

## Progress on the activity on eutrophication status

### Greetings from the Director of CEARAC, Norihiko Tanaka



We are pleased to present the seventh issue of CEARAC annual newsletter in 2010. In the form of a newsletter, we have been introducing on-going activities of CEARAC and NOWPAP

and hot environmental issues which national governments of the NOWPAP member states have concerned about and/or taken any actions against. We hope this newsletter can help you understand more deeply the status of the marine environment in the Northwest Pacific region and the problems this sea area has at present.

At first, in this seventh issue, we would like to introduce a collaborative work being implemented by NOWPAP Working Group 3 and 4 in the 2010-2011 biennium: implementation of the assessment of eutrophication status by the NOWPAP member states.

Based on the mid- and long-term strategies of CEARAC adopted in 2007, CEARAC proposed to develop procedures for assessment of eutrophication including evaluation of land based sources of nutrients for the NOWPAP Region (the Common Procedures) as one of CEARAC projects for 2008-2009, and the proposal was adopted at the 6th CEARAC FPM (March 2008, Toyama). Then, in cooperation with the experts of NOWPAP member states, the Common Procedures was developed in June 2009.

As the Common Procedures were developed based on the case study implemented in Toyama Bay, it is necessary to evaluate its suitability to other NOWPAP sea areas under different environments. So, sea areas for implementing case studies with the Common Procedures were selected in each member state at the 7th CEARAC FPM (September 2009, Toyama) (Figure 1). The

assessments have been conducted in these areas since the beginning of this year.

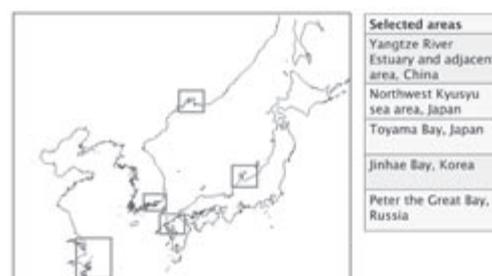


Figure 1. Selected sea area for eutrophication assessment

At first, preliminary assessment of eutrophication is done by using satellite data. Then based on the result of the preliminary assessment, sea areas that require detailed holistic assessment with sea truth data are identified. The results of the preliminary assessment are also used as reference data for dividing the selected area into sub areas.

Next, data of sea-water quality, such as nitrogen, phosphorus, chlorophyll-a and other data such as nutrient input and number of red tide incidents are collected for the past several years. By comparison between the collected data and the assessment criteria set by each NOWPAP state, the status of eutrophication is assessed in 2 elements; (1) whether nutrient concentration is higher or lower than the reference condition, and (2) what is the interannual trend; increasing, decreasing, or no significant trend. At the end, the sea area will be classified into 6 eutrophication status (High-Increase, High-None trend, High-Decrease, Low-Increase, Low-None trend and Low-Increase) by the combination of level and trend.

During the 8th CEARAC FPM (September 2010, Toyama), the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity was held for the first time, and the interim progress of the

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assessment of eutrophication status in each selected sea area was presented by the selected experts of each member state. Following the presentation, the participants of the meeting discussed several gaps, and especially the feasibility of the initial assessment. Taking discussion points into consideration, the experts will continue the assessment until March 2011. The final results of the assessment will be reported to CEARAC, and we will compile all the

reports and prepare an integrated report of the assessment of eutrophication status in the Northwest Pacific Region by the end of 2011. The integrated report will also include information related to land based sources of nutrient, following the suggestion at the 8th FPM. Collaboration with other RACs is especially necessary for preparing this section as we need input from the member states. With this reinforcement, the integrated report will be a very useful

tool for addressing eutrophication problems in the sea area of NOWPAP region.

This is one of the examples which CEARAC plans to work on in cooperation with existing various regional and international organizations. We, CEARAC will advance our activities by implementing more assessments of the marine and coastal environment and will evolve to achieve the conservation of the marine environment.

## Recent NOWPAP developments

### *Masakatsu Ohyama, Administrative Officer, Northwest Pacific Action Plan (NOWPAP) of UNEP*

#### **Marine and coastal biodiversity**

With the financial support from UNEP headquarters, NOWPAP successfully convened the Brainstorming Workshop on Marine and Coastal Biodiversity in September 2009, which was attended by experts and representatives from NOWPAP member states. In light of the importance of biodiversity in the NOWPAP region, the participants of the Workshop recommended for consideration at the NOWPAP Intergovernmental Meeting (IGM) four project concepts: (a) assessment of the current status of biodiversity in the NOWPAP region, (b) Assessment of climate change impacts and other factors on marine and coastal ecosystems, (c) Establishing networks of Marine Protected Areas, including taking into account habitat representation, (d) Developing a regional programme to deal with marine invasive species.

