

Development of a common procedure for assessment of the impacts of major pressures on marine biodiversity in the NOWPAP region

1. Background

Convention of Biological Diversity (CBD) published “Global Biodiversity Outlook 3” in 2010. In this report, Habitat alteration, Climate change, Eutrophication/pollution, Overfishing and Invasive alien species are listed up as pressures on biodiversity. 2010 Biodiversity Target aims to decrease impacts of these pressures on biodiversity and, at the same time, to significantly reduce the current rate of biodiversity loss at the global, regional and national level by 2010. However, it was difficult to achieve this target, and the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10) held in 2010 adopted the Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets. Then, “Global Biodiversity Outlook 4” (2014) reported the progress of the Aichi Biodiversity Targets and the member states and relevant international organizations were required to enhance actions and effort for achievement of the Aichi Biodiversity Targets. Besides, Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) was established in order to provide a mechanism recognized by both scientific and policy communities to synthesize, review, assess and critically evaluate relevant information and knowledge generated worldwide by governments, academia, scientific organizations, non-governmental organizations and indigenous communities. IPBES plans to implement regional assessments on biodiversity and ecosystem services by 2016 and global assessment by 2018. The results of these assessments will be useful information for member states to enhance their efforts for achievement of the Aichi Biodiversity Targets.

On the other hand, CEARAC developed “Common Procedure for assessment of the eutrophication status in the NOWPAP region” (NOWPAP Common Procedure) in 2009 in order to understand the current status and trend of eutrophication in the NOWPAP region. This is the first assessment tool commonly used in the NOWPAP region.

Based on the experiences to develop the NOWPAP Common Procedure, CEARAC will develop a new assessment method for marine biodiversity conservation. In this assessment method, other pressures on marine biodiversity, namely habitat alteration and non-indigenous species, are focused. CEARAC has implemented “Pilot assessment on the impacts of major threats to marine biodiversity in selected sea area in the NOWPAP region” in the 2014-2015 biennium to understand the current status of the major pressures on marine biodiversity and to identify available data to be used commonly among the four NOWPAP member states. The results of national reports of the pilot assessment will be integrated in a regional report by the end of 2015, which introduces possible indicators and assessment method(s) to be used among the member states as well as recommendations for development of a new assessment method.

2. Objective

Objective of this activity is to develop common method(s) (common procedure) for assessment of the impacts of major pressures on marine biodiversity for the NOWPAP region (hereafter, common procedure).

However, it is quite difficult to develop a new procedure from scratch by ourselves in two years. In addition, it is necessary to set the basic policy of NOWPAP on marine biodiversity conservation, the final goal along with the situation of each member state, and a practical road map to the final goal. Therefore, CEARAC Secretariat plans to develop a draft common procedure in the 2016-2017 biennium, and to implement case studies using the draft common procedure. The final version of the procedure will be developed by 2020.

3. Outline of the common procedure

CEARAC plans to develop a common procedure with the following two parts.

The First part explains the basic policy of NOWPAP on marine biodiversity conservation, including definition of marine biodiversity conservation, final goal and challenges to be addressed.

Following the Aichi Biodiversity Targets adopted at COP10 in 2010, each member state has established their national strategies and made efforts to achieve the Targets. The progress of each member state is reported to CBD. Besides, Ocean Biogeographic Information System (OBIS) collects information on marine biodiversity and develops database. UN conducts World Ocean Assessment, and IPBES conducts regional and global assessments on biodiversity and ecosystem services.

Taking into consideration of the global efforts on this issues, it is essential to clarify what NOWPAP should do for marine biodiversity conservation in our region with its basic policy and vision, and identify priority actions while differentiating our actions from other international organizations or projects.

[Assumed contents of part I]

- Basic view of NOWPAP on marine biodiversity conservation
(EXAMPLES)
 - To target all species in this area
 - To understand ecosystem in the region, including interaction between species and environment
 - To focus on specific species, such as endangered species as target

- Final goal on marine biodiversity conservation in the NOWPAP region
(EXAMPLES)
 - To reduce the rate of biodiversity loss
 - To conserve endangered species
 - To achieve Aichi Biodiversity Targets

- Common themes and concerned issues on marine biodiversity among the four member states

(EXAMPLES)

To identify priority actions for marine biodiversity conservation

To review current actions by each member state

To clarify themes and challenges to be addressed by NOWPAP

The second part explains objectives and methodology (procedure) of the assessment.

In the 2014-2015 biennium, pilot assessments on major threats on marine biodiversity have been implemented in each member state, and available data has been identified. Using the outputs of the pilot assessments, common indicators and procedure of the assessment will be established. When considering assessment indicators and possible assessment method, the basic policy of NOWPAP in part I should be referred.

4. Tasks

4-1 Collection of information on marine biodiversity conservation in each member state

Information on national strategies, basic policy, performance targets, goals, challenges and future actions of each member state will be collected. This information will be the base in discussion on NOWPAP policy on marine biodiversity conservation. Collection of information will be done by CEARAC FPs or nominated national experts by CEARAC FPs. CEARAC FPs/experts will submit reports on collected information by the end of 2016.

