

Report of the Eleventh NOWPAP CEARAC Focal Points Meeting

Background leading to this meeting

1. The 10th NOWPAP CEARAC Focal Points Meeting (FPM) (17-18 April 2012, Toyama, Japan) reviewed the progress of the current activities, and taking into consideration of current focus of CEARAC activities on marine biodiversity and eutrophication, it also discussed the revision of the Terms of Reference (ToR) for the NOWPAP CEARAC FPM. Then, the 17th NOWPAP Intergovernmental Meeting (IGM) (1-2 November 2012, Jeju, Korea) approved the progress report and the revised ToR.
2. Prior to the 11th FPM, the Expert Meeting on Marine Biodiversity and Eutrophication in the Northwest Pacific Region was held (5-6 August 2013, Toyama, Japan) to review the progress of ongoing activities on marine biodiversity and eutrophication with experts from the NOWPAP region and relevant international organizations such as PICES. The meeting also provided suggestions and advice on possible CEARAC activities for the 2014-2015 biennium.
3. The 11th FPM was held on 11-12 September 2013 in Toyama, Japan to review the progress and outcomes of the planned activities for the 2012-2013 biennium as well as to discuss proposed workplans for the 2014-2015 biennium for adoption before submission to the 18th IGM (4-6 December 2013, Toyama, Japan) for final approval.

Agenda Item 1 Opening of the Meeting

4. The meeting was opened at 9:00AM at Sky Gallery in Tower 111, Toyama, Japan, on 11 September 2013 by Mr. Hiroshi ONO, Director of CEARAC. Then, welcoming remarks were made by Dr. Alexander TKALIN, NOWPAP Coordinator.

Agenda Item 2 Organization of the Meeting

5. The meeting elected Dr. Yasuwo FUKUYO, FP of Japan, as Chairperson and Dr. Yoon LEE, FP of Korea, as Rapporteur.
6. It was proposed that, for the purposes of the CEARAC FPM, the rules used in the meeting be basically those of the Governing Council of UNEP, adjusted as

appropriate to suit the nature of the meeting. Decisions should be made by consensus and English is the working language of the meeting.

Agenda Item 3 Adoption of the Agenda

7. The Secretariat introduced the Provisional Agenda (UNEP/NOWPAP/CEARAC/FPM 11/1) with the Annotated Provisional Agenda (UNEP/NOWPAP/CEARAC/FPM 11/2).
8. The meeting adopted the Agenda.

Agenda Item 4 Report of the Regional Coordinating Unit (RCU) on the implementation of the Northwest Pacific Action Plan (NOWPAP) including the NOWPAP Medium-term Strategy (MTS) 2012-2017

9. Dr. TKALIN reported the progress of all NOWPAP activities since the 10th CEARAC FPM touching upon the NOWPAP Medium-term Strategy (MTS) 2012-2017 (UNEP/NOWPAP/CEARAC/FPM 11/3 and UNEP/NOWPAP/CEARAC/FPM 11/4Ref3). Dr. TKALIN mentioned that CEARAC has been successful in transitioning its FP membership in order to achieve its new objectives. He also expected the strengthening of partnerships with other RACs and external organizations. Moreover, he suggested CEARAC might consider three indicative activities: setting Ecological Quality Objectives, setting pollution reduction targets, and organizing a regional workshop on Blue Carbon.
10. The meeting acknowledged the report.

Agenda Item 5 Report on the implementation and the expenditure of CEARAC activities for the 2012-2013 biennium

11. The Secretariat reported the implementation of CEARAC activities and the expenditure for the 2012-2013 biennium, including marine litter activities (UNEP/NOWPAP/CEARAC/FPM 11/4).
12. After discussion on Agenda Items 5.1 to 5.3, the meeting adopted the report on the implementation and the expenditure of CEARAC activities for the 2012-2013 biennium.