Taking into account the outcomes of the workshop, three project concepts to deal with biodiversity issues within NOWPAP were presented to the IGM: a) State of Marine and Coastal Biodiversity in the NOWPAP Region; 2) Regional Marine Protected Areas Network; and 3) Regional Marine and Coastal Invasive Species Strategy.

After extensive discussion at the IGM, taking into account that CBD COP-10 will be held in October 2010 in Nagoya, Japan, RCU was mandated to develop project proposal "Assessment of the current status of marine and coastal biodiversity in the NOWPAP region, including main

threats, pressures, impacts and trends, at the ecosystem, community, habitat and key species level".

Based on the decision by the IGM, a report was prepared by a consultant to assess the current status of marine and coastal biodiversity in the NOWPAP region, including pressures, state and governments response. In the report, pressure was evaluated by four indicators: fish catches, nutrient loading, shipping, sea surface temperature; and state was evaluated by marine trophic index and species depletion index. It was concluded that, although various measures to protect marine environment have been implemented in the region (such as fish stock agreements, establishment of MPAs, and bilateral fisheries agreements), the region is currently facing a serious marine biodiversity loss.

At the COP-10 in Nagoya, Marine Biodiversity Outlook Report, covering 18 Regional Seas programmes, along with a Global Synthesis on Marine Biodiversity, was launched, which includes above mentioned report prepared by NOWPAP.

#### **NOWPAP continues dealing with marine litter problem**

With a generous support by the Korean Government, NOWPAP International Coastal Cleanup (ICC) campaign and workshop on marine litter were held in Jeju, Republic of Korea, on 1-2 October 2010. The events were organized by the Ministry of Land, Transport and Maritime Affairs (MLTM), Korea Marine Environment

Management Corporation (KOEM) and NOWPAP Regional Coordinating Unit (RCU). Workshop was attended by NOWPAP Marine Litter Focal Points, representatives of NOWPAP partners (YSLME, COBSEA and PEMSEA) and all NOWPAP Regional Activity Centers (RACs), leading NGOs dealing with marine litter in the region (OSEAN and JEAN) as well as local citizens and experts concerned about negative impacts of marine litter. During the workshop, participants presented and discussed the results of marine litter monitoring and ICC campaigns in the NOWPAP member states. The trends in marine litter composition during the recent 10 to 20 years show that policies or regulations by the Government could help reducing marine litter amounts. In fact, marine litter related to plastic bags and cigarettes shows declining trends as a result of ban on smoking in certain areas and ban on free plastic bags in some municipalities. Workshop participants agreed that the focus on marine litter should be shifted to its sources, and further coordination among central government, local government and local communities is essential in the future. On the second day, workshop participants were involved in beach cleanup along with dozens of local citizens who collected and sorted about a hundred sacks of garbage from the rocky beach composed of volcanic lava. The analysis of the garbage have shown that the most predominant items were: 1) buoys and floats (both polystyrene buoys and glass, mostly in small pieces); 2) glass and plastic bottles; 3) caps and lids.



Over the past four years the NOWPAP member states have made outstanding efforts on improving marine litter management at the national level. In particular, in China several domestic laws and regulations related to marine litter management were revised and enforced including the initiation of the National

Marine Litter Monitoring Program in 2006. In Korea, Marine Environmental Management Act was enacted in 2008 and Marine Litter Management Plan has been implemented since 2009. Under this plan, projects on the development of biodegradable and marked fishing gear, polystyrene foam buoy compactors, and

clean-up of fishing grounds have been implemented.

The events in Jeju marked the 10th anniversary of the ICC campaigns in Korea. Next NOWPAP ICC campaign and workshop (tentatively focusing on the sources of marine litter) will be organized in China in 2011.

## Step Forward — CEARAC Activities

### Meeting

#### *8th CEARAC FPM and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity (September 2010)*

The Eighth CEARAC Focal Points Meeting was held on the 13th and 15th of September 2010 in Toyama, Japan. About 30 experts and authorities including the members of FPM, representatives of NOWPAP RCU and RACs, and others, such as experts on eutrophication and marine biodiversity participated in the meeting.

