to this report as Annex II.

## 3. Review and refine documents approved by the 1st Meeting of Interim YSLME Commission Council

#### 3.1. Terms of reference of RWGs and Chairs/Vice Chairs, and TOR of RWG-H

- 7. Upon the request of the Chair, the Secretariat introduced TOR of RWGs and Chairs/Vice Chairs with focus on TOR of RWG-H. After presentation by the Secretariat, the Chair opened the floor for discussion and invited participants to provide comments for possible revision on TOR which could be submitted for further consideration at the next MSTP.
- 8. Dr. ZHANG from PR China suggested to further clarify the last sentence of paragraph a). After discussion, the Meeting agreed to revise as "Coordinate with RWG-A in conduct of a study on the YS Cold Water Mass (CWM) in relation to threats to biodiversity, identification of causes and areas of improvements and feasibility of taking management measures".
- 9. Professor PARK from RO Korea introduced rationale of how and why "CWM" was added in the TOR and underscored the needs for conducting activities related to "CWM" with enhanced regional cooperation. Due to cross-cutting characteristics of activities on "CWM", close collaboration with RWG-A was suggested.
- 10. Ms. JANG from RO Korea emphasized the significance of regional cooperation between two countries in the development of training modules by addressing two points 1) Training module should be developed in close collaboration between the two countries especially dealing with YS; and 2) Setting up flagship species with interests from two countries in the development of training module and educational program should take this into consideration. After in-depth discussion, the Meeting agreed to have the current version with minor revisions.

#### 3.2. RWG-H workplan (2017-2019)

- 11. The Chair introduced RWG-H workplan 2017-2019, noting that a report on updated TDA and SAP should be included as deliverables of the RWG-H in line with its tasks.
- 12. Mr. MILLINGTON from EAAFP pointed out the lack of activities related to public awareness under Objective 4, pursuing development of capacity and public awareness of benefits of biodiversity conservation areas. He also shared ideas on possible development of a network for public awareness between two countries for promoting biodiversity conservation which will provide mutual benefits to both countries.
- 13. After lengthy discussion, the Meeting suggested to include activities to enable the RWG to review and guide the design and development of communication products to enhance awareness of benefits of biodiversity conservation.

# 4. Review workplan for 2017 and activities, and working among RWG-H members

- 14. Upon the request of the Ms. CHAE from RO Korea, the Chair introduced project activities listed in workplan for 2017 in relation to the mandate of RWG-H which are listed mainly in Outcomes 4.1 and 4.2 of Component 4.
- 15. Professor PARK from RO Korea requested clarification of the locations of two demonstration sites described in Activity 5, i.e. in each country or only in one country. The Chair responded that the sites will be decided based on national interests, experience and opportunities for knowledge sharing.

16. Mr. MILLINGTON from EAAFP expressed concerns on lack of efforts on reclamation related activities besides Activity 2 and encouraged the Meeting to consider possible revision in the workplan. Due to limited amounts of budget, further activities in relation to reclamation is limited to activity 5 which will assess impacts of modifications of areas of critical habitats. In response to the suggestion made by Mr. MILLINGTON, the Activity 5 has been revised by adding the following wordings to the last sentence: "and recommendations on monitoring the effectiveness of management plans and mitigation of measures". After further discussion, the Meeting agreed to have the workplan with minor revisions.

# 5. Key elements of the YSLME Biodiversity Conservation Plan and process for adoption

- 17. Since no meeting document on this agenda was prepared, the Chair sought advice on key elements of the plan and options to proceed.
- 18. In response to request for advice from the Chair, Dr. ZHANG from PR China introduced some elements of the domestic "Conservation Plan" being implemented which include 1) status; 2) challenges; 3) objectives; 4) principles; 5) priorities; 6) actions/activities; and 7) expected benefits.
- 19. The Chair suggested "timeframe" which could be one of key elements when the plan is about to be developed.
- 20. Professor CHOI from RO Korea suggested to specify scope of "Biodiversity Conservation Plan". In response to inquiry raised by Professor CHOI, the Chair explained that the scope could cover guidelines from international societies that have been commonly used with interest recently. The Meeting was also advised to consider previous works implemented during the 1st Phase in collaboration with WWF and KEI, which could be a good reference to start with.
- 21. Mr. MILLINGTON from EAAFP advised the Meeting to consider having a long-term timeframe with clear objectives instead of short-term which limits the number of activities with lack of budgets. He also suggested to develop "Integrated Plan" by combining activities that could be joined from both countries by considering characteristics of potential flagship species showing migratory behaviours in the YS.
- 22. Dr. ZHANG from PR China also agreed to the ideas suggested by Mr. MILLINGTON of developing long-term plan (e.g. till 2030). He stressed on the importance of conservation efforts from both countries regardless of duration of the YSLME Project Phase II.
- 23. In line with suggestions made by Professor PARK from RO Korea, the Meeting felt appropriate to set objectives and targets at different stages, with the first stage overlapping with project duration, the second stage up until 2025 and third stage up to 2030 in alignment with the SDGs.
- 24. After lengthy discussion, the Meeting agreed to include status of biodiversity of YS, challenges and difficulties, timeframe, principles, objectives and targets, priority areas and themes, actions and activities, expected benefits, as well as monitoring mechanisms as key elements of the plan.

## 6. Review the draft YSLME Biodiversity Conservation Planning Workshop

- 25. The Chair introduced program of biodiversity conservation planning workshop to be held in Rudong on 7-9 November 2017. The Meeting agreed to have a "monitoring system" for better understanding of progress of activities.
- 26. Ms. CHAE from RO Korea suggested to add Korean government (e.g., MOF) as one of organizers for the workshop, together with others as listed. She also promised to share a list of stakeholders showing interests to participate. Also, the section for collaborating partners in the program will be updated with information given by Dr. ZHANG from PR China at a later stage.
- 27. The Chair then introduced tentative program of the workshop, composed of 3 sessions -1) understanding the conservation status of the 23 PPAs; 2) re-calibrating response measures to degradation and loss of YSLME biodiversity and 3) action planning.
- 28. On session I, Dr. LEE from RO Korea suggested to consider "Chinese Egret" and "Finless Porpoises" as priority threatened or endangered species. As for the presentation to set the scene, Ms. CHAE from RO Korea suggested that Mr. Sadayoshi TOBAI or Woong-Seo KIM from KIOST) who knew the YS Ecoregion Project well should be invited.
- 29. Mr. MILLINGTON from EAAFP expressed a concern about scope of the activities in the YS by only focusing on 23 PPAs as sites for conservation consideration, and advised to consider study sites from dynamic and spatial aspects as well. In line with his suggestion, the Meeting suggested to change the title of session 1 by replacing the term "23 PPAs" with "YSLME" to expand scope of the workshop.
- 30. On session II, the Meeting agreed to add a couple of presentations on enhancing public awareness of YSLME biodiversity through networking of MPA visitor centers that could be introduced by Eco-Horizon Institute from RO Korea. Ms. JANG from RO Korea also stressed on the necessity of building up public awareness system, promoting knowledge sharing activities in a more systematic way. Mr. Millington suggested to make session II to review positive aspect as well by including status and gaps but also strength aspect. As for potential presenters, RO Korea will seek possible candidates to the topics listed and provide feedback when it will be available.
- 31. On session III, with objectives and targets already established, the session will deal with specific actions, economic benefits, and discussion will be followed by groups.
- 32. Following the session III, the plan for field trip was introduced by Dr. ZHANG from PR China. Possible visit to wetland areas and wind-power stations in Rudong is scheduled at present. In addition, Ms. CHAE from RO Korea suggested to consider visitor center in PR China as one of sites for field trip.
- 33. As for issue of identification of resource person taking chairmanship, the Meeting agreed to have Chair of NWG-H of PR China as a Chair at the workshop during the 1st day and Chair from NWG-H of RO Korea as Chair for the 2nd day. As for the Chair for the 3rd day, a consultant will play a key role to run the session III with help of the Secretariat.

