EAS Congress 2015
THE EAST ASIAN SEAS CONGRESS

Global Targets Local Benefits

Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015

16-21 November 2015

Session 2

Accelerating Actions for Sustainable Development and Climate Change

Workshop 1

Scaling up ICM: Innovations and Impacts at Local, National and Regional Levels

CO-CONVENING AGENCY:

OPRI THE OCEAN POLICY RESEARCH INSTITUTE

CMC

PEMSEA NETWORK OF LOCAL GOVERNMENTS

ICLEI LOCAL GOVERNMENTS FOR SUSTAINABILITY

Co-Chairs: **Dr. Keita Furukawa**
Director, Marine Research and Development, Ocean Policy Research Institute (OPRI), Japan
Dr. Gil Jacinto
Professor, The Marine Science Institute, University of the Philippines, President, Coastal Management Center

PEMSEA gef UNDP WORLD BANK GROUP

Hosted by the Government of Viet Nam
Organized by PEMSEA, Ministry of Natural Resources and Environment (MONRE), Viet Nam Administration of Seas and Islands, and the City Government of Da Nang and supported by GEF and UNDP.

The East Asian Seas Congress 2015
"Global Targets – Local Benefits: Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015"
Da Nang City, Vietnam, 16-21 November 2015

International Conference Session 2:
Accelerating Actions for Sustainable Development and Climate Change

Workshop 1: Scaling up ICM: Innovations and Impacts at Local, National and Regional Levels

Co-conveners:
Ocean Policy Research Institute
Coastal Management Center
ASEAN Centre for Biodiversity
PEMSEA Network of Local Governments for Sustainable Coastal Development,

Workshop Co-Chairs:
Dr. Keita Furukawa
Director, Marine Research and Development , Ocean Policy Research Institute

Dr. Gil Jacinto
Professor, Marine Science Institute, University of the Philippines
President, Coastal Management Center

1. INTRODUCTION AND KEYNOTE PRESENTATION

1.1. The Fifth East Asian Seas (EAS) Congress was co-organized by the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) and the Government of Vietnam through the Ministry of Natural Resources and Environment and the Da Nang City Government. This was held at the Furama Resort in Da Nang City, Vietnam from 16 to 21 November 2015.

1.2. Carrying the theme "Global Targets – Local Benefits: Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015", the EAS Congress 2015 took stock of achievements made in the East Asian Seas region in ocean and coastal governance, and actions that need to be accelerated to realize the Sustainable Development Goals and confront various challenges besetting sustainable development of the region including those posed by climate change. New opportunities for collaboration and cooperation were also identified in order to move the vision of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) 2015 to concrete realities locally by aligning with the global agenda, with particular focus on suitable governance arrangements.

1.3. The EAS Congress 2015 featured the Fifth Ministerial Forum, an International Conference, the annual meeting of the PEMSEA Network of Local Governments (PNLG), an Exhibition, the Fourth EAS Youth Forum, and other activities. More than 800 participants from national and local governments, the academe, UN agencies, regional organizations, business professionals, local and international nongovernmental organization (NGOs), youth and community representatives, and other members of civil society from within and outside the East Asian Seas region participated in the Congress.

1.4. Three major sessions focusing on various aspects of sustainable coastal and ocean governance and development comprised the International Conference as follows:

- Session 1: A Decade of Partnerships in Sustainable Development of the Seas of East Asia: Synergies and Achievements
- Session 2: Accelerating Actions for Sustainable Development and Climate Change
- Session 3: From Vision to Reality: Aligning the Global Agenda with Local Benefits

1.5. The Workshop on Scaling up ICM: Innovations and Impacts at Local, National, and Regional Levels under Session 2, with presentations and discussions on national and local experiences from countries and various programs and projects in the region, served as a venue for taking stock of lessons learned, good practices, impacts and benefits of ICM implementation, challenges and gaps, and key actions to promote replication and scaling up of good practices and innovations.

1.6. The workshop consisted of presentations and panel discussions organized into four parts as follows:

- Part 1A: Good Practices, Innovation and Impacts in ICM Applications at the Local Level
- Part 1B: Good Practices, Innovation and Impacts in ICM Applications in Japan
- Part 2: Good Practices, Innovations and Impacts in ICM applications for MPA and MPA Networks
- Part 3: Transferring and Scaling up of ICM Good Practices and Innovations

1.7. The workshop Co-Chairs, Dr. Keita Furukawa, Director, Marine Research and Development, Ocean Policy Research Institute, and Dr. Gil Jacinto, Professor, Marine Science Institute, University of the Philippines and President, Coastal Management Center, opened the workshop, provided an overview of the objectives, expected outputs and various sessions, and introduced the Keynote Speaker, Dr. Chua Thia-Eng.

1.8. Dr. Chua Thia-Eng, Chair Emeritus of the East Asian Seas Partnership Council, shared lessons learned from over two decades of ICM implementation in the East Asian Seas (EAS) region. He provided an overview of GEF and UNDP initiatives on ICM development and implementation in the region since the early 1990s, starting with two demonstration sites with different social systems, in Xiamen, P.R. China and Batangas, Philippines, to test the ICM concept and process, working directly with the local governments. Dr. Chua highlighted that after 22 years, using the concept and framework provided by PEMSEA and ensuing policy and investment directions, the two original sites are still fully functional. Expansion of ICM implementation has been ongoing over the years, with national and local government funding as well as support from donors and international organizations, currently covering 14% of the regional coastline. Providing specific examples from local ICM sites, Dr. Chua shared key lessons learned from ICM implementation in the region, including the following:

- The imperative for ICM – sustainable development of the coastal and marine areas requires a paradigm shift in concept and operational methodology in order to effectively address management complexities, moving coastal management from a loose, issue- or resource-focused management approach into a strategic, integrative and holistic coastal planning and management operating system with clearly refined concept and improved working methodology for addressing area-/ ecosystem-wide coastal and marine management concerns; improving governance will address pressures on the ecosystems amidst economic, legal, political and social pressures.

- ICM works – coastal governance is strengthened through ICM implementation, facilitating establishment of functional interagency coordinating mechanisms, reduction of policy and legislative conflicts, realization of multi-sectoral cooperation, and mainstreaming of ICM approach and program into local government regular plans; performance varies across sites but the interest among local governments continues; start at the local level to bring into the picture the beneficiaries; and start small and scale up as confidence is built; ICM has been shown to work under various political, social and economic conditions.
- ICM system – over the years, ICM practices have evolved into a system that calls for a comprehensive, systematic, planned and participatory approach including documentation and codification of good practices; the ICM process provides the operational mechanism for implementation, employing various tools and methods to address a wide set of pertinent issues throughout the ICM processes to achieve common objectives; the system has no end and is an continuing process of improvement.
- National policy, strategies and/or legislations support and enhance ICM program development and implementation at the local level — in the 1990s, only R.O. Korea had ICM legislation; 22 years after Xiamen and Batangas, about 80% of countries in the EAS region have developed national ocean policies, triggered by successes at the local level; the 12th year plan of China includes ICM as national policy; the ICM approach provides the methodology to achieve the goals of national government and international agencies on ocean and coastal governance
- ICM is more effective if local governments take the driver's seat — successes at local level can be mainstreamed into national government programs.

1.9 Dr. Chua proceeded to share key lessons and good practices in ICM implementation at the local level, including the following:

- Vision-oriented strategy and action plan are core requirements of an ICM program — integration into the local government program can be a measure of success;
- Interagency, multi-sector coordinating mechanism is critical for reducing policy, legislative, multiple use conflicts and mainstreaming;
- Building local management capacity through "learning by doing" is an integral part of an ICM program while specialized technical skills can be secured through conventional or skill-specific short-term training programs; a coastal manager should think like a scientist, work like a manager, and speak like a diplomat;
- An informed public provides a strong political base for ICM program implementation – an informed public is one that internalizes information and transforms it into something powerful;
- Funding is essential but not a limiting factor in developing and implementing an ICM program;
- Effective application of interdisciplinary science improves administration of governance measures;
- The precautionary principle and adaptive management continue to play key roles in the ICM system; cognitive knowledge builds on practical experiences of what works and what does not;
- Coastal zoning is an effective functional scheme to ensure best use of the sea space and resources therein as well as an effective measure to reduce multiple use conflicts;
- Working together remains a formidable challenge to institutional cooperation due to conflicting interests among coastal users, local leaders, and various agencies and sectors;

- Stakeholders' involvement can take various forms but partnerships are the key to successful collaboration, including horizontal and vertical partnerships among governments, business sector, media, scientific and academic community, NGOs, local communities;
- Making ICM visible through on-the-ground achievements and benefits improves interagency cooperation, local ownership and collective responsibility in meeting programme goals and objectives;
- ICM program is financially feasible and effective in catalyzing financial investment especially for environmental improvement projects;
- State of the Coast Reporting has proven to be a useful system for all stakeholders not only in understanding the current socioeconomic and environmental conditions but also the level of management inputs and outcomes thus enhancing accountability of coastal governance;
- Primary and secondary data collected are best processed, stored, and managed through an Integrated Information Management System (IIMS) as an integral part of ICM practice.

1.10 Emphasizing how far the EAS region has advanced with regard to ICM implementation, Dr. Chua highlighted that the ICM structure and processes match the relevant ISO standards essential for the development of an ICM Code. PEMSEA has developed an ICM Code, based on international standards for environmental management (14001:2004) and quality management (9001:2000) at local government level, to serve as a practical tool to assess progress and achievements of local government in ICM implementation, although more efforts are still needed to make it a standard practice for ICM implementation. Dr. Chua concluded his presentation by highlighting various ICM applications as follows:

- ICM system is feasible and equally needed in developed nations, as evidenced by the development and implementation of integrated urban coastal management (IUCM) in Singapore and ICM programs in Japan considering traditional practices;
- ICM system provides a framework umbrella for local implementation of international conventions especially those related to sustainable development;
- ICM provides the policy and management fundamentals for transformation to a sustainable blue economy;
- The benefits of ICM can be expanded in coastal areas and watersheds throughout the regional coastline through geographical and functional scaling up particularly for achieving the sustainable development goals;
- The ICM System is still evolving : From Art to Management Science

1.11 Open discussions after the keynote presentation highlighted the following:

- Incentives to local governments to work in an integrated manner — local governments implement ICM because they recognize the need for it and there is strong commitment to implement ICM; local governments that are using their own funding to implement ICM are more likely to succeed than those that implement ICM because there is available funding; a strategy to show local governments the value of ICM is to bring them to successful ICM sites; international organizations can assist local governments to seek/generate funding;
- The role of central government in the ICM process — involve the central government to take the lead right from the beginning and start where change can happen but do not rush to cover the whole country;
- How to communicate with upstream users — ICM initially operates within a specific geographical boundary; geographical expansion may result to covering the entire

coastal area while functional integration may link the management of the coastal areas with the watershed and river basin;

- ICM provides opportunities for investments; the private sector can be involved in the process and may partly cover the cost of ICM implementation;
- ICM advocates changing human behavior, promoting in the process a balance between authority and public consensus on major issues.

2. PART 1A: GOOD PRACTICES, INNOVATION AND IMPACTS IN ICM APPLICATIONS AT THE LOCAL LEVEL

2.9 Part 1A, co-chaired by Dr. Gunnar Kullenberg, Former Executive Director, International Ocean Institute, and Ms. Clarissa Arida, Director for Programme Development and Implementation, ASEAN Centre for Biodiversity, focused on ICM applications at the local level, and the contributions that ICM and other related management systems have made to improving governance and management of coastal and ocean areas and related resources, as well as sustainable economic growth and social benefits. The presentations and panel discussions were organized into two sets to highlight: (1) approaches and good practices in managing and protecting coastal areas and resources at the local level; and (2) integrated approaches for river basin and coastal area management.

2.10 The first set of presentations shared experiences from various programs and projects in implementing integrated approaches for managing marine and coastal resources at the local level.