Agenda Item 5.1 Activity on marine biodiversity (preparation of the regional report for conservation of marine biodiversity and sustainable use of marine ecosystem services in the NOWPAP region)

13. The Secretariat presented a draft regional report related to conservation of marine biodiversity and sustainable use of marine ecosystem services in the NOWPAP region (UNEP/NOWPAP/CEARAC/FPM 11/5).
14. The meeting pointed out the difference between the proposed title and the content of the draft report, then suggested that the title more clearly reflect the actual content. The meeting proposed changing the title to “Monitoring and Management of Marine Protected Areas in the NOWPAP Region.” This title was adopted. The draft report will be circulated among FPs, other RACs, and RCU after the FPM to be reviewed and commented on by 30 September 2013.

Agenda Item 5.2 Activity on eutrophication (refinement of the NOWPAP Common Procedure for eutrophication assessment towards the assessment of the whole NOWPAP region)

15. The Secretariat reported on the progress of refining the NOWPAP Common Procedure, along with the results of the eutrophication assessments in the selected sea areas in the NOWPAP region using the refined procedure (UNEP/NOWPAP/CEARAC/FPM 11/6). The Secretariat also presented the table of contents of the Regional Overview of Eutrophication Assessment in the NOWPAP Region (UNEP/NOWPAP/CEARAC/FPM 11/6 Annex 3)
16. The meeting suggested that the Secretariat should revise the title and the table of contents of the regional overview. Dr. Joji ISHIZAKA, FP of Japan, and Dr. TKALIN expressed their concern that the report should clearly explain the progress that has been made since the 2011 Integrated Report on Eutrophication Assessment.
17. The Secretariat will ask the national experts for information regarding changes to existing policies related to the management of eutrophication by 30 September 2013.
18. The meeting expressed concerns about preparing the regional overview report considering the delay in submission of literature review, and proposed not to review the collected literature during this biennium. It was agreed that the list of collected

publications would be attached as an annex of the revised report. Upon the request of Dr. ISHIZAKA, the meeting requested national experts to submit lists of publications related to negative impacts of eutrophication and ecological modeling, as well as to check the relevance of already collected literature.

19. The meeting agreed on the revised title, "Application of the Refined NOWPAP Common Procedure for Eutrophication Assessment in Selected Sea Areas in the NOWPAP Region," and the table of contents of the regional overview (Attachment 1).
20. Dr. TKALIN asked the Secretariat to ensure the inclusion of information on nutrient loading in the report.

Agenda Item 5.3 Activity on remote sensing (organization of the fourth NOWPAP training course on remote sensing data analysis)

21. The Secretariat reported the progress of the organization of the fourth NOWPAP training course on remote sensing data analysis, namely the NOWPAP-PICES Joint Training Course on Remote Sensing Data Analysis (UNEP/NOWPAP/CEARAC/FPM 11/7).
22. The meeting welcomed the progress.

Agenda Item 6 Discussion on the proposed specific projects of CEARAC for the 2014-2015 biennium

Agenda Item 6.1 Activity on marine biodiversity (Pilot assessment of the impacts of major threats to marine biodiversity in selected sea areas of the NOWPAP region)

23. The Secretariat presented a workplan on pilot assessments of the impacts of major threats to marine biodiversity in selected sea areas of the NOWPAP region (UNEP/NOWPAP/CEARAC/FPM 11/8).
24. The meeting wondered about the availability of applicable data for this activity. Dr. FUKUYO also expressed concern that verifying the relationships between environmental threats and their impacts on marine biodiversity will be difficult. The Secretariat answered that the objective of this activity is to study the feasibility of

assessment using limited available data, not to clarify the relationship between threats and impacts.

25. Dr. TKALIN questioned the choice of three specific threats out of the six presented by the Convention on Biological Diversity (CBD), to which the Secretariat answered that they are attempting to avoid duplication of work by other organizations. The Secretariat explained the necessity of this activity for the next biennium to pursue the conservation of marine biodiversity in the future. The meeting agreed on the importance of the activity as being a trial.
26. The meeting requested the Secretariat to decide on a report title that more closely suited its contents. The meeting also requested the Secretariat to study related activities outside of the NOWPAP region and provide information to FPs and experts on possible assessment methodologies for implementation of these activities.
27. The meeting adopted the workplan and requested the Secretariat to elaborate it for smooth implementation based on the suggestions made during discussion.