### 7. Budget for the workshop

- 34. The Secretariat introduced estimated budget for the YSLME Biodiversity Conservation Planning workshop and asked the Meeting to understand current situation facing limited budget.
- 35. With understanding of budget allocation, the Meeting encouraged the members to seek relevant organizations to provide financial support for smooth organization of the event.

# 8. Review of Terms of Reference (TOR) of consultants to contribute to the workshop

- 36. The Meeting introduced the TORs for consultants to implement as planned and the Meeting agreed to initiate all activities with major points as follows:
- Biodiversity Planning Specialist for assessment of coastal and marine habitats and species of critical global and 37. regional significance in the Yellow Sea and drafting of YSLME Biodiversity Conservation Plan - Mr. MILLINGTON expressed a concern of lack of time to implement and advised to reduce the scope of works by preparing only background paper including information on status and trends of threats and underlying causes and etc. The background paper will then be background resource for the participants of the workshop to build a framework of the biodiversity plan and will also contribute to the process of development of biodiversity conservation plan. Professor PARK from RO Korea concerned about quality of outputs which might have difficulty to meet our expectation due to limited time and resources available. In response to the concern raised by RO Korea, the Secretariat explained that the major tasks will be desk review with recommendations which will be consolidated to meet objectives of this work. Ms. CHAE from RO Korea addressed a position of RO Korea, mentioning that all TORs with upcoming results will be shared with MOF for their comments and then report to the Secretariat and PR China. Dr. ZHANG from PR China suggested to divide proposed works into two activities to allow two consultants to accelerate implementation of the project, and agreed to hire two national consultants, one from PR China and one from RO Korea, working together to draft the background paper and YSLME Biodiversity Conservation Plan, and MPA Network which can be implemented by an international consultant.
- 38. Legal expert to assist in strengthening the capacity of national and local government to improve China's Compliance with international and regional treaties and programs Professor PARK from RO Korea suggested to reconsider the theme of this activity because the contents described are more in line with mandate of RWG-G. The Meeting adopted the draft TOR as it is and suggested to share with RWG-G group since it deals with cross-cutting issues.
- 39. Natural Resource Specialist to assess coastal reclamation and impact to critical coastal habitats of Yellow Sea Large Marine Ecosystem Professor PARK from RO Korea suggested not to confine the year of data on reclamation by taking consideration of the monitoring activities conducted till 2010. In response to the suggestion made by Professor PARK, the Chair responded that duration is flexible as described in the 3rd activity mentioning "timeframe of projected". Ms. JANG from RO Korea emphasized the importance of correct information to be included in the outputs since the topic dealing with reclamation is sensitive to be shared from Government perspective. Professor PARK from RO Korea explained domestic situation in RO Korea, requiring internal process to find proper expert to be involved with, and consultation process with MOF to discuss on data available in RO Korea. In response to the concern of RO Korea, the Chair encouraged to consider alternative ways of acquiring relevant data (e.g., satellite image, etc.). Ms. CHAE from RO Korea delivered their position that needs further consultation with MOF/ROK on the availability of data as required in the TOR.

- 40. Consultant to harmonize valuation methodologies, standards and guidelines for evaluation of the effectiveness and impact of ecosystem-based restoration projects The Meeting agreed to revise consultancy status from "national" to "international" taking into consideration developing regional guidelines as the output of this project. By considering the scope of works and deliverables to be produced from the workshop, the Meeting suggested to extend project period until 2018. Professor PARK from RO Korea mentioned that relevant data can be provided as requested from consultants.
- 41. Consultant to synthesize progress with coastal and marine ecosystem and community impact assessment in the YS region Ms. CHAE from RO Korea suggested to have consultancy into "International" by considering nature of this study and asked the Secretariat to consult with RWG-A due to characteristics of some activities which are interlinked with the mandate of RWG-A. Since this study is expected to have comprehensive information, outputs related to biodiversity should be reviewed by this group and assessment and climate change by RWG-A, respectively. The output of this study will serve as background study for subsequent study carrying out with areas on climate change, plankton community and Cold Water Mass (CWM). The Meeting was informed that the workshop planned to be held in the 1st quarter of next year will indicate range of this activity to be pursued. Professor CHOI from RO Korea suggested to split the TOR into two by providing 2 outputs implying aspects of economic and scientific fields, however, the Meeting felt that separated outputs might cause more difficult situations to explain and persuade the relevant stakeholders including policy makers. Ms. CHAE from RO Korea summarized the position of RO Korea, mentioning that the consultancy should be international and the revised version should be shared with RWG-A group for their review and feedback which could be introduced during the workshop. The Meeting agreed to change consultancy into "International" and add "ecosystem and biodiversity in CWM" issue in this project.

### 9. Review of TORs for regional activities

- 42. Activity 4 of Output 4.1.1: develop strategies and governance mechanisms to achieve regional habitat and species targets at 2 demonstration sites, including assessment of impacts of modification of areas of critical habitats and monitoring the effectiveness of management plans Ms. CHAE from RO Korea mentioned not to make decision at this moment due to lack of time to review meeting documents the Secretariat prepared. The Secretariat suggested the Meeting to consider coastal wetland areas as demonstration sites.
- 43. Activity 2 of Output 4.2.1: analysis of country coastal management guidelines, identification of conservation areas according to planning zones The Meeting suggested to consider to mainstream the concept of "connectivity" in marine spatial plan or other zoning schemes as far as species migration is concerned in addition to its integration at MPA or site level.
- 44. Activity 3 of Output 4.2.1: survey and produce overlays to analyse gaps and conservation needs of critical species and habitats (i.e., seal, migratory birds, fish spawning and nursery sites, cold water mass, etc.) and make recommendations on new MPAs Dr. ZHANG from PR China suggested to consider "CWM" as a potential MPA site with involvement of two countries. The Meeting agreed to the fact that developing protected areas or conservation areas with areas-based management measures in areas beyond national jurisdiction such as the Yellow Sea Cold Water Mass could also be explored by the Project by taking consideration of "needs" and "feasibility". Ms. JANG from RO Korea stressed on the significance of collecting valuable data for critical species and habitats to produce outputs which could be good reference on the development of new MPAs.

45. Activity 7 of Output 4.4.2: prepare training modules on ecosystem-based management in LME 1) ecosystem carrying capacity (ECC)-habitat-based and food-chain based approaches for habitat conservation; and 2) ECC: MPA networking – Dr. ZHANG from PR China shared ideas and experiences on food-chain based approach as one of conservation tools. Professor CHOI from RO Korea proposed to consider an activity carrying out long-term survey on trends of the population of primary production (food source) and target species on the high trophic level, which will indicate condition of habitat. Due to technical difficulties in acquiring vast amounts of data for prolonged period, Dr. ZHANG from PR China encouraged the Meeting to think over seriously before initiating. Ms. JANG from RO Korea also suggested to develop training model tailoring to the needs of different target stakeholder groups to maximize results.

### 10. Review of TORs for regional activities

- 46. The Chair requested the Meeting to provide response on two issues 1) potential agenda or topics to be discussed on the next Meeting and 2) process for approval of "Biodiversity Conservation Plan" if necessary.
- 47. In response to the issue on next meeting, Dr. ZHANG from PR China proposed to have next RWG-H meeting on April or June 2018 in PR China. As for the approval process of "YSLME Biodiversity Conservation Plan", both countries expressed difficulties due to complicated internal process. The Meeting recognized the need for acceptance by participating countries and suggested to seek guidance at the 2nd ICC.

### 11. Other business

- 48. Dr. ZHANG from PR China invited the Secretariat to participate in the MPA training course held in October 2017 and invited YSLME Project to consider organizing a joint MPA workshop with NEAMPAN to be held in PR China. Ms. CHAE from RO Korea encouraged the Secretariat to attend the MPA training course and share valuable information with countries.
- 49. Ms. Jahee LEE from Eco-Horizon Institute from RO Korea introduced educational material developed in 2015 for "Sustainable Fishery and YS Conservation" which provide basic background on three major themes – 1) definition of sustainable fishery; 2) significance of habitat conservation in the YS; and 3) introduction of YSLME project.
- 50. Ms. CHAE from RO Korea encouraged the Secretariat to make meeting documents available at least two weeks prior to the meeting.

