















**Theme 1**Coastal and Ocean Governance

WORKSHOP 1:

COASTAL/OCEAN POLICY AND LEGISLATION: IMPLEMENTATION AND NEW INITIATIVES



Ocean Policy Research Foundation

**OPINEAR** 

Ocean Policy Institutes Network of the East Asian Region

Chair:

Mr. Hiroshi Terashima Executive Director, OPRF

Co-Chair:

Dr. Chua Thia-Eng

Chair, East Asian Seas Partnership Council

PEMSEA

# **The East Asian Seas Congress 2009**

"Partnerships at Work: Local Implementation and Good Practices"

Manila, Philippines 23–27 November 2009



# The East Asian Seas Congress 2009 "Partnerships at Work: Local Implementation and Good Practices" Manila, Philippines, 23-27 November 2009

# Theme 1: Coastal and Ocean Governance Workshop 1: Coastal/Ocean Policy and Legislation: Implementation and New Initiatives

#### 24 November 2009

Co-convening Agencies:
Ocean Policy Research Foundation (OPRF) and the Ocean Policy Institutes
Network of the East Asian Region (OPINEAR)

Chair: Mr. Hiroshi Terashima, Executive Director, OPRF Co-Chair: Dr. Chua Thia-Eng, Chair, East Asian Seas Partnership Council, PEMSEA

This workshop highlights the importance of coasts and oceans and discusses the various initiatives and efforts at central and local level in developing and implementing ocean and coastal policies and legislation. The three sessions provided lessons from the practical implementation related to coastal and ocean governance.

#### INTRODUCTION

Mr. Masahiro Akiyama, President of OPRF, welcomed the participants to the Workshop on Coastal and Ocean Policy and Legislation. He encouraged the participants to take advantage of the opportunity to benefit from the exchange of views, opinions and experiences in policymaking.

The Workshop Chair, Mr. Hiroshi Terashima, gave a brief introduction of the workshop and session 1. He said that oceans should be managed through a common framework. Countries are encouraged to adopt a national policy that addresses ocean and maritime issues in an integrated manner anchored on UNCLOS and Agenda 21. Developing and implementing a national ocean and coastal policy is not an easy task hence, the workshop aims to learn from the experiences and good practices of other countries.

# Session 1. National Ocean Policy: Implementation and New Initiatives

Session 1 focuses on the national initiatives, both successes and failures, in developing national coastal/ocean policies, strategies and legislation. The session looks into the experiences and lessons learned in implementing national policies and strategies. The seven presentors in Session 1 presented their country's own experiences in national policy development and implementation although at different stages.

# The New Initiative on Comprehensive Ocean Policy and the Basic Act on Ocean Policy of Japan

In his presentation, Mr. Terashima underscored the need for an ocean policy for Japan following the entry into force of UNCLOS and the adoption of Agenda 21 and WSSD. He stressed the important role played by a research institution, the Ocean Policy Research Foundation, in promoting and supporting the development of national coastal/ocean policy in Japan.

The new ocean governance regime established by UNCLOS entrusts to coastal countries the management of a vast ocean space of up to 200 nautical miles from the shoreline. He noted that Japan, consequently, is given the management of the world's 6<sup>th</sup> largest Exclusive Economic Zone and Continental Shelf. While Agenda 21 and WSSD emphasize the importance of a policy framework for ocean governance, Japan had not taken action until 2005, prompted by the initiative of OPRF.

OPRF developed and later, proposed the adoption of Japan's ocean policy and the enactment of an oceans law, which included 35 concrete measures in managing the expanded ocean space. In response, politicians and experts considering the importance of ocean issues formed the Ocean Law Study Group in 2006, which led to the enactment of the Basic Act on Ocean Policy in July 2007. The Act established a policy framework and mechanism for comprehensive ocean management. The headquarters is established within a high level of office – that of the Prime Minister, who acts as the head, with all the other ministers as members.