2.11 Dr. Stefan Groenewold, Technical Advisor for the Integrated Coastal Management Programme (ICMP) in the Mekong Delta, GIZ Vietnam, shared efforts under the programme to address challenges in shoreline management in the southern Mekong Delta including sea level rise, land subsidence, coastal erosion, and decline in mangrove forests, and to lay the foundation for sustainable growth by conserving ecosystem services. The programme is focusing on integrated, science-based coastal protection planning, technical guidance and respective capacity development at local and institutional levels. Tidal mudflat restoration, rehabilitation of a resilient mangrove belt, coastal spatial planning and integrated management (co-management) are considered as essential instruments. Several practical tools for coastal protection were tested and locally applied including hydrological surveys, modelling of coastal processes, coastal classification, historical erosion mapping, wave-breaker designing, sea-dyke inspection and mangrove planting in exposed areas. Upscaling and acceleration of tools and solutions for coastal protection can be best achieved through cross-sectoral and cross-provincial planning, hence, an Integrated Coastal Protection Plan (ICPP) for the southern Mekong Delta was prepared covering the provinces of Bac Lieu, Soc Trang, Ca Mau and Kien Giang, which would guide the development of bankable investment plans for implementation of feasible and most efficient coastal protection measures.

2.12 Ms. Bui Thi Thu Hien, Marine and Coastal Resources Programme Coordinator and MFF National Coordinator, IUCN/MFF Vietnam, discussed MFF's efforts in developing capacity of stakeholders in support of sustainable management of coastal ecosystems, including (1) running an annual ICM post graduate certificate course in partnership with the Asia Institute of Technology and the Bay of Bengal Large Marine Ecosystem Project since 2007, which will ultimately become a permanent professional course; and (2) on-the-ground efforts in developing resilient communities in Hoi An through the Resilience Analysis Protocol (RAP) and applying ridge-to-reef management approach in the Vu Gia – Thu Bon River Basin. The RAP

involves looking at past and present conditions and future scenarios related to climate change, and developing and implementing strategic policy and on-the-ground interventions in collaboration with various sources of technical and financial support. Ms. Hien also shared challenges related to institutional mechanisms for sustaining ICM implementation in Vietnam.

2.13 Ms. Rocky Sanchez Tirona, Vice President, Rare Philippines, discussed the importance of social science tools in encouraging community support for biodiversity conservation and sustainable fisheries management. She shared Rare's approach in using social marketing tools and behavior change strategies to: understand people's behaviors and motivations; improve knowledge, attitudes and interpersonal communication; and apply barrier removal strategies. Such strategies include strengthening of policy, governance and enforcement mechanisms, in order to influence behaviors of fishers and their communities to reduce threats to a site and support a range of conservation behaviors, such as: no intrusions into marine sanctuaries; use of the right fishing gear; and participation in enforcement, catch reporting and fishery management planning. Application of this approach in 25 marine protected areas across the Philippines has contributed to developing conservation advocates among the communities, reduction of cases of intrusion in marine sanctuaries and improving MPA management effectiveness, leading to conservation results such as increase in coral cover/condition, fish abundance/density/biomass, etc.. She also highlighted the importance of demonstrating socieconomic benefits for the people through livelihood and enterprise development, and the need for social science tools to be considered an integral part of conservation programs.

2.14 Ms. Regina Bacalso, Senior Fisheries and Coastal Resources Management Specialist, Ecosystems Improved for Sustainable Fisheries (ECOFISH) Program, discussed the use of marine spatial planning (MSP) as one of the management strategies and tools for resolving spatial conflicts, conserving ecosystem health, and improving fisheries management in the context of an ecosystem-based approach to fisheries management (EAFM). She shared current efforts of local governments surrounding Balayan Bay in the Philippines, with technical support from the ECOFISH Project, to undertake marine spatial planning and fisheries zoning through a systematic process of identifying, evaluating and allocating uses of their coastal area, employing participatory approaches, considering lessons learned from similar initiatives in the Philippines, Indonesia and other areas. This initiative is being undertaken in support of existing government programs in Batangas Province, and it benefits from, as well as strengthens, the implementation of existing ICM governance, management and enforcement mechanisms in the area.

2.15 Mr. Len Garces, Research Fellow, WorldFish, talked about the importance of developing multi-agency and multi-sectoral governance arrangements at the local level in order to promote collaboration and coordination in improving fisheries management using an ecosystem-based approach. Specifically, he shared experiences in applying a participatory diagnosis and adaptive management approach in order to: (1) strengthen the Iligan Bay Alliance of Misamis Occidental (IBAMO) in the Philippines, an existing partnership framework among local governments; (2) expand the alliance into a multistakeholder body to involve key government agencies; (3) establish the alliance as a 'management constituency' to support the development and implementation of an integrated ecosystem approach to fisheries management (EAFM) in Misamis Occidental to complement existing coastal resources management initiatives in the area; (4) develop capacity and commitment of local government 'champions' and leaders; and (5) engage other institutions, including civil society groups in improving fisheries governance. WorldFish is employing the same approach in other sites in Indonesia, Solomon Islands and Tanzania.

2.16 Open discussions during the session highlighted the following:

- Importance of using traditional knowledge
- Importance of local authority to manage natural resources and environment, guided by a good policy at the national level
- Challenges in working with local governments
- Varying terminologies and frameworks introduced by various donors (e.g., ICM, ICZM, IRBCAM, IWRM, etc.), which may be confusing to local governments

2.17 The Co-Chair, Dr. Kullenberg, emphasized that, notwithstanding the different terminologies, there is a need for a long-term vision of what people want to see for their future, and the need for time to see results, hence the importance of long-term involvement. As shown by Dr. Chua, there is a need to develop mechanisms to sustain ICM programs when donor support ends, hence the need to involve political leaders, and the need for a system that can sustain despite political changes. Dr. Kullenberg also highlighted the need to balance between authority and consensus, and the need to use traditional knowledge, using knowledge and people at the local level.

Panel discussion

2.18 Five panelists were invited to provide their comments and feedback on the presentations and to share related initiatives and experiences in ICM implementation. The panelists were as follows:

- Ms. Nguyen Thi Phuong Dung, Deputy Director, Department of Natural Resources Conservation, Directorate of Fisheries – Ministry of Agriculture and Rural Development, Vietnam
- Mr. Sakanan Plathong, Head, Coral Reef and Benthos Research Unit, Department of Biology, Prince of Songkla University, Thailand
- Dr. Luky Adrianto, Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia
- Dr. Maripaz Perez, Country Director, WorldFish
- Dr. Christian Henckes, Programme Director, Integrated Coastal Management Programme in the Mekong Delta, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Vietnam

2.19 Considering good practices in improving governance and management of coastal and ocean areas and related resources at the local level, replicability of these good practices in other sites, and challenges in replicating/scaling up good practices, below are the highlights of the panel discussion and open discussions:

- ICM needs to be considered as an approach for maintaining ecosystem services and addressing various issues (e.g., climate change, biodiversity, fisheries, etc.), using integrated processes as opposed to fractionated approaches; there are many initiatives introduced by various donors/projects under different names (ICM, ICZM, IRCOM, MFF, COREMAP, etc.) and different flags; there is a need to go beyond the terminologies and flags and share good practices, lessons learned on integrated approaches for achieving sustainable development goals, with some criteria or standards, not for the sake of standardization but for communicating the approach; and PEMSEA can support to facilitate this process
- Good practices in ICM implementation, as shown in the presentations, include: (a) participatory, consensus-building, multi-level/sector approaches in planning and implementation; and community involvement in planning and implementation

processes; (b) developing leadership and local champions; (c) strategic visioning involving communities, academe, and other sectors; (d) using science-based information/evidence to drive innovations/interventions; (e) using/recognizing traditional knowledge in crafting interventions; (f) using social science tools to understand community behavior and encourage their support; (g) capacity building of communities and implementers as part of interventions; (h) sharing of knowledge and technology improvements/innovations with other areas (no need to reinvent the wheel); (i) strengthening governance mechanisms and building accountability and ownership of interventions at the local and community levels to sustain the programs (especially after donor support ends); (j) balancing conservation efforts and economic needs; and (k) and considering benefits for the communities in developing interventions.

- Integration and working together is not easy, usually comes after shocks, and provision of incentives and economic benefits; when changes are triggered, it is important to think about who is benefiting and sharing benefits in developing and implementing interventions
- ICM implementation at the local level — enhancing local government authority and responsibility to manage natural resources and environment; promoting participatory management planning; need collaboration between national and local governments to address needs and priorities at the local level
- Strengthening national government support for ICM initiatives at the local level requires: supporting national policies; linking ICM efforts with national strategies; documenting input/feedback experiences and good practices at the local level for application in policymaking at the national level; demonstrating the process, also injecting some funding and showing results for politicians to better appreciate and understand ICM; integrating ICM into provincial action plans and socioeconomic development plans (SEDP); harmonizing management and funding mechanisms (e.g., in Vietnam, there is budget available at the regional level, but there is no management entity and SEDP at the regional level; in Indonesia, national laws promote decentralization including with regard to environmental and coastal management, although the applications are still not well understood at the local level, and some conflicting issues on management planning at the district and provincial levels need to be resolved)
- Importance of leadership in ICM application — ICM managers, planners and stakeholders prepare the plans but local political leaders make the decisions on budget and implementation; capacity building on ICM should not only be for local implementers and users but also for local executives and decisionmakers; need a mechanism to share/connect knowledge of coastal/local users and implementers to decisionmaking groups
- Private sector participation — when designing interventions, there is also a need to consider private sector involvement and relevant business processes
- ICM development requires a long political process, and constant encouragement and support from various sectors and institutions
- ICM can facilitate implementation of international instruments and commitments at the national and local levels
- Importance of marine spatial planning for sustainable coastal management and development of fisheries — as a tool for supporting co-management at the community level and to address conflicting uses of coastal areas; need support to promote application in Vietnam; need national law in Thailand
- Ecosystem approach to fisheries management (EAFM) — need to move from conventional fishery to ecosystem approach; how to measure success of ecosystem approach to fishery; also need to consider manageability of ecosystem unit and capacity development on the ground, for example, in Indonesia, EAFM has been demonstrated in

two communities (not as large as IBAMO), where mechanisms established were based on traditional/local knowledge and practices

2.9 The Co-Chairs, Dr. Kullenberg and Ms. Arida, concluded the discussion, recognizing the various points raised, which will be consolidated as part of the workshop conclusions and recommendations.

2.10 The second set of presentations for Part 1A shared approaches and experiences of Lao PDR, Malaysia, UNEP-GPA and Ocean Recovery Alliance in applying integrated approaches for river basin and coastal area management.

2.11 Mr. Phousavanh Fongkhamdeng, Deputy Head of Planning and Administration Division, Department of Water Resources, Lao PDR, shared the country's experiences in the development and implementation of integrated river basin management (IRBM) in the Sedone River, a tributary of the Mekong River, involving the three provinces of Saravanne, Sekong and Champasack. A river basin governance mechanism was established including: (1) an institutional mechanism with representation from the three provinces; (2) a State of the Riverbasin Profile; and (3) the Sedone Basin Management Plan. Capacity building of core staff and on-the-ground activities including waste management were also implemented covering 12 selected villages in the three provinces. Guided by the experiences and processes at the basin level, a more localized management plan was developed for Houay Champi sub-basin for better addressing issues at the district and village levels. The presentation highlighted the importance of: (1) following a systematic, step-wise process, at different levels; (2) implementation of IRBM at the grassroots level and not only on a broader scale; (3) linking of conservation efforts to providing practical benefits for the people; (4) engaging multi-sectoral participation even if it takes time; (5) utilizing stakeholders' knowledge of their environment to complement available data and information; and (6) implementing an incremental and long-term approach to capacity development to sustain program implementation.

2.12 Ms. Norfaezah Binti Shamsuddin, Engineer, ICM Section, Development and Operations Division, Selangor Waters Management Authority (LUAS), Selangor, Malaysia, presented the experience of Selangor State in linking river basin and coastal management in order to increase management efficiency of water resources in the area. LUAS, which is responsible for managing water resources including river basins, water bodies, groundwater and coastal areas in the State of Selangor, is building on existing IRBM and ICM initiatives and has established the State of Selangor River Basins and Coastal Area Management Committee, which is headed by the State Secretary and comprised of key state agencies, water concessionaire companies and other technical agencies, with LUAS as the Secretariat. This is expected to improve institutional leadership, coordination, strategic partnership and stakeholders' involvement, and effective communication and sharing of relevant information for water resources management in Selangor. The State of Selangor is actively promoting the approach to other states in Malaysia. It is also encouraging other local governments to be a member of the PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG), a key forum for knowledge sharing on ICM and related approaches.