### 12. Wrap-up and closure of the meeting

- 51. In the wrap-up, the representatives of RWG from PR China and RO Korea expressed their appreciation to the Secretariat for organizing this Meeting. The Meeting understood that close and enhanced cooperation from two participating countries is necessary to deal with critical works ahead.
- 52. The Chair expressed his appreciation to all participants for their active participation and friendship in the discussions.
- 53. Following the closing remarks, the Chair declared the closure of the meeting at 12:00 P.M. on 6th September 2017.

## Annex 1. List of Participants

#### **PR CHINA**

#### Mr. Zhaohui ZHANG

Director Research Center for Marine Ecology, The First Institute of Oceanography, State Oceanic Administration NO.6 Xianxialing Road, Qingdao, 266061, P.R. China Tel: +86-532-88968526 Email: zhang@fio.org.cn

#### Mr. Linlin ZHAO

Assistant Researcher The First Institute of Oceanography, State Oceanic Administration NO.6 Xianxialing Road, Qingdao, 266061 P.R. China Tel: +86-13969676392 Email: zhaolinlin@fio.org.cn

#### Ms. Shuyun LI

Assistant Researcher The First Institute of Oceanography, State Oceanic Administration NO.6 Xianxialing Road, Qingdao, 266061 P.R. China Email: lishuyunouc@163.com

#### **RO Korea**

#### Mr. Gyung Soo PARK

Dean, College of Letters and Science, Department of Marine Biotechnology, Anyang university 602-14, Jungang-ro, Buleun-myeon Ganghwa-gun, Incheon, 417-833 RO Korea Tel: 82-32-930-6032, 82-10-2051-8699` Fax: 82-32-930-6036 Email: gspark@anyang.ac.kr

#### Mr. Keun-Hyung CHOI

Assistant professor Department of Oceanography and Ocean Environmental Sciences Chungnam National University 99 Daehak-ro, Yuseong-gu, Daejeon, 34134 RO Korea Tel: 82-42-821-6432 Email: keunhchoi@cnu.ac.kr

#### **Ms. Sunyoung CHAE**

International Affairs Specialist International Affairs Team, Korea Environment Management Corporation(KOEM) 28, Songpadaero 28 gil, Songpagu, Seoul, 05718 RO Korea Tel: +82-2-3498-8588, +82-10-7374-5838 Email: sychae@koem.or.kr

#### Mr. Si Wan LEE

Director Korea Institute of Environmental Ecology 754 Gwanpyung-dong Yusung-gu Daejeon, 305-509, RO Korea Tel: 82-42-825-6477 Fax: 82-42-825-6478 Email: jiam@kienv.co.kr

#### Ms. Ji Young JANG

Principal Researcher Eco-Horizon Institute 2F, 561-60, Yeonnam-dong Mapo-gu, Seoul 121-869, RO Korea Tel: 82-2-338-9572, 82-18-730-7775 Fax: 82-2-338-9575 Email: ecojangjy@gmail.com

#### Ms. Jahee LEE

Researcher Eco-Horizon Institute 2F, 561-60, Yeonnam-dong Mapo-gu, Seoul 121-869, RO Korea Tel: 82-2-338-9572, 82-10-4357-1024 Email: chik@ecoin.or.kr

#### **OBSERVER**

#### Mr. Spike MILLINGTON

East Asian-Australasian Flyway Partnership (EAAFP) Secretariat Chief Executive 3rd Floor, G-Tower, 175 Art center-daero, Yeonsu-gu, Incheon 22004, RO Korea Tel: 82-32-458-6509 Email: cheif@eaaflyway.net

#### SECRETARIAT

#### Mr. Yinfeng GUO

CTA/Manager 18th Floor, G-Tower, 175 Art center-daero, Yeonsu-gu, Incheon 22004, RO Korea Tel: +82-70-4161-2241 Email: YinfengG@unops.org

#### Mr. Sangjin LEE

Environmental Economist 18th Floor, G-Tower, 175 Art center-daero, Yeonsu-gu, Incheon 22004, RO Korea Tel: +82-70-4161-2242 Email: SangjinL@unops.org

#### Ms. Kyungsuk LEE

Administrative/MIS/Finance Assistant 18th Floor, G-Tower, 175 Art center-daero, Yeonsu-gu, Incheon 22004, RO Korea Tel: +82-32-859-7711 Email: LeeK@unops.org

## Annex 2. Agenda

5 September (Tuesday)		
09:30~10:00	Registration for participants	
10:00~10:15	Opening of the meeting <ul> <li>Welcome addresses</li> <li>Introduction of the members and participants</li> </ul>	
10:15~10:30	Group Photo and Coffee Break	
10:30~10:50	Organization of the meeting • Election of Chair and designation of rapporteurs • Adoption of agenda	
10:50~11:50	<ul> <li>Review and refine the following documents approved by the Interim YSLME Commission:</li> <li>Terms of Reference of RWGs and Chairs/Vice Chairs;</li> <li>TOR of RWG-H;</li> <li>RWG-H workplan (2017-2019)</li> </ul>	
11:50~12:10	Review workplan for 2017 and activities, and work arrangement among RWG-H members	
12:10~12:30	Key elements of the YSLME Biodiversity Conservation Plan (no documents) and process for adoption (the Chair will facilitate a discussion and agree on draft elements of the YBCP and process for review and adoption by the two countries)	
12:30~13:30	Lunch	
13:30~14:00	(Continued) Key elements of the YSLME Biodiversity Conservation Plan (no documents) and process for adoption	
14:00~15:30	Review the draft YSLME Biodiversity Conservation Planning Workshop (meeting document) (the Secretariat will present the program. It is expected that the meeting will agree on the venue, dates, outcomes of the workshop, sessions and outputs, Chair-co-chairs of each session, speakers from RO Korea and China and other organizations under each session, and facilitators of break-out group discussions, and field visit program)	
15:30~15:45	Coffee Break	
15:45~16:10	Budget for the workshop	
16:10~18:00	<ul> <li>Review of Terms of Reference (ToR) of consultants to contribute to the workshop (meeting documents)</li> <li>Environmental Planning Specialist for assessment of coastal and marine habitats and species of critical global and regional significance in the Yellow Sea and drafting of YSLME Biodiversity Conservation Plan</li> <li>Natural Resource Specialist to Assess Coastal Reclamation and Impact to Critical Coastal Habitats of Yellow Sea Large Marine Ecosystem</li> <li>Legal Expert to Assist in Strengthening the Capacity of National and Local Government to Improve China's Compliance with International and Regional Treaties and Programs</li> <li>Consultant to synthesize progress with coastal and marine ecosystem and community impact assessment in YS region</li> <li>Consultant to harmonize valuation methodologies, standards and guidelines for evaluation of the effectiveness and impact of ecosystem-based restoration projects</li> </ul>	

6 September (Wednesday)		
09:00~11:00	<ul> <li>Review of TORs for regional activities</li> <li>Activity 4 of Output 4.1.1: develop strategies and governance mechanisms to achieve regional habitat and species targets at 2 demonstration sites, including assessment of impacts of modification of areas of critical habitats and monitoring the effectiveness of management plans</li> <li>Activity 2 of Output 4.2.1: analysis of country coastal management guidelines, identification of conservation areas according to planning zones;</li> <li>Activity 3 of Output 4.2.1: survey and produce overlays to analyze gaps and conservation needs of critical species and habitats (i.e. seal, migratory birds, fish spawning and nursery sites, cold water mass, etc.) and make recommendations on new MPAs</li> <li>Activity 7 of Output 4.4.2. Prepare training modules on ecosystem-based management in LME 1) ecosystem carrying capacity (ECC) – habitat-based and food-chain based approaches for habitat conservation; and 2) ECC: MPA networking</li> </ul>	
11:00~11:15	Coffee Break	
11:15~11:30	Agenda of next RWG meeting back to back to planning workshop	
11:30~11:40	Other Business	
11:40~11:50	Wrap-up and closure of the Meeting	
11:50~	Lunch	

### Annex 3. Terms of reference

#### Background

UNDP/GEF is providing assistance through UNOPS to countries bordering Yellow Sea in support of their efforts to address among others the increasing trends of depleting fishery stocks, loss of coastal wetland, land and sea-based pollution and implementation of the Yellow Sea Large Marine Ecosystem Strategic Action Programme (YSLME SAP) adopted by China and RO Korea with support of DPR Korea. One of the assistance programs to implement the SAP is the UNDP/GEF/UNOPS project entitled Implementing the Strategic Action Programme for the Yellow Sea Large Marine Ecosystem: Restoring Ecosystem Goods and Services and Consolidation of a Long-term Regional Environmental Governance Framework, or the UNDP/GEF YSLME Phase II Project. The project was launched in July 2017.