Following the report of CEARAC activities for the 2008-2009 biennium, the workplan and budget for the 2010-2011 biennium were explained. Until the last biennium, CEARAC mainly conducted activities related to harmful algal blooms (HAB) and remote sensing (RS). However, in accordance with expansion of its scope of work, CEARAC implements activities focusing on marine biodiversity and eutrophication. Therefore, the new workplan includes activities of these issues as well as HAB and RS: (1) development of the new marine environmental assessment method focusing on marine biodiversity, (2) implementation of the assessment of eutrophication status, (3) updating the

Integrated Reports on HAB and Ocean Remote Sensing (published in 2005), and (4) organization of the 3rd training course on remote sensing data analysis.

In accordance with the expansion of the scope of CEARAC's working areas (eutrophication and marine biodiversity) from this biennium on, the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity back-to-back with FPM8 (14th of September).

During the FPM8, progress reports of the current activities of CEARAC were made with the time schedule. After being reviewed by the focal points members, all the reports were adopted. In the Expert Meeting, in addition to reports of interim results of eutrophication assessment by selected experts of the NOWPAP member states and introduction of a pilot study in Toyama Bay, there was more thorough discussion on the 2 activities: assessment of eutrophication status and development of the new marine environmental assessment

method focusing on marine biodiversity. There were some concerns on availability of necessary data and applicability of proposed assessment methods to the NOWPAP member states. After consideration of the feasibility of the activities from various angles, the meeting agreed on putting some modifications in the proposed methodologies of both assessments.

#### **Voices from the students in the internship program**

Three students of the University of Tokyo Ocean Alliance participated in the 8th NOWPAP CEARAC Focal Points Meeting and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment Focusing on Marine Biodiversity as interns and learned management of the international meetings.

#### *Jyo Junki*

It is a great honor that I can share you the meaningful experience about the



attendance in 8th NOWPAP CEARAC Focal Points Meeting (FPM) and the Expert Meeting on Assessment of Eutrophication Status and Marine Environment focusing on Marine Biodiversity (Sep. 2010, Toyama, Japan) here. As a part of my internship, I was present at the meetings as an observer and did some information collection. Experts from China, Japan, Korea and Russia presented reports on the on-going projects and exchanged their opinions about the future plan. I was impressed by their enthusiasm for CEARAC. I realized that the same goal for them is to protect and improve the marine environment.

I guess although the NOWPAP CEARAC Focal Points Meeting has been held for 8 times, it may be the first time for it to allow student be present. I hope it can be opened to more students in the future. Since we can learn the knowledge which cannot be learned

from textbooks through the meeting and what was discussed there encourages us to undertake the duty of protecting/conserving the marine environment. I feel very excited when I recall unforgettable memories of the meetings. It was also an useful experience for my future.

**Kazuya Matsuda**

Through these conferences, I broadened my mind in terms of having more worldwide perspectives. I recognized how important it is to understand the way each country is cooperated with each other. I sincerely appreciate this opportunity to attend the conferences and I will utilize the experience to my further study.



**Yuki Motomiya**

I would like to say how grateful I am

for being provided the opportunity to attend the 8th NOWPAP CEARAC Focal Points Meeting and the Expert Meeting on Assessment of Eutrophication and Marine Environment focusing on Marine Biodiversity. Through the meetings, I realized that there are various situations depending on countries and institutions and how difficult it is to collect and consider different ideas and to set common goals. Moreover, the subjects of the meetings were related to my study (ecological system), so I could improve my knowledge about the marine environment and the content of the meetings were useful for my study. I would like to make use of this experience to my research and job hunting. Finally, I wish to express my appreciation to the staff of NPEC who gave us the opportunity of this internship.



## Activities of NOWPAP Working Group 3 (HAB) and Working Group 4 (RS) in the 2010-2011 biennium

WG3 and WG4 published the Integrated Report on Harmful Algal Blooms (HABs) and Ocean Remote Sensing (RS) for the NOWPAP region in 2005, respectively. 5 years passed from first publication, so CEARAC will revise these integrated reports. CEARAC has developed the most

effective and laborsaving way for sharing information on HAB occurrences among NOWPAP member states in the 2008-2009 biennium. Integrated Report on HABs will be updated based on the submitted data from each member state.