2.13 Dr. Christopher Cox, Programme Officer, United Nations Environment Programme (UNEP), Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), gave an overview of the global concerns associated with pollution of the marine environment, highlighting the issue of excess nutrient loading from various

sources, and an overview of the Global Partnership on Nutrient Management (GPNM). The GPNM is a global partnership of governments, scientists, policymakers, private sector, NGOs and international organizations, which was launched in 2009 that seeks to address the global challenges faced by the mismanagement of nutrients and nutrient over-enrichment. Dr. Cox presented the environmental pathways and fates of nutrients and planetary boundaries, and highlighted that the planetary boundary for nitrogen is exceeded while the boundary for phosphorus is being approached. He presented areas of the globe that have nutrient excess and highlighted the occurrence of eutrophic and dead zones and corresponding loss of ecosystem services. Five key areas threatened by excess nutrients in the environment include water quality, air quality, greenhouse balance, ecosystems and soil quality. Key global actions to address nutrient excess into the environment include the GPNM, which is linked to the UNEP-GPA, an Intergovernmental mechanism established in 1995. The GPNM has four main strategic work areas: (i) knowledge generation; (ii) piloting innovative solutions and best practices; (iii) awareness raising; and (iv) partnership strengthening. Dr. Cox highlighted key achievements of the GPNM and the contributions of the GEF-funded Global Nutrient Cycling (GEF-GNC) Project, including development of a nutrient management toolbox, development of a database containing collection of good practices on policy and applications and fact sheers that can be downloaded, development of a nutrient calculator, work in the Manila Bay watershed on pollutant load modeling, and development of ecosystem score cards for Chilika Lake in India and Laguna de Bay in the Philippines.

2.14 Mr. Douglas Woodring, Managing Director and Co-Founder, Ocean Recovery Alliance, talked about the global problem of increasing amounts of solid wastes and their impacts to marine and coastal ecosystems, and innovative approaches of addressing this problem including engaging communities in waste monitoring, mapping and remediation. He introduced the Global Alert Platform, which allows communities to report, rate and map plastic pollution levels in their rivers, coastlines or reefs, including uploading of photos, and provides information to relevant agencies to enable them to formulate appropriate solutions. The system, which can be used in any country, has been employed by the Metro Manila Development Authority and applied at the *barangay* (village) level to help local governments improve waste management services. Ocean Recovery Alliance also has local initiatives in Hong Kong such as 'The Plastic Catch' whereby fishers are engaged as partners in plastic waste recovery and recycling, as a means of promoting community awareness and engagement, and providing incentives to participants. The project also has collaborations with the corporate sector to recycle the plastic wastes into clothing and other innovative products. As floating trash has no geographic or political boundaries, solutions must involve scalable international collaboration, yet be local in scope and reach.

2.15 The following panelists were invited to share their feedback on the presentations, and related initiatives and experiences on implementation of integrated approaches for river basin and coastal area management

- Dr. Gil Jacinto, Professor, Marine Science Institute, University of the Philippines
- Dr. Nguyen Minh Son, Technical Adviser, Institute of Environmental Technology, Vietnam
- Mr. Jake Meimban, Executive Director, River Basin Control Office, Department of Environment and Natural Resources, Philippines

2.16 The highlights of the panel discussion and open discussion were as follows:

- No matter how good a local government is in managing its coastal area, it is no use if the upstream area is not managed, hence the need to link coastal management and river basin management.
- ICM provides a framework not just for management of coastal areas but also of river basins (as shown in Lao PDR which does not have a coastal area, and in Xiamen and Malaysia where ICM implementation has been scaled up to link with river basin management).
- The challenges are how to catalyze interaction and foster cooperation among stakeholders of river basins and coastal areas; what would people buy in to integration; how to encourage the people upstream to yield to the needs of the people in the coast; how to make it work if there are more local governments involved; how to sustain the involvement of the governments and communities.
- Linking river basin and coastal area management should involve a participatory process, have practical benefits, and provide a 'win-win' situation for both sides.
- An administrative management mechanism that specifically links river basin and coastal area management, such as LUAS in Malaysia, provides an enabling mechanism; however, is this possible if there is no such entity as is common in other countries.
- In the Philippines, preparation of master plans is ongoing for 18 river basins, which have multi-sectoral governing councils that are still ad hoc in status; work is ongoing on bills to institutionalize these councils although politicians are more concerned with their own respective areas; there are also no financing mechanisms yet for implementing river basin master plans, but relevant government agencies are working together to support community-identified priorities in the master plans; bottom-up planning and budgeting is being applied.
- In Vietnam, there is no legal basis for linking coastal area and river basin management; national laws and strategies prescribe that river basins should be managed in an integrated manner at the river basin scale and there have been efforts to set up coordinating mechanisms but have not worked well; there are 15 major river basins that mostly cut across administrative boundaries and have transboundary issues; the ICM concept and approach has contributed to changes in perception of people including political leaders, although implementation is still a challenge; there is a need to learn and apply good practices from other countries but political will is important to do this.
- Developing knowledge and understanding among leaders and decisionmakers, and identifying 'champions' to promote the integrated approach is important.
- With regard to nutrient management, such as the work in Manila Bay, nutrient subsidies can be targeted for reduction, although it may be more difficult in advanced economies.
- On solid waste management, regular clean up may be useful but more actions are needed to address this issue; as solid waste is visible, its management can be used for campaigns in support of integrated river basin and coastal area management.

2.17 The Co-Chairs, Dr. Kullenberg and Ms. Arida, highlighted the various good practices that can be scaled up, as well as the challenges, needs for improvement and key actions identified, which need to be brought to decisionmaking processes. They also emphasized that in this time of globalization, it is also important to consider how management initiatives can be improved using information technology.

3. PART 1B: GOOD PRACTICES, INNOVATION AND IMPACTS IN ICM APPLICATIONS IN JAPAN

3.1 Part 1B, co-chaired by Dr. Keita Furukawa, Director of Marine Research and Development, Ocean Policy Research Institute, and Prof. Osamu Matsuda, Professor Emeritus, Hiroshima University, focused on ICM applications at the local level in Japan.

3.2 The keynote presentation of Prof. Shin Kisugi, Vice President, The Open University, highlighting ICM development in Japan, was presented by Dr. Keita Furukawa. The presentation traced the origin of Japan's coastal management practices from the pre-Edo era, which focused on developing maritime transport and fisheries. The Meiji Restoration and Development heralded the entry of Japan into the so-called Japanese Miracle period, which was characterized by rapid economic growth. Several landmark legislations for ports and maritime transport, fishery planning, disaster prevention, land management, river management and pollution control were passed, which further defined the highly sectoral approach to coastal management. The presentation outlined the global trends in ICM and how these developments have provided the necessary impetus for Japan to begin discussing the limitations of the sectoral laws in promoting integrated management. Emphasis was made on the experience in the Seto Inland Sea environmental conservation as the forerunner of *satoumi* and ICM in Japan. The approval of the Guideline for ICM Plan in 2000 was considered a significant first step in the implementation of ICM in the country for the past 40 years. The Guideline, however is not binding on local governments, which resulted to absence of initiatives at the local level, particularly on the development of ICM plans.

The enactment of the Basic Act on Ocean Policy in 2007 along with the establishment of institutional arrangements and development of the 5-year Basic Plan on Ocean Policy, first in 2008 and second in 2013, is considered a major breakthrough for ICM in Japan. Based on lessons learned from implementing the Guideline, the second basic plan underscores the role of the central government in providing assistance to local governments in the formulation of ICM plans. Given the sea jurisdiction of prefectures, which is wider than a city or port, localizing ICM in smaller geographic areas is considered easier and workable. Five ICM model sites, i.e., Shima City, Bizen City, Obama City, Miyako City and Sukumo City and Ohtsuki Town, each characterized by different leadership mechanisms and arrangements are being implemented, with support from Ocean Policy Research Institute, Sasakawa Peace Foundation.

3.3 In his introduction of Part 1B, Dr. Osamu Matsuda, Professor Emeritus, Hiroshima University, described the focus of the various presentations, which was divided into three sessions, i.e., Session 1: ICM development in Japan, Session 2: Locally-led ICM Activities and Session 3: Towards Sustainable Coastal Sea (*Satoumi*). Prof. Matsuda cited that the succeeding discussion will endeavor to extract the good practices and lessons learned in ICM implementation in Japan. Prof. Matsuda added that the representatives from selected PNLG member local governments from the Philippines, Thailand and Vietnam will share their experiences in ICM implementation. At the end of the session, the common elements of ICM good practices will be drawn from the presentations and discussions, including the way forward.

Presentation 1: ICM development in Japan

3.4 Dr. Keita Furukawa, Director of Marine Research and Development, Ocean Policy Research Institute, provided an overview of the ICM model site projects in Japan. Dr. Furukawa

underscored the importance of determining the health of coastal ecosystems through a rapid and detailed assessment as prerequisite in ICM implementation. Emphasis was made on ecosystem sustainability and smooth material cycling that serve as indicators of the richness of the sea and must be taken into account in the entire planning process following the plan-do-check-act cycle. The structure of ICM, as how it is implemented at the local level in Japan, was described, which starts with consensus building involving the local councils to discuss the results of the rapid assessment of ecosystem health and the local situation, followed by the development of ICM plans and their implementation. Updates on the progress made by the 5 ICM sites, i.e., Shima City, Obama City, Bizen City, Sukumo Bay and Miyako City, were discussed including future tasks focusing on capacity building and conduct of a more comprehensive assessment of ecosystem health to better inform decision making.

SPresentation 2: Locally-led ICM Activities

3.5 Presentations from Shima City, Obama City and Bizen City provided detailed examples of locally-led ICM activities in Japan. Common elements of ICM practice characterized the three presentations despite the varying context for ICM implementation and strategies for addressing the identified issues and challenges.

3.6 Mr. Hideto Uranaka, Assistant Director of *Satoumi* Promotion Section of the Agriculture, Forestry and Fishery Department of Shima City cited the values of Shima City based on the recognition it received for its excellence in producing high quality marine products such as spiny lobster and abalone, as the birthplace of pearl culture technology and as part of the Ise-Shima National Park, which is known for its natural beauty and cultural importance. He also cited the challenges of the decreasing population that triggered changes in the social environment, which in turn resulted in the decline of industrial production. The creation of the new *satoumi* in 2010 signalled the introduction of ICM in Shima City, which was seen as an economic stimulus measure to promote the recovery of agricultural, forestry, and fishing industry production and shift to high value-added products. The basic principles behind the ICM practice of Shima draws inspiration from the pearl where the “core” represents conservation of the coastal environment, the “nacreous layer” represents sustainable use of resources and the “brilliance” represents attainment of sustainable development.

Mr. Uranaka stressed the achievements of Shima from 2010 to 2013, which included the establishment of the *Satoumi* Promotion Section, the development of *Satoumi* Creation/ICM Basic Plan and the establishment of Shima City *Satoumi* Creation Promotion Council. The Council serves as the platform for participation of interested groups, in information sharing and in promoting the project in accordance with the initiative’s basic policy. The Satoumi Creation Basic Plan on the other hand is designed to achieve five results, i.e., conservation and restoration of the natural environment; sustainable agriculture, forestry and fishing industry; attractive tourist destination; capacity building for the next generation and passing on the *satoumi* culture to the next generation. Mr. Uranaka provided details on the key activities of Shima City that revolved around the Plan’s 5 key objectives and as a result have won the 8th National Maritime Award. Mr. Uranaka concluded his presentation by informing the participants that the 1st *Satoumi* Creation Basic Plan is undergoing evaluation and that the creation of the next plan (2016-2020) will be aligned with the 2nd Shima City’s Comprehensive Plan (2016-2025).

3.7 Obama City's experience in establishing the Future Conference for Coastal City Development stemmed from the need to address the dwindling fishery industry and the deterioration of coastal ecosystems in order to maintain its status as the gateway of culture and commerce from Asia to Japan. According to Mr. Hokuto Mikoshiba, Director, Agriculture, Forestry and Fishery Division of Industry Department, similar to other coastal areas in Japan, fish catch has been gradually decreasing over the past 20 years in Obama, e.g., from 1500 tons in 1993 to 885 tons in 2013. The number of fishers has also been decreasing by about 90 people in the last decade and the percentage of fishers over 60 years old is growing. These factors in combination with the degradation in the mountainous areas, which affected water quality, have caused the deterioration of Obama Bay. ICM was introduced through OPRI to renew the interest among the citizens and revitalize the fishery villages. Mr. Mikoshiba mentioned that the ICM process started with the conduct of Ocean Health Check in 2012 followed by the establishment of the Study Group on ICM in 2013 as part of the City Development Planning. Submission of the policy proposal to the Mayor to develop the ICM plan and to strengthen cooperation among stakeholders and the establishment was undertaken in 2014 as well as the establishment of the Coastal City Development Council in Obama. The council was represented by the fishers, non-profit organizations (NPO), municipality government, prefecture government, university professor and high school teacher.

