

Report of the 8th CEARAC Focal Points Meeting and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity

Background leading to this meeting

1. The 7th CEARAC FPM (14-15 September 2009, Toyama, Japan) discussed draft workplan and budget of CEARAC activities for the 2010-2011 biennium. Draft workplan for the new biennium includes activities of WG3, WG4, and a joint activity of WG3 and 4: assessment of eutrophication status, and a new activity on biodiversity, based on the views of needs of more collaboration of WG3 and WG4 and expansion of CEARAC activities to other assessment indicators besides HABs and eutrophication. After discussion, the meeting agreed on the draft workplan and budget, in general, with some modifications, to submit to the 14th NOWPAP IGM for approval.
2. The 14th NOWPAP IGM (8-10 December 2009, Toyama, Japan) decided the cut-down of the entire budget of NOWPAP for the 2010-2011 biennium due to severe situation of the NOWPAP Trust Fund. Therefore, with the allocated budget of US\$107,000 to each RAC, CEARAC needed to revise its workplan and budget. The entire budget of NOWPAP for the 2010-2011 biennium will be reviewed during the 15th NOWPAP IGM.
3. Based on the agreement of the 7th CEARAC FPM and the decision of the 14th NOWPAP IGM, the 8th NOWPAP CEARAC FPM and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity were held on 13-15 September 2011 in Toyama, Japan to review and discuss the implementation of CEARAC activities for the 2010-2011 biennium. The Expert Meeting was attended by experts of WG3 and WG4, eutrophication and marine biodiversity, aiming to have more thorough discussion on CEARAC activities and to enhance information and opinion exchange among CEARAC-related experts. The involvement of eutrophication and marine biodiversity experts are in accordance with specific activities of CEARAC for the 2010-2011 biennium.

Agenda Item 1. Opening of the Meeting

4. The meeting was opened in Toyama, Japan, at 9:00 a.m. on 13 September 2010 by Mr. Norihiko TANAKA, Director of CEARAC. Then, welcoming remark was made by Dr. Alexander TKALIN, Coordinator of NOWPAP. He mentioned the mid-term strategy of NOWPAP is underway and encouraged all the 4 RACs and focal points to consider areas for collaboration and take each activity in more broad perspective including possible change to the working groups, based on the presentations in Agenda Item 8: Potential Collaborative area with other RACs.

Agenda Item 2. Organization of the Meeting

5. In line with the Terms of References of the NOWPAP CEARAC Focal Points Meeting, the meeting elected Dr. Changkyu LEE, FP of Korea, as the chairperson and Dr. Vladimir SHULKIN, FP of Russia, as the rapporteur unanimously. Then, the rules of procedure were confirmed. English was decided as a working language of the meeting.

Agenda Item 3. Adoption of the Agenda

6. The Secretariat introduced Provisional Agenda (UNEP/NOWPAP/CEARAC/FPM 8/1) and the Annotated Provisional Agenda (UNEP/NOWPAP/CEARAC/FPM 8/2).
7. Dr. Yasuwo FUKUYO, FP in Japan, emphasized more collaboration between NOWPAP RACs and requested to share recent progress on NOWPAP mid-term strategy 2011-2015. The Secretariat proposed to discuss this issue in Agenda Item 8.
8. The meeting adopted both documents.

Agenda Item 4. Report of the NOWPAP Regional Coordinating Unit (RCU) on the implementation of the Northwest Pacific Action Plan (NOWPAP)

9. Mr. Xiaodong ZHONG, Deputy Coordinator of NOWPAP, reported the progress of

the entire NOWPAP activities since the 7th CEARAC FPM (September 2009) (UNEP/NOWPAP/CEARAC/FPM 8/3).