The objective of this regional project is to achieve adaptive ecosystem-based management of the Yellow Sea Large Marine Ecosystem bordered by China, RO Korea and DPR Korea by fostering long-term sustainable institutional, policy and financial arrangements for effective ecosystem-based management of the Yellow Sea in accordance with the YSLME SAP.

There are four components of the project:

- · Sustainable national and regional cooperation for ecosystem based management.
- · Improved Ecosystem Carrying Capacity with respect to provisioning services.
- Improved Ecosystem Carrying Capacity with respect to regulating and cultural services.
- Improved Ecosystem Carrying Capacity with respect to supporting services.

The key outcomes sought are:

- Establishment of a self-sustaining cooperative mechanism for ecosystem-based management.
- Recovery of depleted fish stocks and improved mariculture production and quality.
- · Improved ecosystem health;
- improved inter-sectoral coordination and mainstreaming of ecosystem based management principles at the national level, maintenance of habitat areas, strengthened stakeholder participation in management and improved policy making.
- · Skills and capacity significantly developed for region-wide ecosystem-based management.

Based on the three-year workplan of the Project, terms of reference of the consultants and subcontracts to undertake key activities related with Component 4 are prepared for review and adoption by the RWG-H in its 1st Meeting held on 5-6 September 2017.

# 1. Biodiversity Planning Specialist for assessment of coastal and marine habitats and species of critical global and regional significance in PR China in the Yellow Sea

#### Background

Component 4 addresses improving ecosystem carrying capacity with respect to supporting services. In Outcome 4.1 of Component 4 entitled "Maintenance of current habitats and the monitoring and mitigation of the impacts of reclamation", the project will support a series of activities leading to the development and adoption of the YSLME Biodiversity Conservation Plan including the targets to ensure areas of critical habitats are kept at baseline level. Output 4.1.1 of Outcome 4.1 specifically seeks to arrive at an agreement at all levels to implement the relevant management actions to regulate new coastal zone reclamation project. As one of proposed activities, assessment of coastal and marine habitats, and species of critical global and regional significance can and should be used for habitat management, conservation, and restoration

in the YS. Understanding of the distribution, abundance, and functions of coastal and marine habitats will also assist in coastal and marine spatial planning (CMSP), particularly with effective siting, design, and monitoring of marine protected areas (MPAs). Further, understanding and predicting the effects of climate change and other anthropogenic impacts on ocean resources will require an increased emphasis on marine habitat.

In order to implement biodiversity conservation plan, one of the targets expected to be achieved during the YSLME Project Phase II, assessment of coastal and marine habitats in PR China in the YS should be carried out by focusing on 23 Potential Priority Areas (PPAs) with collection of findings on distribution of endangered and threatened marine organisms, spawning, nursery and feeding grounds, cold water mass (CWM), and endangered migratory waterbirds. Since the Project Phase I, the coastal and marine ecosystems and ecosystem services have already been greatly changed and are still facing threats. Findings from assessment of coastal and marine habitats and critical species in the YS will contribute to the understanding of current status of ecosystems in PR China in the YS by providing guidance for regional biodiversity conservation plan in this region and integration and development of the YSLME MPA Network. In this context, the project plans to mobilize one consultant in PR China and one in RO Korea for assessment of coastal and marine habitats and critical species with following terms of Reference.

#### **Objectives**

The objective underlying the proposed consultancy is to enhance resilience of YSLME biodiversity and ecosystems by strengthening the coverage and connectivity of MPAs and reduce the loss of coastal and marine habitats and species of critical global and regional significance in support of achieving SDG 14 and implementing CBD, RAMSAR and other relevant Conventions.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

• A draft framework plan for YSLME Biodiversity Conservation in the Yellow Sea

#### Activities

Under supervision of the Chief Technical Advisor and Regional Working Group on Habitat of YSLME Phase II Project, in close collaboration with the local project team, the consultant will:

- Conduct desk review to assess the status and trends of threats, stresses and underlying causes (drivers) using existing
  information on biological (e.g., distribution of endangered and threatened marine organisms, spawning, nursery and
  feeding grounds, endangered migratory water-birds, and etc.), physical factors (e.g., climate change, CWM, etc.), policy
  (reclamation, urbanization, marine economic development, etc) affecting coastal and marine ecosystems as contained
  in the NBSAPs, CBD country reports, RAMSAR reports in China to the extent possible;
- Analyze constraints, opportunities, threats, issues, problems and capacity needs and identify solutions (management tools such as MPA network, research and monitoring, education, spatial planning and awareness raising, regulatory tools ranging from regulations and permits to enforcement) through consultation with stakeholders and interest groups;
- Prepare the draft framework plan for YSLME biodiversity conservation (2018-2030) with three stages and submit it for consultation and review by members of the Regional Working Group on Habitat of the YSLME Phase II Project;
- Develop explicit goals, time-bound targets and actions in line with the proposed solutions to assist the bordering countries of YSLME to implement provisions of the CBD, Ramsar and other conventions at a regional approach;
- Present the framework plan and facilitate the conduct of a Biodiversity Conservation Planning Workshop to be conducted in May, 2018, in Rudong, PR China for consultation, validation and refinement on different elements of a conservation plan with different stakeholders;
- Incorporate comments and consolidate into a final draft YSLME Biodiversity Conservation Plan (2018-2030) in collaboration with Biodiversity Planning Specialist in RO Korea in hard copy (in English) and electronically.

#### Inputs

UNDP/GEF YSLME Phase II Project management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in the Biodiversity Conservation Planning Workshop by the PMO.

#### Timing

The consultancy will begin in mid-September 2017 and complete in 31 December 2017.

#### Reporting

The consultant will produce the following reports within the specified timeframe:

- By October 16, prepare and submit a draft framework plan for YSLME biodiversity conservation (2018-2030) in PR China in collaboration with the planning expert in RO Korea; key elements of the framework plan include:
  - Status of marine biodiversity in PR China;
  - Challenges and difficulties
  - principles for development of the YSLME biodiversity conservation plan;
  - objectives and timeframe
  - priority areas
  - actions and activities
  - monitoring and evaluation
- By December 20, submit the consolidated YSLME Biodiversity Conservation Plan (2018-2030);

The consultant can submit reports electronically to the PMO. All reports should be submitted in English.

#### Competencies

- · A good understanding of development and biodiversity contexts of North East Asia
- Advanced university education at MSc or Ph.D. level with expertise in the area of biology, marine sciences or natural resource management
- At least 7 years of professional experience in coastal and marine ecosystems
- · Strong skills in analysis and evaluation, and experience in biodiversity assessment and planning
- Ability to produce high quality reports, publications in English
- · Previous experience with GEF projects and environmental planning is an added plus
- Fluency in Chinese

# 2. Biodiversity Planning Specialist for assessment of coastal and marine habitats and species of critical global and regional significance in RO Korea and DRP Korea in the Yellow Sea

#### Background

Component 4 addresses improving ecosystem carrying capacity with respect to supporting services. In Outcome 4.1 of Component 4 entitled "Maintenance of current habitats and the monitoring and mitigation of the impacts of reclamation", the project will support a series of activities leading to the development and adoption of the YSLME Biodiversity Conservation Plan including the targets to ensure areas of critical habitats are kept at baseline level. Output 4.1.1 of Outcome 4.1 specifically seeks to arrive at an agreement at all levels to implement the relevant management actions to regulate new coastal zone reclamation project. As one of proposed activities, assessment of coastal and marine habitats, and species of critical global and regional significance can and should be used for habitat management, conservation, and restoration in the YS. Understanding of the distribution, abundance, and functions of coastal and marine habitats will also assist in

coastal and marine spatial planning (CMSP), particularly with effective siting, design, and monitoring of marine protected areas (MPAs). Further, understanding and predicting the effects of climate change and other anthropogenic impacts on ocean resources will require an increased emphasis on marine habitat.