In April 2015, the five-year Coastal City Development Plan in Obama was formulated, which espouses seven targets. One of the targets is the establishment of the Future Conference for Coastal City Development under the ICM Council, which is considered as an important driving mechanism for the implementation of the plan. Under the conference, the engagement of the youth as members is widely promoted as well as various sectors with interest in the sea. The conference has provided a venue for information exchange and active participation of the members in implementing measures that would help address the problems in the area such as conduct of research on biodiversity, groundwater utilization and determining the problems of the fishing villages.

3.8 Mr. Takehiro Tanaka, Executive Director, Research Association for *Satoumi* Creation introduced the efforts of Bizen City, Hinase, in restoring the eelgrass beds as part of *satoumi* creation led by fishers group. Such activity was triggered by the need to rehabilitate the eelgrass beds where the cover has been reduced from 590 ha in the 1940s to 12 ha in 1985. In addition, proliferation of oyster farming was notable in the 1970s. Mr. Kazushi Honda, former President of the Hinase Town Fisheries Cooperative (HFC) initiated the restoration activity in 1981 to halt the further reduction of the eelgrass beds due to environmental degradation. Mr. Tanaka inferred that the efforts of the HFC have been attracting wide attention due to their pioneering *satoumi* creation activities, which started in 1981 and continuing with the introduction of ICM in 2008 by OPRI. These activities included: (a) restoration of eelgrass beds; (b) development of eelgrass bed restoration manual and technical guidelines from 1997-2001; (c) implementation of marine farming project from 2002-2013; and (d) practical environmental education on eelgrass beds restoration and oyster farming.

Mr. Tanaka described the three stages of development of the various activities along with the associated institutional arrangements to facilitate the coordination and implementation of various activities. The three stages included the: (a) initiation phase (1981-1999) where a group of volunteers involved in small scale set net fishery initiated eelgrass bed restoration; (b) foundation phase (2000-2010) where a platform was established on the basis of the fisheries cooperative, including oyster and trawl fishers;

and (c) expansion phase (2010-present). During the expansion phase, the Bizen ICM Study Group was created involving a wider range of stakeholders, i.e., local commerce and industry association, tourism association, scientists from OPRI and universities. Through the restoration efforts, the eelgrass beds have recovered from a mere 12 ha in 1985 to more than 200 ha in 2011 and 250 ha in 2015. According to Mr. Tanaka, the activities have been further expanded to involve markets and consumers, including the Okayama co-op, general public and local elementary and junior high schools, advancing the creation of *satoumi*, including environmental education in collaboration with fishers and citizens.

Presentation 3: Towards Sustainable Coastal Sea (*Satoumi*)

3.9 The next set of presentations provided an overview on the concept of *satoumi*, how it was applied in a number of *satoumi* sites and its role in ICM implementation.

3.10 Dr. Tetsuo Yanagi, Principal Researcher, International EMECS Center presented the details of a special project of the Ministry of Environment entitled, "Development of Coastal Management Method to Realize the Sustainable Coastal Seas", which was initiated in 2014 and will be completed in 2018. Dr. Yanagi indicated that the study will involve a comprehensive examination of natural and human activities at three model areas in order to determine how these areas should be changed from their present state to an appropriate status in terms of material circulation and ecotones. The model areas include the Seto Inland Sea, a semi-enclosed sea; the Sanriku Coast, which has a succession of open inner bays, and the Sea of Japan, an international enclosed coastal sea. It can be recalled that the process of establishing *satoumi* was started in Seto Inland Sea, which espouses the need to understand the comprehensive material cycling in a *satoumi* area. In the present project, methods for the environmental management of the coastal seas will be developed. Results of the economic assessment and integrated coastal management model for ecosystem services in coastal areas will feed into the integrated numerical model where the results generated will be useful to inform policy decisions in the coastal areas.

3.11 Prof. Takeshi Hidaka, Professor, Kinki University introduced a hypothesis of multistage management scheme with *satoumi* as a basic component of ICM. Prof. Hidaka cited the complicated and challenging problems in the coastal areas that require an integrated management approach involving various stakeholders and relevant government divisions that share responsibility for their management. Prof. Hidaka noted that *satoumi* initiatives led by regional residents or users that cooperate with local governments to respond to particular situation and issues at the local level have been increasing. However, it is difficult for *satoumi* to cover all coastal areas and resolve all problems because its effectivity is confined in small areas. Prof. Hidaka presented a hierarchical governance structure for coastal management with four layers: (a) *satoumi* initiatives serve as the most basic layer led by regional residents supported by or cooperating with local governments; (b) network of *satoumi* initiatives covering a critical point of the prefecture area; (c) prefecture government supplies infrastructure for the coastal environment through regulations and protective measures; and (d) central government plays a key role in coordinating and facilitating collaboration between relevant prefectures. The first 3 layers cover a prefecture area while the fourth layer covers wider areas beyond the prefectural jurisdiction.

Prof. Hidaka cited that in domestic regions, *satoumi* can be created by spontaneous or joint management through bottom-up and whole region approach. In prefecture areas,

coastal infrastructures can be developed by centralized management through top-down and whole government approach. In wide areas beyond prefecture jurisdictions, coastal infrastructure can be made common through a prefecture alliance supported by the central government. Two approaches can be combined to cover the whole of coastal area. The combination of different management approaches adapting to a range of target areas and layers of governance will be more effective to manage the environment.

3.12 The last presentation for the session was given by Prof. Osamu Matsuda, Professor Emeritus, Hiroshima University where the role of *satoumi* in coastal management and the present status of *satoumi* activities in Japan were highlighted. Prof. Matsuda stressed the shift in coastal environmental management policy in Japan, i.e., from passive to active and single-issue approach to holistic approach, which have been incorporated into the new policy of Japan. For example, the revised basic plan for environmental conservation of the Seto Inland Sea, which is being finalized by the Cabinet in 2015, exemplifies the expansion of the plan coverage to facilitate holistic management of the largest semi-enclosed coastal sea in Japan. Prof. Matsuda revisited the characteristics of *satoumi* and how its linkage to *satoyama* would promote land-ocean interaction and integrated coastal management. From the perspective of *satoumi*, understanding the connection and coordinating management approaches between *satoumi* and *satoyama* is important for the success of *satoumi*.

In an effort to show the role of *satoumi* in ICM implementation, Prof. Matsuda outlined the results of a comparative analysis made between 16 *satoumi* sites and 15 ICM sites. Results indicated that promotion of *satoumi* activity in local areas also promotes integrated management of land and ocean. *Satoumi* therefore plays a vital role in ICM implementation in Japan. Many *satoumi* creation activities were also characterized by activities that promote ICM. In Shima City (Mie Prefecture) in particular, the Basic Plan of *Satoumi* Creation is also considered as the Basic ICM Plan of the area. Prof. Matsuda provided additional examples of *satoumi* initiatives in Yamaguchi (Fushino River tidal flat), Kagawa (vision for creation of *satoumi*) and Okayama Prefectures (seagrass bed restoration), their positive impacts and benefits at the local level and how these initiatives promoted ICM implementation.

Panel discussion: Development of ICM implementation in Japan, from local to national, various types of ICM and stages

3.13 Three panelists representing Chonburi (Ms. Nisakorn Wiwekwin, Sanitary Researcher, Saensuk Municipality, Chonburi, Thailand), Danang (Ms. Pham Thi Chin, Deputy Director, Danang Agency of Seas and Islands, Vietnam) and Sihanoukville (Ms. Sally Nay, Technical Staff, ICM PMO, Sihanoukville, Cambodia) were invited to provide their comments and feedback on the presentations and to share their experiences in ICM implementation. Below are the highlights of the panel discussion:

- The six stages of the ICM cycle, which conform to the plan-do-check-act cycle, are necessary.
- Learning by doing is a key aspect of ICM. Practitioners who have gone through the ICM process have a crucial role in ICM implementation.
- Building a critical mass of ICM practitioners facilitates replication of ICM good practices.
- The coastal areas are preferred sites for multiple economic activities and thus their management must involve all relevant sectors.

- Institutional arrangements for ICM ensure that the relevant sectors are represented and have a voice in the consultation and decision-making processes.
- Prioritization of issues and management measures ensures efficiency in implementation.
- Respect the lifestyle and practices of local people in implementing conservation measures.
- Starting small is easier. It can pave the way for scaling up.

3.14 The co-chairs, Dr. Keita Furukawa and Prof. Osamu Matsuda, summarized the highlights of the presentations and the responses to the three key questions raised during the panel discussion. Key tasks for consideration in future ICM implementation were also identified.

3.15 Below are the highlights of the presentations:

- Japan has a highly sectoral governmental system
- Local or community-based ICM implementation is working well.
- ICM and *satoumi* can be harmonized to improve ecosystem services.
- Local governments play major role in coordinating ICM implementation as in the case of Shima City and Obama City.
- Cooperative activities are bases of implementation in Obama City, and Hinase area in Bizen City.
- *Satoumi* is backed with sound scientific information.
- Conceptual understanding of ICM and networking are crucial.
- Understanding the material cycling in the coastal areas is the first step to *satoumi* and must be considered in restoration work to achieve high productivity and biodiversity. It also requires cooperation and coordination.

3.16 Below is a summary of the responses to the following questions: What are the lessons learned from ICM and *satoumi* implementation? What are the necessary steps and institutional arrangements to implement ICM at the local level? What kind of support is expected for local ICM implementation?

- Japan's case of ICM implementation is based on the concept of *satoumi* where peoples' participation in managing the coastal area and sea is a key. Active interaction of local people with the coastal ecosystem is based on their cognitive knowledge and supported by academia.
- Local governments are expected to act as coordinators for local ICM implementation.
- National government and academia should support proactive implementation of local ICM programs not only from the viewpoint of financing but also technical, legislation and human resources.

3.17 Below are the future tasks identified:

- Resolve mechanisms on how people's interaction can enhance coastal ecosystem sustainability and productivity, and motivate stakeholders and the general public (residents) to participate in local ICM implementation.
- A clear operational methodology is needed to achieve sustainable development of the coastal areas.
- Encourage the active engagement of the business/private sector.
- Strengthen capacity of local governments and other relevant sectors including the youth by promoting "learning by doing".

- Facilitate networking; enforce information exchange and documentation of good practices on ICM implementation.
- Strengthen scientific support including inter-disciplinary research to support policy and decision making.
- Scaling-up ICM should be promoted with proper coordination to avoid legislative duplication in prefectural and national level both spatially and temporally.
- Improve coordination of top-down and bottom-up approach.
- Promote information sharing and knowledge exchange between and among countries.

4. PART 2: GOOD PRACTICES, INNOVATIONS AND IMPACTS IN ICM APPLICATIONS FOR MPA AND MPA NETWORKS

4.1 Part 2, co-chaired by Atty. Roberto Oliva, Executive Director, ASEAN Centre for Biodiversity, and Dr. Maripaz Perez, Country Director, WorldFish, focused on ICM applications for MPA management and MPA networking at the local, national and subregional levels, and scaling up ICM and biodiversity conservation efforts to meet international environmental commitments.

4.2 Dr. Sheila Vergara, Director, Biodiversity Information Management, ASEAN Centre for Biodiversity, discussed the various drivers of marine biodiversity loss including human-induced actions and climate change, and the application of integrated approaches to management of marine and coastal areas in order to improve biodiversity conservation and resilience to climate change. In particular, she shared ACB's collaborations on project development: 91) with PEMSEA to demonstrate the use of the ICM framework and process to improve the resilience of coastal and marine areas in the ASEAN region and conserve their biodiversity; and 92) with the East Asian-Australasian Flyway (EAAF) Partnership and Asia-Oceania Ramsar Secretariat on improving coastal and wetland site management to conserve habitats and migratory waterbirds in the EAAF. Both projects, which aim to support the implementation of national biodiversity strategies and action plans of participating countries and contribute to achieving Aichi Biodiversity Targets, involve: (1) local stakeholder capacity building and empowerment to implement conservation actions; (2) scaling up of necessary geographic coverage of conservation areas and developing partnership networks to improve their effectiveness; and (3) developing platforms for knowledge management and sharing. ACB is working with the LifeWeb Initiative of the Convention on Biological Diversity to facilitate financing for these projects and would welcome support from other potential partners.

