



**Regional Working Group Report**

# **FISHERIES**

**UNDP/GEF Project Entitled “Reducing  
Environmental Stress  
in the Yellow Sea Large Marine Ecosystem”**

**Report of First Meeting**

**Qingdao, China, 11~14 April 2005**



About this publication:

This publication contains the report of the First Meeting of the Regional Working Group for the Fisheries Component, under the UNDP/GEF Project, “Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem.” The report includes a summary of the discussions and agreements from the Meeting. Data and information to be collected for the Yellow Sea Transboundary Diagnostic Analysis are listed in the Annex to the report.

For reference purposes, this report may be cited as:

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Photo credits: Fishing boats on the Yellow Sea near Jeju Island in the southern part of Republic of Korea, March 2005. Courtesy of Mr. Yihang JIANG.

# REDUCING ENVIRONMENTAL STRESS IN THE YELLOW SEA LARGE MARINE ECOSYSTEM

**Report of the First Meeting of the  
Regional Working Group for the Fisheries Component  
UNDP/GEF Yellow Sea Project**

**Qingdao, China, 11<sup>th</sup> to 14<sup>th</sup> April 2005**





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

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UNDP/GEF/YS/RWG-F.1/3  
Date: 14 April 2005  
English only

**First Regional Working Group Meeting  
For the Fisheries Component of  
the UNDP/GEF Yellow Sea Project**  
*Qingdao, China, 11-14 April, 2005*

**Meeting Report**



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

### **1.1 Welcome addresses**

On behalf of the UNDP/GEF Yellow Sea project, the Project Manager Mr. Yihang Jiang opened the meeting and welcomed all participants to Qingdao, “the centre of oceanography and fisheries in China”. He briefly introduced the background of the project and the objectives of the meeting of the Regional Working Group for the Fisheries Component of the UNDP/GEF Yellow Sea Large Marine Ecosystem Project.

- 1.1.1 Mr. Jiang explained the major outcomes of the Project, namely, the development of the Transboundary Diagnostic Analysis (TDA), Strategic Action Programme (SAP), and National Strategic Action Plans. In the final year of the Project, there will be implementation of demonstration and/or pilot activities identified in the SAP. This Meeting will focus on the process for TDA preparation, but also keep in mind the SAP development.
- 1.1.2 Mr. Jiang noted that the preliminary TDA information was a bit out of date. The preliminary TDA was prepared for the Global Environment Facility (GEF) Council to understand the project document before approving Project. The final TDA, to be produced, needs updated data and information. Therefore, this Regional Working Group (RWG) meeting will discuss and agree on identifying fisheries-related problems of the Yellow Sea, agree on the types of information to support the identified problems, agree on the format of the collected information, and propose activities to gather additional required data.
- 1.1.3 Mr Jiang further elaborated that once the required data has been identified, the group will need to determine the kind of actions will need to be undertaken. At this point contracts will have to be made with contractors for data and information collection and that the costs of activities will need to be established with consideration of the national coefficient. These form the critical components of this RWG meeting.
- 1.1.4 There were some discussions regarding co-operative efforts between other regional working groups for a better cross-component distribution of information. Mr Archer informed the group that cross-component meetings may be planned in the future and that Agenda Item 6 will provide more detail about current and potential partnerships and co-operation.

### **1.2 Introduction of the members**

Participants of the regional working group attended the meeting were invited to introduce themselves and each gave a brief introduction of their expertise and experience, to the group. The list of participants is attached to this report as [Annex I](#).

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

### **2.1 Election of Officers**

- 2.1.1 In accordance with the UN rules of procedure for the conduct of meetings, participants were invited to nominate a Chairperson for the meeting.

2.1.2 Ms. Yeon In Ja, for the West Seas Fisheries Research Institute of the National Fisheries Research and Development Institute of Korea, nominated Mr. Jin Xian Shi, of the Yellow Sea Fisheries Research Institute of China, for the position of Chairperson. The group agreed with the nomination and Mr. Jin was duly elected as Chairperson.

2.1.3 Mr. Jin accepted his new post and welcomed the members of the RWG. He referred to the agenda and voiced his hope that the large amount of work could be completed as per the agenda schedule set by the Secretariat.

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

2.2.1 The Chairperson invited the Secretariat to introduce the documents prepared for the meeting.

2.2.2 Mr. Jeff Archer from the Project Management Office (PMO) introduced the list of documents (UNDP/GEF/YS/RWG-F.1/inf.1) and informed the meeting that the documents in front of the group included the discussion documents; Expected Outcomes and Outputs of the meeting, Data and Information Requirements of the TDA, and a Proposal for the Regional Calculation of the Costs of Project Activities; and informational documents including; Provisional Terms of Reference, Financial Reporting Procedures and Requirements for the Regional Working Group for the Fisheries Component. Also included were the Report of the First technical Meeting on Preparation of the Implementation Plan for the UNDP/GEF Yellow Sea Project, the Report of the Second Technical Meeting on the Preparation of the Implementation Plan for the UNDP/GEF Yellow Sea Project, and the Report of the First Project Steering Committee Meeting.

## **2.3 Organisation of Work**

2.3.1 Mr. Archer introduced the document UNDP/GEF/YS/RWG-F.1/inf.3 describing the Provisional Working Programme for the meeting and noted that the meeting would be conducted in plenary as far as possible although sessional working groups could be formed as deemed necessary.

2.3.2 Mr. Jiang Yihang, Project Manager of the PMO, thanked the Yellow Sea Fisheries Research Institute, for their generous support and hospitality provided during the Meeting.

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

3.1 The Chairperson invited participants to consider the Provisional Agenda (Document UNDP/GEF/YS/RWG-F.1/1) and Annotated Provisional Agenda (Document UNDP/GEF/YS/RWG-F.1/2), prepared by the Secretariat, and to propose any amendments or additions that they might wish.