The First Basic Plan on Ocean Policy (Plan), adopted in March 2008, lists measures to be implemented by the Government, including the submission to CLCS of Japan's extended continental shelf. Thus far, laws have been enacted relating to seafarers and piracy, and a plan has been established relating to marine energy.

To conclude, Mr. Terashima noted: (1) institutional arrangements, including the creation of legislation, take vital role to establish and implement an comprehensive and integrated ocean/coastal policy; (2) the development and maintenance of political will is crucial to consolidate formerly separate section-based initiatives into a comprehensive and integrated ocean/coastal policy; (3) ICM is an important part of a comprehensive and integrated ocean/coastal policy as well as local government programs for coastal management.

# Experiences and Lessons Learned from the Implementation of the Coastal Zones and Small Islands Management Act (2007) of Indonesia

Prof. Dr. Hasjim Djalal, highlighted the importance of having a strong high level support and endorsement for the sustainable development of coasts and small islands. National support and commitment are expressed in various legal issuances as well as in the government's proactive role in environment-related regional and international arrangements.

Indonesia is specifically concerned with the management of coastal zones and small islands due to increasing environmental destruction and threats of climate change. Scientists calculate that by 2010, Indonesia could lose some 7,408 km² of land from sea level rise of 0.4 m within the last several years; 30,120 km² by 2050 due to sea level rise of

0.56 m and up to 90,260 km<sup>2</sup> of land in coastal areas and low-lying small islands by 2100 with a sea level rise of 1.1 m. Other causes of concern include lack of attention to the interests and tradition of the coastal population and failure to integrate coastal zone and small islands management into a national planning system.

The national government enacted Law No. 27 in July 2007, which promotes the sustainable utilization of coastal and marine resources. Utilization must not exceed rate of regeneration and must not affect the needs of the next generation. The Minister of Marine Affairs and Fisheries issued a number of regulations relating to the conservation, management and utilization of coastal zones and small islands, management accreditation schemes, and local participation and empowerment. The government is in the process of developing laws concerning coordination and rehabilitation of coastal zones and small islands, delimitation of coastal boundaries, reclamation and disaster mitigation.

Dr. Djalal mentioned that in international forums, Indonesia is playing a proactive role. Indonesia is actively involved in the Arafura and Timor Sea Experts Forum, Sulu-Sulawesi Marine Eco-Region, as well as in various regional fisheries management organizations, such as the Indian Ocean Tuna Commission and Commission for the Conservation of Southern Bluefin Tuna. In May 2008, the Indonesian Parliament also ratified the UN Fishstock Agreement of 1995.

In sum, Dr. Djalal noted that the experiences of Indonesia highlight the importance of: (1) highest level endorsement of initiatives; (2) regional and international cooperation; (3) supporting developing states, particularly those vulnerable to climate change; (4) cooperation of stakeholders; and (5) exploring and exploiting ocean energy (waves, current, solar, etc.) to reduce the use of fossil fuels.

### **China's Recent Ocean Policy Initiatives and Implications**

Dr. Huming Yu of the China Institute of Maritime Affairs gave an overview of the status of coastal and ocean governance in China. He noted in particular that the negative impact of rapid urbanization on China's ecosystem health deserves serious attention. He advanced that sustainable development and urbanization must consider the protection of the ecosystem. Loss of habitat and natural resources may lead to serious consequences impacting long-term socioeconomic progress.

Coastal economies in China contribute to 62% of the country's GDP while using less energy in comparison with economies in the rest of the country. China, however, has been undergoing rapid urbanization at the rate of 35.04 since 1949. There is much concern that continuous economic and infrastructure development without regard for ecosystems, may cause habitat and resource loss.