In order to implement biodiversity conservation plan, one of the targets expected to be achieved during the YSLME Project Phase II, assessment of coastal and marine habitats in RO Korea and DPR Korea in the YS should be carried out by focusing on 23 Potential Priority Areas (PPAs) with collection of findings on distribution of endangered and threatened marine organisms, spawning, nursery and feeding grounds, cold water mass (CWM), and endangered migratory waterbirds. Since the Project Phase I, the coastal and marine ecosystems and ecosystem services have already been greatly changed and are still facing threats. Findings from assessment of coastal and marine habitats and critical species in the YS will contribute to the understanding of current status of ecosystems in RO Korea and DPR Korea in the YS by providing guidance for regional biodiversity conservation plan in this region and integration and development of the YSLME MPA Network. In this context, the project plans to mobilize one consultant in RO Korea and one in PR China for assessment of coastal and marine habitats and critical species with following terms of Reference.

#### **Objectives**

The objective underlying the proposed consultancy is to enhance resilience of YSLME biodiversity and ecosystems by strengthening the coverage and connectivity of MPAs and reduce the loss of coastal and marine habitats and species of critical global and regional significance in support of achieving SDG 14 and implementing CBD, RAMSAR and other relevant Conventions.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

• YSLME Biodiversity Conservation Plan for RO Korea and DPR Korea in the Yellow Sea

#### **Activities**

Under supervision of the Chief Technical Advisor and Regional Working Group on Habitat of YSLME Phase II Project, in close collaboration with the local project team, the consultant will:

- Conduct desk review to assess the status and trends of threats, stresses and underlying causes (drivers) using existing
  information on biological (e.g., distribution of endangered and threatened marine organisms, spawning, nursery and
  feeding grounds, endangered migratory water-birds, and etc.), physical factors (e.g., climate change, CWM, etc.), policy
  (reclamation, urbanization, marine economic development, etc) affecting coastal and marine ecosystems as contained
  in the NBSAPs, CBD country reports, RAMSAR reports in RO Korea and DPR Korea to the extent possible;
- Analyze constraints, opportunities, threats, issues, problems and capacity needs and identify solutions (management tools such as MPA network, research and monitoring, education, spatial planning and awareness raising, regulatory tools ranging from regulations and permits to enforcement) through consultation with stakeholders and interest groups;
- Prepare the draft framework plan for YSLME biodiversity conservation (2018-2030) with three stages and submit it for consultation and review by members of the Regional Working Group on Habitat of the YSLME Phase II Project;
- Develop explicit goals, time-bound targets and actions in line with the proposed solutions to assist the bordering countries of YSLME to implement provisions of the CBD, Ramsar and other conventions at a regional approach;
- Present the framework plan and facilitate the conduct of a Biodiversity Conservation Planning Workshop to be conducted in November 7-10 in Rudong China for consultation, validation and refinement on different elements of a conservation plan with different stakeholders;
- Incorporate comments and consolidate into a final draft YSLME Biodiversity Conservation Plan (2018-2030) in collaboration with Biodiversity Planning Specialist in PR China in hard copy (in English) and electronically.

#### Inputs

UNDP/GEF YSLME Phase II Project management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in the Biodiversity Conservation Planning Workshop by the PMO.

#### Timing

The consultancy will begin in mid-September 2017 and complete in 31 December 2017.

#### Reporting

The consultant will produce the following reports within the specified timeframe:

- By October 16, prepare and submit a draft framework plan for YSLME biodiversity conservation (2018-2030) in RO Korea and DPR Korea in collaboration with the planning expert in PR China. Key elements of the framework plan include:
  - Status of marine biodiversity in RO Korea and DPR Korea;
  - Challenges and difficulties
  - principles for development of the YSLME biodiversity conservation plan;
  - objectives and timeframe
  - priority areas
  - actions and activities
  - monitoring and evaluation
- By December 20, submit the consolidated YSLME Biodiversity Conservation Plan (2018-2030);

The consultant can submit reports electronically to the PMO. All reports should be submitted in English.

#### Competencies

- · A good understanding of development and biodiversity contexts of North East Asia
- Advanced university education at MSc or Ph.D. level with expertise in the area of biology, marine sciences or natural resource management
- At least 7 years of professional experience in coastal and marine ecosystems
- · Strong skills in analysis and evaluation, and experience in biodiversity assessment and planning
- Ability to produce high quality reports, publications in English
- · Previous experience with GEF projects and environmental planning is an added plus
- Fluency in Korean

# 3. Legal Expert to Assist in Strengthening the Capacity of National and Local Government to Improve Compliance with International and Regional Treaties and Programs

#### Background

In Component 1 of the Project, the project seeks to improve the compliance with regional and international treaties, agreements and guidelines by participating countries in Yellow Sea. During the governance analysis stage, it is recognized that lack of adequate legal instruments, and weak or non-existing enforcement of existing rules and laws with a lack of compliance among stakeholders constitute the major legal challenges to restoring the ecosystem carrying capacity of the Yellow Sea. In response, the YSLME SAP has identified the following actions to strengthen the legal framework and successful enforcement of laws and regulation:

- 1. Development a protocol to control dumping at sea (Action 4.2);
- 2. Effectiveness implementation of MARPOL 1973/78 for control of oil pollution (Action 4-3);

In the proposed actions to improve effectiveness of legal instruments of the YSLME SAP, it is suggested to improve the implementation of international and regional treaties and guidelines and improve the scope of coverage and enforcement of legal instrument. In the regard, the following additional actions are proposed:

- 3. Ensure full ratification of the treaties;
- 4. Developing regional guidelines to incorporate suggested guidelines of the FAO Code of Conduct for Responsible Fisheries into YSLME's context;
- 5. Developing regional guidelines on matters not covered by UNCLOS, CBD, RMSAR, including reducing pollution discharge from sea-based (e.g. mariculture) and atmospheric deposition of pollutants, and marine litter (in particular microplastics).

In the GEF Global International Waters Assessment conducted in 2005, the following legal reforms are suggested to be included in the YSLME SAP:

- 6. Enhancement of laws and enforcement mechanisms related to pollution prevention and wastewater treatment practices;
- 7. Development, harmonization and enforcement of a legal framework to control the use and disposal of fertilizers and pesticides;
- 8. Development and enforcement of suitable laws and regulations to promote good practices in agriculture and to restrict the introduction of alien and invasive species for aquaculture;
- 9. Development and implementation of policy and law enforcement mechanisms to restrict destructive fishing practices;
- 10. Enhancement of laws, regulations and enforcement mechanisms to restrict the entry of excessive fishing fleets and fishermen into the fishing industry

In the governance analysis, the following are also highlighted as critical to improvement enforcement:

11. Enhance the skills and qualifications of managers and technical through adequate training.

With regards to the scope of implementation and enforcement, the Project Documents defines the scope of the assessment as the following:

- UNCLOS
- CBD
- 1972 Convention on the Prevention and of Marine Pollution by Dumping of Wastes and Other Matter
- 1973 International Convention for the Prevention of Marine Pollution from Ships and its 1978 Protocol
- RAMSAR
- FAO Code of Conduct for Responsible Fisheries
- UNFCCC

#### **Objectives**

The development objective underlying the proposed consultancy is the improvement of implementation of international and regional treaties and guidelines in participating countries of the Yellow Sea. In particular, the aim is to strengthen the national and local capacity in compliance with international and regional treaties and guidelines and enhance the capacity of law enforcement. The consultancy will also be devoted to improve education of ecosystem-based management of LMEs in marine affairs, marine policy and law at appropriate institutions.