3.2 The meeting adopted the agenda, which is attached as [Annex II](#) to this report.

#### **4. TERMS OF REFERENCE, MEMBERSHIP AND RULES OF PROCEDURE FOR THE REGIONAL WORKING GROUP FOR FISHERIES (RWG-F)**

- 4.1 The Chairperson invited Mr. Archer of the Secretariat to introduce document UNDP/GEF/YS/RWG-F.1/inf.4, describing the Terms of References for the Regional Working Group on Fisheries prepared during the PDF-B phase.
- 4.2 Mr. Archer described the Implementation Structure of the YSLME Project, noting specifically that the primary reporting requirements of the Regional Working Groups (RWGs) are to the PMO, with some requirement to the National Project Co-ordinator (NPC). Mr. Archer further noted that the PMO, in consultation with the Chairperson, would convene meetings of the RWG according to an agreed schedule, which formed part of the agreed work-plan and timetable for the Project, and that the PMO would act as Secretariat to the RWGs.
- 4.3 Mr. Archer explained how the RWG fitted within the framework of the project and described the focal areas and major tasks of the RWG, providing examples of the Major Tasks that the RWG were expected to perform that were listed in the document. These are to:
- Provide technical inputs and comments for the project work-plans in their respective areas of competency;
  - Develop annual and quarterly work plans and implement activities in respective thematic area, based on, and fully integrated in the project work-plan, and make annual and quarterly progress reports;
  - Develop relevant regional recommendations, guidance and strategy within area of competency;
  - Assist in development and implementation of the National Yellow Sea Action Plans (NYAP's) and Regional Strategic Action Plan (SAP).
- 4.4 Mr. Archer introduced UNDP/GEF/YS/RWG-F.1/inf.5 and gave an overview of the functional requirements of the working group, its reporting relationships and responsibilities, its role in achieving objectives, and the financial rules and financial reporting responsibilities of the regional working group.
- 4.5 Mr. Archer outlined the budgetary control framework and noted that the UNOPS, with assistance from UNDP/GEF is the responsible organisation with respect to the entire budgetary process, and that the PSC approves the budget and work-plans developed by the RWG on an annual basis, within the framework of the Project Implementation Plan.
- 4.6 It was explained that the responsibilities of Contracted Institutions and individuals will be detailed in the agreements developed for each contracted activity, and that there were several different contract modalities for these agreements based on the nature of contracted entities and the magnitude of costs. These included: reimbursable MOAs for agreements with NGOs, with the possibility of a small amount paid up-front if needed; Fixed-price and reimbursable contracts for institutions, large contracts vs. smaller-component contracts for long-term activities.
- 4.7 Mr. Archer emphasized that open-competitive bidding should be applied in selecting institutions and individuals to maximise benefits of funding allocated to activities.
- 4.8 Mr. Archer went onto say that contractors (individuals or institutions) are required to provide two documents in addition to the final product of the contract. These are an

expenditure report and a progress report, the frequency of which will be based on the modality of contract. An example of each was provided as tables in the document.

- 4.9 Members asked for clarification and expansion of certain points and collectively agreed to remove the word 'annual' from the first and second bullet point of the 'Major Responsibilities of Regional Working Group on Fisheries' which referred to the effective mechanism of regional stock assessment and carrying capacity, respectively. Also, the 5<sup>th</sup> bullet point of the same paragraph was modified with the change in the words 'bilateral or regional agreement' to 'bilateral and/or regional agreement' to reflect the alternative.
- 4.10 The Chairman asked that the PMO reflect these changes in the document and provide a new TOR to the group for them to consider. Mr. Archer agreed to have the document ready for revision at the start of the meeting on the next day.
- 4.11 The Group revised the TOR for RWG-F provided by the PMO, and agreed on the main body of text regarding the membership and working modality. There was some discussion regarding the concept of Carrying Capacity and whether it was an archaic assessment that may have been superseded by more contemporary methods such as other, newer, ecosystem-based fishery management tools.
- 4.12 The group agreed to modify the statement regarding Carrying Capacity in the TOR to allow the group freedom to explore newer techniques, methods and mechanisms for ecosystem-based fisheries management in addition to Carrying capacity. The new version of the TOR for the RWG-F can be found in Annex III.

## **5. OVERALL GOALS AND OBJECTIVES OF THE FISHERIES COMPONENT**

- 5.1 Mr. Archer introduced documents UNDP/GEF/YS/RWG-F.1/4 and UNDP/GEF/YS/RWG-F.1/5., describing respectively, the Expected Outcomes and Outputs of the Meeting and the Data and Information Required, and due to unfamiliarity of the project by some members, summarized the general requirements and procedures for preparing the Transboundary Diagnostic Analysis (TDA), Strategic Action Plan (SAP), and the general activities pertaining to the Regional Working Group for the Fisheries Component (RWG-F) as contained in the project brief.

The 'Causal Chain Analysis' and 'Governance Analysis' procedure was outlined to the group, and examples of Causal Chain Analysis relevant to the Fisheries Component of the TDA were provided.

- 5.2 Mr. Archer highlighted the priority questions for the regional working group to consider during this meeting, answers for which were required to fulfil the TDA and develop the SAP.
- 5.3 The required Outcomes and Outputs of the meeting were then reiterated for the group. These were to:

Outcomes:

- Discuss and agree on the TOR for the RWG-F.
- Discuss and agree on the types of data and information to collect to fulfil objectives.

- Discuss and agree on the costs, types and schedule of activities to implement.
- Determine cooperative measures with other RWGs for preparing cross-component analysis.

#### Outputs

- Produce a list of data and information requirements and their format.
  - Provide an agreed method of equitably calculating the costs of activities.
  - Produce a listed cost of actions.
  - Produce a list of agreed responsibilities of relevant institutions and individuals in collecting required data and information, and carrying out relevant analysis.
  - Provide a proposal to be submitted to the regional Science and Technical Panel on ways to coordinate with other RWGs in preparing the TDA; and
  - Produce a work-plan for the Fisheries Component for 2005 and 2006.
- 5.4 The Chairman invited comments from the group on the overall goals and objectives of the meeting.
- 5.5 Ms. Yeon remarked that it would be difficult to determine a common way to collect data and agree on its format due to differences in the way the different regions obtain data. She cited a specific example of the differences between the way Korea and China collect their fisheries data.
- 5.6 Mr. Archer stated that it is up to the RWG to decide on how to collect data and information, and what its format is, in such a way so as to create a common method that can be used regionally to review historic data and also form the basis for future comparative studies. The agreed method did not need to be perfect at this present time, and can be a good compromise.
- 5.7 Mr Jiang reiterated the need for a common method for gathering data for the future for a better representation of the conditions of the Yellow Sea. From this we can identify the gaps and decide on how to fill the gaps.
- 5.8 Mr. Fang Jian Guang stated that the data presented in table is currently too exact and should be more general in nature.
- 5.9 Mr. Archer stated that the table presented in the document was just an example for consideration of the group and that all data provided could be added to, deleted or modified as required by the group.
- 5.10 There was some discussion about the TDA and SAP process, with some members, who were unfamiliar with the process, seeking additional clarification of the above.
- 5.11 Mr. Archer reiterated some of the points from his presentation with regard to the TDA/SAP process procedure for the information of the group.
- 5.12 The group requested that the PMO prepare a list of the most commonly used abbreviations or acronyms used in the documentation and presentation for their reference during presentations and review of documents. Mr. Archer agreed to produce this list and provide to them at the start of the next days meeting, and this list can be found as Appendix I to the new version of the TOR for the RWG-F in Annex III of this document.

