

Development of the CEARAC Medium-term Strategy on Marine Biodiversity

1. Background

CEARAC started activities on marine biodiversity from 2010. At the beginning, CEARAC tried to develop a coastal environmental assessment method for marine biodiversity conservation with in-kind support of the Northwest Pacific Region Environmental Cooperation Center. In the 2012-2013 biennium, CEARAC focused on Marine Protected Areas (MPAs) as a tool for marine biodiversity conservation, and developed “Monitoring and management of MPAs in the NOWPAP region” in order to share information on definition of MPA in each member state and the status of monitoring and management in MPAs. From 2014, CEARAC focused on pressures on marine biodiversity. It is difficult to cover all pressures in the NOWPAP region; therefore, CEARAC selected three major pressures, namely eutrophication, non-indigenous species (NIS) and habitat alteration based on the past NOWPAP activities and the situation in the NOWPAP region. Then, CEARAC implemented pilot assessments on the impacts of major threats to marine biodiversity in the selected sea areas in the NOWPAP region for collecting available data on eutrophication, NIS and habitat alteration in the NOWPAP member states. Using the outcomes of pilot assessments, CEARAC published “Assessment of Major Pressures on Marine Biodiversity in the NOWPAP region” in the 2016-2017 biennium.

Through the past activities, gaps of data availability and the situation among member states were identified. In order to contribute to actions for marine biodiversity conservation of the NOWPAP member states through CEARAC marine biodiversity activities, it is necessary to clarify the theme(s) and activities which CEARAC should tackle with in the future. It was suggested that both NOWPAP and CEARAC show the future vision for marine biodiversity conservation in the NOWPAP region.

NOWPAP planned to develop the NOWPAP Marine and Coastal Biodiversity Regional Action Plan which show NOWPAP's future direction in the NOWPAP Medium-term Strategy 2012-2017. However, this Regional Action Plan have not been developed yet, and it is planned to be developed in the next NOWPAP Medium-term Strategy 2018-2023. CEARAC cannot wait for the development of the Regional Action Plan by 2023.

Then, CEARAC proposed to develop the CEARAC Medium-term Strategy on Marine Biodiversity at the 15th CEARAC FPM (August 2017, Toyama), and it was approved to submit the 22nd NOWPAP IGM by CEARAC FPs. During the 15th CEARAC FPM, CEARAC FPs suggested to reflect needs of the member states into the proposal. Based on the suggestion, CEARAC asked its FPs to provide potential topics which will be considered as future CEARAC activities based on the movement in each member state, and revised the proposal accordingly.

This revised proposal was submitted to the 22nd NOWPAP IGM (December 2017, Toyama) and approved.

2. Objective

Objective of this activity is to develop the CEARAC Medium-term Strategy on Marine Biodiversity (MTS). It is expected that the developed MTS contributes to the policies and actions for marine biodiversity conservation in the NOWPAP member states. Therefore, while MTS is developed, topics and challenges will be selected based on the needs from the member states.

3. Activities

3-1 Development of a list of potential topics for future CEARAC activities

Table 1 shows potential topics and activities proposed from CEARAC FPs and expert. If necessary, other themes and activities may be added.

Table 1 List of potential themes and activities for future CEARAC activities proposed by CEARAC FPs

<i>Country</i>	<i>Proposed potential topics</i>	<i>Potential activities</i>
<i>China</i>	Assessment of Marine Biodiversity	Development of methodology and indicators of marine biodiversity assessment
	List of marine biological species and its distribution	<ul style="list-style-type: none"> - Development of a list of the main marine biological species and invasive species - Understanding of distribution and quantity of the main marine biological species and invasive species.
<i>Japan</i>	Specific migratory species	<ul style="list-style-type: none"> - Detection of migratory endangered species - Environmental assessment of sea areas where endangered species migrate
	Conservation of tidal flat, salt-marsh and seagrass/seaweed beds	<ul style="list-style-type: none"> - Seagrass/seaweed mapping
<i>Korea</i>	Specific migratory species	<ul style="list-style-type: none"> - Detection of migratory endangered species - MPA network for conservation of migratory species
	Harmful species and invasive species	<ul style="list-style-type: none"> - Monitoring on moving route of harmful species and its damages
	Impact of marine litter	<ul style="list-style-type: none"> - Distribution of foreign origin marine litter
	Impact of ballast water	<ul style="list-style-type: none"> - Effect of ballast water on introduction of invasive species
<i>Russia</i>	Introduction of biological invasive species	<ul style="list-style-type: none"> - Development of regional invasive species strategy

