

# NEWSLETTER

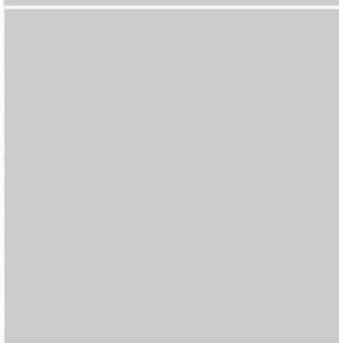
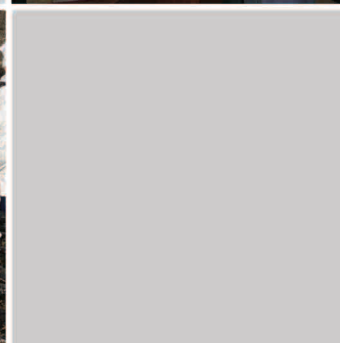
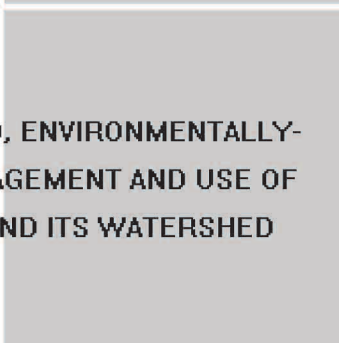
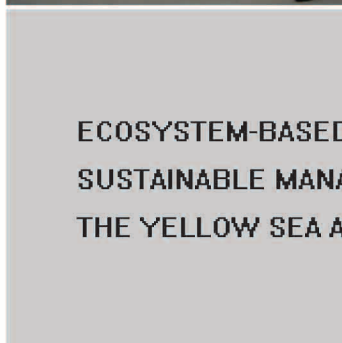
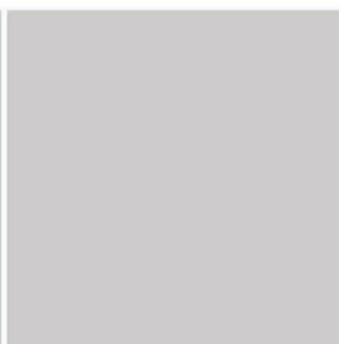
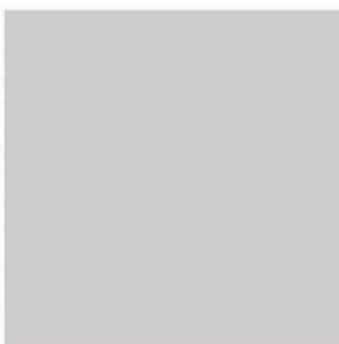
Yellow Sea Large Marine Ecosystem



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UNDP/GEF Project Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem

UNDP/GEF Yellow Sea Project Management Office, Korea Ocean Research and Development Institute Compound 1270, Sa-2dong, Sangnok Ansan City 426-744, Republic of Korea, Tel. 82-31-400-7829, Fax. 82-31-400-7826, <http://www.yslme.org>, [info@yslme.org](mailto:info@yslme.org)



## UNDP/GEF YSLME PROJECT HOLDS CO-OPERATIVE CRUISE LAUNCHING CEREMONY

The 12th January 2008 was a memorable day for the project. The co-operative cruise between China and Republic of Korea got underway after numerous negotiations and discussions on this activity.



The ceremony with Qingdao City in the background.

A "Cruise Launching Ceremony" was organized by State Oceanic Administration (SOA), China, and its North Sea Branch in Qingdao, China, on 12th January 2008. Congratulatory speeches were given by:

- Mr. JIANG Yihang, Project Manager;
- Mrs. Alessandra Tisot, Senior Deputy Resident Representative, UNDP Beijing;
- Prof. ZHU Mingyuan, Chief Scientist of the Cruise; and
- high-level government officials from China and Republic of Korea: Dr. LEE In Soo, Commissioner, Korea Maritime Safety Tribunal, MOMAF, Mr. WANG Fei, Deputy Administrator, SOA.

Dr. ZHANG Zhanhai, Director General of SOA International Co-operation Division, and also the Project's new National Project Co-ordinator for China, acted as Compere of the ceremony.



Mrs. Alessandra Tisot addressing the crowd.