## **6. CO-OPERATION WITH OTHER PROJECT COMPONENTS AND RELEVANT ACTIVITIES IN THE REGION**

- 6.1 Mr. Archer introduced this agenda item by providing details of the current co-financing arrangement, which included participation by GEF, UNDP, Governments, NOAA and WWF-/KORDI/KEI Yellow Sea Eco-Region Planning Project (YSEPP), and showed a list of potential NGOs, Institutes and programs, prepared by the PMO, for the consideration of the group.
- 6.2 The group accepted the provisional list with the understanding that the list would be dynamic as items are eliminated, and new relationships established.
- 6.3 Mr. Archer invited participants to add to the list by providing other national and regional activities that could co-operate with the Fisheries component of the YSLME Project, in particular, sources of co-financing and methods of co-operation, and how the activities of the Fisheries component can be co-ordinated with other components of the YSLME Project, and present these lists during the early parts of the next-days meeting.
- 6.4 The need to cooperate with the other RWGs for the YSLME project, especially with regards to the Ecosystem component, was highlighted by members of the group, stressing that the carrying-capacity area of the RWG-F should look to cooperate with both the RWG for Ecosystem and Investment on numerous matters such as carrying-capacity, policy and legal issues, respectively. Members of the meeting suggested that joint RWG meetings could be organised to facilitate communication, discussion, sharing and coordination of activities between RWGs for the benefit of the project.
- 6.5 Mr. Jin noted that RWG Chairs come together during regular RSTP meetings and that this would be a good venue for groups to exchange vital information and improve coordination, and agreed to the suggestion that each RWG should be asked to consider what co-operation was needed to benefit each working group, and that these requirements should be submitted to the PMO before the next RSTP meeting so that they can be discussed and addressed.
- 6.6 Mr. Jiang informed the group that the organisation of a joint meeting was an option but may not be an effective activity at present given the paucity of data at hand, and the absence of a stratagem for obtaining required data. He noted that there was an urgent need to finalize the data and information requirements pertaining to the Fisheries RWG activities before any effective coordination between RWGs at meetings could occur. He also noted that the structure of the RWG meeting schedule was set at the beginning of the project and it would be currently be difficult to alter its framework, especially given the lack of information on data and information needs. He suggested that the RSTP could be asked to consider the organisation of an 'Ecosystem' meeting including all RWGs in the near future to discuss the cross-component issues.

## **7. REVIEW AND EVALUATION OF STOCK ASSESSMENT OUTPUTS ACCORDING TO WORKPLAN**

- 7.1 On behalf of Korea and China, Ms. Yeon and Mr. Jin presented brief diagnoses of the fisheries stocks in their regions, highlighting the problems that existed,

highlighting the transboundary issues and describing the national and regional sources of data and information that were available.

- 7.2 Ms. Yeon gave a review and diagnosis of the fisheries stocks in the Korean waters of the Yellow Sea based on available commercial monitoring data, biological parameters and survey results. She noted that the commercial fish catches and resources abundance have been significantly reduced, species composition of catches has changed from; large size-classes, with higher price, in higher trophic levels and mainly demersal species guilds (such as Small Yellow Croaker, Hairtail etc) to; smaller sized, lower value, lower trophic level, and mainly small pelagic species, (such as anchovy) and bivalves . Estimated optimum fishing intensity was at much lower level than the current fishing effort. In general, the quality of the major commercially valuable stocks is at 'low levels'. She said that monitoring and biological data for commercial fisheries currently exists in Korea, but the data from survey results is not enough to indicate the precise fisheries abundance and current carrying capacity of the system.
- 7.3 Mr. Jin gave an overview of the status of fisheries resources and transboundary problems in the Yellow Sea. He presented the current data sets possessed for this region, indicating the gaps in data and the transboundary issues that currently exist and gave some recommendations on how the data gaps can be addressed. Mr. Jin noted that survey data, as opposed to fisheries data, was the most reliable and accurate measure of obtaining data for stock assessment. He reported that although total catch has increased over recent times, the general CPUE has been at low levels. He mentioned that although there has been a dramatic decrease in the biomass of some commercially valuable species, there has also been an apparent dramatic increase in the biomass of others. He added that in general fishes are smaller in size, lower in economic value, and dominant species has varied with time. Mr. Jin also provided information on the current methods of fishery management for the China region of the Yellow Sea that includes: Sino-Korean Fisheries Agreements, summer bans on fishing, closed seasons and areas, minimum landing sizes, minimum mesh sizes and reduced fishing efforts from China.

## **8. REVIEW AND EVALUATION OF CARRYING-CAPACITY OUTPUTS ACCORDING TO WORKPLAN**

- 8.1 Ms. Yeon presented an unpublished paper developed by colleagues from the Marine Environment Management Team, National Fisheries Research and Development Institute (NFRDI) of Korea; providing an overview of the current state-of-knowledge and data that exists on carrying capacity for their region of the Yellow Sea Large Marine Ecosystem (YSLME) and the results of preliminary carrying-capacity analysis, highlighting present initiatives and actions of fisheries management in Korea, current and emerging issues on carrying capacity, and describing current research concerns and the national and regional sources of data and information that are available. The paper also describes some methods for developing models for the study of carrying capacity for fisheries and how they can be applied to the study of the Yellow Sea.
- 8.2 Mr. Jin reported that due to incomplete nature of the marine surveys in the region, they are unable to determine carrying capacity in the whole of the Yellow Sea at present.