In the other hand, the situation of remote sensing in this region is changing. New

satellite is launched and new satellite image will be available. In addition, the techniques of using remote sensing image are also progressed. The Integrated Report on RS will be updated based on such new information.

## Biodiversity

Northwest Pacific Region Environment Cooperation Center (NPEC), our host organization, held "Marine Biodiversity Forum in the Northwest Pacific Region" on 16 October 2010 in Toyama, Japan. The objectives of this forum were to share information on the activities related to marine biodiversity conservation and to exchange opinions on the importance of the activities for marine biodiversity conservation at global, regional and local scales. On this day, over 150 people including local citizens participated to this forum.

The presenters and presentation title are as follow;

**Keynote speech**

"UNEP global marine and coastal biodiversity assessment"  
Ms. Jacqueline Alder,  
Coordinator of UNEP Regional Seas Programme

**Three presentations**

"Current threats to marine biodiversity in the NOWPAP region"  
Mr. Alexander Tkalin, Coordinator of UNEP Northwest Pacific Action Plan  
"Current situation of marine environment in the Northwest Pacific Region"  
Ms. Jing Zhang, Toyama University  
"Activity on marine biodiversity by



NPEC"  
Mr. Norihiko Tanaka, NPEC  
After presentation, panel discussion by nine panelists (Ms. Alder, Mr. Tkalin, Mr. Stuart Chape (Programme Manager of Secretariat of the Pacific Regional

Environment Programme), Mr. Yihang Jiang (Project Manager of Yellow Sea Large Marine Ecosystem), Mr. Yoshihisa Shirayama (Professor of Kyoto University), Mr. Yasuwo Fukuyo (Professor of the University of Tokyo), Mr. Tanaka and Mr. Osamu Matsuda (Emeritus Professor of Hiroshima University: Coordinator of panel discussion)) was held. In the panel discussion, opinions on the necessity of development of the national marine biodiversity conservation strategies based on the achievements of local activities, the importance of sharing information on local

activities and situation in regional scale and the role of UNEP for the marine biodiversity conservation in global scale were exchanged. The panelists agreed that UNEP and Regional Sea Programmes are key framework for sharing information on activities implemented in each local site and confirmed the necessity on the contribution of local activities to regional and global marine biodiversity conservation. The outputs of this forum were introduced



at the event of UNEP which held in Nagoya as a side event of COP10.

## Studying changes in coastal environment from free Landsat data archive

Landsat 1 is the world's first earth observation satellite launched in 1972 by the United State. Ever since, nearly four decades of accumulated earth imageries have been observed by Landsat and its successor satellites under the Landsat Program by NASA and the U.S Geological Survey (USGS). Landsat's extensive collection of satellite imageries provides valuable information for scientists and decision makers. However, access to those data had been limited for long time until the stunning announcement was released on April 21, 2008 that USGS would release entire USGS Landsat image archive to the public at no charge. Today, thousands of Landsat images are being distributed by the USGS over the Internet for free of charge. Although Landsat was originally designed

for monitoring land surface, many studies and research projects have shown the usefulness for monitoring of coastal environment by Landsat. Changes of land use and land cover which may affect coastal water quality and distribution of coral reefs, seagrasses, mangroves and other structures of coastlines which forms coastal habitat can be observed from Landsat. Following the announcement of USGS,

we have recently prepared new contents on Marine Environment Watch Project homepage to introduce how to analyze land use changes with free Landsat images provided by USGS. Please visit the following web site address and give us your feedbacks.

<http://www.nowpap3.go.jp/jsw/eng/case/landsat/index.html>

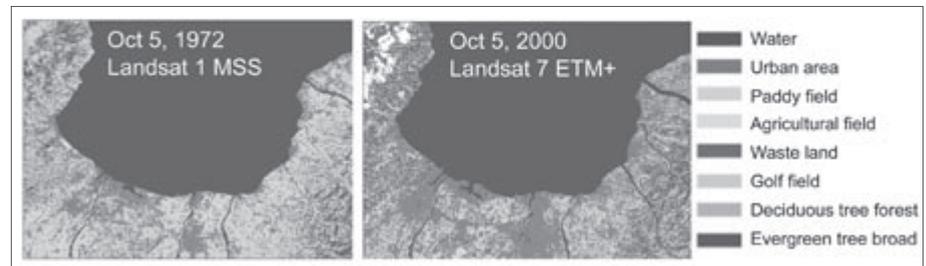


Figure 2. Changes of land cover observed from Landsat imageries

## Voice from the Partners

### Satoumi Related Activities in CBD COP10

*Osamu Matsuda, Expert of CEARAC Working Group 3, Professor Emeritus of Hiroshima University, Japan*