China has passed Ocean Agenda 21 and other legal and policy reforms to promote sustainable coastal and marine development and coordination of marine affairs. The Sea Area Use Law covers China's internal and territorial waters and adopts management schemes such as zoning, rights management and user-fees. The National Marine Functional Zonation (2002) divides water areas that include the contiguous zone, the Exclusive Economic Zone and the Continental Shelf into zones and ensures that ecosystem health will be considered in development projects. China's national five-year economic and social development programme of 2006 included a section on "marine resource protection and development." In the same year, the State Ocean Development Programme 2010-

2020 was launched. It adopted the watershed/catchment management principle, requiring upstream activities on land to consider their impacts on the downstream environmental carrying capacity in adjacent seas. Other features include the development and implementation of water rights-based management, market-based management and ecosystem-based management.

Dr. Yu reported that various ocean policy initiatives have been effective in reducing multiple coastal use conflicts, but not in regulating coastal reclamation activities. In some areas, coastal reclamation is being undertaken at the expense of coastal ecosystem health. In some localities, habitat protection is fighting a losing battle against the proposed reclamation projects.

Dr. Yu recommends the application of ICM as a first step for land-sea interface and ecosystem-based management. Even amid wide local implementation, ICM has yet to be adopted in national policies and programmes. Coastal Management still needs to develop a high level cross-sector ocean policy coordination and review mechanisms for coastal development projects.

### Adoption of the ICM Concepts for Management of Coastal Areas in Singapore

Dr. Nigel Goh of the National Parks Board of Singapore recounted that as early as the mid-1980s, academics from the National University of Singapore had started groundwork to promote ICM in Singapore. However, misconceptions and lack of full understanding of the concept were some of the reasons that had not allowed ICM to take off, even though Singapore had implemented projects that demonstrated many basic components of ICM, like the cleanup of the Singapore River. It was only in 2008 when ICM was recognized as an imperative for Singapore.

Dr. Goh identified the following lessons from Singapore's experience in its road toward implementation of ICM: (1) preparation is crucial and early involvement and engagement of key stakeholders is essential to build stakeholder ownership and buy-in; (2) establish partnership and avoid partisanship; (3) need for persistence and follow through; and (4) trust is built when promise is delivered. Certain misconceptions on ICM include: (1) ICM involves creation of new super sector that will erode influence of existing sector; and (2) ICM is a cure for all sustainable management issues.

Dr. Goh also noted the growing regional popularity of ICM as a viable approach to coastal management. There is increasing understanding and implementation of ICM across the region, with significant contributions by PEMSEA. Dr. Goh also stressed the usefulness of the SDCA framework of PEMSEA, which he said, gave Singapore a structure on which it, and other countries can overlay their experiences and achievements, as well as identify gaps in coastal management.

# Implementation of the Ocean Korea 21, Korea Coastal Zone Management Act and Basic Law on Marine and Fishery Development

Dr. Kim Sung Gwi of the Korean Maritime Institute related the recent reforms in ocean governance in the Republic of Korea. Earlier, Korea had established the Ministry of Maritime and Fisheries (MOMAF) for integrated ocean governance and passed the Coastal Zone Management Act (CZMA) and the Basic Act on Marine and Fishery Development (BAMFD). The new administration, however, integrated the Ministry of Construction and

Transportation and MOMAF to form the Ministry of Land, Transportation and Maritime Affairs. Fishery functions were transferred to the Ministry of Food, Agriculture, Forestry and Fishery.

Dr. Kim noted that the change necessitated institutional and legal reforms. He said that the revised BAMFD deleted matters on fisheries and became the basic law for marine-related matters. The National Ocean and Fishery Development Plan (OK 21) provides direction to National Ocean Policy. The first OK 21 contributed to progress in ocean industry and resource development. The second OK 21 (2011-2020) will reflect emerging environmental issues particularly global climate change and consequences of sea level rise and warming of sea waters. OK 21 will also include strategies that will support Korea's goal of becoming an ocean G7 country by 2020. To achieve this, Korea will undertake extension of ocean activity areas, redirect ocean industries and establish a sustainable ocean management system.