## 9. REVIEW AND EVALUATION OF MARICULTURE PRODUCTION OUTPUTS ACCORDING TO WORKPLAN

- 9.1 Mr Jang presented a regional overview of the existing status and trends of Mariculture and highlighting the problems that existed in the Korean region and describing the national and regional sources of data and information that are available. He noted that in general there has been a dramatic increase in mariculture production coupled with an increase in the number of mariculture farms and activities. He listed the major produced species and their proportional representation; With Macroalgae forming 50% of production (the Sea Mustard *Undaria* 48%), followed by shellfish (Oysters 80%, Short-neck clam 8%), then finfish (Flatfish 55%, Rockfish 17%), and described the problems and threats to the industry. He mentioned that, of the diseases affecting mariculture at the present, the shrimp disease White Spot Syndrome Virus (WSSV) was the most important due to the sudden introduction of the disease from Taiwan, the increasing rate of infection in the wild shrimp population, rapid spread around the globe and its dramatic effect on infected livestock.
- 9.2 Mr. Fang presented a regional overview of the existing status and trends of Mariculture and problems that existed for the Chinese region. He reported the 'development in mariculture in China. He described three main current shallow sea mariculture issues: High density culture, quality product and the exploitation of coastal waters for economic benefit with little concern for the environment. He also described information on the modelling of carrying capacity for cultured macro-algal and scallop stocks in Sungo Bay, China.
- 9.3 Participants separated into two groups to discuss, modify and add to, the Problem and Data requirement table and Causal Chain analysis provided by the secretariat, and after much discussion, agreed on a list of data and information requirements, and a provisional Causal Chain Analysis Matrix to present to the RSTP and use for the future planning of activities.
- 9.4 Mr. Kim presented an additional list of suggested data and information parameters for consideration to be added to the list to include certain socio-economic issues, such as policy, legal issues, regulations and enforcement. He emphasized a need to include information on fishing income in during data acquisition (by fisherman) and fishing costs (by fisherman and fishing). He also emphasized the importance of obtaining information on the export and import of fisheries products between Korea and China. He noted that this information is helpful in helping us understand the fisheries and economies of both countries. He requested the group for feedback on the information he provided.
- 9.5 The group made comments, additions and modifications to the list of information requirements provided by Mr. Kim, and these were incorporated into the main data and information requirement table. The group agreed that if both countries didn't possess the required dataset for a given parameter, then that parameter will be removed from the data requirements table unless, that data could be obtained by both countries, and in the same format, from that point on. The final table contains an agreed data-set required for the TDA for which both countries can either obtain historical data for, or can collectively obtain in the future. The final table and that of the final Causal Chain Analysis matrix can be found in Annex IV.

## **10. DISCUSSION AND ADOPTION OF ACTIVITIES COSTINGS AND WORKPLAN**

- 10.1 The Chairman invited the Secretariat to give a presentation on a proposed regional criterion for the calculation of costs to obtain data and information.
- 10.2 Mr. Archer briefly outlined the required actions by the RWG-F that were needed to meet the requirements for the preparation of the TDA. These were to agree on list of costed activities to be supported within the framework of the project; and formulate a work-plan for the first two years, with an indication of the tasks, responsibilities and deadlines for completion of the tasks.
- 10.3 The participants were invited to review the attached document UNDP/GEF/YS/RWG-F.1/6 detailing a proposed regional criterion for calculating the costs of activities. The Full Time Equivalent (FTE) Agreement was briefly described and was proposed as a possible method of equitably calculating the costs of activities taking into consideration regional differences in the way labour/salaries are calculated and differences in the Cost of Living Index (COL). The background of the FTE unit, the calculation of the FTE figure and the development of the FTE Agreement, was briefly explained.
- 10.4 Mr. Jiang gave a brief history of the nature of this document and the rationale for its inclusion in the meeting. He noted the urgency to address this issue but remarked however, that the issue was beyond the scope and expertise of this group and recommended that this issue should be referred to the higher government organisations involved in this project for their deliberation.
- 10.5 The group made supporting comments to Mr. Jiang's recommendation and further recommended to the Chair that the issue be referred to the RSTP for discussion and resolution at their next meeting.
- 10.6 The group then revised the list of activities and actions required for the Fisheries Component of the Implementation Plan and developed a new work-plan for the 2005 and 2006 years. The group made a small change to the list of activities and some modifications to the existing work-plan due to new changes in scheduling of some activities such as Ship surveys and meeting dates.
- 10.7 The revised agreed list of activities is attached to this report as Annex V.

## **11. OTHER BUSINESS**

- 11.1 The Chairman invited members to presentations or raise any other issues that need to be considered by this meeting.
- 11.2 Ms. Yeon on behalf of the Korean delegation reported that the Terms of Reference (TOR) for membership of the RWG were 'unfair' given the inequality in the number of members. She noted that Korea would prefer an equal number and would like to know if this could be changed at this time.
- 11.3 The Chairman invited Mr. Jiang to give a brief overview of how the decision was made to use only three members for each working group from each country, and only one chairman to represent both.

- 11.4 Mr. Jiang replied that it was an agreement of the 2<sup>nd</sup> meeting of the Regional Technical Meeting (RTM), and agreed by the Project Steering Committee (PSC) two months ago. However, if RWG felt strongly about it and wanted it changed, they would have to seek an agreement with all the other working groups, agree on the number of members, and provide a new proposal for consideration of the PSC at their next meeting.
- 11.5 Ms. Wei from China stated that this issue has been discussed at the RTM meeting and the agreement on the number of experts for the five project components has reached. The agreement was submitted and approved by the PSC some two months ago, it was not appropriate to change the number of the regional working group at this moment.
- 11.6 With the statement made by the members, the meeting did not reach an agreement on this issue.
- 11.7 Mr. McGilvray of the Marine Stewardship Council (MSC) gave a brief overview of the organisation that he represents, summarising the organisation frameworks, the eco-labelling and certification process which they have developed and are implementing globally, and how their activities may benefit the YSLME project. Presently they have certified 12 fisheries using the MSC process, standards and guidelines and are currently assessing over 20 other fisheries for inclusion in the MSC eco-labelling and certification process.

## **12. VENUE FOR NEXT REGIONAL WORKING GROUP MEETING**

- 12.1 The Chairman invited members to consider and agree on the venue for the next Regional Working Group – Fisheries Component meeting.
- 12.2 A provisional meeting date had been set by the PMO for the early part of October, however, due to the PICES Meeting being held at this time, it was agreed to move the meeting to the 25<sup>th</sup> to 28<sup>th</sup> October, 2005. It was suggested that the possible venue of the meeting would be Jeju Island or Gyeongju, Korea. The secretariat will discuss the venue with the host and make arrangements on behalf of the group.

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

- 13.1 The report was considered paragraph by paragraph and adopted as contained in this document.
- 13.2 The Chairman moved the formal motion for the adoption of the report of the First Meeting of the Regional Working Group for the Fisheries Component of the YSLME which was passed by acclamation.

## **14. CLOSURE OF THE MEETING**

- 14.1 The Chairperson thanked the Members of the Regional Working Group for the Fisheries Component, the Project Manager, PMO staff and other participants for their hard and constructive work.

