



**YSLME**

UNDP/GEF Yellow Sea  
Large Marine Ecosystem

**3<sup>rd</sup>** Interim Commission  
Council Meeting

12-14 MARCH 2019 • QINGDAO, PR CHINA

## Agenda 5.2

# Annual Project Report 2018



Empowered lives.  
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## Recommendation

The Secretariat recommends that the 3<sup>rd</sup> Meeting of the MSTP/ICC:

- i. **Invite** comments from the RWG Chairs and partners on the inclusiveness, coherence and relevance of project progress and assess the policy, institutional, capacity and technical gaps towards achievement of the end of project targets;
- ii. **Direct** the RWGs to continue to serve the quality assurance mechanism for project implementation and to provide timely review of technical deliverables through webinar and other innovative ways;
- iii. **Request** the Secretariat to keep and maintain a register of project risks and issues for timely escalation to project partners for solutions; and
- iv. **Direct** the Secretariat to communicate the project progress to the project team and partners for collaborative planning and information sharing

# COMPONENT 1: Ensuring Sustainable Regional and National Cooperation for Ecosystem-Based Management

Indicator Description	Cumulative progress since project start
<p><b><u>Indicator 1.1: Status of YSLME Commission and subsidiary bodies at regional level</u></b></p> <p><b><u>End of the project targets:</u></b></p> <p><b>1) All the Terms of Reference for the YSLME Commission and Subsidiary Bodies approved by all participating country Governments; and 2) Functioning YSLME Commission</b></p>	<ul style="list-style-type: none"> <li>● TORs and Rules of Procedures in place for ICC, TORs of the Management, Science and Technical Panel (MSTP) and six Regional Working Groups (RWGs) and Secretariat Staff</li> <li>● The interim regional ocean governance mechanism is functioning well since its inception in the second phase.</li> <li>● The first and second meetings of ICC and MSPT were held in July, 2017 in Seoul, RO Korea, and in March 2018 in Dalian, PR China.</li> <li>● The first meetings of the six RWGs were held respectively: RWG-A (Incheon, ROK, November 21-22, 2017); RWG-F (Yantai, PRC, October 17-18, 2017); RWG-G (Seoul, ROK, Dec 14-15, 2017); RWG-H (Incheon, ROK, Sept 4-5, 2017); RWG-M (Weihai, PRC, Oct 26-27, 2017); RWG-P (Dalian, PRC, Oct 10-12, 2017).</li> <li>● The second meetings of three RWGs were held in 2018: RWG-A (Kunming, PR China, June 25-26, 2019), RWG-F (Jeju, ROK, October 10-11) and RWG-M (Jeju, ROK, Dec 8-9).</li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="73 232 658 418"><b>Indicator 1.2: Status of Inter-Ministerial Coordinating Committee (IMCC)</b></p> <p data-bbox="73 482 653 1146"><u>End of the project target:</u> 1) Participation of Ministries in the IMCC will include but not limited to the following: Ministry of Foreign Affairs, Ministry of Finance, relevant department or ministry of ocean &amp; fishery. 2) Two meetings of IMCC every year and functioning coordination</p>	<ul data-bbox="739 225 1839 1132" style="list-style-type: none"> <li data-bbox="739 225 1761 611">● In RO Korea, IMCC has been established with the following membership: <b>Ministry of Foreign Affairs(MOFA) as GEF National Focal Agency; Ministry of Oceans and Fisheries(MOF) as GEF National Implementing Agency; Other relevant Ministries including Ministry of Environment, Ministry of Unification</b> etc.</li> <li data-bbox="739 654 1839 1039">● In PR China, the existing IMCC includes <b>Ministry of Finance (MOF), State Oceanic Administration (now known as Ministry of Natural Resources, MNR), Ministry of Agriculture (now known as Ministry of Agriculture and Rural Affairs, MARA), Ministry of Foreign Affairs(MOFA); and Ministry of Ecology and Environment</b></li> <li data-bbox="739 1082 1240 1132">● <b>Both operationalized.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p><b>Indicator 1.3: Number of the YS Partnerships; Number of activities on capacity building and public awareness; Number of participants in capacity building activities</b></p> <p><u>End of project target:</u></p> <p>1) Number of partnerships: 40; 2) Number of capacity building activities: 25;</p> <p>3) Number of public awareness initiatives: 15;</p> <p>4) Number of participants in capacity building activities: about 200</p>	<ul style="list-style-type: none"> <li>● <b>Yellow Sea Partnership (YSP) and adoption of Guidelines for Strengthening the YSP.