



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

UNDP/GEF/YS/PC.1/3
Date: 22 March 2006
English only

**The Regional Conference on Parliamentary Roles in
Protection of Marine Environment and
Sustainable Use of Marine Resources in the Yellow Sea**
Qingdao, China, 28-30 March 2006

Speech Abstract

(Received up to 22nd March 2006)

Plenary Presentation 1: Environmental stresses in the Yellow Sea

Title: Harmonisation and/or reform of regional and national legislation in
protection of marine environment and sustainable use of marine
resources – Legal perspectives

Speaker: Mr. GAO Zhiguo

Plenary Presentation 1: Environmental stresses in the Yellow Sea

Keynote speech 2

Title: *Status and trends of marine environment and resources in the Yellow Sea, and management issues required for sustainable development*

Speaker: **Mr. JE Jong Geel**

Keynote Speech

By Dr. Jong Geel Je

ABSTRACT

Because of its closeness (semi-enclosed) and shallowness, the Yellow Sea is most vulnerable to the environmental stresses. Huge amount of land based wastes, riverine sediments and airborne pollutants are pouring into the sea. Coastal development, reclamation, overfishing, heavy shipping activities are also accountable for the degradation of the Yellow Sea ecosystem.

Most pollutants derive from the three littoral countries bordering the YSLME, and thus it is crucial to have full geographical coverage of information on resources, their distribution, interaction and potential yields of the region to cope with the problems. Environmental problems are part of social, economic and cultural systems of the society and involve in the interests of various levels of stakeholders. Solutions for the pollution, therefore, must be considered with regard to these multidimensional aspects which require inter-sectoral, inter-ministerial and inter-national as well as regional collaboration.

The parliaments have a responsibility to work towards to maintain the sustainability of the Yellow Sea; to incorporate interests of multiple stakeholders, to set priorities of values, and to coordinate conflicting legal, institutional, and financial instruments. The parliaments will have to seek joint policies to promote the sustainable use of the sea by active participation of all littoral countries. In this context, it is hoped that a tangible parliamentary forum be formally established to share the vision, knowledge and experience between the members for the sound sustainability of the YSLME as well as the other seas in the northeast Asian region.

Plenary Presentation 2: Yellow Sea Large Marine Ecosystem and its economic value

Keynote speech 1

Title: *Legal and institutional requirements and feasibility for a regional agreement in protecting marine environment in the Yellow Sea*

Speaker: **Mr. NI Yuefeng**

Plenary Presentation 2: Yellow Sea Large Marine Ecosystem and its economic value

**Title: Yellow Sea Large Marine Ecosystem– Its' Transboundary Issues and
Management Perspectives**

Speaker: Mr. HUH Hyung-Tack

**The Yellow Sea Large Marine Ecosystem (YSLME):
Its Transboundary Issues and Management Perspectives.**

Hyung Tack Huh,

NPC, YSLME; Fellow, Korean Academy of Science & Technology

ABSTRACT

The Yellow Sea Large Marine Ecosystem (YSLME) is an important global resource. It has provided food and livelihood to the civilizations in the region for millennia. The Sea has been most favorable ground for fisheries and other resources as well as the highway for vast international shipping activity. Recently, however, the Sea has been under the environmental stresses and pushed beyond its capacity due to the heavy exploitation with environmental degradation from coastal development, land reclamation, etc. Most of the pressures are anthropogenic with some from natural stresses.

There have been many environmental changes in the YSLME, most of which are transboundary in nature; decline of major fish stocks, changes in fishing grounds, fisheries yields, biodiversity, and water quality. Occurrence of mass mortality of marine organisms and harmful algal blooms have also been increased causing significant economic losses.

The priority actions required to solve the problems are in the fields of fisheries management, scientific investigation and monitoring of the ecosystem, conservation of biodiversity and habitats, data management, capacity building, establishment of common standards in environmental regulations and contingency plan, etc. To implement these actions, it is imperative to have inter-national as well as regional cooperation.

The YSLME Project is to develop ecosystem-based, environmentally sustainable management strategies and establish national and regional infrastructures for the Yellow Sea and its watershed. To achieve this objective, the project will focus in preparing Transboundary Diagnostic Analysis (TDA), National Yellow Sea Action Plan (NYSAP), and Strategic Action Plan (SAP). The final SAP will consist of a series of legal, policy and institutional reforms, and investment to address the priority transboundary issues.

Plenary Presentation 2: Yellow Sea Large Marine Ecosystem and its economic value

Title: Yellow Sea dynamics – scientific indicators of the existing ecosystems
in the Yellow Sea

Speaker: Mr. HU Dunxin

Plenary Presentation 2: Yellow Sea Large Marine Ecosystem and its economic value

Title: Economic consideration within framework of integrated management of marine and coastal resources

Speaker: Mr. ENDO Isao

Economic consideration within the framework of integrated management of marine and coastal resources

Isao Endo

UNDP/GEF YSLME PMO

This presentation addresses the following three points: (i) importance of the economic consideration on ecosystem conservation, (ii) importance of the integrated management, and (iii) economics of the international co-operation.

Economic consideration on ecosystem conservation. Decision-makers often face a dilemma between conservation and development. Economics could help these decision-makers address the issue by providing simple yet effective criteria: Comparing the gains (benefits) with the losses (costs) of an action (e.g., conservation efforts), if the former exceeds the latter, support the action; otherwise, oppose it. With various valuation methods employed, the benefits and costs of goods and services that concerned ecosystems provide are measured. The results of the “benefit-cost analysis” could enable the decision-makers to select efficient actions for conservation.