4.3 Dr. Augustus Rex Montebon, Program Manager, Coastal, Marine, and Fisheries, Conservation International (CI) Philippines Foundation, Inc., introduced CI and its work to support national and local governments in increasing the spatial coverage of MPAs in order to increase their effectiveness for marine resource conservation and management. He highlighted their efforts, using integrated and science-based approaches, to scale up conservation initiatives to the corridor and seascape levels, as well as to the country and regional levels, through the Sulu-Sulawesi Seascape (SSS) Project and the Sulu-Celebes Sea Sustainable Fisheries Management (SCSSFM) Project. The SSS includes four priority corridors (waterways connecting large bodies of water) in the Verde Island Passage (VIP), the Cagayan Ridge, and the Balabac Strait in the Philippines, and the Tri-National Sea Turtle Corridor covering the Philippines, Indonesia, and Malaysia. In the VIP, the center of the center of marine shorefish biodiversity, CI has worked in partnership with national

agencies, local governments, conservation organizations, private sector, academe and the communities to develop the VIP Framework Plan, increase MPA coverage from 1,000 to 17,000 hectares, and establish a network of MPAs at the provincial and corridor levels, with policy, institutional and law enforcement support. Simulation studies on fisheries replenishment potential were also undertaken in collaboration with the academe to help identify other priority MPA sites. Efforts of stakeholders in the VIP on marine conservation are recognized through the annual BRAVO Awards (Batangas Recognition Awards for Verde Passage Outstanding Marine Protected Areas). There is also a recognition system at the national level, and the Batangas MPA Network (part of the VIP) was recognized as the best MPA network in 2015. Amplification of efforts at the corridor, seascape, and national levels in the Philippines is supported by Executive Order 578 (2006), which established the national policy on biological diversity, prescribing its implementation throughout the country particularly in the Sulu-Sulawesi Marine Ecosystem and VIP Marine Corridor. At the regional level, the SCSSFM Project facilitated the analysis of transboundary problems across the Philippines, Indonesia, and Malaysia, and the adoption and signing by the three countries of a Regional Strategic Action Program for Sustainable Fisheries Management of the Sulu-Celebes (Sulawesi) Sea Large Marine Ecosystem, building on existing plans and coordinating mechanisms for the ecoregion.

4.4 Dr. Zhao Linlin, Assistant Researcher, First Institute of Oceanography, State Oceanic Administration, China, provided an overview on the marine protected area system in China, and specific efforts in Dongying City to enhance the effectiveness of existing MPAs in the area through networking and coastal use zoning. China, with various marine and coastal ecosystems which are threatened by environmental degradation, has two types of MPAs, including marine nature reserves (MNR) and marine special protected areas (MSPA). MNRs aim to protect and keep in their natural state selected coastal ecosystems, important and endangered species, and natural relics and other resources. MSPAs, on the other hand, aim to maintain ecosystem services and sustainable use of special geographical locations, marine ecosystems, ocean parks and marine resources. China currently has 260 MPAs covering the two aforementioned types, with a total area of more than 100,000 km^2. Dongying is a typical coastal city, located in the Bohai Sea, in the center of the Yellow River delta. The city hosts the second largest oil industry in China and is also one of the cities in northern China with rapid development in marine economy. In the face of tremendous environmental pressure, and considering the importance of the area as a migration route for birds between Siberia and Australia, and as habitat for commercial fisheries and endangered species, six MPAs were established along the coastline of Dongying City, including the Yellow River Delta National MNR and five national MSPAs to protect shellfish, bottom-living fish, razor clam and clamworm in specific areas and the estuary in the Yellow River. In order to better protect ecosystem integrity and connectivity in the entire Yellow River delta, the six MPAs were organized into an MPA network. The State Oceanic Administration also announced in 2012 the Bohai Sea Marine Ecological Red-Line Zoning Plan, which identified zones for prohibited development and restricted development especially in the MPA areas. Implementation of these measures has improved the management capacity of MPA management offices on plan formulation, financing and implementation, restored damaged areas, and improved protection for migratory species like birds, including the oriental white stork (*Ciconia boyciana*), which has increased in number each year since 1997.

4.5 Dr. Porfirio Aliño, Professor, Marine Science Institute, University of the Philippines, shared experiences, good practices and lessons learned in MPA and MPA networking in the Coral Triangle. Highlighting the importance of the Coral Triangle Region (CTR) to national,

regional and global marine biodiversity and the potential risks to the area and local fishers, and showing selected examples from the Philippines and across countries in the CTR, Dr. Aliño shared the following lessons learned and good practices:

(1) Accelerating areas covered by MPAs can improve their effectiveness;
(2) Community-based grow-out culture, which provides supplemental livelihood for fishers and fosters community participation, are viable resource management tools in combination with reseeding of protected areas;
(3) A triage approach is insufficient in areas where addressing multiple objectives have to be considered in MPA planning and implementation; connectivities also exist among ecosystems at various scales and benefits from natural networks need to be sustained, hence the need to form MPA networks as single MPAs cannot do this;
(4) In order to achieve multiple objectives, a systematic approach in MPA planning and implementation that is linked to a sustainable development agenda such as ICM is imperative; and in designing networks and governance responses, the suitability, sensitivity and susceptibility of the systems also need to be considered, as well as impacts of multiple stressors, and importance of functional biodiversity in accelerating trophic recovery from stressors;
(5) A nuanced and specific lens per country in the CTR is needed in terms of site-level analyses and responses/actions, considering the combination of threats that need to be addressed (e.g., sedimentation, pollution, coral bleaching, etc.);
(6) An integrated synthesis can be derived in the CTR in the theory and practice of MPA design and implications to marine spatial planning, which need to be rationalized and improved to a larger scale;
(7) Varied manifestations in each country require site-level vulnerability analyses to determine how these manifestations play out in the pursuit of various paths to sustainable development;
(8) There is a need to address higher level outcomes in relation to governance, i.e., improving governance helps alleviate poverty and hunger;
(9) MPA analyses of lessons within each country would vary according to their local perspectives, but would show that MPAs alone may not solve everything but it is a good entry point for learning a ridge to reef and highlands to oceans approach, and highlight the need to consolidate MPA and watershed management within ICM;
(10) MPA tools, such as for assessing MPA management effectiveness and vulnerability assessment, which help and understanding and making informed decisions, are available and can be shared;
(11) Application of design principles of MPA networks show that timely actions can help accelerate recovery of fish biomass and enforcement prevents violations; appropriate organizational development and alliance configurations of local governments on coastal resources management and ICM have also been shown to reduce the cost of coastal law enforcement;
(12) Coordination of strategies and scaling up of conservation efforts to seascape level can help achieve the five goals of the Coral Triangle Initiative;
(13) Opportunities to link champions and provide incentives (e.g., awards for best MPAs) enable awareness and motivate further efforts and partnerships on MPA management and networking; and
(14) Feedback mechanisms include State of the Coasts reporting, MPA and ICM forums. Dr Aliño further emphasized that it is time to act now to accelerate MPA management effectiveness, reduce threats, strengthen and capacitate organizations, and sustain networks and institutions, as doing business as usual would require 100 years to achieve the targets.

Panel discussion

4.6 Four panelists were invited to share their feedback on the presentations, and related initiatives and experiences on implementation of integrated approaches for biodiversity conservation and management in support of the Aichi Biodiversity Targets.

4.7 Ms. Janina Korting, Advisor on Marine and Coastal Management, Blue Solutions Initiative, GIZ, introduced the Blue Solutions Project, which is being implemented by the GIZ together with GRID-Arendal, IUCN and UNEP, and how it is contributing towards achieving marine and coastal Aichi Targets. The project provides a global platform to collate, share and generate knowledge and capacity for sustainable management and equitable governance of natural resources and ecosystems. Through this project, 'blue solutions' or innovative concepts, practical approaches and good practices that facilitate actions towards healthy and productive marine and coastal ecosystems (e.g., governance models, community-based approaches, effective MPA management, etc.) are identified, documented and shared, with the aim of supporting scaling up of different initiatives across different sectors and geographies.

4.8 Ms. Clarissa Arida, Director for Programme Development and Implementation, ASEAN Centre for Biodiversity, highlighted the approaches and opportunities for scaling up ICM and biodiversity conservation in the EAS region, including the following:

- The collaboration between ACB and PEMSEA as regional organizations to develop a platform to support CBD implementation in the region, which will demonstrate the use of scientific basis for expanding protected areas, use of ICM to achieve Aichi targets at the local level, use of knowledge management to support scaling up efforts, and implementation of a region-wide strategy to mainstream commitments of countries into their respective development and budget plans;
- Initiatives to scale up conservation efforts at the ecosystem level, such as in the Sulu-Sulawesi ecoregion, and to develop effective governance mechanisms;
- Importance of MPA networking, as applied in the Coral Triangle region; and
- Importance of national and local actions on MPA management and networking, as shown in China.

She reiterated the need to accelerate actions to scale up the geographic coverage and improve the effectiveness of conservation areas.

4.9 Mr. Charles Besancon, Programme Officer, LifeWeb Initiative, Convention on Biological Diversity Secretariat, shared that:

- The Convention on Biological Diversity (CBD) and the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets, provide a framework for 196 countries to work at the national and local levels towards achieving common global targets to promote conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of benefits arising from genetic resources;
- The LifeWeb Initiative of the CBD helps countries find funding to achieve targets by facilitating matching and partnerships with donors; in the process it facilitates aligning of global and national targets and scaling up of efforts to achieve the targets;
- Under the CBD, countries have agreed on the use of an ecosystem approach for achieving the Aichi targets; efforts on ICM and ecosystem approach in the EAS region fit with what the countries agreed on;

- Aichi Target 11 is to have at least 17 per cent of terrestrial and inland water and 10% of coastal and marine areas under effective protection by 2020; but currently only 3.5% is under protection, and in the high seas, only 2.5% is protected; and
- Donors need to support the scaling up of biodiversity conservation efforts in the EAS region; there is a long way to go, and partnerships at the regional level will help to achieve the targets.

4.10 Ms. Bui Thi Thu Hien, Marine and Coastal Resources Programme Coordinator/MFF National Coordinator, International Union for Conservation of Nature (IUCN) Vietnam Country Office, noted the achievements at the global level in developing conglomerates of protected areas, but emphasized the need for cooperation at the global and regional levels to scale up biodiversity conservation efforts. In Vietnam, for example, only 50% of the targets have been achieved due to human and financial resource constraints. There is a need for support from donors and partners, and a platform for sharing good practices with other countries.

4.11 A succeeding open discussion highlighted the importance of and approaches for educating and involving the youth, and developing cooperation between the academe and governments, in achieving the Aichi targets. The importance of working together within an ICM framework, and finding appropriate entry points and developing forums for cooperation were emphasized.

4.12 The Co-Chairs summarized key points from the session and re-echoed Dr. Aliño's remark that if it will be business as usual, it will take 100 years, so there is a need to work together and the time is now.

5. PART 3: TRANSFERRING AND SCALING UP OF ICM GOOD PRACTICES AND INNOVATIONS

5.1 Part 3, co-chaired by Atty. Analiza Teh, Undersecretary and Chief of Staff, Department of Environment and Natural Resources, Philippines, and Dr. Jose Erezo Padilla, Regional Technical Advisor for Marine, Coastal and Island Ecosystems, Bangkok Regional Hub, United Nations Development Programme, considered good practices and lessons learned in ICM implementation in selected local ICM sites, and the transferability of innovations and lessons learned for managing marine and coastal areas and resources at the national and regional levels to other sustainable development priorities and programs within and outside the EAS region.

5.2 The first set of presentations featured experiences and good practices in three PEMSEA local ICM sites in applying the ICM framework and process to address key environmental and socioeconomic concerns.