to discuss CBD-related issues but for many people to understand the importance

CBD COP10 was held on Oct.18-29, 2010 in Nagoya, Japan and provided a valuable opportunity not only for specialists

of biodiversity through various COP10-related activities such as side events and exhibitions. Since CEARAC-, NOWPAP- and NPEC-related activities during COP10 are separately reported in this newsletter, I would like to introduce my personal experiences and impression, and brief reports of the events I participated in, focusing on Satoumi and related activities. During the time of COP10, Satoyama

and Satoumi, originated from Japan and have long history, were especially noticed as a sustainable community-based and ecosystem-based management of rural land and coastal sea, respectively. Satoumi is sometimes spelled as Sato-Umi.

Fortunately I was invited to 4 COP10-related international meetings: 1) Marine Biodiversity Forum held on Oct.16 in



**COP10 at Nagoya Congress Center**



**Overflowing audience at the launching event**

Toyama as a COP10 partnership event co-organized by NPEC and Toyama prefecture; 2) CBD Technical Series Report Launching Event held on Oct.19 as a COP10 side event co-organized by CBD Secretariat and United Nations University-Institute of Advanced Study (UNU-IAS); 3) Side Event on Sato-Umi; A Synergy of Tradition and Science for Biodiversity along Japanese Coast held on Oct.21 organized by Ministry of the Environment (MOE), Japan; and 4) Informal Consultation Meeting on the Sustainable Ocean Initiative (SOI) held on Oct.24 co-organized by CBD Secretariat and UNU-IAS.

**1) Marine Biodiversity Forum**

I fortunately played a role of the coordinator in the panel discussion in this Forum. Keynote report on UNEP activities on marine and coastal biodiversity by Dr. Jacqueline Alder (UNEP) was comprehensive and very impressive, and the report informed us of the global crisis on biodiversity. Other reports from South Pacific and Yellow Sea (YSLME) showed valuable examples of case studies in regional activities. Introduction of biodiversity-related activities in NOWPAP region by Mr. Norihiko

Tanaka, Director of CEARAC, was also valuable and informative including the report of development of the new marine environmental assessment method focusing on marine biodiversity. As the coordinator of the panel discussion, I appreciate all the panelists for providing excellent information and ideas in particular of local, national, regional and global levels of activities on biodiversity although the time for discussion including the audience was very limited.

**2) CBD Technical Series Report Launching Event**

CBD Technical Series Report on Satoumi is now on the editing process and will be published by CBD Secretariat in December 2010. The title of the report is “Biological and Cultural Diversity in Coastal Communities: Exploring the Potential of Satoumi in Implementing the Ecosystem Approach in the Japanese Archipelago”. The event held in the occasion of COP10 was a kind of preliminary introduction of the report by its authors with many case studies. Dr. Marjo Vierros of UNU-IAS made an introductory talk followed by Mr. Takuya Yamada of MOE, Japan. Case studies in Japan were introduced by each

author: I introduced a successful case of Ago Bay in Mie Prefecture, and Mr. Ryo Tsujimoto of NPEC introduced a case study of Toyama Bay. Director Anne McDonald of UNU-ISA OUIK and Dr. Jihyun Lee of CBD Secretariat made conclusive talks at the conference room full of audience. The Technical Series Report on Satoumi will be appeared on the occasion of the closing event for the International Year of Biodiversity (IYB) which will be held on Dec. 18 and 19, 2010 in Kanazawa, Japan.

**3) Sato-Umi side event organized by MOE, Japan**

A side event “Sato-Umi; A Synergy of Tradition and Science for Biodiversity along Japanese Coast” was attached to the subtitle of “The Role of Sato-Umi in Preserving Biodiversity.” In this event, several successful examples of coastal management using the Sato-Umi approach with its concept aiming at high biological diversity and high biological productivity under appropriate human interaction were introduced. Main program consisted of Presentation with an introductory video on Sato-Umi image, Opening address by Dr. Yoshitaka Ota (Ocean Policy Research Foundation), Talk on biodiversity and



**The present author (Osamu Matsuda) giving a talk on Satoumi**



**(from left) Dr. Jihyun Lee (CBD Secretariat), co-chair Dr. Patricio Bernal and Director Anne McDonald at the consultation meeting**

Sato-Umi by Dr. Tetsuo Yanagi (Kyushu University), Talk on the case of Sato-Umi creation in Ago Bay by the present author (Osamu Matsuda), Talk on Sato-Umi and our daily life by Director Anne McDonald, and Talk on the supporting activities for the creation of Sato-Umi in Japan by Mr. Yasuhiro Muroishi of MOE. Following the talks, there was a very active discussion including the audience.