Agenda Item 5. Report on implementation and expenditure of CEARAC activities for the 2008-2009 biennium and revised workplan and budget of CEARAC activities for the 2010-2011 biennium

10. The Director of CEARAC reported the results of implementation of CEARAC activities and expenditure for the 2008-2009 biennium and briefly introduced the revised workplan and budget for the 2010-2011 biennium (UNEP/NOWPAP/CEARAC/FPM 8/4), based on the decision of the 14th IGM.
11. Dr. Fukuyo encouraged the Secretariat to link CEARAC websites to related web pages of other organizations, such as PICES and IOC. Also, he encouraged to disseminate the outcomes of CEARAC activities using every possible opportunity such as conferences and workshops.
12. Mr. Akira NITTA, FP in Japan, asked about the difference between the CEARAC's new project on marine biodiversity and the proposals NOWPAP RCU has submitted for 3 possible fund resources. Dr. Tkalin explained that CEARAC aims at developing a methodology for marine environmental assessment with marine biodiversity as indicators while NOWPAP RCU aims to assessing marine biodiversity in the NOWPAP region.
13. The meeting adopted the CEARAC report for the 2008-2009 biennium and the revised workplan and budget for the 2010-2011 biennium.

Agenda Item 6. Discussion on specific projects for the 2010-2011 biennium

14. The Secretariat explained 5 specific projects respectively under the following sub-agenda items.

6.1. Report of development of the new marine environmental assessment method focusing on marine biodiversity

15. The Secretariat introduced an activity on developing the new marine environmental assessment method focusing on marine biodiversity (UNEP/NOWPAP/CEARAC/FPM 8/5). The detailed review and discussion on this activity were to be done during the Expert Meeting on Assessment of Eutrophication Status and Marine Environment focusing on Marine Biodiversity on the following day.
16. Dr. Fukuyo and Dr. Tkalin requested to clarify the ambiguous expressions in meeting documents and requested the Secretariat to correct them. The Secretariat agreed on modifying the title in terms of conveying the proper meaning of the meeting: the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity.
17. After reviewing the contents, the meeting adopted the report.

6.2. Report of implementation of the assessment of eutrophication status by the NOWPAP member states

18. The Secretariat explained the workplan on the assessment of eutrophication status by the NOWPAP member states (UNEP/NOWPAP/CEARAC/FPM 8/6). The detailed progress report in each selected assessment area was made by the selected experts of each NOWPAP member state during the Expert Meeting on the following day.
19. Dr. Tkalin mentioned the missing words “land-based sources of nutrients.” in the title of this activity, taking into considerations of past discussions. The Secretariat replied that those keywords would be included in the Integrated Report with modification of the table of contents.
20. Dr. Fukuyo pointed out the meaning of the word “eutrophication,” and he suggested that the word should not have only negative connotation. The Secretariat agreed with his comment and promised that this would be reflected in the Integrated Report.
21. Dr. Fukuyo also expressed his concern of not having enough opportunities to well-discuss the case studies in each selected area and requested the Secretariat to provide some opportunities for more discussion. The Secretariat replied it would be done through means such as teleconferences, as necessary.

22. The meeting decided to reflect the discussion of the Expert Meeting on the following day for the revision of the draft table of contents of the Integrated Report.

6.3. Report of updating the Integrated Report on HAB for the NOWPAP Region based on the HAB Case Studies

23. The Secretariat explained the workplan and budget of updating the Integrated Report on HAB (UNEP/NOWPAP/CEARAC/FPM 8/7). As in the same line of the activity, CEARAC also explained the task of updating *Cochlodinium* website: adding pages of the NOWPAP member states' languages. Also, mentioning the upcoming PICES annual meeting in October 2010, the Secretariat asked the meeting to agree on submission of a proposal of holding a workshop on remote sensing technique for HAB detection at PICES annual meeting in 2011.
24. Mr. Junlong LI, FP in China, mentioned that selected sea area in China is Weihai Coastal Area instead of Yantgze River estuary area. Dr. Shulkin explained the additional sea area in Russia is Aniva Bay which is located in the southern part of Sakhalin.
25. Dr. Lee asked the Secretariat to contact HAB-Section of PICES as early as possible for the proposal about holding the remote sensing workshop.
26. Dr. Tkalin asked the Secretariat to confirm the usage of terminology in the provisional contents of the updated Integrated Report with a native English speaker.
27. After review and discussion on the progress of the work, the meeting adopted the report with revision of some target sea areas.