Integrated management. The integrated management considers as many “ecosystem services” as possible, examines the linkages among the different services, and may require international co-operation if transboundary problems exist. A research, conducted in Bintuni Bay, Indonesia, found that the strong correlation between mangrove logging and other ecosystem services, in particular offshore fisheries. With such linkages considered, the optimal strategy is to ban the logging; meanwhile, with the linkages ignored, the optimal strategy is to clear-cut the mangrove forests. The lessons from this study are: (i) the linkages among various ecosystem services might exist; (ii) improper managements of one service could result in significant economic losses elsewhere; and (iii) failure to implement the appropriate management would lead to not only ecological degradation, but also economic losses and possibly social, political instability.

Integrated management. According to the “game theory,” if there is a transboundary environmental problem between two countries, the both countries do not abate in order to maximize each benefits (“prisoner’s dilemma”); then, the total benefits for the society is minimized. If the two countries agree to co-operate to reduce the pollution, however, the total benefits will be maximized.

Conclusions. (i) Considering the economic aspects of conservation efforts would help the decision-makers take efficient actions. (ii) The integrated management could prevent not

only environmental degradation, but also economic losses and social instability. (iii) The international co-operation makes sense economically as well as ecologically.

Plenary Presentation 2: Yellow Sea Large Marine Ecosystem and its economic value

Title: Economic development – its dependence on the marine ecosystem –
experience and lessons learned from Korea

Speaker: Mr. CHO Dong-Oh

Economic Development - Its Dependence on the Marine Ecosystem: Experience and Lessons Learned from Korea

Dr. Dong-Oh Cho

Korea Maritime Institute

The coastal and ocean environment and resources are important to the economy and society in Korea considering its small land mass, poor resources, and dense population. However, over the last four decades the Korean government has developed and used the marine environment and resources for the economic development, which has been carried out by a series of "National Economic Development Plans" starting from 1962 through 1996. By the results, the added value of marine industry to GDP shared at 4.4% in 1998, 5.3% in 2003, and it will be increased to 11.3 % in 2030.

However, the over-exploitation and development of marine ecosystem resulted serious negative issues, such as depletion of fisheries, degradation of water quality, frequent redtides, loss of wetlands, and dense development of coastal zone. During the last ten years from 1987 to 1998, about 25.3% of total wetlands were lost due to reclamation for creating land for agriculture, industrial complexes, coastal cities, and ports. Although since 1991 the coastal water quality measured by COD maintained at the second class standard, the level of nitrogen and phosphorus marks much higher than the standards.

However, the general public and government became to recognize the value of marine ecosystem by a series of oil spill accidents, frequent redtides, and controversies over large reclamation projects. In 1996 Korean government responded to manage the marine environment and resources positively and established MOMAF (Ministry of Maritime Affairs and Fisheries) by integration of most ocean-related government agencies, such as Maritime and Port Administration, Fisheries Administration, and National Marine Police Administration.

Over the last decade MOMAF has struggled to establish policies and programs from sector-based management toward marine ecosystem-based management. The Marine Environment Preservation Comprehensive Plan, Integrated Coastal Zone Management, Wetland Preservation, Special Area Management, Oil Spill Management, and Sustainable Fisheries Management are the representatives. However, the way to marine ecosystem-based management is not easy. Many laws and programs resisting ecosystem-based management have been already enacted and established. Recognition of marine

ecosystem, institutional arrangement, integrated ocean policy, and geographic integration of marine ecosystem are the key factors for the success of ecosystem-based management.

**Plenary Presentation 3: Parliamentary roles in environmental management in the
Yellow Sea**

**Title: Yellow Sea Large Marine Ecosystem Project – Concept, development
and management implication**

Speaker: Mr. TANG Qisheng

Plenary Presentation 3: Parliamentary roles in environmental management in the Yellow Sea

Title: Institutional and financial consideration in the management of marine and coastal resources – management perspectives

Speaker: Mr. HAN Kwang Won

Institutional and Financial Consideration in the Management of Marine and Coastal Resources Management Perspectives

Kwang-Won Han

Member of National Assembly

Republic of Korea

The management of marine environment and resources (ocean policy) is so wide and complicate in geographic scope and function that there have been so many laws and programs. There are more than 50 laws on the coastal land and waters and oceans which mandates each relevant government agency to establish a national management policy, regulations, incentives, and investment based on those laws. However, until recently those laws and programs were enacted and established in fragmented and sector-based objectives.

The Institutions for marine ecosystem-based management in Korea consists of “Committee on Agriculture, Forestry, and Fisheries” and “Oceans Forum” in Congress, MOMAF (Ministry of Maritime Affairs and Fisheries”, and local governments. At present all of the institutions are hard to establish and implement ocean policy toward sustainable development and ecosystem-based management.

The Korea Congress is supporting to enact and revise coastal and ocean relevant laws, which mandates MOMAF to establish and implement ecosystem-based management. Also the Korea Congress is supporting to invest to ecosystem-based management, such as in establishing “Marine Environment Preservation Complex Plan,” preservation fisheries stocks, and R&D.

The Yellow Sea has been important to neighboring countries in cultural, social, and economic aspects. However, the Yellow Sea Marine Environment and Resources have been seriously degraded and depleted. The Korea Congress together with all the stakeholders will support YSLME Project, which is assumed to be an optimal option to preserve the Yellow Sea environment and resources.