Agenda Item 6.2 Activity on eutrophication (Trial applications of the screening procedure of the NOWPAP Common Procedure for eutrophication assessment)

28. The Secretariat presented a workplan on trial application of the screening procedure of the NOWPAP Common Procedure for eutrophication assessment for the entire NOWPAP region (UNEP/NOWPAP/CEARAC/FPM 11/9).
29. Dr. Vladimir SHULKIN, FP of Russia, and Dr. Junlong LI, FP of China, expressed concerns about the difficulty in determining water residence times along the coast of NOWPAP sea area in each state. Dr. Choong-Ki KIM, representative of MERRAC, then advised the Secretariat to begin with a simple approach using river discharge and salinity information to estimate water residence times, and further recommended to use numerical models for more precise estimates.
30. The meeting expressed concerns about estimating and mapping water residence times as proposed in the screening procedure. The Secretariat replied that listing enclosed and semi-enclosed bays would be the first task, and then consider the use of simplified methodologies in each state with the help of national experts.

31. Dr. LI mentioned that estimates of chlorophyll-*a* concentration from remote sensing techniques often provide higher values than in-situ measurements in Chinese coastal waters. The Secretariat mentioned that the latest algorithm for chlorophyll-*a* estimation in turbid water will be used. Dr. ISHIZAKA added that validation of the latest algorithm is necessary for implementation of this activity.
32. The meeting wondered about the efficacy of the proposed training workshops on assessment and management of eutrophication for coastal managers and suggested postponing their implementation depending on the results from the first year of the activity and the verification of actual needs of coastal managers.
33. The meeting adopted the workplan with modifications, such as the conditional implementation of training workshops.

Agenda Item 6.3 Activity on seagrass mapping (Case studies on seagrass and seaweed mapping in selected sea areas in the NOWPAP region)

34. The Secretariat presented a workplan on case studies on seagrass and seaweed mapping in selected sea areas in the NOWPAP region (UNEP/NOWPAP/CEARAC/FPM 11/10).
35. Dr. SHULKIN asked if remote sensing data would be purchased for study areas of all four member states, to which the Secretariat replied that availability, quality, and affordability would be the determining factors.
36. Ms. Guihua DONG, FP of China, said that it is difficult to distinguish between seaweed and seagrass only with satellite imagery. She mentioned that imagery up to 10 meter resolution could be used for the purpose of seagrass and seaweed mapping in China.
37. Dr. FUKUYO mentioned that IOC/WESTPAC has been working on a similar project for four years and that CEARAC should attempt to collaborate.
38. The meeting adopted the workplan.

Agenda Item 7 Discussion on the draft workplan and the budget of entire CEARAC activities for the 2014-2015 biennium and recommendation to the 18th NOWPAP IGM

39. The Secretariat presented an entire workplan with three budget plans for CEARAC activities for the 2014-2015 biennium (UNEP/NOWPAP/CEARAC/FPM 11/11).
40. Dr. TKALIN suggested, and the meeting agreed, to give the Secretariat some flexibility on budget planning. In addition, he recommended that the Secretariat explore more collaboration with regional and international organizations, including other RACs, and more frequent exchange and sharing of information.
41. After discussion, the meeting agreed on the presented workplan to be submitted to the 18th IGM with modifications indicated in Attachment 2.

Agenda Item 8 Discussion on potential collaborative areas with other RACs and partner organizations

42. Dr. Hiroaki SAITO, representative of PICES, explained the structure and ongoing activities of PICES, as well as presented potential areas for collaboration between NOWPAP and PICES.
43. Dr. FUKUYO suggested that the upcoming IOC/WESTPAC symposium presents a good opportunity for collaboration and information exchange including a CEARAC project on seagrass mapping.
44. Other RAC representatives suggested additional areas of potential collaboration, such as oil spill detection and seagrass mapping by remote sensing, establishing ecologically quality objectives, and enhanced data sharing.
45. The meeting requested the Secretariat to more closely monitor the activities of other RACs and international organizations in order to further deepen collaboration.
46. The Secretariat asked for information on economic impacts by harmful algal blooms to fisheries and aquaculture for presentation at the PICES annual meeting in October.