Dr LEE In Soo giving his congratulatory speech.

The ceremony was attended by numerous scientists from China and Republic of Korea, the research vessel's crew and on-board scientists, and North Sea Branch naval officers. Provincial and city government

The band welcoming participants to the ceremony.



The research vessel, "Hai Jian 17."

officials from the Ocean and Fisheries Bureau of Shandong and Liaoning Province, as well as Qingdao and Dalian City were present to show their support for the project and the co-operative cruise. The representatives of the participating institutions in the project also participated in the Ceremony, including the North Sea Branch of SOA, the First Institute of Oceanography and the Yellow Sea Fisheries



Dr. Zhang Zhanhai opens the ceremony.



Mr. Yihang Jiang thanking all who made the co-operative cruise possible.

Research Institute.

Besides acquiring new knowledge, the co-operative cruise marks an important historical event for the region. As many of the Yellow Sea's environmental problems are transboundary, they require the efforts of all players (countless people in the governments, research institutes, Project Management Office) in the region to overcome these troubles. The co-operative spirit of the littoral countries has allowed the first joint basin-wide survey of the Yellow Sea to be realised.

The co-operative cruise will add to the current knowledge, as surveys on pollutants and ecosystem function and structure will be undertaken. The additional information gathered will enable the region to ensure an ecosystem-based, environmentally

sustainable managed and use of the Yellow Sea resources. The new knowledge will also help steer the management actions to be implemented in the future, through the “Strategic Action Programme” that is being developed under the project.



Mrs. Tisot, Mr. Jiang, and Mr. Zhang sending off the crew and scientists.



Mr. Wang Fei giving his speech, while Mr. Yang Yafeng translates.



Prof. Zhu Mingyuan addressing the ceremony participants.



From left to right: Mr. Hong Seongjin-Hanyang University; Ms. Kim Sunyoung-Inha University; Dr. Yang Eun Jin-KORDI, Captain Wang-Hai Jian 17 Captain; Prof. Zhu Mingyuan-FIO, received bouquets on behalf of the crew and scientists.

CPR surveys. The “Ocean Colour Algorithm Development” activity will explore ways to include other scientists from the region who are also working on this topic. Additional CPR surveys will be carried out. A “Fast Repetition Rate Fluorimeter-2” was purchased and will be used to measure primary production.



## 4th Round of RWG Meetings Successfully Convened

The 4th round of Regional Working Group (RWG) meetings were successfully convened from September to November 2007. The RWGs for Biodiversity, Ecosystem, Fisheries, and Pollution finalised the regional management targets and proposed management actions for the region’s Strategic Action Programme (SAP). These RWGs also carried out technical feasibility studies for the proposed technical management actions. The RWG for Investment reviewed the political and social acceptance work that needs to be undertaken and how to carry out cost-benefit analysis of the actions. All RWGs also proposed demonstration activities to implement and test the effectiveness and benefits of the management actions listed in the SAP.

### Biodiversity

Travel plans were hastily changed as typhoons prevented planes landing on Jeju Island where the meeting was originally scheduled. The meeting was finally held at the KORDI, Ansan, ROK 17-19 September 2007. Participants carefully reviewed and finalised the regional targets and management actions proposed by the Strategic Action Programme Ad-Hoc Working Group, discussed progress of ongoing activities and proposed activities for 2008.

Importantly, the meeting provided an opportunity for representatives of the YSESP WWF/Panasonic project, Mr. Tobai Sadayosi and Mr. Wang Songlin, to discuss future collaboration. Members agreed that YSLME and WWF should work together to help identify critical habitats for conservation and specific sites where SAP management actions could be demonstrated. Other future activities agreed during the meeting were the need for an assessment of management effectiveness of MPA’s and the need for training for MPA/National Park managers.

### Ecosystem

The meeting was held in Ningbo, China, 3-5 October 2007. Members reviewed the completed activity using a continuous plankton recorder (CPR) to survey plankton and physical oceanographic variables in the Yellow Sea. The fronts for temperature and salinity were observed and reported. Members also gave guidance on future activities, such as “Ocean Colour Algorithm Development,” “Estimation of basin-wide primary production and carrying capacity,” and future



4th RWG-E Meeting Participants relaxing after the meeting

## RWG-Fisheries

The 4th RWG-F meeting was held in Sokcho, ROK 7-9 November 2007. Members came from all corners of the globe to attend. Participants reviewed and finalised the Ecosystem Quality Objectives or regional targets, management actions that are required to meet these targets, evaluated the feasibility of the technical management actions and selected actions for demonstration activities.