</b></li> <li>● <b>By the end of 2018, more than 40 national and local governments, regional organizations and regional seas programmes, academia, NGOs and private sector participated in YSLME events.</b></li> <li>● <b>14 partners collaborated with YSLME Phase II Project in the conduct of workshops, seminars and training courses.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="63 168 624 482"><b>Indicator 1.4: Status of recognition and compliance to regional and international treaties and agreements</b></p> <p data-bbox="63 554 643 1325"><b>End of project targets: Better compliance of the relevant regional and international treaties and agreement e.g. UNCLOS, The 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, CBD, Ramsar, The FAO Code of Conduct for Responsible Fisheries, and the bilateral agreements between China &amp; ROK on environment protection and fisheries</b></p>	<ul data-bbox="701 161 1821 1318" style="list-style-type: none"> <li>● <b>the assessment report on China’s legal framework in compliance with the international and regional legal instruments for the implementation of SAP in the YSLME Project II</b></li> <li>● <b>the assessment report of China’s national and local capacity for implementation of international legal documents in the YSLME Phase II Project.</b></li> <li>● <b>The preparation of regional guidelines for incorporating FAO Code of Conduct for Responsible Fisheries (CCRF) in YSLME context is being undertaken by YSFRI.</b></li> <li>● <b>International Seminar on the Law and Policy to Promote Regional Ocean Governance in the YSLME Region (17-18 November 2018, Qingdao, enhanced the understanding of regional ocean governance (ROG) theory, share information on good ROG practices, and discuss about how to improve the law and policy framework to achieve a more effective governance with more than 50 experts.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p><b><u>Indicator 1.5:</u></b>  <b>Agreement on the financial arrangement for the YSLME Commission</b></p> <p><u>End of project target:</u>            Financing agreement between and among countries agreed to fully support YSLME for at least 5 years.</p>	<ul style="list-style-type: none"> <li>● Initial discussion on financial arrangement of the regional marine environmental cooperation mechanism took place in the first meeting of the RWG-G (December 14-15, Seoul). The meeting decided to continue to seek external grant such as GEF and GCF to support the operation of the YSLME Commission if established within the project timeframe.</li> <li>● The Financing Specialist has already submitted the YSLME Partnership Trust Fund for review by the ICC-4</li> </ul>

# COMPONENT 2: Improving Ecosystem Carrying Capacity with Respect to Provisioning Services



## Indicator Description

## Cumulative progress since project start

### **Indicator 2.1:** **Number of fishing boats decommissioned from the fleet in YSLME waters**

End of project targets: Fishing boat numbers substantially reduced by 10%, in line with the 2020 target of 30% reduction

- **PR China: to reduce 20,000 fishing vessels with a total capacity of 1.5 million KW and reduce fishing landings by 15 percent during the 13<sup>th</sup> FYP (2016-2020).**
- **Fishing closure in Yellow Sea from May 1 to September 16, 2017**
- **Reduction from the baseline of 21,713 (Liaoning: 7,084; Shandong: 10,355; and Jinagsu: 4,274) in 2015 to 18,797 (Liaoning: 6,177; Shandong: 8,976; and Jiangsu: 3,644) by 2020. 13.4 percent reduction expected by 2020**
- **Continued reduction in fisheries outputs in the two countries, evidenced by a significant reduction in RO Korea up to 2017 and a decrease of annual total allowable catch from 13 million tons to 10 million tons from inshore and offshore capture fisheries**
- **A study on the social and economic implication of the implementation of the fishing vessel buy-back scheme in PR China is ongoing,**
- **livelihood support and vocational skills training to enhance the employment of displaced fishermen.**