#### **Immediate Objectives**

In order to improve the implementation of international treaties and guidelines in YS, the specific objective of the consultancy includes:

 the compliance of national legal and regulatory framework in identified areas to international and regional treaties and guidelines shall be assessed, weakness and gaps identified and recommendations for improvement and strengthening and training proposed; 2. preparation of training module to synergize implementation of international environmental treaties and conventions using EBM approach in LMEs;

#### **Expected Outputs**

The Legal Expert is expected to deliver the following results:

- an assessment report of the weakness and gaps of legal framework in compliance with international and regional treaties and guidelines, and recommendations for improvement and strengthening;
- an assessment report of national and local capacity in implementing of existing international legal and regional treaties and guidelines and a capacity development plan with identification of partners, stakeholders whose capacities should be developed, availability of expertise and training modules;
- a training module on synergizing implementation of international environmental treaties and conventions in light of ecosystem-based management of YSLME

#### Activities

Activities include but not necessarily limited to the following tasks:

# Output 1: an assessment report of the weakness and gaps of legal framework in compliance with international and regional treaties and guidelines, and recommendations for improvement and strengthening;

- synthesize the obligations of Parties to international agreements and conventions or global guidelines under the UNCLOS, CBD, UNFCCC, RMSAR Convention, 1972 Convention on the Prevention and of Marine Pollution by Dumping of Wastes and Other Matter, 1973 International Convention for the Prevention of Marine Pollution from Ships and its 1978 Protocol, and FAO Code of Conduct for Responsible Fisheries, Global Programme of Action to reduce pollution from land-based sources, Global Nutrient Partnerships, Global Marine Litter Program, FAO Code of Conduct for Responsible Fisheries, etc
- assess the level of compliance of China to the above agreements and conventions and guidelines and identify gaps and weakness in national legislation and regulatory framework;
- formulate recommendation for improvement to enable China to fully comply with obligations of international agreements and conventions and guidelines;

# Output 2: an assessment report of national and local capacity in implementing of existing international legal and regional treaties and guidelines and a capacity development plan with identification of partners, stakeholders whose capacities should be developed, availability of expertise and training modules;

- review the capacity needs at institutional and individual levels for China to implement and enforce international agreements, agreements and guidelines and programs it has acceded to or ratified, and identify stakeholders for capacity development, partners to develop capacity, availability of expertise and training modules and materials;
- · prepare a capacity development plan based on the review for consultation and adoption;
- present the results of legal gaps assessment with international agreements, conventions, programs and guidelines at regional workshops to be held in early November, 2017, and seek consensus among stakeholders from China and RO Korea in particular.
- Participate in capacity development and training of managers and officers at national and local levels to improve China's compliance and enforcement effectiveness of international agreements and conventions;

# Output 3: a training module on synergizing implementation of international environmental treaties and conventions in light of ecosystem-based management of YSLME

- Based on identified environmental issues and challenges, synthesize the legislation, policy, mechanisms and capacities to be in place for participating countries to implement and enforce international environmental agreements and conventions;
- · identify opportunities of synergizing efforts of national and local governments in implementation and enforcement of

these international instruments in line with ecosystem-based management of LME based on the experiences of YSLME;

• Prepare a training module in English with the view of synergizing efforts of national and local governments in implementation and enforcement of international agreements, conventions, treaties, program and guidelines for effective implementation of the YSLME SAP in line with ecosystem-based management.

#### Inputs

UNDP/GEF YSLME Phase II Project Management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics in relation to participation of the consultant in workshops and meetings as deemed necessary by the PMO.

#### Timing

The consultancy will start in mid-September 2017 and end in December 2018

#### **Reporting and other services**

The consultant will produce:

- A detailed assessment report the weakness and gaps of legal framework in compliance with international and regional treaties and guidelines related with coastal and oceans, and recommendations for improvement and strengthening;
- An assessment report of national and local capacity in implementing of existing international legal and regional treaties and guidelines and a capacity development program with identification of partners, stakeholders whose capacities should be developed, availability of expertise and training modules;
- A 100-page training module on synergizing implementation of international environmental treaties and conventions in light of ecosystem-based management of YSLME

The consultant will submit both electronically and in hard copy in the number of 2 copies to PMO and 2 copies to UNOPS. The reports will be submitted in English.

The consultant will deliver:

- At least two trainings in improving capacity to implement and enforce international agreements and conventions for the protection of the YSLME;
- At least two presentations of progress to the Management, Science and Technical Panel, or at regional working group on Governance or Habitat;

#### Competencies

- A good understanding of global ocean agenda, and policy, legal and institutional context of PR China and RO Korea;
- Advanced university education at MSc or PhD level with expertise in the area of law, policy and ocean governance;
- At least 5 years of professional experience
- Previous experiences in environmental policy making and legal reform and ecosystem-based management
- Ability to produce high quality reports in English;
- Excellent written and spoken English

# 4. Natural Resource Specialist to Assess Coastal Reclamation and Impact to Critical Coastal Habitats of Yellow Sea Large Marine Ecosystem

#### Background

Component 4 will address the habitat loss in particular coastal habitats. The main cause of the habitat loss has been land reclamation, especially in estuaries and shallow bays. Coastal mudflat reclamation has been mainly for expansion of aquaculture and mariculture, building houses, apartment and industrial areas. Approximately 880,000 ha of Yellow Sea mudflat areas have been reclaimed. This comprises 37% of the inter-tidal areas of the Chinese portion of the Yellow Sea, which have been reclaimed since 1950, and 43% of the mudflats on the ROK coast, which has been reclaimed since 1917. The main effect of habitat loss is on the composition of assemblages of organism communities in tidal mudflats, especially benthic organisms, water birds and reduced resting and feeding grounds for migratory birds.

In Outcome 4.1 of Component 4 entitled "Maintenance of current habitats and the monitoring and mitigation of the impacts of reclamation", the project will support a series of activities leading to the development and adoption of the YSLME Biodiversity Conservation Plan including the targets to ensure areas of critical habitats at baseline level. Output 4.1.1 of Outcome 4.1 specifically seeks to arrive at an agreement at all levels to implement the relevant management actions to regulate new coastal zone reclamation project.

#### Objectives

The development objective underlying the proposed consultancy is improved understanding of the trends and impact of reclamation projects and identification of opportunities for maintaining the critical habitats based on criteria of RAMSAR and Birdlife International.

#### **Immediate Objectives**

Specific objectives of the consultancy include:

- Support the PM to review of the status of critical coastal wetlands in estuarian and shallow bays in particular, and the areas and locations of reclamation projects up to 2016, and projected future reclamation plan and their impact to the identified critical habitats in the YSLME.
- help to develop policy and legal recommendations and propose management measures to maintain the areas of critical habitats.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

- A review report of the past and future reclamation projects and implication to the critical coastal habitats identified by RAMSAR and Birdlife International;
- Legal, policy and management measures recommended for maintenance of the existing critical habitats to improve the ecosystem carrying capacity of supporting services of YSLME.

#### Activities

Activities include but not necessarily limited to the following tasks:

- 1. Desk review of conservation gaps of coastal habitats using the criteria of RAMSAR and Important Bird Areas (IBAs) of Birdlife International in coastal areas of Yellow Sea;
- 2. Review of status, patterns, areas and number of reclamation projects in coastal areas of Yellow Sea as of 2016, and develop maps;
- 3. Review the areas, location and timeframe of projected reclamation projects in Yellow Sea overlapping with the identified critical habitats, and develop maps;
- 4. Assess the potential ecological implications of previous, existing and future projects;

- 5. Assess the adequacy and rigorousness of legislation, policies and guidelines in the control of reclamation projects with impacts on the identified critical habitats, and propose recommendations for improvements.
- 6. Present the initial results of the assessment at the YSLME Biodiversity Conservation Planning Workshop to be held in the second week of November, 2017, in Rudong, China
- 7. Finalize the report for publication as a YSLME Knowledge Product.