- 14.2 On behalf of all participants, the Project Manager thanked the Chairperson for his hard work and guidance that ensured the success of the meeting.
- 14.3 The meeting was formally closed at 12:30 hrs, April 14<sup>th</sup>, 2005.



## Annex I

### List of Participants

#### People's Republic of China

**Dr. JIN Xianshi**

Director,  
Fishable Resources & Ecosystem  
Management Division  
Yellow Sea Fisheries Research Institute  
106 Nanjing Road  
Qingdao 266071  
Tel: 86-532-584-9430  
Fax: 86-532-581 1514  
Email: [jjin@ysfri.ac.cn](mailto:jjin@ysfri.ac.cn)

**Dr. FANG Jianguang**

Professor Director  
Mariculture Ecology Division  
Yellow Sea Fisheries Research Institute  
106 Nanjing Road  
Qingdao 266071  
Tel: 86-532-582-2957  
Fax: 86-532-581 1514  
Email: [fangjq@ysfri.ac.cn](mailto:fangjq@ysfri.ac.cn)

**Dr. ZHAO Xianyong**

Deputy Director  
Fishable Resources and Ecosystem  
Management Division  
Yellow Sea Fisheries Research Institute  
106 Nanjing Road  
Qingdao 266071  
Tel: 86-532-583-6344  
Fax: 86-532-581 1514  
Email: [zhaoxy@ysfri.ac.cn](mailto:zhaoxy@ysfri.ac.cn)

**Dr. WANG Jun**

Associate Professor  
Yellow Sea Fisheries Research Institute  
106 Nanjing Road  
Qingdao 266071  
Tel: 86-532-583-6344  
Fax: 86-532-581 1514  
Email: [wangjun@ysfri.ac.cn](mailto:wangjun@ysfri.ac.cn)

**Ms. WEI Yan**

Department of International Co-operation  
State Oceanic Administration  
1 Fuxingmenwai Avenue  
Beijing 100860  
Tel: 86-10-6804-8051  
Fax: 86-10-6803-0799  
Email: [shb@soa.gov.cn](mailto:shb@soa.gov.cn)

#### Republic of Korea

**Dr. In Ja YEON**

Senior Scientist  
West Sea Fisheries Research Institute  
National Fisheries Research & Development  
Institute (NFRDI)  
707, Ulwang-dong, Jung-gu, Incheon,  
400-420, Republic of KOREA  
Tel: 82-32-745-0551  
Fax: 82-32-745-0549  
Email: [ijyeon@nfrdi.re.kr](mailto:ijyeon@nfrdi.re.kr)

**Dr. JANG In Kwon**

Senior Researcher  
West Sea Fisheries Research Institute  
National Fisheries Research &  
Development Institute (NFRDI)  
707 Ulwang-dong, Jung-gu, Incheon  
400-420, Republic of KOREA  
Tel: 82-32-745-0570  
Fax: 82-32-745-0558  
Email: [jangik@nfrdi.re.kr](mailto:jangik@nfrdi.re.kr)

**Dr. KIM Do Hoon**

Senior Researcher  
Korea Maritime Institute  
1027-4 Bangbae-3-Dong, Seocho-Gu,  
Seoul, Korea 137-852  
Tel: 82-2-2105-2754  
Fax: 82-2-2105-2859  
Email: [kimdh@kmi.re.kr](mailto:kimdh@kmi.re.kr)

**Marine Stewardship Council**

**Mr. Frazer McGilvray**

Regional Manager-East Asia  
Marine Stewardship Council  
Unit 10, 46-48 Urunga Parade,  
Miranda, NSW, 2228, Australia  
Tel: 612-9524-8400  
Fax: 612-9524-8900  
E-mail: [frazer.mcgilvray@msc.org](mailto:frazer.mcgilvray@msc.org)

**Project Management Office (PMO)**

**Mr. Yihang JIANG**

Project Manager  
UNDP/GEF Yellow Sea Project  
Korea Ocean Research and Development  
Institute  
1270 Sa-dong Sangnok-gu Ansan-si  
Gyeonggi-do 426-744  
Republic of Korea  
Tel: (82-31) 400 7825  
Fax: (82-31) 400 7826  
email: [yihang@yslme.org](mailto:yihang@yslme.org)

**Mr. Jeffrey ARCHER**

Fisheries/Biodiversity Officer  
UNDP/GEF Yellow Sea Project  
Korea Ocean Research and Development  
Institute  
1270 Sa-dong Sangnok-gu Ansan-si  
Gyeonggi-do 426-744  
Republic of Korea  
Tel: (82-31) 400 7832  
Fax: (82-31) 400 7826  
email: [jeff@yslme.org](mailto:jeff@yslme.org)

**Ms. Jung-Hwa KIM**

Secretary  
UNDP/GEF Yellow Sea Project  
Korea Ocean Research and Development  
Institute  
1270 Sa-dong Sangnok-gu Ansan-si  
Gyeonggi-do 426-744  
Republic of Korea  
Tel: (82-31) 400 7829  
Fax: (82-31) 400 7826  
email: [junghwa@yslme.org](mailto:junghwa@yslme.org)

## Secretariat

### **Ms. WANG Wenqi**

Senior Engineer  
Vice Director of Foreign Affairs Office  
First Institute of Oceanography, SOA  
6 Xianxialing Road Hi-Tech Industrial Park  
Qingdao, Shandong 266001  
Tel: 86-532-889-7431  
Fax: 86-532-889-7548  
Email: [fiokje@public.qd.sd.cn](mailto:fiokje@public.qd.sd.cn)

### **Ms. SUN Ping**

First Institute of Oceanography, SOA  
6 Xianxialing Road Hi-Tech Industrial Park  
Qingdao, Shandong 266001  
Tel: 86-532-896-7440  
Fax:  
Email: [sharry\\_cn@hotmail.com](mailto:sharry_cn@hotmail.com)

### **Ms. NIU Mingxiang**

Yellow Sea Fisheries Research Institute  
106 Nanjing Road  
Qingdao 266071  
Tel: 86-532-5836344  
Fax:  
Email: [nmx77@163.com](mailto:nmx77@163.com)



## **Annex II**

### **Agenda**

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

- 1.1 Welcome addresses
- 1.2 Introduction of the members

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

- 2.1 Election of Officers
- 2.2 Documentation Available to the Meeting
- 2.3 Organisation of Work