The CZMA of 1999 classified coastal areas into 5 zones, and 63 out of 76 local government units prepared their plans accordingly. It was revised, however, to conform to the emerging trends and issues. The revised CZMA introduced coastal waters use system which harmonized coastal lands and waters. It also seeks to prevent the radical change of natural landscape and natural scenery due to sea level rise, coastal erosion, etc., and to preserve it in the future through coastal maintenance projects.

## **National Policy of Vietnam for Coastal and Marine Development**

Dr. Nguyen Chu Hoi of the Vietnam Administration of Seas and Islands presented an overview of the value of coastal and marine areas to Vietnam and its people. Industrial activities, tourism, aquaculture, agriculture, port and shipping, and urban expansion in Vietnam are generally concentrated in the coastal areas. Coastal and marine economy significantly contributes to the country's GDP but escalating economic activities have also resulted in overexploitation of resources. The IPCC Report also identified Vietnam as one of the countries most vulnerable to sea level rise and climate change.

Dr. Chu Hoi reported the policy responses of Vietnam. The government adopts integrated coastal management and tasked the Vietnam Administration of Seas and Islands (VASI) under Ministry of Natural Resources and Environment (MONRE) as implementing agency. Currently, Vietnam is yet to develop its integrated national coastal and marine policy. The laws on sea-related activities remain fragmented, sectoral, and not reflective of the country's international commitments to sustainable coastal and marine development.

The government has approved and enacted ICM-related policies and laws. Its first integrated governance policy in the field of coasts, seas and islands is Governmental Decree No.25/2009/ND-CP on Integrated Marine Resources Management and Environmental Protection, which became effective in May 2009. The Decree guides ICM implementation including coastal function zoning and marine spatial planning. In 2007, the Government enacted National Strategy on Vietnam's Seas towards 2020 that focuses on marine economic development in relation to other sectors. Vietnam entered into cooperation agreements to promote ICM including projects with The Netherlands, United States and the WorldFish Center. Vietnam is developing a National Strategy on Sustainable Development of Marine Resources and Environmental Protection as its contribution to the implementation of the Sustainable Development Strategy for the Seas of East Asia following the PEMSEA framework.

#### A National Ocean Policy for Malaysia: Rationale and Proposed Components

Ms. Cheryl Rita Kaur of the Maritime Institute of Malaysia presented the status of the development of Malaysia's National Ocean Policy. Recognizing that Malaysia's maritime sector is multifaceted, interlinked and is influenced by internal as well as external factors, she emphasized the need to develop an overarching policy that will balance the need to continue or perpetuate the provision of goods and services from the sea while promoting development and economic activities. Balanced development cannot be achieved in a fragmented or sectoral management approach.

At present, Ms. Kaur said that maritime affairs in Malaysia are generally managed in a sectoral manner based on a tiered system structured around the federal and state government, ministries and agencies and to a lesser extent, the local authorities. The management system depends on each tier of governance to perform planning and coordination, implementation, enforcement, and developmental roles within the confines of their jurisdiction. The fragmented approach, while reasonably covering sectoral issues, gives rise to multiple use conflicts.

Integrating ocean management in Malaysia will require a comprehensive oceans policy addressing sectoral as well as inter-sectoral or cross-sectoral issues. It should state clear objectives and priorities and policy responses to alleviate pressures on marine environment and resolve multiple use conflicts. Other components that need to be incorporated include conflicts resolution mechanism, effective institutional arrangements, maritime economy and new economic opportunities, human resource development, delimitation of maritime boundaries, and marine scientific research.

# **Session 1 Summary**

Dr. Chua Thia-Eng recognized the dynamic initiatives of countries, and the region as whole, in developing and implementing coastal/ocean policy as well as steering transformation towards integration. National policies may be vital in giving common and strategic framework and guidance, implementation at the local level is crucial. The road towards sustainable development is still a long way and how to sustain current efforts remains a challenge. Mr. Terashima, in addition, emphasized that political will is the driver of ocean policy.