#### Inputs

UNDP/GEF YSLME Phase II Project Management Office (PMO) will provide the background information and documents.

#### Timing

The consultancy will start in November 1, 2017 and complete in March 31, 2017

#### Reporting

The consultant will produce a review report of the past and future reclamation projects and implication to the critical coastal habitats identified by RAMSAR and Birdlife International with recommended legal, policy and management measures for maintenance of the existing critical habitats to improve the ecosystem carrying capacity of supporting services of YSLME.

The consultant will submit both electronically and in hard copy in the number of 2 copies to PMO. The initial draft should be submitted to PMO before October 31 for inclusion in workshop documents. Second version should be submitted before December 1 for review by PMO. Final version should be submitted before December 31 for publication as a knowledge product of the YSLME. All reports should be submitted in English.

Competencies

- Advanced university education at MSc with expertise in the area of remote sensing, natural science, oceanography, and environmental policy making or another related field with at least 5 years of relevant professional experience is required
- Bachelor's Degree with additional two years of relevant experience may be accepted in lieu of a advanced university degree (MSc)
- Previous experiences in conservation gap analysis and application of remote sensing and mapping is an asset
- · Ability to produce high quality reports within deadline is required
- Fluency in English is required
- · Fluency in Chinese is an asset

#### 5. Marine Protected Area Planning Specialist for to draft a proposal for a YSLME MPA Network

#### Background

Component 4 addresses improving ecosystem carrying capacity with respect to supporting services. In Outcome 4.1 of Component 4 entitled "MPA Network strengthened in the Yellow Sea", the project will support a series of activities leading to the expansion of the MPA system that will take into account connectivity measured by use of developed connectivity toolkit or other means and increase in management effectiveness of existing MPAs.

During the YSLME Project Phase II, assessment of coastal and marine habitats in the YS will also be carried out by focusing on 23 Potential Priority Areas (PPAs) with collection of findings on distribution of endangered and threatened marine organisms, spawning, nursery and feeding grounds, cold water mass (CWM), and endangered migratory waterbirds. Findings from assessment of coastal and marine habitats and critical species in the YS will contribute to the understanding of current status of ecosystems in the YS by providing guidance for regional biodiversity conservation plan in this region and development of the YSLME MPA Network. In this context, the project plans a engage consultancy to prepare a concept paper for establishing the YSLME MPA Network .

#### Objectives

The objective underlying the proposed consultancy is to enhance resilience of YSLME biodiversity and ecosystems by strengthening the coverage and connectivity of MPAs and reduce the loss of coastal and marine habitats and species of critical global and regional significance in support of achieving SDG 14 and implementing CBD, RAMSAR and other relevant Conventions.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

• A proposal for an YSLME management-based MPA Network

#### Activities

The consultant under supervision of the Chief Technical Advisor and technical guidance of the Regional Working Group on Habitat, in close collaboration with the national project team, will help to develop a proposal for an YSLME managementbased MPA Network to be established on the basis of agreed selection criteria, areas of connectivity, common goals and objectives, cross management strategies applicable to all MPAs in the network, sustainability and lessons learnt in similar networks. Specific activities include:

- Review the existing YSLME MPA Network, MPA networks of China, RO Korea and DPR Korea, to the extent possible and develop a list of MPAs in the YSLME with identification of conservation objectives and key species or ecosystem for protection;
- 2. Using EBSA criteria to assess the relevance of the MPAs to the key biodiversity areas of YSLME in particular 23 Potential Priority Areas (PPAs) of the WWF YSLME ecoregion project, to identify and/or confirm the conservation focus of biodiversity in the region.
- 3. Identify areas of connectivity among the existing MPAs in the three countries in particular MPAs inside or to be established in the 23 PPAs;
- 4. Using the recognized criteria for selection of MPAs for networking, taking into account of both social and cultural context as well as assessment results, propose a network of MPAs at regional level for improved management effectiveness;
- In order to achieve consistency and coordination to enhance management effectiveness on a larger ecosystem-based spatial scales of the proposed MPA network, propose program areas (such as research and monitoring, education and awareness building) and regulatory tools (regulations, permits, enforcement, ICM plan, etc) as areas of collaboration and coordination;
- 6. Adapt existing MPA networking training modules on the basis of Dr. Alan White's publication to YSLME context and prepare a training program for networking of MPA in YSLME.
- 7. Consolidate the assessment results, program areas and training program into a concrete proposal for strengthening the YSLME MPA Network;
- 8. Present the proposal at the YSLME Biodiversity Conservation Planning Workshop to be held tentatively in May 2018 in Rudong, Jiangsu of China, and facilitate a discussion on proposal;
- 9. Taking into account the comments from the workshop, revise and develop the proposal into a program for the YSLME MPA Network review by Regional Working Group on Habitat and Project Management Office.

#### Inputs

UNDP/GEF YSLME Phase II Project management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in the Biodiversity Conservation Planning Workshop by the PMO.

#### Timing

The consultancy will begin in October 18, 2017 to June 30, 2018.

#### Reporting

The consultant will produce the following reports within the specified timeframe:

- By December 10, submit a working draft of the proposal for strengthening the YSLME MPA Network;
- By March 31, submit the training program and modules
- By June 30, submit the final proposal YSLME MPA Network for implementation by the Project

The consultant can submit reports electronically to the PMO. All reports should be submitted in English.

#### Competencies

- · A good understanding of development and biodiversity contexts of North East Asia
- Advanced university education at MSc or Ph.D. level with expertise in the area of biology, marine sciences or natural resource management
- At least 7 years of professional experience in coastal and marine ecosystems
- · Strong skills in analysis and evaluation, and experience in implementing environmental projects
- · Ability to produce high quality reports and publications in English
- Previous experience with MPA networking and planning is an added plus

# 6. Consultant to harmonize valuation methodologies, standards and guidelines for evaluation of the effectiveness and impact of ecosystem-based restoration projects

#### Background

Component 4 addresses improving ecosystem carrying capacity with respect to supporting services. In Outcome 4.1 of Component 4 entitled "Maintenance of current habitats and the monitoring and mitigation of the impacts of reclamation", the project will support a series of activities leading to the development and adoption of the YSLME Biodiversity Conservation Plan including the targets to ensure areas of critical habitats at baseline level. Output 4.1.1 of Outcome 4.1 specifically seeks to arrive at an agreement at all levels to implement the relevant management actions to regulate new coastal zone reclamation project. As one of proposed activities, sharing experience and good practice of restoration projects including valuation methodologies, standards and guidelines were planned by conducting regional and national workshops in the late of 2017. Sharing experience and good practice of restoration projects conducted in national/regional scale would contribute to achieve targets on development of YSLME biodiversity conservation plan.

#### **Objectives**

The objective underlying the proposed consultancy is sharing experience and good practice of restoration activities including methodologies, standards and guidelines in the YS.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

- A review report covering information on restoration activities including methodologies, standards and guidelines in the YS;
- Regional guidelines and/or standards, reflecting practices on coastal restoration efforts conducted by two countries to improve the ecosystem carrying capacity of supporting services of YSLME

#### Activities

The consultant under supervision of the Chief Technical Advisor and technical guidance of the Regional Working Group on Habitat in close collaboration with the local project team, will:

- · Review of ecosystem-based restoration activities implemented by two countries, both in China and RO Korea;
- Collect information on relevant assessment and evaluation guidelines of restoration projects at regional and global scale

- Analyze constraints, opportunities, threats, issues, problems and capacity needs and identify solutions through consultation with stakeholders and interest groups
- Prepare the draft review report and submit it for consultation and review, including presentation at a Biodiversity Conservation Planning Workshop for consultation with different stakeholders in November 2017
- · Incorporate comments and submit a final comprehensive report in hard copy (in English) and electronically

#### Inputs

UNDP/GEF YSLME Phase II Project management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in the Biodiversity Conservation Planning Workshop by the PMO.