## Indicator Description

### **Indicator 2.2: Status of major commercially important fish stock from restocking and habitat improvement**

End of project target: 1) Measurable improvement (5%) in standing stock and catch per unit effort; 2) Future management decisions on restocking based on effectiveness

## Cumulative progress since project start

- Total allowable catch (TAC), marine ranching involving artificial reef, fish fry release and marine forests plantations and license system are the key measures in the PR China and RO Korea to recover fish stocks and support fishermen's revenue.
- Both PR China and RO Korea have introduced total allowable catch (TAC) system in fishery management. TAC for 11 species with 70 TAC observers in ROK, while PR China piloted the system in 2017 starting with two species.
- Marine ranching exchanges to widely used and experiences sharing will be facilitated by the project to restore depleted fish stocks.
- The Korea-China Workshop on Stock Assessment in Tongyeong, RO Korea on 30-31 July 2018 for the exchange of experiences among participating countries in stock assessment methodologies and processes;
- Marine ranching demonstration in Haiyang of Shandong for fish stock enhancement through artificial reefs.

Indicator Description	Cumulative progress since project start
<p><b>Indicator 2.2: Status of major commercially important fish stock from restocking and habitat improvement</b></p> <p><u>End of project target:</u> 1) Measurable improvement (5%) in standing stock and catch per unit effort; 2) Future management decisions on restocking based on effectiveness</p>	<ul style="list-style-type: none"> <li>● <b>Effectiveness of license system assessed in PR China indicating: (1) license system has already restricted the quantity of marine fishing vessel numbers that had fishing activities in the Yellow Sea. (2) positive effect on fisherman’s income.</b></li> <li>● <b>The study recommends that: (1) implement input control management together with output control; (2) improving the existing input control management system and introducing advanced output control management system; (3) conduct comprehensive surveys and stock assessment of fishery resources to serve scientific management and decision-making for fishery management.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="63 182 562 501"><b>Indicator 2.3: 1) Type of mariculture production technology; 2) Level of pollutant discharge from mariculture operations</b></p> <p data-bbox="63 568 616 886"><u>End of project targets:</u> Reduction of contaminants caused by mariculture production (5% reduction in the demo sites)</p>	<ul data-bbox="681 175 1856 1046" style="list-style-type: none"> <li>● Helped replicating IMTA through further demonstration in land-based aquaculture, scaling up carrying capacity assessment in mariculture, training module development and organization of training courses in project impact areas.</li> <li>● Training module for IMTA in Chinese and English for use in training courses. Two training courses for Chinese mariculture managers and academia were conducted in 2018.</li> <li>● Land-based aquaculture area in Haiyang, one oyster monoculture farm in Sungo Bay and one kelp monoculture area and one shellfish-seaweed IMTA area in Sungo Bay, Rongcheng.</li> </ul>