Members agreed that as fisheries is not included in the co-operative cruise, the fisheries component should conduct its own regional stock assessment. Differences in stock assessment methodology are to be harmonised and each country is to hold 2 stock assessment surveys using an identified methodology. The methodology and results are to be discussed during a series of meeting designed to increase trust, co-operation and capacity in both countries. Other activities that were discussed and finalised included the participation of the YSLME in the World Aquaculture Society Conference in Busan, ROK 19-23 May 2008, a young fisheries scientist exchange programme and the need for a Regional Mariculture Conference, 9-11 September 2008.

## RWG-Pollution

The 4th RWG meeting was held in Jeju, Republic of Korea, from 11-12 October 2007. Members finalised preparation of the marine assessment workshop that will be held next spring. They also suggested new activities for 2008 that include capacity building in nutrients, metals and organics analyses, further inter-calibration exercises, and experience exchange with other Large Marine Ecosystem Projects.

This component is also exploring ways to link their SAP demonstration activities with other components. Updates on this will be reported in future newsletters.

## RWG-Investment

The 4th Regional Working Group Meeting for Investment Component was held in Jeju, Republic of Korea, 16-19 October 2007.

The Meeting discussed completed and on-going activities since the last RWG meeting, including those for public awareness and for data and information management. The Meeting suggested recommendations for each activity and agreed to submit them to the Project Steering Committee for its consideration and approval. One of the recommendations is to continue Small Grants Programme in the year 2008 with its successful implementation during the last two years considered. The Meeting thought that the Programme would greatly contribute to enhancing the awareness of local communities about environmental problems in the Yellow Sea.

The Meeting also discussed the preparation of the Strategic Action Programme (SAP). Having reviewed guidelines prepared by the SAP Ad-hoc Working Group, the Meeting prepared detailed implementation plans for cost-benefit analysis and for political and social acceptance analysis. The cost-benefit analysis will be conducted, as case studies, on selected management actions such as the 30% reduction of fishing efforts. The acceptance analysis will examine the feasibility of the SAP, considering the stakeholders' perspective by collecting and analysing their comments in the final SAP. Additionally, the Meeting reviewed draft guidelines for preparing National Strategic Action Plans (NSAPs) which will be developed to implement necessary management actions at national level to protect marine environment and sustainable use of coastal and marine resources.



## 4th RSTP and 4th PSC Meetings

The 4th Regional Scientific and Technical Panel (RSTP) Meeting was held in Guangzhou, China, 26-28 November 2007. The RSTP reviewed the project's progress during 2007, and discussed and approved the procedure to finalise the SAP, which will be another major outcome of the project. The meeting explored, discussed and recommended future steps for the activities such as: technical workshop for data and information management, linking demonstration activities across project components where necessary, the databases' mirror site.

The RSTP also discussed and agreed on the workplan for 2008, with special emphasis on the finalisation of the SAP, and also explored further the participation of DPR Korea in the project.

The recommendations and agreements from the RSTP were forwarded to the Project Steering

Committee (29-30 November 2007), where they were duly approved.

The published “Data & Information Collection Activity” and “Regional Syntheses Reports” were displayed and distributed to the participants of both meetings. The DVD from the “First Yellow Sea Regional Science Conference” was also displayed and distributed.



During a break in the meeting, Professor Zhu Mingyuan, Chairperson of the RSTP Meeting, studied the new posters produced by PMO.