#### 4) Informal Consultation Meeting on the Sustainable Ocean Initiative (SOI)

This special meeting was held in order to promote the development of scientific partnerships between Japanese experts and international partners for effective implementation of the CBD COP10 decisions on marine and coastal

biodiversity. The meeting was held on Sunday (Oct. 24) in order to secure enough time for discussion, co-chaired by Dr. Patricio Bernal (Global Ocean Biodiversity Initiative) and Director Anne McDonald with two rapporteurs of Dr. Jihyun Lee and Dr. Marjo Vierros. After the opening by the co-chairs, Mr. Tsunao Watanabe (MOE, Japan) made an introductory address. In Part I of the meeting for stocktaking of existing international scientific partnerships and relevant Japanese initiatives, Dr. Nobuyuki Yagi (Tokyo University), Dr. Hiroyuki Matsuda (The Japanese Society of Fisheries Science, Yokohama National University) and Dr. Tomoya Akimichi (Research Institute of Humanity and Nature) gave talks from the Japanese side as well as presentations by international

organizations such as INCN, UNESCO, TNC, WMO, IOC and Census of Marine Life. I also gave a talk and explained about Satoumi related activities in Japan. Then, in Part II, there was discussion on scoping of possible areas for enhancing existing international scientific partnerships. At the end, all the participants agreed with the positive continuation of SOI activities in future. After almost 4 hour discussion, most of the participants moved to a Japanese traditional pub in downtown Nagoya to continue further discussion which will be very helpful to promote partnerships among many participants and organizations and to conserve marine and coastal biodiversity in near future.

## Ocean Color Remote Sensing in NOWPAP

*Joji Ishizaka, Professor, Hydrospheric Atmospheric Research Center, Nagoya University, (CEARAC Focal Points of Japan)*



Remote sensing is a useful tool to monitor large area where it is difficult to approach directly. NOWPAP region is a good place

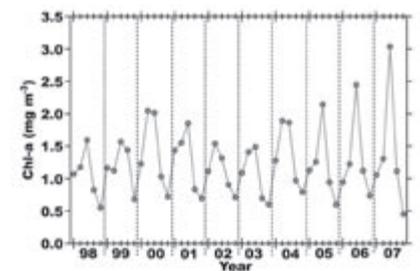
to show the usefulness, because the area including long coastal area of different countries and large marginal seas with quite complex political boundaries. Remote sensing can supply spatially continuous measurements of environmental parameters which can be used for common assessment of the marine environment.

Ocean color remote sensing is useful for monitoring of abundance of phytoplankton and other colored materials. Red tide is well known phenomena of discoloration of seawater caused by abnormally abundant phytoplankton and it often makes damage to fishery activities and is called harmful algal bloom (HAB). Most of NOWPAP countries are suffering by HAB and looking for new way to reduce the damage. Ocean color remote sensing is a developing tool to detect the red tide and to identify potential red tide area.

One of the causes of increase of phytoplankton is known as eutrophication. Nearly 15 years of accumulation of ocean color remote sensing data is also useful to monitor the change of phytoplankton abundance (chlorophyll-a) which is an index of eutrophication. However, in coastal area, other colored materials, like suspended matter and dissolved organic matter, often make problems for the estimation. Estimation method of chlorophyll-a and other materials from ocean color remote sensing has been improved.

NOWPAP/CEARAC has been greatly supported the remote sensing activities in this area last 10 years, and several workshops have been held with WG4 activities and national and international reports were published. As joint activity with WG3, application of remote sensing to HAB and eutrophication assessment has been discussed. Training courses were conducted and more people are inspired to use the remote sensing technology. Useful websites of remote sensing as Marine Environmental Watch System and Ocean Remote Sensing Portal Site were created.