Agenda Item 9 Arrangement of the 12th NOWPAP CEARAC Focal Points Meeting

47. The Secretariat proposed to hold the 12th NOWPAP CEARAC Focal Points Meeting either in winter or early spring in 2014 in Toyama, Japan, and the meeting agreed on the proposal, taking into account the schedule of meetings and workshops being held by other organizations.

Agenda Item 10 Other matters

48. The meeting was invited to raise any other issues relevant to the CEARAC activities and no other issues were raised.

Agenda Item 11 Adoption of the report of the meeting

49. A draft report of the 11th NOWPAP CEARAC FPM was prepared by the Secretariat with the help of Rapporteur. After review, the report was adopted unanimously.

Agenda Item 12 Closure of the meeting

50. After the customary exchange of courtesies, the 11th NOWPAP CEARAC FPM was closed at 3:00PM on 12 September 2013.

Attachment 1

Table of contents of "Application of the NOWPAP Common Procedure for eutrophication assessment in selected sea areas in the NOWPAP region"

Table of contents

PREFACE

EXECUTIVE SUMMARY

1 INTRODUCTION

2 ASSESSMENT METHODS AND DATA

- 2.1 Refinement of the NOWPAP Common Procedure
- 2.2 Eutrophication classification with the use of the NOWPAP Common Procedure
- 2.3 Selection of target sea areas in the NOWPAP member states
- 2.4 Data and parameters used in each selected sea area
- 2.5 Assessment parameters and their national standards in NOWPAP member states
- 2.6 Reference values used in selected sea areas
- 2.7 Assessment data used in selected sea areas

3 EUTROPHICATION STATUS IN SELECTED SEA AREAS OF THE NOWPAP REGION

- 3.1 Jiazhou Bay, China
- 3.2 Northwest Kyushu sea area, Japan
- 3.3 Toyama Bay, Japan
- 3.4 Jinhae Bay, Korea
- 3.5 Peter the Great Bay, Russia

4 EVALUATION OF THE REFINED NOWPAP COMMON PROCEDURE

Comparison of eutrophication assessment results with the original and refined NOWPAP Common Procedure will be described

5 EXISTING POLICIES RELATED TO THE MANAGEMENT OF EUTROPHICATION IN THE NOWPAP MEMBER STATES (Deleted if no update)

- 5.1 China
- 5.2 Japan
- 5.3 Korea
- 5.4 Russia

6 CONCLUSIONS AND RECOMMENDATIONS

- 6.1 Conclusions
- 6.2 Recommendations to address eutrophication in the NOWPAP region
(Including discussion on land based sources of nutrient loading)

Annex A List of literature related to negative impact of eutrophication and ecological modeling

Annex B List of available monitoring data can be used for eutrophication assessment in each NOWPAP member state

Attachment 2**3.2 Budget Plan B (US\$ 125,000)**

The proposed workplan and budget are shown in Table 2.

Table 2 Workplan and Budget of CEARAC for the 2014-2015 biennium

Activity	Planned Budget (US\$)			Note
	2014	2015	Total	
2 CEARAC FPMs and 1 Expert Meeting	20,000	34,000	54,000	FPM12-winter/spring 2014 FPM13-fall 2015 EM- summer 2015
Maintenance of Websites	1,500	1,500	3,000	Current service level maintained
<Specific project> Marine Biodiversity - Assessment in member states - Preparing a report - 1 workshop	12,000 (3,000/ea)	2,000 10,000	24,000	
Eutrophication assessment - Assessment in member states - 2 training workshops*	12,000 (3,000/ea)	8,000 (4,000/ea)	20,000	
Seagrass/seaweed mapping - Developing a manual - Purchasing satellite images - Case studies	4,000 4,000	12,000 (3,000/ea)	20,000	
Cooperation and coordination	2,000	2,000	4,000	
TOTAL	62,500	62,500	125,000	

Note: Budget for marine litter activity (RAP MALI) is separated from the budget allocated to each RAC.

*The implementation of training workshops is subject to the progress of assessment work and verification of actual needs of coastal managers. If it is decided not to implement, the budget (US\$ 8,000) may be spent for additional assessment work or other specific project, for instance, a workshop on seagrass/seaweed mapping.