#### Session 2: Enabling Environment for ICM Implementation

Session 2 examines how the planning and management framework of ICM could be effectively applied in an integrated manner for addressing the issues of climate change, marine pollution, biodiversity conservation, food security and freshwater resources depletion. The seven presenters shared their experiences in applying ICM tools that have been effective in promoting environmental changes in coasts and oceans.

#### What is ICM?

Dr. Chua Thia-Eng, Chair of the East Asian Seas Partnership Council of PEMSEA, commenced session 2 with a brief overview of ICM and proceeded to discuss PEMSEA's process-oriented framework for Sustainable Development of Coastal Areas through ICM Implementation (SDCA). He briefly explained the elements of governance as well as the different aspects of sustainable development. He related the SDCA framework to the ICM cycle for the implementation of ICM.

# A Review of National and Local Initiatives in Promoting, Implementing and Scaling Up ICM Practices in the Philippines in Implementation of EO 533

The Philippines has adopted Integrated Coastal Management through Executive Order 533 (EO 533) as a national strategy to ensure the sustainable development of the country's coastal and marine resources. Director Carlo Custodio of the Coastal Marine Management Office of the Philippines Department of Environment and Natural Resources shared the status of the implementation of EO 533.

The Philippine archipelago is made up of 7,107 islands occupying a total land area of 300,000 km² with a coastline extending to about 36,289 km. It is rich in diversity of marine resources and where the "center of the center of marine shore fish diversity" is found. Around 54% or 1,541 of municipalities in the Philippines are coastal and where 62% of the population also lives. However, the marine and coastal environment is under increasing pressure from overexploitation, unsustainable fishing methods, aquarium and souvenir trade, invasive alien species, water pollution, reclamation, conversion to fishponds, coastal development, and human pressure due to population. The consequences of these pressures are declining fisheries productivity, loss of marine biodiversity and degradation of the coastal environment. EO 533 was adopted to reverse the trend.

Following EO 533, the DENR spearheaded the development of ICM programmes, with LGUs at the forefront. ICM coordinating mechanisms have been created in almost all LGUs. LGUs were given capacity-building training on development of coastal strategies and Marine Protected Area Plans, mangrove management, environmental monitoring, and information management. Public awareness campaigns have been mounted for a better understanding of stakeholders' shared responsibility and appreciation of coastal and marine resources.

Challenges in the implementation include conflicts in local priorities. Some LGUs refuse to allocate funds for ICM implementation. Some also have no capacity to handle information resulting in loss of important data. There is also a need to address social concerns. Land-based activities need to be developed to prevent or limit extraction and dependency on marine resources.

# Involvement of the Judiciary in the Rehabilitation of Manila Bay

Atty. Antonio A. Oposa, a distinguished Environmental Lawyer, gave an overview of the value of the natural resources of Manila Bay and noted the important role of lawyers and the judiciary in environmental advocacy. The severe water pollution in Manila Bay prompted Atty. Oposa to resort to the judiciary to seek environmental justice for Manila Bay. There is reluctance on the relevant agencies to act on the problem due to short-term or shortsighted vision that their efforts would not be continued by the next administration. He said that the seeming lack of political will and action on the part of the government agencies would need to be supplanted by the will, force and power of law. The law makes it the duty of government agencies concerned to clean up a dirty body of water, like Manila Bay.

On the unprecedented act, Atty. Oposa reported that he filed a case in court in 1999 to compel the Department of Environment and Natural Resources (DENR) and relevant agencies to draw up a plan of action to clean up Manila Bay. As the case dragged on, the DENR, with the assistance of PEMSEA, prepared the Manila Bay Strategy and Manila Bay Operational Plan. In 2009, the Supreme Court finally resolved the case requiring government agencies to implement the Manila Bay Operational Plan and to report their actions every 90 days to an Advisory Committee established for the purpose of monitoring compliance, composed of Supreme Court Justice Velasco as chair, other environmental advocates and the UP-Marine Science Institute.