6.4. Report of updating the Integrated Report on Ocean Remote Sensing for the NOWPAP Region

28. The Secretariat explained the workplan and budget of updating the Integrated Report on Ocean Remote Sensing (UNEP/NOWPAP/CEARAC/FPM 8/8).
29. As the progress is very fast in the field of remote sensing, Mr. Leonid MITNIK, FP in Russia, wondered the volume of the updated integrated report. The Secretariat replied the focus should be followed by the sub-title: towards assessment of marine and coastal environment. Eutrophication and oil spill will remain as two major subjects.

30. After review and discussion on the progress of the work, the meeting adopted the report.

6.5. Report of organization of the 3rd NOWPAP training course on remote sensing data analysis

31. The Secretariat explained the tentative plan of the 3rd training course on remote sensing to be held in Russia in 2011 with IOC/WESTPAC and PICES (UNEP/NOWPAP/CEARAC/FPM 8/9).

32. Dr. Mitnik introduced that POI would be willing to provide the venue of the training course and requested the Secretariat to consider the period of the course and transportation of participants, following the decision of PICES annual meeting 2010.

33. Dr. Joji ISHIZAKA, FP in Japan, asked about the demography of the survey respondents from the trainees of the 1st and 2nd training courses and expected the Secretariat to monitor the performance of the past training courses. The Secretariat replied that it would continue to contact with the former trainees.

34. Dr. Ishizaka also expressed his expectation of holding the training course in China in the next biennium, taking consideration of rotating the venue among the NOWPAP member states. The Chinese focal points agreed on his opinion and will reply to CEARAC Secretariat after reporting this expectation to the corresponding department of the Chinese Ministry of Environmental Protection.

35. After reviewing the progress of this activity, the meeting adopted the report.

Agenda Item 7. Report of implementation of the NOWPAP Regional Action Plan on Marine Litter (RAP MALI)

36. The Secretariat explained RAP MALI related activities allocated to CEARAC for the 2010-2011 biennium (UNEP/NOWPAP/CEARAC/FPM 8/10).

37. Dr. Tkalin encouraged two-way communications for collecting, updating and sharing information among the National Focal Points, CEARAC and DINRAC for more smooth progress of work.

38. After review of the work, the meeting adopted the report.

Agenda Item 8. Potential collaborative area with other RACs

39. In response to the request from the meeting, draft mid-term strategy of NOWPAP 2011-2015 was distributed to the participants.
40. Mr. Hongbo SHANG, Director of DINRAC, explained collaborative area of work of DINRAC with CEARAC, especially mentioning constructing data base on every CEARAC activity.
41. Ms. Hye-Mi LEE, a consultant of MERRAC, explained collaborative area of work of MERRAC with CEARAC. She hoped that the joint project on the near-real time oil spill monitoring would be one of the potential areas for collaboration between MERRAC and CEARAC.
42. The Secretariat asked about the gap between the action taken to respond oil spills and use of satellite images in reality. Ms. Lee replied that satellite images were obtained but were not practically utilized for real oil spill response during the Hebei Spirit oil spill incident because of technical problems such as lack of timely provided satellite images. Following her explanation, Dr. Mitnik commented high cost of obtaining satellite images from European organizations and emphasized the necessity of some financial support.
43. Dr. Anatoly KACHUR, Director of POMRAC, explained collaborative area of work of POMRAC with CEARAC, such as ICARM and the state of the marine environment in the NOWPAP region.
44. Dr. Lee expected collaboration between these two RACs would be easier.