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

#### **4. TERMS OF REFERENCE, MEMBERSHIP AND RULES OF PROCEDURE FOR THE REGIONAL WORKING GROUP FOR FISHERIES (RWG-F)**

#### **5. OVERALL GOALS AND OBJECTIVES OF THE FISHERIES COMPONENT**

#### **6. CO-OPERATION WITH OTHER PROJECT COMPONENTS AND RELEVANT ACTIVITIES IN THE REGION**

#### **7. REVIEW AND EVALUATION OF STOCK ASSESSMENT OUTPUTS ACCORDING TO WORKPLAN**

#### **8. REVIEW AND EVALUATION OF CARRYING-CAPACITY OUTPUTS ACCORDING TO WORKPLAN**

#### **9. REVIEW AND EVALUATION OF MARICULTURE PRODUCTION OUTPUTS ACCORDING TO WORKPLAN**

#### **10. DISCUSSION AND ADOPTION OF ACTIVITES COSTINGS AND WORKPLAN**

#### **11. ANY OTHER BUSINESS**

#### **12. VENUE FOR NEXT REGIONAL WORKING GROUP MEETING**

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

#### **14. CLOSURE OF THE MEETING**



## **Annex III**

### **Revised Terms of Reference For the UNDP/GEF Yellow Sea Project Regional Thematic Working Groups**

#### **Background:**

To facilitate the achievement of the regional goals and objectives, Regional Thematic Working Groups (RWG) for each component (Ecosystem, Biodiversity, Fisheries, Pollution, and Investment) have been established with overall responsibility for ensuring effective implementation of project activities and to provide a mechanism for exchange of information and experience of management experiences in each country.

#### **Membership:**

Each of the five RWGs will include:

- Two scientists (social and natural) from each country;
- One additional expert drawn from the legal, regulatory, investment, and/or environmental management fields, from each country;
- One Chairman for each RWG; and
- The Working Group Chairpersons will be members of the Regional Science and Technical Panel.

#### **Working modalities:**

Each RWG will represent the regional perspective and not just the national perspective. Working “without walls”, the RWGs will communicate primarily through email, with one or two working meetings annually. Each RWG will operate on the basis of working parties involving participation of experts from all coastal countries together with external experts where this is considered necessary. The RWGs report to the Regional Scientific Technical Panel through the Project Management Office (PMO), although they may also have national reporting requirements from the National Project Co-ordinators.

#### **Meetings:**

The PMO, in consultation with the Chairperson, shall convene meetings of the RWGs according to an agreed schedule, which will form part of the agreed work plan and timetable for the work of the Project.

The PMO shall act as Secretariat to the RWGs, and shall ensure that reports of the meetings are circulated to all members of the working groups, and are copied to the members of the RSTP.

#### **Tasks:**

- Provide technical inputs/comments for the project workplans in their respective areas of competency;
- Develop annual and quarterly work plans and implement activities in respective thematic area, based on and fully integrated in the project workplan, and make annual and quarterly progress reports;

- Be responsible for regional coordination within area of competency;
- Facilitate creation of effective national thematic network;
- Organise and conduct working parties and training within area of competency;
- Develop relevant regional recommendations, guidance and strategy within area of competency;
- Contribute scientific knowledge in the area of expertise to the development of the TDA;
- Assist in development and implementation of the Regional Strategic Action Programme (SAP) and National Yellow Sea Action Plans (NYSAP);
- Contribute to the development of the Priority Investment Portfolio;
- Assist, through the Chair, in effective Project Management by assisting with scheduling, scoping, and budgeting for various interlinked activities;
- Contribute scientific and technical advice to the formulation of proposals for national and regional actions and donor funding;
- Network with national and international institutions and specialists in respective focal area;
- Assist in preparing and implement regional pilot projects and/or demonstration projects;
- Liaise closely with PMO, through RWG Chairpersons;
- Contribute scientific and technical expertise to YSLME information system development, public awareness activities and stakeholder participation;
- Co-operate with other RWGs; and
- Develop and maintain a database within area of competence.

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## **MAJOR RESPONSIBILITY OF REGIONAL THEMATIC WORKING GROUP ON FISHERIES**

Location of WG Chair: People's Republic of China

Tasks:

- Develop common methodology for regional stock assessment strategy and region-wide monitoring. Perform initial joint stock assessment. Elaborate an effective mechanism for regional stock assessment.
- Perform re-iterative series of regional analyses of carrying capacity. Develop mechanism for regional carrying capacity determination and/or other ecosystem-based fisheries management tools.
- Develop joint applied research program for sustainable mariculture. Pilot demonstration projects in mariculture. Assist region to implement more broadly proven sustainable mariculture techniques.
- Coordination of joint development and demonstration of methods for diagnosis, prevention, and control of disease in mariculture. Development of regional communication network about diseases to reduce transboundary implications.
- Facilitate developed and endorsed bilateral and/or regional agreement for sustainable use of fisheries resources.

- Facilitate improvement of fisheries management in the YSLME. Develop strategies for sustainable use of transboundary stocks building on management plans.

## APPENDIX I

### LIST OF ACRONYMS/ABBREVIATIONS USED BY THE PMO IN DOCUMENTATION AND PRESENTATIONS

DPRK	Democratic People's Republic of Korea
EcoQO	Ecosystem Quality Objectives
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
GIS	Geographic Information System
GLOBEC	Global Ocean Ecosystem Dynamics
HAB	Harmful Algal Bloom
IMCF	Inter-ministerial Coordinating function
LME	Large Marine Ecosystem
MOA	Memorandum of Agreement
NFP	National Focal point
NGOs	Non-Governmental Organizations
NOAA	US National Oceanic and Atmospheric Administration
NOWPAP	Northwest Pacific Action Plan
NPC	National Project Coordinator
NYAP	National Yellow Sea Action Plan
PDF	Project Development Facility
PMO	Project Management Office (also known as PCU-Project Coordinating Unit)
PRC	People's Republic of China
PSC	Project Steering Committee
PTDA	Preliminary Transboundary Diagnostic Analysis
ROK	Republic of Korea
RSTP	Regional Scientific and Technical Panel
RWG	Regional Working Groups
RWG-F	Regional Working Groups for Fisheries Component
SAP	Strategic Action Program
TDA	Transboundary Diagnostic Analysis
TOR	Terms of Reference
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
YSLME	Yellow Sea Large Marine Ecosystem
WG	Working Group