Workshop Co-chair, Dr. Chua Thia-Eng stated that Atty. Oposa's presentation shows an interesting case reflective of the concern and action of stakeholders in helping the government effect policy and environmental changes. On the question of dealing with various LGUs around Manila Bay, Atty. Oposa replied that the Department of Interior and Local Government exercises supervisory authority and monitors their compliance.

#### **Nested Approach for ICM Implementation in Europe**

Dr. Yves Henocque, Visiting Fellow from OPRF, presented the nested approach to ICM in Europe.

The first stage of ICM development within the EU started under the guidance of the Environment Directorate General (DG) and its ICM demonstration programme (1995-2000) which ended up with an EU ICM Recommendation in 2002. While member states and maritime regions developed their own ICM policies, the international debate went more and more "offshore" with regard to oceans conservation and maritime activities development. In 2006, the Fisheries DG merged with the Maritime Affairs DG to become the "DG Mare" which soon started preparing a green book for an EU integrated maritime policy. This is considered to be the second stage of ICM development in Europe where ICM is not any more considered in isolation but as part of national maritime policies. In its Progress Report on the EU's integrated maritime policy (2009), the Commission considers six strategic directions where:

- i. integrated maritime governance must be further enhanced through more intense dialogue between the EU, Member State's Governments and coastal regions;
- ii. cross-cutting tools like maritime spatial planning are considered of utmost importance to enhance economic development;
- iii. definition of the boundaries of sustainability in the framework of the Marine

- Strategy Framework Directive;
- iv. sea-basin strategies based on cooperation with and among Member States and regions sharing a sea basin or sub-basins;
- v. Europe commits to play a leading role in improving global maritime governance as in matters of piracy or destructive fishing practices; and
- vi. a renewed focus on sustainable economic growth, employment and innovation.

ICM had also been put to proper perspective by integrating Water Basin to Maritime Basin. In regard to the different approaches at work, integrated water resource management (IWRM) initiatives should be organically linked to integrated coastal management (ICM) and further offshore to a form of integrated regional seas and ocean management (yama-kawa-umi) from national to regional and finally global levels, all underpinned by the ecosystem-based management approach

Finally, Dr. Henocque noted the important role of regional conventions in Europe, particularly, OSPAR, HELCOM and Barcelona Conventions.

# Integrated Implementation of Relevant International Conventions Using ICM Planning and Management Framework

Prof. Raphael P.M. Lotilla, Executive Director of PEMSEA introduced the importance of ICM in implementing international conventions. Ms. Stella Regina Bernad of PEMSEA presented the SDCA framework and gave an overview on how the implementation of ICM through the framework will result in implementation of certain obligations under various international instruments relating to marine environment and maritime affairs. Some international instruments that intersect the SDCA framework include: (1) International Convention for the Prevention of Pollution from Ships 73/78); (2) International Convention on Civil Liability for Oil Pollution Damage; (3) International Convention on the Establishment of an International Oil Pollution Compensation Fund; (4) International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea; and (5) International Convention on Oil Pollution Preparedness, Response and Cooperation. Environmental instruments include: (1) Convention on Biological Diversity; (2) Convention on International Trade in Endangered Species; (3) Ramsar Convention on Wetlands; (4) Convention on the Conservation of Migratory Species of Wild Animals; and (5) Convention Concerning the Protection of the World Cultural and Natural Heritage.

# Information Management for ICM Policy, Planning and Decision-Making

PEMSEA recognizes that access to sound information is the primary concern of policymakers. Organizations, thus, should establish an effective management information system to ensure provision of accurate, timely, reliable and quality information to support informed policy, planning and decisionmaking for sustainable development of coasts and oceans as stated in Agenda 21. Quality and useful information is important for policymakers in ensuring sound assessment of environmental issues, and evaluation and selection of options. In coastal and marine management, information is critical in reducing uncertainties, mitigating risks and avoiding environmental damages that may sometimes be irreversible. Information, to be effective, should be visible and instrumental in bringing about beneficial policy changes.