# Component 3: Improving Ecosystem Carrying Capacity with respect to Regulating and Cultural Services



Indicator Description	Cumulative progress since project start
<p><b>Indicator 3.1:</b>  <b>Level of pollutant discharges particularly Nitrogen in YSLME tributaries</b></p> <p><u>End of project target:</u> 10% reductions in N discharges every 5 years</p>	<ul style="list-style-type: none"> <li>● <b>Consultancy on the regional marine environment monitoring network is being developed together with the water quality standards.</b></li> <li>● <b>PCA-supported activities ongoing to understand/confirm sources and sinks of pollutants, environmental status and trends in the Yellow Sea</b></li> <li>● <b>Nutrients from sea-based (mariculture and shipping) and atmospheric sources from PR China and RO Korea are being studied.</b></li> <li>● <b>For 10% reductions in N discharge, with project support NMEMEC has been undertaking studies to calculate nutrients using exports coefficient model in Haizhou Bay, Jiangsu Province of PR China.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p><b>Indicator 3.2: Types of technologies applied for pollution reduction</b></p> <p><u>End of project targets:</u>            Successful demonstration of use of artificial wetlands in pollution control in 1 site and replicated in about 2 coastal municipalities and local government units</p>	<ul style="list-style-type: none"> <li>● In YSLME area, Rizhao, Dalian, Qingdao, Weihai, Yantai are selected as demonstration sites by .</li> <li>● A regional strategy to use wetland as nutrient sinks is under support by the Project ready for review.</li> <li>● Integrated wetland assessment project in Jiaozhou Bay of Qingdao will be reviewed and discussed at ICC-3</li> </ul>

Indicator Description	Cumulative progress since project start
<p><b>Indicator 3.3: Status of legal and regulatory process to control pollution</b></p> <p><u>End of project targets:</u> Develop evaluation tools, in the first year, to assist in harmonizing national and provincial legislation to improve coastal water quality in Shandong, Jiangsu and Liaoning provinces</p>	<ul style="list-style-type: none"> <li>● <b>Consultancy completed to review the marine litter legislation. No marine litter-specific laws or regulations in PR China yet a series of relative laws and regulations have been enacted to prevent and control of marine litter pollution.</b></li> <li>● <b>Marine environmental law currently under revision in PR China</b></li> <li>● <b>Use of regional and global monitoring protocols of microplastics through training module development and training program</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="79 275 624 446"><b>Indicator 3.4: Status of the control of marine litter at selected locations</b></p> <p data-bbox="79 511 624 1275"><u>End of project targets:</u> 1) Regional Guidelines on control of marine litter based on those initiated by NOWPAP produced and adopted for use in the Yellow Sea; 2) Established regional data base in the first year, and significant reduction in the quantities of marine litter at selected beach locations</p>	<ul data-bbox="681 275 1837 1068" style="list-style-type: none"> <li>● Agreed to use the NOWPAP marine litter monitoring guidelines to conduct the baseline survey.</li> <li>● The status of marine litter in two sites in Weihai, assess the legal and regulatory framework gaps, and propose incentive policies in recycling economies.</li> <li>● In ROK, beach litter survey along the coastline has been conducted 6 times per year at 382 sites to monitor and observe types of litters and their abundance.</li> <li>● Baseline survey of marine litter completed by NMEMC</li> <li>● Yellow Sea Grant Program will support the on-the-ground reduction in quantity of marine litter.</li> </ul>

# Component 4: Improving Ecosystem Carrying Capacity with respect to Supporting Services



Indicator Description	Cumulative progress since project start
<p><b>Indicator 4.1: Areas of critical habitats; Status of mitigation of reclamation impacts</b></p> <p><u>End of project targets:</u> Areas of critical habitats maintained at current level.</p>	<ul style="list-style-type: none"> <li>● In 2018, MNR requested suspension of all reclamation projects in coastal areas</li> <li>● In RO Korea, a 7 million US dollar project was completed in Ganghwa to restore the ecosystem connectivity of intertidal mudflats</li> <li>● YSLME Biodiversity Conservation Plan 2020-2030 in RO Korea completed and consultant is contracted in March to do the same study in PR China.</li> <li>● A regional biodiversity forum will discuss status of biodiversity, positive achievements, gaps, underlying causes to base objectives, targets and actions to be proposed in the conservation plan up to 2030.</li> </ul>