## Annex IV

### Provisional Data Requirement Summary

Problem	Type of Data Required	Type, Unit:	Frequency:	Temporal Requirements:	Available: ROK	Available: CHINA
Decline in Many Commercially Important Fishery Species	Landings	Tonnes, by species		30 years	Y	Y
	Fishing Effort	No. Boats, by fishery		30 years	Y	Y
		HP of boats, by fishery		30 years	Y	Y
	Composition of Catch	% Species of catch		30 years	Y	Y
	Biological data	Growth pattern, by species		10 indicator species	Y	Y
		Reproduction, by Species		10 indicator species	Y	Y
		Spawning Season, by Species		10 indicator species	Y	Y
	Survey Result	Species Composition		20 years	5 coastal, annually. Once In 1970s.	2-3times in every decade since 1980s with large coverage.
		Biomass		20 years	5 coastal, annually. Once In 1970s.	2-3times in every decade since 1980s with large coverage.
		Environmental Characteristics		20 years	5 coastal, annually. Once In 1970s.	2-3times in every decade since 1980s with large coverage.
		Icthyoplankton counts		20 years	5 coastal, annually. Once In 1970s.	2-3times in every decade since 1980s with large coverage.
	New Survey Result	Species Composition, Biomass, Environmental Characteristics and Icthyoplankton, etc.		2-3 surveys/Dec.-Jan; April-may; Autumn ?		
	Ecological Characteristics	Migration pattern by species, spawning and nursery areas by species.			10 species	Y

<b>Lack of knowledge of Carrying Capacity</b>	Basin-Scale survey, Existing methods/models	Estimated from survey data			N	Y
<b>Unsustainable Mariculture</b>	Change in extent of marine farms	ha per region (province, habitat) per annum		Min 25 yrs	10 years	10 years
	Change in production of marine farmed species	Tonnes per species (or kinds of organisms) per annum			10 years	10 years

<b>Environmentally Destructive aquaculture practices</b>	Change in the condition of habitats in the vicinity of aquaculture facilities	Abundance and distribution of important species				
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<b>Socio-economic Data Required</b>	Vessels by Fishery					
	Number of Fisherman by Region					
	Fisheries Income					
	Fishery Consumption Per Capita					
	Fishery Export and Import					
	Economic Importance of Fisheries (e.g. Employment, GDP Contribution)					

### AGREED CAUSAL CHAIN ANALYSIS MATRIX

Problem	Impacts	Immediate Causes (Technical)	Underlying cause	Root cause	Governance	Priority rank (H, M, L)	Trans-boundary?	If yes, priority rank (H, M, L)
<b>Fisheries Issues</b>								
<b>Decline in Conditions of Many Commercially Important Fishery Species</b>	<i>Reduction in trophic level, Reduction in overall size of some commercially valuable species, Change in composition of species</i>	Over-exploitation of target species	Inadequate management and control of fisheries activities, Over-Capacity of fishing fleets, Illegal Fishing, Inadequate monitoring and enforcement, lack of scientific-based knowledge on status of stocks	Increasing demand for marine resources due to rapid population and economic expansion	Inadequate legal instruments at national and regional levels, inadequate implementation of national regulatory instruments; lack of regional harmonization of regulations. Inadequate knowledge and infrastructure base	H	Y	H
<b>Uncontrolled Aquaculture Practices</b>	<i>Damage to coastal infrastructure, damage to environmental quality, introduction of foreign species and pathogens, increase in disease outbreak</i>	Over-extensive and overly-intensive aquaculture activities	Effect of mariculture activities on surrounding habitats	Increasing demand for marine resources due to rapid population and economic expansion	Inadequate legal instruments at national and regional levels, inadequate implementation of national regulatory instruments; lack of regional harmonization of regulations. Inadequate knowledge and infrastructure base	H	Y	H
<b>Inadequate Capacity to Assess Ecosystem</b>	<i>Incapacity to adequately manage activities and resources and mitigate effects</i>	Lack of information, environmental impact assessments	Inadequate knowledge and infrastructure base	Poor regional coordination, communication and collaboration, insufficient financing mechanisms and support	Inadequate understanding and associated policies	M	Y	M



## Annex V

## AGREED LIST OF ACTIVITIES OF THE IMPLEMENTATION PLAN

<b>Objective I. Fisheries &amp; Mariculture</b>	
<b>Activities Agreed</b>	<b>Actions to be taken</b>
<b>IA. Stock assessment</b>	
Activity 1. Review of existing data (review of historical data commercial fisheries and research results)	Contract to relevant national institution(s) for data and info.
	Revise national data and info
	Inputs to final TDA
Activity 2. Diagnosis of stock conditions	Regional WG meeting 1
	Finalisation of data and info. WG meeting 3
Activity 3. Develop common methodology for joint regional stock assessment and perform initial joint regional stock assessment	Gathering existing methods & prepare suggested methods(consultant)
	Discuss & Modify the methods (WG meeting 1)
	Revise the regional methods (consultant)
	finalise the method (WG meeting 2)
Activity 4. Perform demonstration of a Regional Survey	Prepare guidelines for survey (consultant)
	Accept guidelines (WG meeting 2)
	Equipment
	Ship rental for Regional Survey (sub-contract)
	Analyse survey result (consultant)
	Publish survey result (printing)
Activity 5. Perform initial joint regional stock assessment	Prepare a plan for the stock assessment
	Technical discussion on the plan (WG meeting 3)
	implement the regional stock assessment (contracts)
	Discuss the results of assessment (WG meeting 4)
	Additional assessment if necessary (contracts)
	Accept the assessment result (WG meeting 5)
Activity 6. Create mechanism for regional annual multi-species stock assessment, by introducing legal/policy changes to overcome existing barriers	Identify major barriers in stock assessment WG meeting 2)
	Identify the species to be assessed (WG meeting 2)
	Prepare draft mechanism for annual assessment (PMO)
	Discuss the draft mechanism (WG meeting 3)
	Revise the draft mechanism (consultant)
	Finalisation of the mechanism (WG meeting 5)
<b>IB. Carrying capacity</b>	
Activity 1. Review existing state-of-knowledge and preliminary carrying capacity analysis (retrospective) and define gaps	Contract to relevant national institution(s) for assessing information
	Regional WG meeting 1
	Revise national state of knowledge
	Finalisation of Report (WG meeting 3)
	Inputs to final TDA
Activity 2. Fill the knowledge gaps for carrying capacity analysis.	Prepare guidelines for carrying capacity (consultant)
	Reg Training course on carrying capacity (Training 1)
Activity 3. Perform iterative series of analysis of carrying capacity	Prepare workplan for the analysis (consultant)
	discuss and agree on the workplan (WG meeting 3)
	Implement the workplan (contracts to national focal points)
Activity 4. Annual carrying capacity determination	Gathering results of the analysis (PMO)
	Scientific seminar (together with WG meeting 5). (Meetings)