5.3 Dr. Ario Damar, Deputy Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia, shared how a fishing community in Serangan Island in Denpasar, Bali, Indonesia, with technical and financial support from various partners, and leadership of a local fishers organization, has recovered from the adverse ecological and socioeconomic consequences of environmental degradation arising from a massive coastal reclamation, and developed a thriving ecotourism destination that promotes environmental education and conservation. With support from the Bali ICM Project, national and local governments, academic institutions, NGOs and the private sector, and facilitation of the Coastal Fishermen Group of Karya Segara, the community in Serangan Island was

empowered to address their problems through: (1) education and awareness programs; (2) strengthening of the community organization through provision of necessary facilities and training on environment-friendly fishing, ornamental fish handling and coral transplantation; and (3) development of alternative livelihood opportunities linked to the conservation program, including development of market access for fish catch that used eco-friendly methods, transplanted soft corals, and artificial live rock for tropical aquariums; building networks with local governments in and outside of Bali, and with the private sector to support rehabilitation of coral reefs in different areas throughout Indonesia; and developing ecotourism services in the rehabilitated area in collaboration with tour agencies including hands-on coral transplantation and release of marine species by tourists. The availability of a support network; integration of ecological, social and economic aspects in the community environmental management program; and economic empowerment of the community through livelihood programs were instrumental in facilitating the change in behavior of the community from being coral miners to conservation advocates. The community initiative has become a learning center for areas within and outside Indonesia, and received in 2011 the Kalpataru award, the highest award given to individuals and groups in Indonesia for contributions to environmental management.

5.4 Mr. Prak Visal, ICM Coordinator, Sihanoukville, Cambodia, shared how application of the ICM framework and process in Sihanoukville facilitated cooperation and collaboration among the government, local stall owners and private hotel operators in order to improve coastal tourism and beach management in Occheauteal Beach. He showed how the process of stakeholder consultations and participatory planning and implementation, with catalytic support from PEMSEA, contributed to the development and adoption of a masterplan for the beach and consensus among the government, communities and private sector on their roles and responsibilities in implementing the plan, including zoning of the beach area for various uses, issuance of necessary legislation, capacity building and enforcement, and development of necessary infrastructure to support better tourism and environmental management in the area. Limitations in budget and technical capacity, and initial resistance due to personal interests were overcome by promoting opportunities for socioeconomic improvement and benefits for all, building trust among partners through transparency of operations, and facilitating contributions from all sectors. The local government will be replicating the initiative in Occheauteal Beach to other coastal areas in Sihanoukville. With the existence of a mechanism to report local actions to the national government, the experience on beach zoning and management in Sihanoukville was also considered in developing the national policy on beach development in Cambodia.

5.5 Dr. Yi Dan, Associate Professor, The First Institute of Oceanography, State Oceanic Administration, P.R. China, presented efforts in Dongying City (Shandong Province) to address environmental problems associated with traditional aquaculture practices and develop the aquaculture industry in a sustainable manner. In May 2009, Dongying adopted an ICM Strategy, which included actions to achieve the dual objectives of developing the aquaculture industry and improving the marine environment through demonstration of modern, efficient and ecologically-friendly aquaculture practices. Modern ecological aquaculture is practiced by using natural ocean processes for farming, multi-trophic farming and use of seawater in multiple ways to close the nutrient cycle (e.g., sea cucumber, shrimp and crab, artemia farming and salt-making), application of industrial aquaculture management practices to ensure quality of aquaculture, strengthening of law enforcement on aquaculture production, implementation of a monitoring system for seafood quality and safety, and strengthening the organizational and management mechanism for the development and operation of the aquaculture area. This approach has significantly reduced

the concentration of nutrients in coastal areas surrounding Dongying City while aquaculture production and socioeconomic benefits increased. Dr. Yi Dan highlighted the importance of aligning interventions with national and local development strategies. In Dongying, an enabling land and sea use zoning plan, coordination mechanism, legislation, law enforcement and quality control and monitoring mechanisms have created a business and investment landscape for ecological aquaculture. She also emphasized the importance of partnering with the academe for technical support, providing incentives for participation of local investors, facilitating the development of the supply chain from aquaculture farming, processing, marketing and logistics, and creation of a consumer market conscious of food safety.

5.6 Dr. Chua Thia-Eng also shared some background information on the three ICM sites to highlight the local contexts and basis for the programs and interventions presented, and their progress and accomplishments in addressing their respective local issues and needs.

5.7 The second set of presentations showed initiatives of development agencies and organizations to promote and facilitate specific aspects of sustainable development and facilitate sharing of good practices and lessons learned and improving partnerships and collaboration across programs in East Asia and other regions.

5.8 Dr. Lily Ann Lando, Scientist, WorldFish, presented the efforts of WorldFish under the Aquatic Agricultural System (AAS) Program to assist fishing and farming communities in developing and implementing holistic and inclusive community programs that will help improve their livelihood, income and food security. The AAS Program employs a framework and process that is participatory and inclusive of various sectors, civil society groups and genders, founded on a continuing cycle of observing, reflecting, planning and acting, to facilitate learning and networking, capacity strengthening and development of effective partnerships. Aiming to facilitate transformative change, activities undertaken contribute to changing knowledge and skills, to generate outputs that contribute to changing practices, processes and policies, resulting to positive changes in attitude, behavior and mindset. In the past two years, the AAS Program has assisted eight communities in eight sites in Visayas and Mindanao, Philippines, in identifying priority issues and needs and the people's visions and desired changes; preparing action plans to address priority issues; initiating implementation of action plans including activities that demonstrate short-term benefits to sustain community interest and support; and developing collaboration and partnerships with various sectors to promote complementation of efforts. Acting as bridge, broker and catalyst, WorldFish does not provide funding for implementation of community action plans but instead provides support for capacity building and identifying and accessing potential sources of funding. It also supports research and technological innovations as needed and appropriate for the needs of the area. This approach helps cultivate a sense of ownership and responsibility among the communities for implementing their respective local programs. Lessons and good practices from program implementation are being packaged as 'portables' that can be applied for scaling up and out of the AAS approach to other sites. The AAS program is also being implemented in Indonesia.

5.9 Ms. Thu-Huyen Thi Nguyen, National Coordinator, UNDP/GEF Small Grants Programme (SGP), Vietnam, shared the UNDP/GEF SGP's approach of "thinking globally, and acting locally" by providing financial and technical support to civil society organizations to implement community projects that conserve and restore the environment while enhancing people's well-being and livelihoods. Since 1999, the SGP has implemented 140 community-based projects related to GEF focal areas of biodiversity, climate change and land degradation and

desertification in Vietnam, covering 109 communes in 40 (out of 63) provinces in the country particularly in the central coast. Specifically, she presented initiatives in engaging communities as partners in environmental and marine and coastal resources management, including sustainable crab management in Cham Island and nipa palm conservation and sustainable development in Hoi An in Da Nang Province, coral reef protection for ecotourism development in the provinces of Quang Nam and Binh Dinh, co-management of oyster resources and ecosystem protection in Binh Thuan Province, and demonstrating use of LED lights instead of traditional light sources in fishing in Ninh Thuan Province to reduce green house gas emissions. Through these examples, Ms. Thu-Huyen highlighted the importance of integrated management of natural resources and environment and the coastal zone including environmental protection in the World Heritage Sites, harmonizing benefits sharing among stakeholders particularly communities, analysis of ecosystem services to engage stakeholders especially local communities in the management process, livelihood improvement, promoting the pride of the local citizen, mainstreaming with local socioeconomic development plan (SEDP), and strengthening partnerships with local government and mobilizing co-financing. As key best practices, she highlighted: (1) strengthening partnerships with local governments to enable mainstreaming of good practices into local SEDP; (2) strengthening working partnerships with other PEMSEA sites and partners including IUCN/MFF; and (3) enhancing regional sharing of knowledge and information resources.

5.10 Dr. Jose Erezo Padilla discussed approaches, mechanisms and opportunities under the GEF-supported portfolio for sharing good practices in integrated planning and management of marine, coastal and inland areas from East Asia to other areas within as well as beyond the EAS region. He highlighted the recognition of integrated management as a key approach for implementing various international conventions and action plans on sustainable development and related aspects including the 2030 Agenda for Sustainable Development, and achievements, lessons learned and good practices in developing working models on the application of integrated approaches for improving management of marine and coastal resources at the local, national and regional levels. This includes the application of ICM in East Asia, where the PEMSEA regional programme has benefited from around US$ 46 million funding from the GEF to support ICM demonstration and scaling up. Recognizing the importance and benefits of ICM, the GEF-6 Programming Directions specifies the application of ICM to: (1) address direct pressure on coral reef ecosystems within and outside marine management areas (under the Biodiversity Focal Area, Objective 3 (BD 3), Programme 6: Ridge to Reef+), to complement existing Ridge to Reef projects focusing on reducing land-based pollution and promoting IWRM; and (2) to tackle complex threats to coastal habitats on different administrative levels using multi-stakeholder approach (under the International Waters Focal Area, Objective 3 (IW 3), Program 6: Prevent the loss and degradation of coastal habitats). Dr. Padilla shared selected projects and programmes on implementation of ICM and related approaches that are being supported by the GEF including the:

(1) Regional Programme on Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments, GEF-approved in November 2012 under GEF 5, which consists of three regional projects on: (a) Scaling Up Implementation of the Sustainable Development Strategy for the Seas of East Asia; (b) Implementation of the Yellow Sea LME Strategic Action Programme for Adaptive Ecosystem-Based Management; and (c) Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas;
(2) Pacific Islands Ridge-to-Reef National Priorities, involving 14 countries, and approved by the GEF on June 2013;

(3) various regional and global projects approved by the GEF in 2015;
(4) the Arafura and Timor Seas Strategic Action Programme (SAP) Implementation, approved in GEF-6 and currently under project preparation grant;
(5) the Solomon Islands Water Sector Adaptation Project (SIWSAP); and
(6) the Vanuatu Coastal Zone Adaptation Project (V-CAP).

Dr. Padilla underscored that the GEF's investments have demonstrated the utility of ICM as a tool to promote national, provincial and local governance reform for improved management of coastal and ocean resources (e.g., in EAS region). As such, the GEF will continue to contribute to bringing 5% of coastlines in GEF-eligible Large Marine Ecosystems under ICM, considering risks related to climatic variability and climate change. Approaches to facilitate replication/ scaling up of good practices include documentation of good practices and transformation into 'knowledge products' that can guide replication/application at the local level; sharing of good practices through knowledge-sharing events/forums; and dissemination through online knowledge-sharing portals such as the IW-LEARN and the SEA Knowledge Bank.

5.11 The following panelists were invited to provide their feedback and views on the presentations and to share their related experiences, highlighting good practices that can be promoted for scaling up/replication; challenges and needs, as well as strategies and opportunities, for scaling up/replication of good practices; and key actions to facilitate sharing of good practices and lessons learned and improving partnerships and collaboration across programs in East Asia and other regions.

- Dr. Chou Loke Ming, Adjunct Research Professor, Tropical Marine Science Institute, National University of Singapore
- Ms. Amelia Supetran, Team Leader, Environment and Energy Unit, United Nations Development Programme Manila
- Mr. Christian Severin, Senior Environmental Specialist, Global Environment Facility Secretariat
- Mr. Gualberto Galia, Head, Environment and Natural Resources Office and PMO Director, ICM Program, Province of Guimaras, Philippines

5.12 The highlights of the panel discussions are as follows:

- Single, sectoral issues are not usually effective; broader contextualization works;
- Integrated management is necessary; integrating various objectives makes possible synergies and should be cost effective;
- To roll out an ICM program, the following are important: operational framework, roadmap, normative tools, stakeholders engagement in the development of regulatory framework and institutional mechanisms, and delivery mechanisms including the academe, training organizations and the media;
- Bottom-up approach and work at the local level generates more benefit to people;
- Change in behaviour is important and this is driven by incentives generated from implementation;
- Importance of buy in among different stakeholders at local levels;
- Importance of political commitment, local champion, addressing priority issues and needs;
- Highlight the value of protection in monetary terms;
- Work with the private sector to sustain the investment;
- Tools are needed to understand the problems in the light of new risks; science is necessary; practical measures should be based on solid empirical basis; and

- Mechanisms for sharing of experiences should be facilitated, but problems, challenges and failures should be documented and shared as well along with good practices and successes; these should be shared among donors to generate more support for development activities.

5.13 The co-chairs summarized key points from the discussions and emphasized the need to continue promoting mechanisms and tools to address multiple use conflicts in coastal and adjoining land areas, and strengthening of enforcement against violation of national and local laws on coastal protection.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 The following conclusions and recommendations were generated by the workshop and session co-chairs from the presentations and panel and open discussions:

Conclusions

6.2 Integrated coastal management is necessary and is effective in addressing various issues and considerations related to biodiversity, fisheries, pollution, river basin, water resources, climate change and disaster risk management, and coastal development (e.g., tourism, aquaculture, and coastal settlements), contributing to the achievement of local, national, regional and global targets.