#### Timing

The consultancy will begin in mid-September 2017 and complete in 31 December 2018.

#### Reporting

The consultant will produce a review report on ecosystem-based restoration activities conducted. The consultant will submit both electronically and in hard copy in the number of 2 copies to the PMO. The initial draft should be submitted to PMO before 31 October for inclusion in workshop documents. Second version should be submitted before 1 December for review by PMO. Final version should be submitted before 31 December for publication as a knowledge product of the YSLME. All reports should be submitted in English.

#### Competencies

- · A good understanding of ecosystem-based restoration both in China and Korea linked to biodiversity conservation
- Advanced university education at MSc or Ph.D. level with expertise in the area of biology, marine sciences or natural resource management
- At least 7 years of professional experience in restoration projects
- · Strong skills in analysis and evaluation, and experience in implementing environmental projects
- Ability to produce high quality reports, publications in English
- · Previous experience with GEF projects and ecosystem-based restoration project is an added plus
- Excellent writing skills in Chinese and English

# 7. Consultant to synthesize progress with coastal and marine ecosystem and community impact assessment in the Yellow Sea

#### Background

In the YS, climate change has resulted in increasing sea surface temperatures, changing the characteristics of the Yellow Sea Cold Water Mass (YSCWM) as a fish habitat and changing the structure of plankton communities. In Outcome 4.3 of Component 4 entitled "Adaptive management mainstreamed to enhance the resilience of the YSLME and reduce the vulnerability of coastal communities to climate change impacts on ecosystem processes and other threats identified in the TDA and SAP", the project will help better understanding of impacts of climate change to the coastal communities in the YS. Output 4.3.1 of Outcome 4.1 specifically seeks to adopt regional strategies on site-based ICM plans enhancing climate resilience. Impacts of climate change in the YS ecosystem, in particular the impacts of the plankton community, had been studied in the demonstration sites of the first project. There is a need for further efforts to determine the impacts of climate change were planned. Findings of this study conducted in national/regional scale would contribute to the development of regional strategies on adaptive management to enhance climate resilience.

#### **Objectives**

The objective underlying the proposed consultancy is conducting stock-taking vulnerabilities of coastal communities and ecosystem services in YSLME to impact of climate change. Findings of this study would contribute to other activities to be carried out by providing background information on sea surface temperature, impacts of plankton community and CWM in the YS.

#### **Expected Outputs**

The consultant is expected to deliver the following results:

- A stock-taking report on assessments of vulnerabilities of coastal communities and ecosystem services in YSLME to impact of climate change;
- A review report of current and emerging management measures planned and/or being implemented by both countries (China and RO Korea) in response to vulnerabilities of coastal communities and ecosystem services to impact of climate change

#### Activities

Under supervision of the Chief Technical Advisor and technical guidance of the Regional Working Group on Assessment and Monitoring, and in close collaboration with the local project team, the consultant will:

- Review of assessments on vulnerabilities of coastal communities and ecosystem services in YSLME to impact of climate change;
- Review existing information related to adaptation measures from both countries as well as scientific knowledge on sea surface temperature rise, impacts of plankton community and Yellow Sea cold water mass;
- · Collect relevant activities carried out in regional and global scale
- Analyze constraints, opportunities, threats, issues, problems and capacity needs and identify solutions through consultation with stakeholders and interest groups (coastal communities)
- Prepare the draft review report and submit it for consultation and review, including presentation at a Biodiversity Conservation Planning Workshop for consultation with different stakeholders in November 2017
- · Incorporate comments and submit a final comprehensive report in hard copy (in English) and electronically

#### Inputs

UNDP/GEF YSLME Phase II Project management Office (PMO) will provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in the Biodiversity Conservation Planning Workshop by the PMO.

#### Timing

The consultancy will begin in mid-September 2017 and complete in 31 December 2017.

#### Reporting

The consultant will produce a stock-taking report on assessments of vulnerabilities of ecosystem services and communities, and the relationship of sea surface temperature rise to structure of phytoplankton communities and Yellow Sea cold water mass, and management measures. The consultant will submit both electronically and in hard copy in the number of 2 copies to the PMO. The initial draft should be submitted to PMO before 31 October for inclusion in workshop documents. Second version should be submitted before 1 December for review by PMO. Final version should be submitted before 31 December for publication as a knowledge product of the YSLME. All reports should be submitted in English.

#### Competencies

- · A good understanding of ecosystem-based restoration both in China and Korea linked to biodiversity conservation
- Advanced university education at MSc or Ph.D. level with expertise in the area of climate change and marine science

- · At least 5 years of professional experience in vulnerability studies to the impact of climate change projects
- · Strong skills in analysis and evaluation, and experience in implementing environmental projects
- Ability to produce high quality reports and publications in English
- · Previous experience with GEF projects and ecosystem assessment projects is an added plus
- Excellent writing skills in English

# 8. Activity 4 of Output 4.1.1: develop strategies and governance mechanisms to achieve regional habitat and species targets at 2 demonstration sites, including assessment of impacts of modification of areas of critical habitats and monitoring the effectiveness of management plans.

#### Tasks

- In line with the YSLME Biodiversity Conservation Plan and YSLME MPA Network, develop criteria for selection of demonstration sites and target species or habitat, and identification of sites through consultation at national and local levels;
- gap analysis between regional targets on connectivity and status quo of demonstration sites in terms of management and regulatory tools;
- · Conduct assessment of impacts of modification of areas of critical habitats (estuarine or coastal mudflat);
- develop strategies and coordination and/or governance mechanisms to integrate the habitat or MPA within the ICM plan or MSP;
- set up and implement joint monitoring program for effectiveness of MPA or habitat management plan.

# 9. Activity 2 of Output 4.2.1: analysis of country coastal management guidelines, identification of conservation areas according to planning zones

#### Tasks

- · Collect and review data/information of YS coastal management guidelines;
- Summarize the characteristic / current status/ future need of coastal management guidelines;
- Collect the relevant planning zone guidelines such as: eco redline, eco civilization, zoning plan, ICM plan, etc;
- · Consider to study on "Connectivity" in marine spatial plan or other zoning scheme by considering species migration
- Develop protected areas or conservation areas with areas-based management measures in areas beyond national jurisdiction such as the Yellow Sea Cold Water Mass;
- map out the zones which were planned as conservation areas.

# 10. Activity 3 of Output 4.2.1: survey and produce overlays to analyze gaps and conservation needs of critical species and habitats and make recommendations on new MPAs

#### Tasks

- · identify the endangered species and important habitats and spawning sites;
- Conduct field survey, record the current status of critical species, fishing spawning, nursery sites & analysis of ecological connectivity
- Collect the data of critical species/habitat conservation status;
- · Produce overlay and recommend habitats where need to be protected;
- Compare the overlay result with existing MPAs, find out gaps and conservation needs and propose management measures;
- According to the gaps, prepare technical proposal for new MPAs.

# 11. Activity 7 of Output 4.4.2. Prepare training modules on ecosystem-based management in LME 1) ecosystem carrying capacity (ECC) – habitat-based and food-chain based approaches for habitat conservation; and 2) ECC: MPA networking

#### Tasks

- Summarize the good and bad practice of habitat-based and food-chain based approaches for habitat conservation, and MPA networking;
- · Compile the training material for the modules on ecosystem-based management in LME;
- Develop training module tailing to the needs of different target stakeholder groups to maximize results.

#### **UNDP/GEF YSLME Phase II Project Management Office**

Email: yinfengg@unops.org Website: www.yellowseapartnership.org

#### **Incheon Secretariat**

18th floor G-Tower 175 Art center-daero, Yeonsu-gu, Incheon 22004 RO Korea Tel: +82 (0)32 859 7711

#### **Dalian Branch**

National Marine Environment Monitoring Center of State Oceanic Administration P.O. Box 303, Linghe Street 42 Dalian 116023 Liaoning PR China Telephone: +86 (0)411 8478 0700