Agenda Item 9. Arrangement of the 9th NOWPAP CEARAC FPM

45. The Secretariat proposed to hold the 9th CEARAC Focal Points Meeting in September 2011 in Toyama, Japan, back-to-back with the next Expert Meeting. The exact date will be proposed later and will be discussed through e-mail communication.
46. The meeting agreed on the plan.

Agenda Item 10. Other matters

47. The meeting was invited to raise any other issues to be discussed, which were relevant to the NOWPAP CEARAC activities.
48. Mr. Wataru ITO of the Japan Meteorological Agency, one of the operation agencies of NEAR-GOOS Regional Real Time Data Base, explained WESTPAC's plan for co-organizing the 3rd training course on remote sensing data analysis with CEARAC. He also explained the current work on NEAR-GOOS.
49. There were no other specific things raised as discussion issues from the participants.

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50. The Secretariat explained the purpose and the procedures of the Expert Meeting. To guide the meeting, the Secretariat asked the participants to agree on nominating Dr. Fukuyo as a facilitator of the meeting. The recommendation was adopted unanimously.
51. Before starting the presentations, the facilitator reminded the meeting participants to consider the feasibility of the assessment methods ("Common Procedures") and their usefulness.

Agenda Item 11. Report of implementation of the assessment of eutrophication status by the NOWPAP member states

11.1. Preliminary assessment of eutrophication by remote sensing in the Northwest Pacific region

52. The Secretariat reported results of the preliminary assessment of eutrophication by remote sensing, which was developed for Toyama Bay and applied to the Northwest Kyushu sea area in Japan and the western Pacific region.

53. Following the presentation, the meeting discussed issues of reliability of satellite derived Chl-a data in turbid water, and necessity of the use of the regional algorithms. These issues will be addressed in the Integrated Report.

11.2. Report of interim result of eutrophication assessment from China

54. Dr. Chao CHAI, on behalf of Prof. Zhiming YU, an expert of eutrophication in China, reported interim result of the eutrophication assessment being implemented in the Yangtze River estuary and adjacent sea area in China.

55. The meeting suggested inclusion of time series of data to detect trend. Dr. CHAI replied that the trend analysis would be included in the final report. She also hoped that CEARAC help supply validated satellite Chl-a for the assessment of eutrophication status in the Yangtze River estuary.

11.3. Report of interim result of eutrophication assessment from Japan

56. Mr. Ryo TSUJIMOTO, a staff member of Northwest Pacific Region Environmental Cooperation Center (NPEC), host organization of CEARAC, reported interim result of the eutrophication assessment being implemented in the Northwest Kyushu sea area in Japan.

57. Dr. Osamu MATSUDA, an expert of marine biodiversity in Japan, asked about consistency between the preliminary assessment by remote sensing and the assessment result based on the Common Procedures in the selected sea areas in Japan. The Secretariat replied that there are consistencies between them.

11.4. Report of interim result of eutrophication assessment from Korea

58. Dr. Youngtae PARK, an expert of eutrophication in Korea, reported interim result of the eutrophication assessment being implemented in Jinhae Bay in Korea.

59. The Secretariat requested Dr. Park that the final assessment of eutrophication status would be submitted with the assessment of eutrophication status classes based on the Common Procedures. Dr. Park agreed with this request.

11.5. Report of interim result of eutrophication assessment from Russia

60. Dr. Pavel TISHCHENKO, an expert of eutrophication in Russia, reported interim result of the eutrophication assessment being implemented in Peter the Great Bay in Russia.
61. Dr. Shulkin recommended including the data on chemical characteristics of sea surface layers in the assessment. Dr. Tishchenko agreed on this recommendation.