4-2 Discussion on the basic policy of marine biodiversity conservation in the NOWPAP region

Based on the information collected in 4-1, NOWPAP's basic policy and final goal will be discussed. Discussion will be done by the Working Group. CEARAC Secretariat, CEARAC FPs, NOWPAP RCU, NOWPAP RACs and relevant expert are expected to be the members of the Working Group. The Working Group meeting will be held back-to-back with CEARAC FPM. Through discussion in the meeting, a draft basic policy will be prepared by CEARAC Secretariat.

4-3 Development of the draft assessment method

CEARAC Secretariat will prepare the second part of the common procedure based on the results of the pilot assessments and a regional report in the 2014-2015 biennium and the discussion on 4-2. Basically, this assessment focuses on eutrophication, non-indigenous species and habitat alteration as major pressures on marine biodiversity. However, if other pressures and/or themes are selected as important by the Working Group, focused pressures may be changed.

(1) Selection of common indicators

Common indicators to assess the pressures of eutrophication, non-indigenous species and habitat alteration on marine biodiversity will be selected using the data inventory on available data in each

member state, which is developed in the pilot assessments in the 2014-2015 biennium. Common indicators are basically available in all member states. However, even if the data is not available in some member states but recognized as important to assess the pressures, such indicator will be included in the common assessment indicators.

In addition, indicators which are used by other international organizations/projects will be included, if necessary. For example, PICES Working Group 28 (Development of Ecosystem Indicators to Characterize Ecosystem Responses to Multiple Stressors) is selecting ecosystem indicators to understand the impact on marine ecosystem. Working Group 32 (Biodiversity of Biogenic Habitats) was established in 2015 and they will select potential indicators on assessment/monitoring of biodiversity and biogenic habitat. UN is conducting World Ocean Assessment on marine ecosystem services, food security and food safety, human activities and the marine environment and marine biodiversity and habitats.

Indicators used by such international programs may be related to this planned assessment and so be useful.

(2) Development of the common procedure

CEARAC Secretariat will develop a draft procedure of assessing eutrophication, non-indigenous species and habitat alteration. The procedure is expected to be simple as much as possible in order to be used in all the member states. In addition, this assessment should contribute to the final goal of NOWPAP on marine biodiversity conservation.

(3) Refinement of the draft common procedure (Part II)

Based on (1) and (2) above, the common procedure (Part II) will be refined by CEARAC Secretariat. The draft will be reviewed by CEARAC FPs, NOWPAP RCU, NOWPAP RACs and expert.

4-4 Organization of workshop/expert meeting

In order to review the basic policy and the draft common procedure, a workshop or an expert meeting will be held.

5. Expected outputs

Basic policy and the final goal of NOWPAP on marine biodiversity set through this activity can be a principle of NOWPAP Biodiversity Action Plan in the NOWPAP Medium-Term Strategy 2012-2017, so CEARAC's activity will contribute to the development of NOWPAP Biodiversity Action Plan. Also, this activity is also closely related to one of POMRAC's activity: development of Ecological Quality Objectives (EcoQOs) for the NOWPAP region. It will be possible to recognize the final goal of this project as EcoQOs of biodiversity in NOWPAP. Therefore, this project can contribute to development of NOWPAP's EcoQOs through strengthening collaboration among RACs.

6. Potential partners

NOWPAP RACs, PICES, UN, IPBES etc.

7. Budget

Task	Budget (US\$)
Development of a draft common procedure	8,000
Collection of information on marine biodiversity conservation in each member state	China 3,000
	Korea 3,000
	Russia 3,000
Organization of a workshop/expert meeting	13,000
Total	30,000

8. Schedule

Time		Actions		Main Body
		Common procedure (Part I)	Common procedure (Part II)	
2015	October	20 th NOWPAP IGM - Approval of Program of Works and budget for the 2016-2017 biennium		NOWPAP National FPs
2016	Q1-Q2	14 th CEARAC FPM - Review and approval of workplan		CEARAC Secretariat, CEARAC FPs, RCU and RACs
		Discussion of basic policy for marine biodiversity conservation		
	Q2-Q4	Collection of information in each member state	Preparation of draft assessment procedure	Expert and CEARAC Secretariat
2017	Q1-Q2	Workshop/Expert meeting -Review of draft assessment procedure -Discussion of basic policy		CEARAC Secretariat, CEARAC FPs, Expert, RACs
	Q2-Q3	Preparation of draft basic policy	Preparation of draft assessment procedure	
	Q3	15 th CEARAC FPM -Review of the draft common procedure		CEARAC Secretariat, CEARAC FP

	Q3 to Q4	Refinement of the draft common procedure	CEARAC Secretariat
2018-2019		Case study using the draft common procedure	
2020		Finalization of the common procedure	

Outline of the Common Procedure for assessment of impacts of major pressures on marine biodiversity

Part I Basic policy on marine biodiversity conservation in the NOWPAP region

National strategies and goals on marine biodiversity conservation in the member states

Priority and common concerned issue among the member states

Final goal on marine biodiversity conservation in the NOWPAP region

Roadmap to marine biodiversity conservation in the NOWPAP region

Part II Assessment method of impacts of major pressures on marine biodiversity

II-1 Outline of assessment

Objective of assessment

Expected outputs and effects

II-2 Assessment method

Assessment indicators

Assessment method

II-3 Case studies/Best practices

Case studies/best practices in member states

Image of discussion about basic policy for NOWPAP biodiversity conservation

