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**IMPLEMENTING THE STRATEGIC ACTION PROGRAMME FOR THE YELLOW SEA LARGE MARINE ECOSYSTEM:
RESTORING ECOSYSTEM GOODS AND SERVICES AND CONSOLIDATION OF A LONG-TERM REGIONAL
ENVIRONMENTAL GOVERNANCE FRAMEWORK
(UNDP/GEF YSLME Phase II Project)**

UNDP/GEF/YS/RWG-P/WS
English only

**Draft Program of the Korea-China Workshop on Nutrient Management
Harerbin City, PR China, 15-17 July 2019**

Background

Coastal eutrophication is associated with large urban populations and agricultural production that has high fertilizer use or large numbers of livestock. Excessive nutrients transported by rivers into coastal waters can cause algal blooms that may be toxic and may deplete the oxygen in the water and make it turbid, affecting fish and other marine life. Atmospheric nitrogen deposition is also a contributor to coastal eutrophication. Policy responses that reduce nutrient inputs to watersheds will decrease risk to LMEs. Based on the data of 2000, coastal eutrophication in Yellow Sea is rated as high, according to IOC-UNESCO and UNEP (2016). The YSLME SAP adopted in 2009 by PR China and RO Korea specifically targets to reduce nutrient loadings in coastal areas from land-based, atmosphere and ocean-based sources. UNDP/GEF YSLME Phase II Project has been supporting the review of current status of coastal eutrophication and loading modelling in hotspots, demonstration of nutrient mitigation through natural solutions and sewage treatment to achieve reduction of nutrients in Yellow Sea.

Under these circumstances, the workshop on Nutrient Management and the workshop on Marine Litter will be held in Harerbin City of PR China on 15-17 July of 2019 co-organized by YSLME PMO in collaboration with KIOST of RO Korea and NMEMC of PR China.

Objectives

- To review the status of nutrient inputs from selected river basins, atmosphere-based and sea-based sources;
- To understand the progress being made in nutrient reduction through increase in nutrient-use efficiency in crop production, improvements in management of manure, and upgrading sewage treatment, and use of artificial wetland as nutrient sinks in the Yellow Sea.
- To discuss opportunities for improved nutrient reduction through regional cooperation and policy developments.

Sponsors

- Marine Policy Office, Ministry of Oceans and Fisheries, RO Korea
- Department of International Cooperation, Ministry of Natural Resources, PR China
- Department of Marine Ecology and Environment of Ministry of Ecology and Environment

Organizers

- KIOST, RO Korea
- NMEMC, PR China
- YSLME PMO

Tentative Programme of Korea-China Workshop on Nutrient Management
Harerbin, PR China, 15-17 July 2019

| 15 July (Monday) Arrival of Participants | |
|--|---|
| Day 1: 16 July (Thursday) | |
| 08:00~09:30 | Registration for participants |
| 09:30~09:50 | Facilitator: Mr. Zhengguang ZHU, Environment Officer, YSLME Welcome Speech <ul style="list-style-type: none"> • Ministry of Ecology and Environment, PR China Congratulatory Speech <ul style="list-style-type: none"> • MEE/NMEMC, PR China • KIOST/RO Korea Opening Remarks: <ul style="list-style-type: none"> • UNDP/UNOPS |
| 09:50~10:00 | Photo Session and Coffee Break |
| 10:00~12:00 | Session 1: Status of nutrients inputs e.g. nitrogen and phosphorus from land-based, atmosphere-based and sea-based sources from selected river basins: <u>Session Moderator: (TBD)</u> <u>Part 1: Land-based Sources of Nutrients in the Yellow Sea</u> <ul style="list-style-type: none"> • Watershed modelling and nutrient loadings in Haizhou Bay of Jiangsu Province, PR China Speaker: Mr. Lijun Wang, NMEMC of MEE • Watershed modelling and nutrient loadings in Han River of RO Korea Speaker: TBD, RO Korea <u>Q&A session</u> |
| 12:00~13:30 | Lunch and Break |
| 13:30~15:30 | <u>Part 2: Atmosphere-based Sources of Nutrients in the Yellow Sea</u> <ul style="list-style-type: none"> • Country presentations on monitoring and acquisition of data from atmosphere based sources Speaker: Ms. Limin YU from NMEMC of MEE • Country presentations on monitoring and acquisition of data from atmosphere based sources by expert from RO Korea Speaker: TBC, RO Korea <u>Part 3: Sea-based Sources of Nutrients in the Yellow Sea</u> <ul style="list-style-type: none"> • Monitoring and acquisition of data from sea based sources in PR China Speaker: Ms. Fan YANG, NMEMC of MEE • Monitoring and acquisition of data from sea based sources in RO Korea Speaker: TBD, RO Korea <u>Q&A session</u> |
| 15:30~15:50 | Coffee break |

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| 15:50~17:50 | <p>Session 2: inter-RWG cooperation in monitoring and assessment of ecosystem health and nutrient inputs from different sources</p> <p><u>Session Moderator: TBD</u></p> <ul style="list-style-type: none"> • Summary report of 1st China-Korea Workshop on Harmful Marine Organisms <u>Speaker: TBD</u> <p><u>Q&A and discussion</u> on opportunities for enhancing the effectiveness of ecosystem health and nutrient inputs monitoring</p> |
| 18:00~ | Dinner Hosted by YSLME PMO |
| <u>Day 2: 17 Sep (Wednesday)</u> | |
| 09:00~10:30 | <p>Session 3: fertilizer use inputs to watershed and nutrient use efficiency</p> <p>Moderator: TBD</p> <ul style="list-style-type: none"> • Fertilizer Use and inputs in watershed in coastal provinces of the Yellow Sea in PR China <u>Speaker: TBD, PR China</u> • Fertilizer Use and inputs to watershed in coastal provinces of the Yellow Sea in RO Korea Speaker: TBD, RO Korea • Nutrient use efficiency in PR China <u>Speaker: PR China</u> • Nutrient use efficiency in RO Korea Speaker: TBD, RO Korea |
| 10:30-10:50 | Coffee break |
| 10:50~12:00 | <p>Session 4: Nutrient reduction or remediation through nature-based solutions</p> <p><u>Session Moderator: TBD</u></p> <ul style="list-style-type: none"> • Restoring coastal wetlands as nutrient sinks: case studies and regional strategies Mr. Guoxiang LIAO, NMEMC, PR China • Seaweed farming in YSLME as a contributor to nutrient balance Speaker: TBD, ROK/PRC <p><u>Q&A</u></p> |
| 12:00-12:20 | Wrap-up and closure of the workshop |
| 13:00-18:00 | Field trip (TBC) |

List of Participants

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