	Annual carrying capacity determination (scientific seminar)
	Publication of regional carrying capacity
<b>IC. Mariculture Production</b>	
Activity 1. Review existing status and trends of mariculture	Contract to relevant national institution(s) for assessing information
	Regional WG meeting 1
Activity 2. Develop joint applied research program for sustainable mariculture	Prepare a draft joint research plan (consultant)
	Present draft to the WG meeting 2
	Revise the draft according to the agreement
	Finalise the plan in WG meeting 3
	Prepare technical guidelines (consultant)
	Training course on mariculture techniques
Activity 3. Pilot demonstration projects in mariculture	Selection sites for pilot, WG meeting 3
	Implementation of the pilot activities (contract)
	Present results to WG meeting 5
	Publication of the results (printing)
Activity 4. Facilitate communication about new diseases, diagnoses, and control techniques	Establish a regional network on information sharing and quick response (PMO)
	Agreement at WG meeting 3
	Prepare technical guidelines (consultant)
	Training course on disease diagnosis, prevention and control
<b>ID. Regional Agreements and National Laws &amp; Management Plan</b>	
Activity 1. Review existing national laws and regulations on fisheries and mariculture, and pertinent international agreements	Contract to relevant national institution(s) to assess information on national laws & regulation, and national responsibility of regional and Int'l conventions
	Publication of the existing knowledge together with analysis and suggestions
Activity 2. Develop regional agreement for sustainable use of fisheries resources	Feasibility study on regional agreement, in particular to implement the FAO code of conduct for responsible fisheries
	Prepare draft regional agreement (consultant)
	Discuss the regional agreement WG meeting 4
	Revise the draft (PMO)
	Discussion WG meeting 5
	Repeat the actions if necessary
	Finalise the agreement and propose to the respective governments for approval
Activity 3. Propose measures for strengthening laws and regulations	Enforcement will be considered together with Activity 2
Activity 4. Development of Regional fisheries management/implementation plans, including regional recovery programme	Identify regional requirements and target for regional SAP (consultant)
	Prepare national SAP (contract to focal points)
	Discuss draft national SAP (WG meeting 3)
	Revise national SAP
	Finalise national SAP
	Discuss framework of Regional SAP (WG meeting 3)
	Prepare draft regional SAP (consultant)
Discuss and revise (WG meetings 4, 5, 6)	
	Implement reg'l management plan

## Annex VI

### WORKPLAN 2005 & 2006

#### Proposed Fisheries Component Workplan for 2005

		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Fisheries Regional Working Group Meetings			1						2			
Project Steering Comm. Meetings		■									■	
Regional STP meetings		■				■					■	
Stock assessment	Activity 1	Contract to national institution(s) - Review existing data and info										
		Revise national data and info (Contractor)										
	Activity 2	Finalisation of data and info. WG meeting 3										
	Activity 3		Discuss the methods (RWG 1)									
			Gathering existing methods & prepare suggested methods(consultant)									
			Revise the regional methods (consultant)									
			Discuss, modify and finalise the method (RWG 2)									
	Activity 4		Prepare guidelines for survey (consultant)									
			Accept guidelines (RWG 2)									
			Obtain Equipment									
			Ship rent for Regional Survey (sub-contract)									
			Ship Survey									
			Analyse survey result (consultant)									
	Activity 6		Publish survey result (printing)									
			ID major barriers in stock assessment (RWG 2)									
			Identify the species to be assessed (RWG 2)									
			Prepare draft mechanism for annual assessment (PMO)									
			Discuss the draft mechanism (RWG 3)									
			Revise the draft mechanism (consultant)									
	Carrying capacity	Activity 1	Contract to relevant national institution(s) for assessing information									
		RWG 1										
		Revise national state of knowledge										
		Finalisation of Report (RWG 2)										
Activity 2		Prepare guidelines for carrying capacity (consultant)										
		Reg Training course on carrying capacity (Training 1)										
Activity 3			Prepare workplan for the analysis (consultant)									
			discuss and agree on the workplan (RWG 3)									
			Implement the workplan (contracts to national focal points)									
Activity 4			Gathering results of the analysis (PMO)									
		Scientific seminar (together with RWG 5)										
	Annual carrying capacity determination (scientific seminar)											
	Publication of the regional carrying capacity											





**Proposed Fisheries Component Workplan for 2006**

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Mariculture Production	Activity 1	Contract to relevant national institution(s) for assessing information Regional WG meeting 1												
	Activity 2	Prepare a draft joint research plan (consultant) Present draft to the WG meeting 2												
		Revise the draft according to the agreement												
	Activity 3	Finalise the plan in WG meeting 3												
		Prepare technical guidelines (consultant) Training course on mariculture techniques												
	Activity 3	Selection sites for the pilot (RWG 3)												
		Implementation of the pilot activities (contract)												
		Present results to WG meeting 5 Publication of the results (printing)												
	Activity 4	Establish a regional network on information sharing and quick response (PMO)												
		Agreement at WG meeting 3												
		Prepare technical guidelines (consultant)												
		Training course on disease diagnosis, prevention and control												
	Regional Agreements and National Laws & Management Plan	Activity 1	Contract to relevant national institution(s) to assess information on national laws & regulation, and national responsibility of regional and Intl conventions Publication of the existing knowledge together with analysis and suggestions											
		Activity 2	Feasibility study on the regional agreement, in particular for implement the FAO code of conduct in responsible fisheries											
Prepare draft regional agreement (consultant)														
Discuss the regional agreement WG meeting - 4														
Revise the draft (PMO)														
Discussion WG meeting 5 repeat the actions if necessary Finalise the agreement and propose to the respective governments for approval														
Act 3		Enforcement will be considered together with Activity 2.												
Activity 4		Identify regional requirements and target for regional SAP (consultant)												
		Prepare national SAP (contract to focal points)												
		Prepare draft regional SAP (consultant)												
	Discuss framework of Regional SAP (WG meeting 3)													
	Discuss and revision (WG meetings 4,5, 6)													
	Discuss draft national SAP (WG meeting 5)													
	Revise national SAP Finalise national SAP Implement regl. Management plan													



Global Environment Facility  
United Nations Development Programme

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in the Yellow Sea Large Marine Ecosystem**

UNDP/GEF Yellow Sea Project Management Office  
c/o Korea Ocean Research and Development Institute  
1270, Sa-2dong, Sangnok  
Ansan City 426-744  
Republic of Korea

Tel. +82-31-400-7829  
Fax. +82-31-400-7826  
[www.yslme.org](http://www.yslme.org)

For a copy of the publication, please contact the Project Management Office  
[info@yslme.org](mailto:info@yslme.org)