## Inter-calibration Summary Workshop Enhances Capacity Building

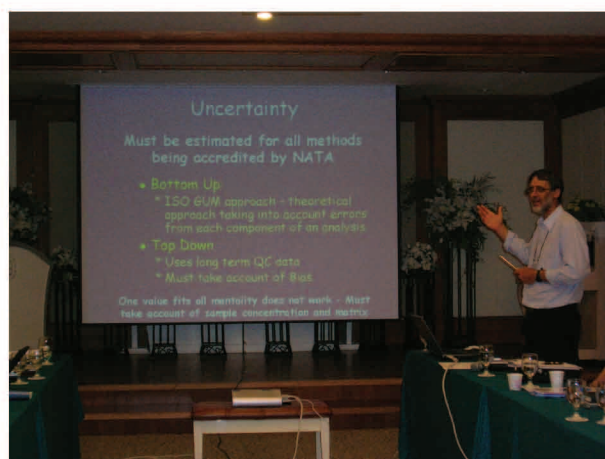
The second round for “Nutrients in Seawater Inter-calibration” activity was completed by the same four labs from China and three labs from ROK that participated in Round 1. Labs continued with the activity by analysing nutrient concentration of certified reference materials (ammonia, filterable reactive phosphorus, nitrate, nitrite, silica) obtained from a lab in Australia contracted to implement the activity. The Queensland Health Scientific Services, Australia, co-ordinated the activity on behalf of the Yellow Sea Project, by supplying the reference materials to each lab, collecting and analysing the results, and preparing the final reports containing the summary results and recommendations for future improvement. Similar to Round 1 carried out in 2006, the results from Round 2 also were very good, with a high acceptance rate of the results, with nearly all labs meeting the acceptable level for all nutrients.

Inter-calibration exercises for metals and organic compounds in sediment and biota started in 2007 with participation by 4 labs in China for both metals and organics analyses, 4 labs from ROK for each metals and organics analyses. The IAEA-MEL co-ordinated the activity by supplying the reference materials to each lab, and collecting and analysing the results. The results are very good, with most labs achieving the acceptance levels.

Results were presented at the Inter-calibration Summary Workshop held from 8-10 October 2007 in Jeju. The objectives of the workshop were to:

- Review and summarise the two nutrient inter-calibration exercises organised by YSLME and QHSS.
- Review results-to-date for metals & organics inter-calibration exercise.
- Assess the degree of comparability of the results obtained by the participating labs.
- Exchange experiences on and lessons learned from problems related to analytical chemistry, and to apply lessons learned to future work.

Participants presented their results, standard operating procedures, QA/QC methods, problems encountered, and exchanged ideas on improving analytical skills, such as methods for validating data, precision data, repeatability, reproducibility, bias, and uncertainty. The co-ordinators for the exercises participated in the workshop to make recommendations to participants on improving analytical skills, and obtain information from participants on technical and capacity gaps in the laboratories.



Dr. Dan Wruck explaining some salient points during Inter-calibration Summary Workshop.



## YSLME Regional Workshop on Mariculture Disease Diagnosis, Control and Prevention

Mariculture disease costs the global industry billions of dollars annually and disease outbreak continue to threaten profitable businesses in the region. Mass mortalities of shrimp were reported in ROK in 2004-2005 caused by diseases that had never been reported in the region before. To help combat the problem, a workshop was held at Jeju National University 16-17 October 2007, capably organised by Professor Albert Choi. Eighteen scientists gave presentations on all aspects of the ongoing battle

against disease from new developments in the identification of pathogenic organisms, to control and prevention of disease using selective breeding and genetics, probiotics, bacteriophages and pharmacology.

The workshop finished with a round table discussion on the need for a regional early-warning system to prevent disease outbreaks. Scientist debated the effectiveness of the Network of Aquaculture Centres in Asia-Pacific (NACA), the current mechanism where member countries are required to report outbreaks of notifiable diseases four times a year. ROK, although not a member yet, follows these guidelines. Participants agreed that although this system may not cover all the regionally important diseases, it was effective. However, they recommended an annual regional workshop where mariculture scientists can exchange information on recent developments in the control of emerging diseases. This will be incorporated into the Regional Mariculture Conference, 9-11 September 2008. The proceedings are available on line at [www.yslme.org](http://www.yslme.org) and follow the link to "Meeting documents."



### Public Awareness Increases with ICC Busan

The Project has been strengthening co-operation with UNEP's Northwest Pacific Action Plan (NOWPAP) in a variety of areas, especially in the area of marine litter.