6.3 Good practices and success factors that contribute to a cost-effective and sustainable ICM implementation include:

6.3.1 Application of a framework and participatory process for ICM development and implementation that has been tested and proven to work in the region, including demonstration in a small/pilot area and scaling up spatially to ecosystem level or functionally in terms of issues covered as capacity is developed; promoting accountability and ownership of the process at the local level;

6.3.2 Developing mechanisms that facilitate coordination and stakeholder participation including:

- coordination by the local government;
- inclusiveness, involving various stakeholders (communities, academe, private sector, NGOs and other partners), with policy, technical, human resource and financial support from national government;
- a vision-oriented strategy and action plan prepared through stakeholder consultations;
- facilitating synergies and complementarities across agencies and sectors in implementation; and
- balancing authority and consensus building processes.

6.3.3 Building capacity at the local, national and regional levels, involving various stakeholders from communities and coastal management practitioners to decision-makers; developing leadership/'champions' in governance at all levels;

6.3.4 Enabling active participation of local communities by establishing confidence, building trust, empowerment and use of empirically-based practices and traditional knowledge such as the "*Satoumi*" concept in Japan;

6.3.5 Using science to better understand and address problems considering new and emerging concerns, and to support better-informed decisionmaking;

6.3.6 Using appropriate technical tools such as natural sciences (marine spatial planning and coastal use zoning, designation of conservation areas) and social sciences to address multiple use conflicts, promote coordination among users, change behaviours, and improve management of marine and coastal areas;

6.3.7 Demonstrating benefits of ICM in terms of livelihood improvement and socioeconomic and financial incentives;

6.3.8 Application of ecosystems approach in areas where problems transcend political and spatial boundaries, e.g., integrating river basin and coastal management, MPA networking; and

6.3.9 Sharing of information and good practices on ICM implementation through various media.

6.4 Challenges to the development and implementation of effective and sustainable ICM programs include:

6.4.1 Integration among the various sectors and levels of governments remains a challenge.

6.4.2 Generating buy-in among key stakeholders such as local leaders and decision-makers is not easy.

6.4.3 Changing behaviour does not happen overnight.

6.4.4 Tools need to be better understood and address problems considering new/ emerging concerns especially at the local and national levels.

6.4.5 Information technology is changing the way decisions and actions are being made.

Recommendations

6.5 There is a need to think out of the box; not to do 'business as usual; and seek innovative ways to address key issues facing all stakeholders on coastal resource management and protection.

6.6 There is a need to promote the scaling up and replication of ICM implementation and good practices including:

6.6.1 Strengthening horizontal and vertical coordination in terms of policies, legislations, planning process and timeframes; aligning national and local development strategies; mainstreaming ICM into local and national socioeconomic development

plans; having a feedback mechanism from local to national level on good practices to support policymaking;

6.6.2 Considering innovative approaches and mechanisms to foster cooperation and operationalize integrated management at scales that cover different administrative boundaries and issues, e.g., integrated river basin and coastal area management and MPA networking;

6.6.3 Promoting integration of land and sea use planning to harmonize multiple and conflicting uses of coastal and terrestrial areas;

6.6.4 Strengthening of enforcement against violation of national and local laws on coastal protection;

6.6.5 Continuously strengthening knowledge and capacity among stakeholders particularly the decisionmakers;

6.6.6 Developing and providing socioeconomic incentives and equitable sharing of benefits, considering the balance between environmental management and conservation and pursuing economic benefits and providing livelihoods to communities;

6.6.7 Advancing the application of social marketing and social science approaches to change behaviour and facilitate transformative change;

6.6.8 Facilitating public-private partnerships and engaging donors and other partners, particularly in areas where their participation is crucial to achieve the targets;

6.6.9 Applying adaptive approaches in relation to new knowledge/data/information and priorities, including exploring use of information technology and social media to develop an 'informed' public and engage them to take action;

6.6.10 Implementing a system of rewards/incentives for local sites and stakeholders to recognize achievements in ICM implementation; and

6.6.11 Documenting good practices, benefits and impacts, including successes and failures; facilitating sharing of information; developing/expanding networks for sharing/exchange of technical expertise, applicable methods and experiences among countries, programs and projects in the region; and using lessons learned and good practices at the local and national levels to guide interventions for scaling up and out.

ANNEX 1
LIST OF PARTICIPANTS

Dr. Keita Furukawa
Director, Marine Research and Development,
Ocean Policy Research Institute, SPF, Japan
Email: k-furukawa@spf.or.jp

Dr. Gil Jacinto
Professor, Marine Science Institute, University of the Philippines
President, Coastal Management Center
Email: gjacinto@gmail.com

Dr. Chua Thia-Eng
Chair Emeritus, East Asian Seas Partnership Council, PEMSEA
Email: thiaengchua@gmail.com

Dr. Gunnar Kullenberg
Former Executive Director, International Ocean Institute
Email: gkullenberg@gmail.com

Ms. Clarissa Arida
Director for Programme Development and Implementation, ASEAN Centre for Biodiversity, Laguna, Philippines
Email: ccarida@aseanbiodiversity.org

Prof. Osamu Matsuda
Professor Emeritus, Hiroshima University, Japan
Email: matsuda036@go3.enjoy.ne.jp

Atty. Roberto Oliva
Executive Director, ASEAN Centre for Biodiversity, Laguna, Philippines
Email: rvoliva@aseanbiodiversity.org

Dr. Maripaz Perez
Country Director, WorldFish, Laguna, Philippines
Email: Ma.Perez@cgiar.org

Dr. Jose Padilla
Regional Technical Advisor for Marine, Coastal and Island Ecosystems, Bangkok Regional Hub, United Nations Development Programme
Bangkok, Thailand
Email: jose.padilla@undp.org

Atty. Analiza Teh
Undersecretary and Chief of Staff
Department of Environment and Natural Resources, Philippines
Email: tehanna08@gmail.com

Dr. Stefan Groenewold
Technical Advisor, Integrated Coastal Management Programme in the Mekong Delta, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Vietnam
Email: stefan.groenewold@giz.de

Ms. Bui Thi Thu Hien
Marine and Coastal Resources Programme Coordinator / MFF National Coordinator, International Union for Conservation of Nature (IUCN) Vietnam Country Office
Email: Hien.BUITHITHU@iucn.org

Ms. Rocky Sanchez Tirona
Vice President, Rare Philippines
Email: rtirona@rare.org

Ms. Regina Bacalso
Senior Fisheries and Coastal Resources Management Specialist, Ecosystems Improved for Sustainable Fisheries (ECOFISH) Program, Philippines
Email: Regina.Bacalso@ecofish-ph.com

Mr. Len Garces
Research Fellow, WorldFish, Laguna, Philippines
Email: L.GARCES@cgiar.org

Ms. Nguyen Thi Phuong Dung
Deputy Director, Department of Natural Resources Conservation, Directorate of Fisheries – Ministry of Agricuture and Rural Development, Vietnam
Email: nguyendzung74@gmail.com

Mr. Sakanan Plathong
Head, Coral Reef and Benthos Research Unit, Department of Biology, Prince of Songkla University, Thailand
Email: sakanan2004@yahoo.com

Dr. Luky Adrianto
Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia
Email: lukyadrianto@gmail.com

Dr. Christian Henckes
Programme Director, Integrated Coastal Management Programme in the Mekong Delta, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Vietnam
Email: christian.henckes@giz.de

Mr. Phousavanh Fongkhamdeng
Deputy Head of Planning and Administration Division, Department of Water Resources, Lao PDR
Email: lan.jrp@gmail.com

Ms. Norfaezah Binti Shamsuddin Engineer, ICM Section, Development and Operations Division, Selangor Waters Management Authority, Selangor, Malaysia
Email: norfaezah@luas.gov.my

Dr. Christopher Cox
Programme Officer, Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, United Nations Environment Programme
Nairobi, Kenya
Email: Christopher.Cox@unep.org

Mr. Douglas Woodring
Managing Director, Co-Founder
Ocean Recovery Alliance
Hong Kong
Email: doug@oceanrecov.org

Dr. Nguyen Minh Son
Technical Adviser, Institute of Environmental Technology, Vietnam
Email: nminhson05@gmail.com

Mr. Jacob Meimban
Executive Director, River Basin Control Office, Department of Environment and Natural Resources, Philippines
Email: jakemeimban@gmail.com

Mr. Hideto Uranaka
Assistant Director, Satoumi Promotion Section, Agriculture, Forestry and Fishery Department, Shima City, Japan
Email: uranaka-hideto@city.shima.lg.jp

Mr. Hokuto Mikoshiba
Director, Agriculture & Forestry & Fishery Division, Industry Department, Obama City, Japan
Email: mikoshiba@city.obama.lg.jp

Mr. Takehiro Tanaka
Executive Director, Research Association for *Satoumi* Creation, Bizen City, Japan
Email: satoumiken@gmail.com

Dr. Tetsuo Yanagi
Principal Researcher, International Environmental Management of Enclosed Coastal Seas Center, Japan
Email: tyanagi@riam.kyushu-u.ac.jp

Prof. Takeshi Hidaka
Professor, Kinki University, Japan
Email: hidaka@fuk.kindai.ac.jp

Ms. Pham Thi Chin
Deputy Director, Danang Agency of Sea and Islands, Vietnam
Email: chindng@gmail.com

Ms. Nisakorn Wiwekwin
Sanitation Researcher, Saensuk Municipality / ICM Coordinator, Chonburi, Thailand
Email: nisakorn.w@hotmail.com

Ms. Sally Nay
Technical Staff, ICM PMO, Sihanoukville, Cambodia
Email: sallynay@gmail.com

Dr. Sheila Vergara
Director, Biodiversity Information Management, ASEAN Centre for Biodiversity, Laguna, Philippines
Email: sgvergara@aseanbiodiversity.org

Dr. A. Rex F. Montebon
Program Manager, Coastal, Marine, and Fisheries, Conservation International Philippines Foundation, Inc.
Email: arfmontebon@gmail.com

Dr. Zhao Linlin
Assistant Researcher, First Institute of Oceanography, State Oceanic Administration, P.R. China
Email: zhaolinlinouc@163.com

Dr. Porfirio Aliño
Professor, Marine Science Institute, University of the Philippines
Email: pmalino2002@yahoo.com

Ms. Janina Korting
Advisor on Marine and Coastal Biodiversity, Blue Solutions Initiative
Email: janina.korting@giz.de

Mr. Charles Besancon
Programme Officer, LifeWeb Initiative, Convention on Biological Diversity Secretariat, Montreal, Canada
Email: charles.besancon@cbd.int

Dr. Ario Damar
Deputy Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia
Email: adamar@pksplipb.or.id

Mr. Prak Visal
ICM Coordinator, Sihanoukville, Cambodia
Email: visalpmo@yahoo.com

Dr. Yi Dan,
Associate Professor, The First Institute of Oceanography, State Oceanic Administration , Qingdao, P.R. China
Email: yidan@fio.org.cn

Dr. Lily Ann Lando
Scientist, WorldFish, Laguna, Philippines
Email: L.Lando@cgiar.org

Ms. Huyen Thi Thu Nguyen
National Coordinator and Program Officer, Global Environment Facility Small Grants Programme, Vietnam
Email: nguyen.thi.thu.huyen@undp.org

Dr. Chou Loke Ming
Adjunct Research Professor, Tropical Marine Science Institute, National University of Singapore
Email: tmsclm@nus.edu.sg

Ms. Amelia Supetran
Team Leader, Environment and Energy Unit, United Nations Development Programme Manila
Email: amelia.supetran@undp.org

Mr. Christian Severin
Senior Environmental Specialist, Global Environment Facility Secretariat, Washington, DC, USA
Email: cseverin@thegef.org

Mr. Gualberto Galia
Head, Environment and Natural Resources Office and PMO Director, ICM Program, Province of Guimaras, Philippines
Email: galiagualberto@yahoo.com