# Component 4: Improving Ecosystem Carrying Capacity with respect to Supporting Services



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<p><b>Indicator 4.1: Areas of critical habitats; Status of mitigation of reclamation impacts</b></p> <p><u>End of project targets:</u> Areas of critical habitats maintained at current level.</p>	<ul style="list-style-type: none"> <li>● A technical proposal has been prepared to include an area of 42.88 KM<sup>2</sup> as a special MPA at national level to protect the Spoon-billed Sandpiper.</li> <li>● Similar MPA expansion initiative ongoing in Ganghwa Island of RO Korea, one of tidal flats of the Han River estuary in Yellow Sea, the larger of the only two known breeding sites globally for the critically endangered Black-faced Spoonbill (<i>Platalea minor</i>).</li> <li>● A draft report for maintenance of the existing critical habitats to improve the ecosystem carrying capacity of supporting services of YSLME were submitted and currently in revision.</li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="63 162 544 401"><b>Indicator 4.2: level of ecological connectivity in expansion of the Yellow Sea MPA system</b></p> <p data-bbox="63 505 544 1136"><u>End of project targets:</u> 1) the planned expansion of the MPA system currently does take into account ecological connectivity (measured by use of developed connectivity tool kit or other means); 2) expansion of MPA to 3%</p>	<ul data-bbox="614 162 1881 1322" style="list-style-type: none"> <li>● To date, 31 national MPAs in PRC (8,056 km<sup>2</sup>) and 16 national MPA in ROK (386 km<sup>2</sup>) are designated to protect marine mammals, birds, fishes, mollusks, plants and algae in YS. The national MPAs of the PRC and ROK only represent 2.35% of Yellow Sea, far below the 10% Aichi Target.</li> <li>● Surveys and production of overlays to analyze gaps and conservation needs of critical species and habitats, i.e. seal, endangered migratory birds, fish spawning and nursery grounds, cold water mass, etc. are being conducted by FIO, NMEMC and YSFRI in PR China through PCAs. R</li> <li>● Garorim Bay Marine Species Protected Area in RO Korea as MPA site in July 2016 covering areas of 91.237km<sup>2</sup> with a goal of protection of habitat and breeding grounds of protected marine species including spotted seal, and systematic conservation and protection of key habitats of marine and pelagic species.</li> <li>● An MPA connectivity training was held in 23-27 July, 2018, in Seocheon, RO Korea to further expand the coverage of coastal areas as MPA in an effectively managed network.</li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="63 201 649 572"><b>Indicator 4.3: Status of incorporation of adaptive management of climate change regional strategies and in ICM plans for selected coastal communities</b></p> <p data-bbox="63 672 595 979"><u>End of project target:</u> CC adaptation strategies incorporated in regional strategies such as YSCWM and plankton communities</p>	<ul data-bbox="722 194 1862 811" style="list-style-type: none"> <li>● <b>A synthesis report being prepared along with regional strategy on relationships between the changes of Yellow Sea Cold Water Mass (YSCWM) and structure of plankton communities for developing adaptive management</b></li> <li>● <b>Climate change adaptation ICM model framework plan in Dandong to be approved.</b></li> <li>● <b>Scientific research on the ecological mechanism for the blooms of floating <i>Sargassum horneri</i> in western YS to be approved.</b></li> </ul>

Indicator Description	Cumulative progress since project start
<p data-bbox="63 201 600 436"><b>Indicator 4.4: Status of Regional Monitoring Network for application of ECBM</b></p> <p data-bbox="63 529 649 1225"><u>End of project target: 1)</u> Agreed number of cruises &amp; parameters for the regional monitoring network established and data shared regionally via the project web site. 2) Regular LME-wide assessments; enhanced information exchange; periodic scenarios of ecosystem change</p>	<ul data-bbox="722 194 1881 348" style="list-style-type: none"> <li>● <b>The draft monitoring programs of jellyfish, HAB and drifting macroalgal blooms and N/P/Si reviewed at the RWG-A;</b></li> </ul>

## Recommendation

The Secretariat recommends that the 3<sup>rd</sup> Meeting of the MSTP/ICC:

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