Information management involves data collection and organization, processing and transformation, and communication. Technology is a key strategic tool in all aspects of information management. Ms. Bresilda Gervacio discussed the Integrated Information Management System for Coastal and Marine Environments (IIMS) of PEMSEA, which is one of its comparative advantages. PEMSEA developed IIMS to provide a decision-support system to supply the necessary data needs. IIMS stores, retrieves and maintains a computerized database so that applications can be supported, including bridging data gaps in ocean and coastal governance. Data/information are then analyzed and packaged to formats that are understood by the users. Based on PEMSEA's framework information are packaged into various reports, which are communicated to users such as managers, policy makers and the stakeholders, in general. Among these reports are the environmental profiles and atlases, environmental risk assessments, state of the coasts, natural resource damage assessments, integrated environmental monitoring and others. These reports are important inputs in the development of coastal and river basin strategies and integrated land- and sea-use zoning.

Ms. Gervacio traced the steps and experiences on how PEMSEA's proactive approach to information management has made the invisible information visible in the light of the policy changes in Manila Bay and other ICM sites in the Philippines. As a result of earlier studies, Manila Bay came up with the Manila Bay Declaration, Coastal Strategy, the Manila Bay Operational Plan and integrated land-and sea-use zoning plan of Bataan. The activities also contributed to the issuance of Executive Order 533. The case of Manila Bay supports the view that quality and relevant information, if processed into useful materials for policymakers, will help shape policies to support ICM implementation.

# **Promoting Marine Education in Japanese Elementary and Middle Schools**

Mr. Manabu Tamura of Japan's Ministry of Education shared the efforts of Japan to improve its education system. He said that Japan promotes marine education, even to children as early as elementary and middle schools, to ensure that citizens will have better understanding of, and deeper interests in the oceans, UNCLOS and other international agreements for the sustainable development and use of the oceans. In particular, the Basic Plan on Ocean Policy (Basic Plan) requires states to promote interdisciplinary education in universities to enhance human resources and build their capacity and knowledge to address issues regarding oceans.

School curriculum in Japan contains marine-related subjects including Fisheries. The Basic Plan requires improvement of the Fisheries curriculum to include practical education through on-site practices. More training vessels need be equipped and improved at high schools. To improve marine education, Mr. Tamura cited several proposals that included revision of marine curriculum, improving learning environments as well as outside support systems, promoting research and developing leadership capacity.

#### LEGISLATORS' DIALOGUE

The Legislators' Dialogue provided a venue for exchange of ideas among legislators and policymakers. The heart of the dialogue is the next legislative or policy action agenda that will contribute to the enabling environment for coastal and ocean policy development and implementation as well as wider application of the ICM approach for integrated implementation of relevant international conventions.

Philippine Senator Pia Cayetano facilitated the dialogue with PEMSEA Executive Director, Prof. Lotilla, co-facilitating. Participating in the dialogue are Senator Mean Som An from Cambodia, former Senator Je Jong Geel of the Republic of Korea and Hon. Nguyen Van Cu of Vietnam Administration of Seas and Islands.

### **Climate Change Challenges and National Response**

Senator Cayetano's first question related to climate changes and policy and legislative responses. Senator Som An replied that Cambodia has adopted legislations with sanctions such as laws on environment, protected area, water resource management, forestry and biosafety. Senator Som An admitted however that the legislative cannot do controlling on its own but would need the support of all stakeholders. Local government agencies should coordinate with national agencies. Cambodia is also intensifying information dissemination to increase people's awareness. Consultation with the public is usually undertaken to ensure that all their concerns are being addressed.

RO Korea, on the other hand, noted that there is yet no legislation specifically on climate change although there are various laws that address climate change such as the Ocean Law and Coastal Zone Management Act. Its Ocean Policy, though, is shifting from development to conservation. Due to the increasing loss of its wetlands and natural coastlines because of reclamation activities, RO Korea passed the Wetland Conservation Act.