The International Coastal Cleanup (ICC) Campaign/Workshop was organised by NOWPAP in Busan, ROK, 28-29 September 2007 as one of NOWPAP's activities to address marine litter issues in the region. A Programme Officer of the PMO contributed to this activity by giving presentations, attending panel discussions, and conducting coastal cleanup. This is the second time for the Project to attend the Campaign; the Project supported the ICC in Rizhao (June 2007) as the last Newsletter (No.3 Vol.4) reported. The Campaign attracted a great deal of attention in ROK with the local participants ranging from city mayors, government officials, NGOs, and scientists to business communities. The activity was broadcasted nationwide by the local media.

The contribution made by the PMO not only enhanced collaboration between the two international projects, but also provided opportunities for the Project to expand its partnerships to relevant organisations such as local NGOs in China and ROK.



### 2nd YSP Workshop

(See Next Paragraph)

The second Yellow Sea Partnership (YSP) Workshop, hosted by NOWPAP, was organised in Busan, ROK, 1st October 2007. The meeting reviewed the completed and on-going co-operative activities, discussed co-operative activities from 2007 and onwards, and discussed the management mechanism of the YSP. The Project assisted NOWPAP in organising this annual meeting by providing ideas on meeting agenda, joint activities, and administrative mechanism.

The Workshop agreed to exchange further information for joint activities in 2008, host regular meetings by rotation, and use both the YSP logo and each organisation's logo on the partnership's outputs. The Project continues to take charge of some secretariat tasks for the Partnership — the membership application/registration process and the website maintenance — until the year 2009 when the Project finishes. The next Workshop will be held back-to-back with the meeting of Ramsar Convention in Changwon, ROK, from 28 October to 4 November 2008.



### Regional Conference

Given the successful implementation of the Parliamentary Conference and the agreement made by its participants, the "Regional Conference on Protection of the Marine Environment and Sustainable Use of Marine Resources in the Yellow Sea" was organised as a follow-up meeting of the Parliamentary Conference in Incheon, ROK, 11-13 October 2007.

With prominent regional scientists as well as representatives from national and municipal assemblies in China and ROK invited, the Regional Conference focused on socio-economic aspects of the Yellow Sea's ecosystem, such as legislation, economy, and public awareness.

The conference also explored the possibility and mechanism to secure continuous dialogue at the highest level of decision-making among the two participating countries and other relevant countries.

Through presentations and panel discussions, the Conference enhanced regional co-operation, particularly the co-operation of the parliamentary bodies in the Yellow Sea region, in protecting the marine environment and promoting sustainable use of marine and coastal resources in the Yellow Sea.



### Ocean Policy Forum Strengthens Ocean Governance and Management

(See Next Page)

With participation of 7 marine nations in the Asia-Pacific region, the Ocean Policy Forum 2007 was organised by Ministry of Maritime Affairs and Fisheries, R. Korea, in Seoul, 14-15 November 2007. The Forum provided a good opportunity for policy makers, government officers and research scientists to exchange views and experiences on the issues of ocean governance, integrated ocean policies and relevant management issues. National reports on ocean policies and other relevant presentations showed a high level of interest of the participating countries in designing and implementing ocean policies.

It was noted that the countries with specific national management agencies for the ocean have paid more attention to ocean policy issues, such as DFO, Canada; SOA, China; MOMAF, Korea; and NOAA, USA. The Forum emphasised that there is a strong need to enhance ocean management in the countries, as the ocean is playing more important roles in human existence.

From the presentations, it was apparent that ocean policy covers a wide area. The national territorial interests are not the only concerns for ocean policy. The sustainable use of coastal and marine resources and protection of marine environment are becoming very important elements of ocean policy. Some presentations that covered topics on maritime heritage, culture, tourism, and community resilience on coastal hazards opened up new areas for ocean policies to consider in the future.



## Proposal and Report Writing Workshop For Regional Scientists and Environmental Practitioners

The “Proposal and Report Writing Workshop for Environmental Practitioners: Keys to Effective Writing” was organised in Ansan, ROK, 22-23 October 2007 to strengthen the capacity of government agencies and research organisations to prepare high-quality proposals and reports for securing the integrity and sustainability of environmentally-related research activities that the organisations implement. Eighteen professionals who deal with marine and coastal management participated in the Workshop: ten from China and eight from ROK. Dr. Christopher Craft, Professor, Indiana University at Bloomington was invited to serve as the workshop lecturer.