New remote sensing sensors, will soon be launched by NOWPAP member states; Korean Geostationary Ocean Color Imager (GOCI) on Communication, Ocean, Meteorological Satellite (COMS) in 2010, Chinese Ocean Color Temperature Sensor (COCTS) on HaiYang-1B/C (HY-1B/C) in 2012, and Japanese Second generation Global Imager (S-GLI) on Global Change Observation Mission-Climate (GCOM-C) in 2014. With the progress of these missions, ocean color remote sensing will be an indispensable tool for marine environmental assessment in the NOWPAP region.



**Figure 3. Increase of Spring (Feb.-Jun.) Satellite Chlorophyll-a in the middle of Yellow Sea derived by recently developed empirical algorithm (Yamaguchi et al., in prep.).**

# Recent Progress of Japanese policy for Marine Environment conservation

*Koichi MIYAMOTO, Deputy Director, Office of Marine Environment, Water Environment Division, Environmental Management Bureau, Ministry of the Environment JAPAN (Acting CEARAC Focal Point of Japan)*



It is my great pleasure to have a chance to contribute to the CEARAC newsletter. Here I briefly report the recent

progress about Japanese policy for Marine Environment conservation.

Considering increasing awareness about importance for marine environment conservation, Ministry of the Environment JAPAN reorganized its structure and Office of Marine Environment was newly established in Environmental Management Bureau on this October, aiming to promote integrated measures for marine environment conservation. The office mainly treats the issue of Marine pollution and the issue of marine litter.

For measures of Marine litter reduction, a Cabinet approved Basic Policy for the Comprehensively and Effectively Promoting Measures against Marine Litter, based on "the Law for the Promotion of Marine Litter Disposal" which is explained in the newsletter 2009. After the approval, each bodies (including central government, local governments, coast administrators, NGOs etc.) have to play their own role and progress projects against marine litter, based on the Basic Policy. Of course, central government is doing financial support to local governments, for example "Regional Green New Deal Fund" described last year. The central government also makes several surveys and is trying to find out the best

way to make collection and disposal of marine litter effectively and efficiently, to catch the brief distribution of marine litter drifting ashore in whole Japan, to promote measures for marine litter generation reduction.

Internationally, the 12th Tripartite Environmental Ministers Meeting (TEMM12) was held in Hokkaido in this May by environmental ministers from China, Japan and Korea and the three ministers agreed to enhance the cooperation for marine litter issue through NOWPAP based on the request from our country in the meeting. This enhancement is also described in the "Tripartite Joint Action Plan on Environmental Cooperation" agreed by three countries, which defines the purpose and actions for tripartite environmental cooperation for 5 years from 2010. After the TEMM12, Japan-China-ROK Trilateral Summit was held in the same May and leaders of the three countries endorsed the environmental ministers to implement the tripartite joint action plan and agreed to strengthen cooperation in protecting marine environment of the region, and to make efforts to enhance public awareness on reducing marine litter generation, reiterating the importance of implementing of the 'Regional Action Plan on Marine Litter' (RAP MALI) under the framework of NOWPAP to prevent marine litter.

Marine Litter issue is still very significant and emergent issue and we will take appropriate measures through the framework of the Basic Policy and the Law. Importance of NOWPAP is recognized by

international society and we will cooperate with other member states and promote projects through NOWPAP based on RAP MALI.

For marine pollution problem, we are dealing with the international rule including "The London convention 1972 and of the 1996 Protocol Thereto" (LC/LP), MARPOL convention etc and taking appropriate measures in our country like regulations for a waste dumping at the sea and prevention of marine pollution by oils or harmful materials, based on "the Law Relating to the Prevention of Marine Pollution and Maritime Disaster".

Recently, many international conventions for marine environment conservations are being adopted, or being considered to be revised in IMO; for instance, adoption of "International Convention for the Control and Management of Ships' Ballast Water and Sediments", a revision of LC/LP to make it available for CCS in seabed etc. Japan progresses domestic projects to collaborate internationally, in view of global environment.

As we have seen, needs and importance of marine environment conservation is increasing more and more. Ocean connects many countries and to improve marine environment, international cooperation is indispensable. NOWPAP, a framework for marine environment conservation by China, Japan, Korea, and Russia which has long history, is now highlighted and we Japan as a member states of NOWPAP will continue to promote NOWPAP projects in collaboration with other member states.

## Announcement

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All the information about this newsletter and more can be downloaded from CEARAC Website.

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