Vietnam is one of the countries most vulnerable to climate change. Thus, coastal/ocean policies play an important role. Administrator Van Cu said that the Prime Minister recently approved the program to assess the impact of climate change, promote science and technology, and identify solutions. Specifically, the program will develop scenarios of climate change and sea level rise, look into international cooperation, and develop an action plan within the framework of national strategy program.

The Philippines, on the other hand, related that the President has just signed into Law Republic Act 9729 or the Climate Change Act, which tasked the development of a framework strategy and the creation of the Climate Change Commission. Other legislative responses to Climate Change include the establishment of the Inter-Agency Committee on Climate Change, and the issuance of Executive Order 533 on ICM. Geographically, there may be difficulty addressing the particular needs of 7,107 islands.

# **ICM Agency and Role of Local Government**

Agencies that are in charge of ICM vary in each country, but local implementation is generally given to the local government units (LGUs). In Cambodia, the Ministry of Environment is the lead agency, but the local authority has the mandate to protect and conserve the environment and to directly respond to the issues of climate change.

Cambodia created the Committee on Climate Change composed of nine agencies, and a technical subcommittee. The same is true in RO Korea, where the Ministry of Land Transportation and Marine Affairs is the lead agency but LGU implements at the local level. About 60 out of the 76 LGUs in RO Korea implement ICM. There is difficulty, however, in the coordination between central and local government.

#### **Financial Mechanisms**

Funding is important in the implementation of policies, plans and programs. Vietnam, RO Korea, Philippines and Cambodia all provide specific budget allocation for their environmental activities. However, in all cases, government budget is not sufficient. For Cambodia, the limited budget results in the prioritization of activities. Philippines tap the private sector to participate in environmental activities. A good example is that industries like the Ayala Group of Companies are committed to Sustainable Development as part of their social responsibility to adopt environmental projects through the public-private partnership.

### **Policy and Legal Support**

In law development and policymaking, there is a need for further support from stakeholders to ensure that all concerns are addressed. One of the challenges raised is how to involve the scientists. Senator Cayetano said that there is a bill to protect the interest of scientists and their royalties. She also said that the private sector should also be involved. RO Korea cited its experience in the establishment of Marine Protected Areas. The central government called on the local government, particularly the mayors, to engage the local community in the planning of activities.

#### CONCLUSION

Countries in the region are developing and/or implementing their respective national ocean/coastal policies based on UNCLOS, although there may be variations in terms of coverage. National ocean/coastal policy should address emerging issues, such as climate change, integrated management of land and sea, and economic development.

ICM is also an important part of an integrated ocean/coastal policy and coastal management programs, particularly of local governments. Sustainability of ICM programs must be addressed. Strong political will is important to be able to integrate sectoral initiatives into a national ocean/coastal policy. It should be materialized into institutional arrangements, and legislation.

While national ocean/coastal policies vary, they also have similar features and commonalities based on the international character of oceans. Thus, exchange of information and knowledge among countries is important. Communication and knowledge sharing between policymakers, stakeholders and scientists are important in ocean/coastal policy and ICM development and implementation. Marine education in schools and public outreach play an important role in raising awareness on ocean/coastal policy.

#### RECOMMENDATIONS

The workshop made the following recommendations:

- 1. Facilitate, through the PEMSEA cooperative mechanism, exchange of information, knowledge and experience among countries on the development and implementing of national ocean/coastal policies;
- 2. Nest ICM in an integrated ocean/coastal policy;
- 3. Enhance political will, through the efforts of ocean society, in order to expand the circle of politicians who understand the importance of comprehensive and integrated ocean/coastal policy and to encourage materialization of this political will into institutional arrangements and legislation;
- 4. Incorporate in national ocean/coastal policy such measures that address emerging issues, such as climate change, integrated management of land and sea, and economic development:
- 5. Implement ICM within a framework for funding to be more accessible;
- 6. Enhance communication and knowledge sharing between policymakers, stakeholders and scientists;
- 7. Promote marine education at schools and public outreach;
- 8. Harmonize ICM policy and implementation in national and local governments.