



**NOWPAP DINRAC**

**REPORT**  
**of the**  
**“Regional Workshop on Marine Invasive Species**  
**Problems in Northwest Pacific Region”**

November 1, 2012

Data and Information Network Regional Activity Center of Northwest Pacific Action Plan

A.V. Zhirmunsky Institute of Marine Biology of the Far-East Branch of Russian Academy of Science

Japan Agency for Marine-Earth Science and Technology

East Sea Fisheries Research Institute of Korea National Fisheries Research & Development Institute

## 1 Background

The problem of marine invasive species (MIS) is one of the major threats to marine biological diversity, which plays a critical role in overall sustainable development and poverty eradication, and is essential to our planet, human well-being and to the livelihood and cultural integrity of people. Marine invasive species have serious negative impacts on marine biodiversity, including damage to ecosystems, change of ecosystem functions, and cause of genetic changes in coastal organisms. It also has impacts on economy. For many years, the international society has been making efforts to control this problem. The Convention on Biological Diversity states that each Contracting Party shall, as far as possible and as appropriate, prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. The Agenda 21 called on the International Maritime Organization (IMO) and other international bodies to take action to address the transfer of harmful organisms by ships. The WSSD in 2002, in its Johannesburg Plan of Implementation, urges all countries to strengthen national, regional and international efforts to control invasive alien species, encourage the development of effective work programme on invasive alien species at all levels, and urges nations to accelerate the development of measures to address invasive alien species in ballast water. In the outcome document of "Rio+20", "the future we want", it is stated that "We note the significant threat alien invasive species pose to marine ecosystems and resources and commit to implement measures to prevent the introduction of, and manage the adverse environmental impacts of alien invasive species, including, as appropriate, those adopted in the framework of the IMO".

With the support and cooperation from all members of the Northwest Pacific Action Plan (NOWPAP), the Data and Information Network Regional Activity Center (DINRAC) of NOWPAP carried out a joint research on MIS and its potential damage in Northwest Pacific region in 2009, which produced national reports by China, Japan, Republic of Korea and Russia, and a regional overview. The regional overview concluded that there is insufficient information about MIS at both national and international levels. There is a strong need to strengthen the data exchange and communication among relevant countries to share available information and to discuss future activities in this field.

Under this situation, with assistance from the partners, namely, the A.V. Zhirmunsky Institute of Marine Biology of the Far-East Branch of Russian Academy of Science, Japan Agency for Marine-Earth Science and Technology, and East Sea Fisheries Research Institute of Korea National Fisheries Research & Development Institute, DINRAC started to apply for financial support from the Asian-Pacific Network for Global Change Research (APN) under its CAPaBLE Programme to convene a regional workshop on MIS problems in the Northwest Pacific Region to promote exchange of information on MIS problems among officials and experts from NOWPAP member states, exchange of experiences on the prevention and control of MIS among

officials and experts from NOWPAP member states, analysis of the needs for policies and measures on MIS and recommendations for NOWPAP member states, which also meets the objectives of the CAPaBLE Programme, which aims at providing researchers (young and aspiring scientists in particular) and decision - makers with opportunities for capacity development in the area of global change.

In order to facilitate the invitation of prominent and experienced experts from China, Japan, Korea and Russia, since July 2012, DINRAC started to seek support from the Regional Coordination Unit (RCU) of NOWPAP, A.V. Zhirmunsky Institute of Marine Biology of the Far-East Branch of Russian Academy of Science, Japan Agency for Marine-Earth Science and Technology, East Sea Fisheries Research Institute of Korea National Fisheries Research & Development Institute had provided professional support, the Ministry of Environmental Protection of China, Japan Oceanographic Data Center, Chinese Research Academy of Environmental Science, the Marine Ecology Research Center of the First Institute of Oceanography of State Oceanic Administration of China and other research institutes to improve the agenda of the workshop and help invite experts from the four countries. These organizations and institutes have been working on MIS problems for many years and have contacts with prominent experts in this field.

With technical support from the organizations, the Final Agenda of the workshop included three major topics: Session 1: Current situation of MIS problems in NOWPAP member states, Session 2: Impacts of the MIS on Ecosystems and Environment in NOWPAP Member Countries, and Session 3: Current policies and measures on preventing and controlling MIS problems in the NOWPAP member states and future needs for policies, measures and regional cooperation (Annex 1: Agenda of the Workshop). About 20 prominent experts were invited from 17 organizations in the four countries and more than 20 relevant local researchers in Qingdao City were also invited (Annex 2: List of Participants).