	Plankton species which related to aquaculture and fisheries	<ul style="list-style-type: none"> - Realization of a monitoring system in order to control the possible emergence of microalgae which generate toxins - Control the impact of nutrient for countermeasures on HAB - Development and implementation of monitoring of plankton communities using remote sensing techniques <ul style="list-style-type: none"> - Maintenance of reference database on HAB
<i>Japanese expert</i>	Environmental DNA	<ul style="list-style-type: none"> - Spread methodology of biodiversity monitoring using environmental DNA

3-2 Feasibility study of potential topics and activities

CEARAC will ask CEARAC FPs to nominate expert(s) who will implement feasibility study of potential topics and activities in each member state. Nominated experts will identify data availability of potential topics/activities and feasibility to implement them in each country.

Nominated experts are expected to propose potential activities based on the feasibility study.

For your reference, [EXAMPLE] feasibility study of proposed potential topics/activities in Japan is attached as Annex.

3-3 Organization of a marine biodiversity workshop and a meeting for development of CEARAC Medium-term Strategy on Marine Biodiversity

A marine biodiversity workshop will be held in order to share information on national needs for marine biodiversity conservation and results of the feasibility study. It is expected that governmental officers and experts who involve in national policies and strategies participate in this workshop.

A meeting for development of MTS will be held back-to-back with the abovementioned Marine Biodiversity Workshop to develop the framework of MTS. During the meeting, priority of potential topics/activities will be discussed and decided based on the feasibility study in each member state.

The planned Workshop and the meeting will be held in spring 2019.

3-4 Development of the CEARAC Medium-term Strategy on Marine Biodiversity

Based on the outputs of 3-1 to 3-3 above, CEARAC Secretariat will prepare a draft of CEARAC MTS which shows not only CEARAC's focusing fields/areas on marine biodiversity but also the course of actions on CEARAC's marine biodiversity activities after 2020.

The prepared draft MTS will be reviewed by CEARAC FPs at the 17th CEARAC FPM in 2019, and proposed to the 24th NOWPAP IGM.

4. Expected outputs

MTS will be developed based on the needs of the member states and global movements on marine biodiversity. Therefore, MTS can show the vision of CEARAC's marine biodiversity activities for the next several biennia and contribute to the NOWPAP Marine and Coastal Biodiversity Action Plan which will be developed in the NOWPAP Medium-term Strategy 2018-2023. By implementing well-planned activities shown in the MTS, CEARAC can contribute to conservation of marine biodiversity in the NOWPAP region more effectively.

5. Budget

Activities	Budget (US\$)
Collecting information on potential topics	1,000
Implementation of feasibility study of potential topics/activities	12,000 (3,000 for each expert of member states)
Organizing of a Marine Biodiversity Workshop and a Meeting on developing CEARAC MTS on Marine Biodiversity	15,000
Developing the draft CEARAC MTS on Marine Biodiversity	2,000
Total	30,000

6. Schedule

Timing		Actions	Main body
2017	December	The 22 nd NOWPAP IGM - Approval of the workplan and budget for the 2018-2019 biennium	NOWPAP National FPs
2018	May 10-11	The 16 th CEARAC FPM - Review and approval of workplan	CEARAC FPs and CEARAC Secretariat
	Q1	Collection of information on potential topics	Consultant and CEARAC Secretariat
	Q3-Q4	Feasibility Study of potential topics/activities	Experts nominated by CEARAC FPs
2019	Spring	Marine Biodiversity Workshop Meeting on developing CEARAC MTS on Marine Biodiversity	Experts, governmental officers and CEARAC Secretariat
	Spring - Summer	Preparing a draft CEARAC MTS on Marine Biodiversity	CEARAC Secretariat
	Q3	Review of the draft CEARAC MTS on Marine Biodiversity	CEARAC FPs
	September	The 17 th CEARAC FPM - Approval of the draft CEARAC MTS on Marine Biodiversity - Approval of workplan for the 2020-2021 biennium	CEARAC FP and CEARAC Secretariat
	Winter	The 24 th NOWPAP IGM - Approval of the CEARAC MTS on Marine Biodiversity - Approval of the workplan and budget for the 2020-2021 biennium	NOWPAP National FPs