Ms. Nancy Bermas
PEMSEA
Email: nbermas@pemsea.org

Ms. Cristine Ingrid Narcise
PEMSEA
Email: cinarcise@pemsea.org

Ms. Belyn Rafael
PEMSEA
Email: brafael@pemsea.org

Dr. Natalie Degger
PEMSEA
Email: ndegger@pemsea.org; nataliedegger@gmail.com

ANNEX 2
WORKSHOP PROGRAM

Time	Activity/Presentation	Possible Speaker/Panelist
Day 1, November 17		
Workshop Co-Chairs: Dr. Keita Furukawa (Director of Marine Research and Development , Ocean Policy Research Institute) and Dr. Gil Jacinto (President, Coastal Management Center/Professor, The Marine Science Institute, University of the Philippines)		
1030 – 1045	Introduction by the Workshop Chair • Overview of the workshop • Expected outputs • Introduction of the Keynote Speaker	Workshop Co-Chairs
1045 – 1115	Keynote Presentation: Two decades of Integrated Coastal Management Implementation in the Seas of East Asia: What have we learned?	Dr. Chua Thia-Eng Chair Emeritus, East Asian Seas Partnership Council
1115 – 1130	Open Forum	Workshop Co-Chairs
Part 1A: Good Practices, Innovation and Impacts in ICM Applications at the Local Level **Co-Chairs: Dr. Gunnar Kullenberg (Former Executive Director, International Ocean Institute) and Ms. Clarissa Arida (Director for Programme Development and Implementation, ASEAN Centre for Biodiversity)**		
1130 – 1150	Introduction from the Co-Chairs • Overview of the session • Expected outputs	Session Co-Chairs
1150 – 1210	Integrated Coastal Management Program in the Mekong Delta: accelerating practical solutions in managing and protecting coastal ecosystems	Dr. Stefan Groenewold, Technical Advisor, Integrated Coastal Management Programme in the Mekong Delta, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Vietnam
1210 – 1230	Building Community Resilience Through ICM Approaches	Ms. Bui Thi Thu Hien Marine and Coastal Resources Programme Coordinator / MFF National Coordinator, International Union for Conservation of Nature (IUCN) Vietnam Country Office
1230 – 1400	LUNCH BREAK	
1400 – 1420	Social marketing for more sustainable fisheries	Ms. Rocky Sanchez Tirona, Vice President, Rare Philippines
1420 – 1440	Marine spatial planning for improved fisheries management: resolving spatial conflicts in Balayan Bay, Philippines	Ms. Regina Bacalso, Senior Fisheries and Coastal Resources Management Specialist, Ecosystems Improved for Sustainable Fisheries (ECOFISH) Program
1440 – 1500	Strengthening governance partnerships at the local level and improving fisheries management (case study from Mindanao, Philippines)	Mr. Len Garces, Research Fellow, WorldFish
1500 – 1600	Panel discussion: • Summary of good practices in improving governance and	Panelists: Ms. Nguyen Thi Phuong Dung, Deputy Director,

	management of coastal and ocean areas and related resources at the local level • Replicability in other sites • Challenges in replicating / scaling up good practices	Department of Natural Resources Conservation, Directorate of Fisheries – Ministry of Agricuture and Rural Development, Vietnam Mr. Sakanan Plathong, Head, Coral Reef and Benthos Research Unit, Department of Biology, Prince of Songkla University, Thailand Dr. Luky Adrianto, Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia Dr. Maripaz Perez, Country Director, WorldFish Dr. Christian Henckes, Programme Director, Integrated Coastal Management Programme in the Mekong Delta, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Vietnam
1600 – 1615	*Coffee Break*	
1615 –1630	IRBM approach to water use and supply management in the Sedone River Basin	Mr. Phousavanh Fongkhamdeng, Deputy Head of Planning and Administration Division, Department of Water Resources, Lao PDR
1630 - 1645	Increasing management efficiency of water resources in Selangor through close coordination between IRBM and ICM	Ms. Norfaezah Binti Shamsuddin, Engineer, ICM Section, Development and Operations Division, Selangor Waters Management Authority, Selangor, Malaysia
1645 – 1700	Global Partnership in Nutrient Management: advancing good practices in nutrient management	Dr. Christopher Cox, Programme Officer, Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, United Nations Environment Programme
1700 - 1715	Community engagement for integrated management of waste in watersheds and coastlines	Mr. Douglas Woodring, Managing Director, Co-Founder, Ocean Recovery Alliance
1715- 1745	Panel discussion: • Summary of good practices in implementing integrated approaches for river basin and coastal area management • Replicability in other sites • Challenges in replicating / scaling up good practices	Panelists: Dr. Gil Jacinto, Professor, The Marine Science Institute, University of the Philippines Dr. Nguyen Minh Son, Technical Adviser, Institute of Environmental Technology, Vietnam Mr. Jacob Meimban, Executive Director, River Basin Control Office, Department of Environment and Natural Resources, Philippines
1745 - 1800	Workshop conclusions and recommendations	Session Co-Chairs
Part 1B: Good Practices, Innovation and Impacts in ICM Applications in Japan **Co-Chairs: Dr. Keita Furukawa (Director of Marine Research and Development, Ocean Policy Research Institute) and Prof. Osamu Matsuda (Professor Emeritus, Hiroshima University)**		

1130 – 1200	Keynote Presentation: ICM development in Japan	Dr. Keita Furukawa, Ocean Policy Research Institute
1200 – 1230	Presentation 1: ICM development in Japan Introduction of the Session Introduction of the ICM model site project in Japan	 Dr. Osamu Matsuda, Professor Emeritus, Hiroshima University Dr. Keita Furukawa, Ocean Policy Research Institute
1230 – 1400	LUNCH BREAK	
1400 - 1500	Presentation 2: Locally-led Activities for ICM Implementation in Japan ICM following PDCA cycle-second round of the new *Satoumi* promotion Challenge of Obama City- Future Conference for Coastal City Development Reviving the Seto Inland Sea, Japan: coastal environment restoration for ICM implementation in Bizen City	 Mr. Hideto Uranaka, Assistant Director, Satoumi Promotion Section, Agriculture, Forestry and Fishery Department, Shima City Mr. Hokuto Mikoshiba, Director, Agriculture & Forestry & Fishery Division, Industry Department, Obama City Mr. Takehiro Tanaka, Executive Director, Research Association for *Satoumi* Creation
1500 – 1545	Presentation 3: Towards Sustainable Coastal Sea (*Satoumi*) Development of Coastal Management Method to Realize the Sustainable Coastal Sea Hypothesis of multistage management scheme for *Satoumi* as integrated coastal management Present status of *Satoumi* activities in Japan: Case studies on the role of *Satoumi* in coastal management	 Dr. Tetsuo Yanagi, Principal Researcher, International Environmental Management of Enclosed Coastal Seas Center Prof. Takeshi Hidaka, Professor, Kinki University Dr. Osamu Matsuda, Professor Emeritus, Hiroshima University
1545 – 1600	*Coffee Break*	
1600 – 1700	Panel discussion: Development of ICM implementation in Japan, from local to national, various types of ICM and stages Based on the uniqueness of ICM implementation in Japan, the discussion will extract lessons and good practices from the various case studies and consider the following:	Panelists: Presenter of presentation 1 to 3, including some delegates from PNLG Panelists from PNLG: - Ms. Pham Thi Chin, Deputy Director, Danang Agency of Sea and Islands, Vietnam - Ms. Nisakorn Wiwekwin, Sanitation Researcher, Saensuk Municipality / ICM Coordinator, Chonburi, Thailand - Ms. Sally Nay, Technical Staff, ICM PMO,

	- What are the lessons learned from ICM and *Satoumi* implementation? - What are the necessary steps and institutional arrangements to implement ICM at the local level? - What kind of support is expected for local ICM implementation?	Sihanoukville, Cambodia
Day 2, November 18		
1030 – 1045	Introduction by the Workshop Co-Chairs • Recap of Day 1 • Overview of Day 2 workshop sessions	Workshop Co-Chairs
Part 2: Good Practices, Innovations and Impacts in ICM applications for MPA and MPA Networks **Co-Chairs: Atty. Roberto Oliva (Executive Director, ASEAN Centre for Biodiversity) and Dr. Maripaz Perez (Country Director, WorldFish)**		
1045 – 1100	Introduction from the Session Co-Chairs • Overview of session • Expected outputs	Session Co-Chairs
1100 – 1115	Improving biodiversity conservation and resilience to climate change through integrated coastal and marine protected areas management in the ASEAN region	Dr. Sheila Vergara, Director, Biodiversity Information Management, ASEAN Centre for Biodiversity
1115 – 1130	Scaling and amplifying MPAs for the effective conservation of the "Center of Center of Marine Biodiversity", the Verde Island Passage	Dr. A. Rex F. Montebon, Program Manager, Coastal, Marine, and Fisheries Conservation International Philippines Foundation, Inc.
1130 – 1145	Enhancing effectiveness of Marine Protected Areas through networking and implementation of "Ecological Red-line"	Dr. Zhao Linlin, Assistant Researcher, First Institute of Oceanography, State Oceanic Administration, P.R. China
1145 – 1200	Experiences, good practices and lessons learned in MPA / MPA networking in the Coral Triangle	Dr. Porfirio Alino, Professor, The Marine Science Institute, University of the Philippines,
1200 – 1300	Panel discussion: • Opportunities for scaling up Aichii Biodiversity Targets through ICM	Panelists: Ms. Janina Korting, Advisor on Marine and Coastal Biodiversity, Blue Solutions Initiative Ms. Clarissa Arida, Director for Programme Development and Implementation, ASEAN Centre for Biodiversity Mr. Charles Besancon, Programme Officer, LifeWeb Initiative, Convention on Biological Diversity Secretariat Dr. Pham Anh Cuong, Director/ Mr. Tran Ngoc Cuong, Agency for Biodiversity Conservation,

		Vietnam Environment Administration, Ministry of Natural Resources and Environment/ Ramsar National Focal Point for Vietnam Ms. Bui Thi Thu Hien Marine and Coastal Resources Programme Coordinator / MFF National Coordinator, International Union for Conservation of Nature (IUCN) Vietnam Country Office
Part 3: Transferring and Scaling Up of ICM Good Practices and Innovations **Co-Chairs: Atty. Analiza Teh (Undersecretary and Chief of Staff, Department of Environment and Natural Resources, Philippines) and Dr. Jose Padilla (Regional Technical Advisor for Marine, Coastal and Island Ecosystems, Bangkok Regional Hub, United Nations Development Programme)**		
1400 – 1415	Introduction from the Session Co-Chairs • Overview of session • Expected outputs	Session Co-Chairs
Component 1:	**Good practices at the local level**	
1415 – 1435	Coral restoration and conservation in Serangan Island, Denpasar City, Bali, Indonesia: turning coral miners into conservation advocates	Dr. Ario Damar, Deputy Director, Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia
1435 – 1455	Mobilizing public and private sectors to improve coastal tourism and beach management in Sihanoukville, Cambodia	Mr. Prak Visal, ICM Coordinator, Sihanoukville, Cambodia
1455 – 1515	Transforming Traditional Pond Aquaculture to Modern Ecological Aquaculture through Multiple Seawater Use and Application of Industrial Management Practice in Dongying, China	Dr. Yi Dan, Associate Professor The First Institute of Oceanography, State Oceanic Administration , Qingdao, P.R. China
Component 2:	**Mechanisms for scaling up and replicating good practices**	
1515 – 1530	Alternative platform for addressing poverty and hunger in coastal communities: Experiences from the Philippines	Dr. Lily Ann Lando, Scientist, WorldFish
1530 – 1545	Small Grants Programme: From local to global implementation	Ms. Huyen Thi Thu Nguyen, National Coordinator and Program Officer, Global Environment Facility Small Grants Programme, Vietnam
1545 – 1600	Transferring good practices, innovative approaches and lessons learned from ICM implementation in East Asia to other regions	Dr. Jose Padilla, Regional Technical Advisor for Marine, Coastal and Island Ecosystems, Bangkok Regional Hub, United Nations Development Programme
1600 - 1615	Coffee break	
1615 – 1700	Panel Discussion: • Synthesis of good / innovative practices that can be promoted for	Panelists: Dr. Chou Loke Ming, Adjunct Research Professor, Tropical Marine Science Institute, National

	scaling up/replication, • Challenges and needs, as well as strategies and opportunities, for scaling up/replication of good practices • Initiatives of development agencies and organizations to promote and facilitate specific aspects of sustainable development (inclusiveness; gender equity; livelihoods; biodiversity conservation; food security; etc.) • Key actions to facilitate sharing of good practices and lessons learned and improving partnerships and collaboration across programs in East Asia and other regions	University of Singapore Ms. Amelia Supetran, Team Leader, Environment and Energy Unit, United Nations Development Programme Manila Mr. Christian Severin, Senior Environmental Specialist, Global Environment Facility Secretariat Mr. Gualberto Galia, Head, Environment and Natural Resources Office and PMO Director, ICM Program, Province of Guimaras, Philippines
Part 4: Workshop conclusions and recommendations		
1700 – 1800	Synthesis of discussions, conclusions and recommendations from Part 1 to Part 3	Workshop and Session Co-Chairs