## **2 Holding the Workshop**

During October 23-24, 2012, the Regional Workshop on marine invasive species (MIS) Problems in Northwest Pacific Region was held in Qingdao, China. Representatives from the Division of Marine Environment of the Department of Pollution Prevention and Control of the Ministry of Environmental Protection of China, Division of Biological Safety of the Department of Nature and Ecology Conservation of the Ministry of Environmental Protection of China, NOWPAP RCU, Shandong Maritime Safety Administration of China made opening remarks at the workshop, and 13 presentations were made by the experts, followed by discussions (Annex 3: Opening Remarks and Presentations made at the Workshop).

With financial support from the Asian-Pacific Network for Global Change Research (APN) and human resource support from the First Institute of Oceanography of State

Oceanic Administration of China, DINRAC tried its best to provide appropriate accommodation, food and other meeting support for the participants, who showed satisfaction with the organization of the workshop.

### **3 Outcome of the Workshop**

Through nearly two days' discussion, participants to the workshop made the following major conclusions (Annex 4: Conclusion of the Workshop):

Participants to the workshop stressed that that the problem of MIS is one of the major threats to marine ecosystem, including the Northwest Pacific area, and this workshop is very necessary for the Northwest Pacific region to brings together relevant officials and experts to exchange information and experiences on the prevention and control of MIS.

Participants noted that the problem of MIS is of international concern, and that the Convention on Biological Diversity states that each Contracting Party shall, as far as possible and as appropriate, prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species.

Participants noted that the Agenda 21 called on the International Maritime Organization (IMO) and other international bodies to take action to address the transfer of harmful organisms by ships.

Participants noted that the World Summit on Sustainable Development in 2002, in its Johannesburg Plan of Implementation, urges all countries to strengthen national, regional and international efforts to control invasive alien species, encourage the development of effective work programme on invasive alien species at all levels, and urges nations to accelerate the development of measures to address invasive alien species.

Participants noted that, in the outcome document of "Rio+20", "the future we want", it is stated that "We note the significant threat of alien invasive species pose to marine ecosystems and resources and commit to implement measures to prevent the introduction of, and manage the adverse environmental impacts of alien invasive species, including, as appropriate, those adopted in the framework of the IMO".

In the Northwest Pacific region, there are already a lot of research and information on the current situation of MIS, such as the origins, pathways, categories, distribution and impacts of MIS, but they are still inadequate for policy-making and management. There is insufficient reliable research and statistics of the origins, pathways, categories, distribution and impacts of MIS.

Countries in the Northwest Pacific region have made many efforts to prevent and

control MIS, including legislations, putting management responsibilities on governmental organizations, implementation of international rules and guidelines, development of technologies, etc. However, due to limited knowledge and understanding of MIS, and also due to the extreme difficulty to fully investigate and control this problem, the measures are still inadequate in terms of legislation, management system and concrete actions. Participants acknowledged that, through this workshop, they shared many information, experiences and knowledge on MIS in the Northwest Pacific region, and their understanding of the issue of MIS was improved, which will benefit their future international cooperation on MIS.

Participants recommended that more investigation of and research on MIS are needed, and countries in the Northwest Pacific region need to provide resources to strengthen the investigation and researches on this issue, and to develop regional cooperation on data-sharing in the framework of NOWPAP, and close cooperation with other international organizations.

Participants stressed that, since it is very difficult to eliminate MIS after their invasion, prevention measures are very important and indispensable, including strict inspection and environmental impact assessment.

Participants recommended that a rapid entry into force of the IMO Ballast Water Convention is essential to prevent further spread of MIS. There is a need to strengthen regional cooperation through participation in international organizations, including FAO, UNEP and PICES, etc.

Participants recommended that current national legislation and management systems for MIS need to be improved to further prevent and control MIS, including control of pathways that lead to the introduction and spread of MIS, routine monitoring to detect and rapid response to eradicate or control MIS before they spread, and long-term response to mitigate the impacts of MIS.

Through this workshop, it can be said that the understanding of the issue of MIS among the researchers and government officials of NOWPAP member states was improved, the awareness on the necessity and ways to prevent and control MIS among NOWPAP member states was increased, and the awareness on the need for regional cooperation among NOWPAP member states to prevent and control MIS was also increased.