(Overall Discussion)

62. The meeting appreciated the efforts in implementing the activity and recognized usefulness of the Common Procedures. The meeting also recognized the different conditions in availability of the data and applicability of the Common Procedures among the member states.
63. Dr. Matsuda appreciated the effort of the Secretariat in developing the Common Procedures during the last biennium as an outcome of a collaborative work of Working Group 3 and 4; however, he expressed his concern on the differences of scheme and actual method being taken in the member states, reflecting the difference of the social and environmental situations.
64. The Secretariat requested the member states to follow the categories in the Common Procedures and choose best-available parameters to assess eutrophication in line with the eutrophication status classes based on the Common Procedures.
65. Dr. Tkalin emphasized the necessity to include evaluation of land-based sources of nutrients in the Integrated Report. In response to that, the Secretariat proposed to revise the draft table of contents to include evaluation of land-based sources of nutrients in the Integrated Report by correspondence.
66. Following a short presentation of Dr. Ishizaka on limitation of current remote sensing techniques in turbid water of East China Sea, the meeting agreed on the idea to conduct a preliminary assessment of eutrophication by remote sensing in each selected area, through comparison of satellite derived Chl-a with in-situ measured Chl-a and identification of advantages and disadvantages of means of

both observations. The meeting requested the Secretariat to provide technical assistance in each selected sea area to validate satellite data, if necessary.

67. The meeting acknowledged that the nominated experts would determine the reference conditions in accordance with standard in each country. The meeting then requested the Secretariat to take the leadership to unify one statistical method to analyze trend of time series data. The Secretariat replied that the statistical method used in Toyama Bay will be shared after the meeting.

Agenda Item 12. Report of development of the new marine environmental assessment method focusing on marine biodiversity

68. The Secretariat explained the purpose and the progress of a pilot study implemented in Toyama Bay.

(Overall Discussion)

69. In response to an enquiry, the Secretariat explained that the marine biodiversity workshop was held in September 2009 in Toyama, Japan, and various activities and information related to marine biodiversity in the member states were introduced; however, there was no discussion on the CEARAC activities during the workshop. Then the Secretariat reminded the meeting of the process of the adoption of this activity. During the 7th CEARAC FPM in September 2009, a new activity: development of the new marine environmental assessment method focusing on the marine biodiversity was proposed by the Secretariat. After the discussion, the workplan was adopted in principle with a request to the Secretariat to provide the revised document based on the discussion.
70. The meeting pointed out the incoherence of the title and the contents of this activity. Also, they pointed out that the methodology used in the pilot study in Toyama Bay does not cover the sufficient marine biodiversity parameters.
71. The meeting requested the Secretariat to inform the FPs and the experts of relevant information on marine biodiversity assessments implemented by other organizations.

72. Some member states expressed their concern on the difficulty of data collection for this assessment activity and they are not ready to apply the methodology to their countries.
73. The meeting suggested cooperation on the assessment of eutrophication status by sharing useful data and so on. The meeting asked the Secretariat to modify this project and the assessment method, based on the recommendation and advice by CEARAC focal points and experts of marine biodiversity in the NOWPAP member states through e-mail communication.
74. Dr. Tkalin introduced the brochure titled “Threats to Marine and Coastal Biodiversity in the NOWPAP Region”, which was prepared by NOWPAP as part of the UNEP Marine Biodiversity Outlook to be launched during CBD COP-10 in Nagoya. The NOWPAP report contains information on the pressures to marine and coastal biodiversity in the NOWPAP region including overfishing, pollution, invasive species and climate change, and the responses from NOWPAP member states.
75. At the end of the Expert Meeting, the Secretariat introduced the Marine Biodiversity Forum to be held on 16 October in Toyama, Japan as a side-event of COP 10 and invited people interested to the forum.

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Agenda Item 13. Adoption of the report of the meeting

76. A draft report of the meeting was prepared by the Secretariat with the help of the rapporteur. After closely reviewed line by line, the report was adopted unanimously.

Agenda Item 14. Closure of the meeting

77. After the customary exchange of courtesies, Mr. Tanaka declared the closure of the 8th CEARAC Focal Points Meeting and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity at (11:45) a.m. on 15 September 2010.