The workshop, consisting of lectures and hands-on exercises, covered how to write effective proposals, research papers, and abstracts. The lectures described tips for writing proposals, including proposal organisation, experimental design and statis-

tics, and presentation of data (figures and tables). The hands-on exercises illustrated how to present data as figures and tables and how to organise and list references (in-text citations and bibliographic list). Tips for writing a research paper, including the structure of the paper, composing the abstract and use of SI units (Le Système international d'unités), were also covered. A writing exercise to compose abstracts for presentations, proposals, and research papers was conducted as part of the hands-on exercises.

The Workshop report with teaching materials is available online at: <http://www.yslme.org/>.



## Voluntary Internship Programme

The Voluntary Internship Programme (VIP) with Yonsei University Graduate School of International Studies (GSIS) has developed into a full-fledged program.

The Project invited four graduate students who were selected from among applicants to the “Regional Conference” (Incheon, ROK, 11-13 October 2007). While the students attended the Conference as observers, they greatly contributed to organising the meeting by providing administrative support and translation services.



The interns received a certificate during the final stage of the VIP programme.

After the Conference, the Programme's summary and reporting session was held at Project Management Office in Ansan, ROK on 26 October 2007, where the participating students gave presentations on lessons learned from the internship and suggestions for improving both Project implementation and conservation activities in the Yellow Sea.

The interns suggested facilitating more co-operation in the region, NGO and youth participation, and DPRK involvement in the Project's activities. The interns also recommended strengthening the VIP to encourage more participation from university students.

Through the Programme, the participants developed a basic understanding of not only managing marine ecosystem in a sustainable manner, but also the

procedure of implementing UN environmental projects. Upon satisfactory completion of the assignment, a certificate was given to the interns as proof of their contribution to the Project.



### Small Grants Programme

Following the successful implementation of the Small Grants Programme in 2006, the Project decided to fund projects under the Programme in 2007. An External Review Panel selected five projects to fund, from 14 submitted proposals from universities, local government, and local environmental NGOs (See below).

Project Title	Organisation
Capacity Building for Local Sea-Water Cultivation Proprietors in the Participation and Management of Marine Protected Areas around Yantai Region	Yantai University-Shandong
Fishermen’s self monitoring of marine litter in Boryeong, W Korea	Korea Marine Rescue Center Corp.- Chungcheongnam-do
Promoting Civil Participation in Coastal Conservation Utilizing the Muan Tidal flat Center	Eco-Horizon Institute-Seoul
Enhancing the Ability of Local Stakeholders to Effectively Understand the Impacts and Technical Ways of Sustainable Mariculture in San Gou bay	Shandong Province-Rongcheng
Building the Partnership between Government Departments and Enterprise on Protecting the Marine Environment of Yalujiang River Estuary	Liaoning Ocean and Fishery Department



### Helping With Oil Spill Clean-up

On the morning of 7th December 2007, a barge owned by Samsung Heavy Industries smashed into the Hong Kong-registered supertanker, “Hebei Spirit,” about 8km off the coast of Taean (in the Yellow Sea), Republic of Korea (ROK), tearing holes in its hull. The anchored tanker was carrying about 230,000 tonnes of crude oil, of which an estimated 10,840 tonnes gushed into the sea between ROK and China before the leak was finally halted on Sunday morning. This was the worst oil spill encountered by ROK.

The clean-up effort, which began the day after the oil slick started to wash ashore, has involved hundreds of ships as well as thousands of police, soldiers, fishermen, and volunteers. Korea Ocean Research and Development Institute (KORDI) organised a volunteer clean-up event on 13th December 2007, where 85 volunteers from KORDI, including two PMO staff participated. The volunteers worked very hard for one afternoon to clean the oil from the rocky beach. Despite the efforts, there is still a lot of work to be done, and numerous efforts continued weeks after the oil spill happened. The environmental recovery is estimated to take years, if ever. Given this tragic incident, the Yellow Sea Project is considering how it can assist in both humanitarian and technical efforts.

All suited up and ready to clean the oil.

