Session 3 Conclusions and Recommendations

The following conclusions and recommendations, prepared on the basis of three workshop reports and three associated special events of Session 3, were presented by Dr. Zhanhai Zhang, Director General of Strategic Planning and Economy, State Oceanic Administration, PR China, and Session Chair, at the closing of the International Conference on November 20, 2015. The specific workshops and special events included:

Workshops
1. Matching the Societal Aspiration for a Blue Ocean through Public-Private Partnerships
2. Future of Coastal Cities
3. Blue Economy Development: Where are we now? Where are we headed?

Special events
1. Technical and Policy Workshop on Sustainable Nutrient Management
2. Roundtable: Investing in Blue Economy for Conservation and Impact

Session Focus
1. The session focused on ways and means of addressing issue-specific and region-wide objectives and action programs beyond 2015 under the updated SDS-SEA, UN Sustainable Development Goals (SDGs), the Aichi Biodiversity Targets, and other international commitments. Transboundary problems, climate change, and other emerging issues affecting ocean health and sustainability of ocean economy pose new dimensions in economic and environmental management.
Session Conclusions

Realizing a blue economy

2. The concept of blue economy is evolving as the ocean space is changing dramatically, driven by innovations, new industries, shifting demands, and pressures from rapid urbanization, changing environment and climate, and loss of ecosystems and biodiversity. The blue economy assessment is geared toward facilitating improved understanding of:
   a) the role of the ocean and its contribution to the national economy;
   b) impacts of human activities on ocean health and sustainability;
   c) potential areas for investments in innovative and environmentally-sound technologies and infrastructure; and
   d) interventions needed to effectively manage the ocean economy and ensure healthy oceans, coasts and cities.

3. By measuring the ocean economy and showing its significance, a case can be made for supporting investments in key ocean economic industries, higher budget allocation for protecting ocean health, and pushing forward the blue economy agenda.

4. The blue economy assessment involves ocean economy-environment accounting. Seven countries presented their national ocean economic accounts, with some indicators for coastal and marine ecosystems. The ocean economy contributes to the GDP of the EAS countries in varying degrees: 3% in RO Korea, 4.5% in the Philippines, 9% in China, 13% in Indonesia, and 19% in Vietnam. There is a rich body of work completed, and yet a long road is ahead towards a blue economy assessment that encompasses market values, as well as nonmarket ecosystem services, environmental costs, and equity aspects.

5. It is essential to recognize natural capital as a critical economic asset and as a source of public benefits. The oceans provide significant ecosystem services. Ocean economic sectors, such as fisheries, aquaculture, seafood processing, biotechnologies, and tourism, rely on healthy ecosystems. Most countries reported degradation of coastal and marine ecosystems, which affect the sustainability of the ocean economy. Ecosystem services, such as carbon sequestration and shoreline protection, and environmental costs, such loss of ecosystem resiliency, are not fully captured in GDP, but could significantly alter the true GDP. However, investments are also being made in key ocean sectors that contribute to blue growth, environmental protection, sustainable management of ecosystems, and climate resiliency.

Making cities blue

6. The countries of the East Asian Seas are experiencing urbanization and population growth in coastal areas, and facing serious challenges to sustainable development in their growing cities, including access to safe drinking water and affordable housing, providing a clean environment, reducing water, energy and carbon footprints, building effective sewerage systems, and providing convenient and affordable public transportation systems.
7. The Sustainable Development Goals (SDGs) are good reference targets for cities and local governments to pursue. The application of Integrated Coastal Management (ICM) and Integrated Urban Coastal Management (IUCM) has yielded progress, achievements and good practices in sustainable development and climate change mitigation and adaptation among local governments/cities in the region. Global networks of cities and local governments showcased various initiatives being implemented at city level in promoting sustainable development, as well as the effectiveness of concerted efforts of local alliances for sizable successes.

Making ocean industries blue

8. Different examples of how ocean industries and investments can be ‘blue’ were presented, such as green ports and shipping, climate smart aquaculture, and ecotourism. There are also new and innovative industries, such as marine biotechnologies and ocean energy. These industries started with the initiatives of the scientific community, but in response to emerging demands. Presentations on blue carbon and public environmental investments reflect comprehensive plans that would contribute to the protection of coastal and marine ecosystems.

Investing in the blue economy

9. Active private sector engagement will be critical for tackling the post-2015 global sustainable development agenda. New approaches, beyond business-as-usual, will be needed in the face of increasingly disruptive ecological and economic trends. There is no shortage of investment capital, but expectations must be aligned with investor requirements, and more work is needed to prepare projects for investment.

10. Several factors for viable and sustainable investments and public-private partnerships (PPP) were pointed out:

   - government leadership and political will at both national and local levels;
   - clear legal and regulatory framework and consistent enforcement;
   - institutional arrangements and governance;
   - transparent procurement process;
   - financing mechanisms to ensure project viability and bankability (e.g., user fees; viability gap funding; national government subsidies; donor support);
   - contracts that include acceptable rate of return, cost recovery mechanisms, risk allocation and mitigation measures, and performance-based targets; and
   - stakeholder awareness to increase willingness to pay and build trust.

Advancing public-private partnerships

11. There are public services, which can be made more efficient and cost-effective through partnership with the private sector, and accessing its technical and managerial expertise and experience. Environmental investments, such as wastewater and solid waste management projects, can generate revenues and at the same time contribute to
protecting ocean health. There are also environmental projects where corporate social responsibility of the private sector can be tapped, and companies can be made partners of local governments and communities in sustainable development of oceans and coasts. It was emphasized that there is no universal template in getting the private sector involved in the provision of public utilities and services as the context in which PPP operates varies from country to country. Having a clear understanding of government priorities and needs as well as the envisioned extent of private sector participation is a good starting point in determining the most appropriate PPP modality.

12. Successful models show that PPP results in:

- lower project cost; shorter repayment period;
- improvement of public service provision and water quality (case of Nanming, China);
- more efficient operations (case of Baliwag Water District, Philippines); and
- access to innovative and cost-effective technologies, technical and managerial skills, and financing.

13. PPP also contributes to inclusive growth. PPP projects create jobs and generate employment opportunities. Revenue-sharing with indigenous communities, payment of ecosystem services, and community protection of coastal and marine ecosystems that enhances fisheries and ecotourism are some of the mechanisms to ensure that communities share in the benefits of PPP projects.

Valuing ecosystem services and environmental costs

14. Valuation of ecosystem services and environmental costs is an important tool that should be integrated in economic development plans at the national and local levels. It enables designing of combined carrot-and-stick mechanisms to refine existing policies and laws and make them more implementable by the private sector. Innovative financing mechanisms are now available to capture resource rent and pay for programs to reduce pollution and protect ecosystems and biodiversity.

15. Investments can be turned into sustainable PPP projects by incorporating the valuation of ecosystem services in project proposals and design. Financial viability should not be the only criteria for investments. In addition to bankability, the long term benefits from the protection of coastal and marine ecosystems need to be included in project analysis and approval process. Environmental impacts and economic internal rate of return are the usual indicators used in project design, however, there are still gaps and absence of agreed methodologies for valuation of ecosystem services.

Nutrient and ecosystem health reporting

16. The nutrient challenge is a multi-layered complex issue that should be addressed in an integrated manner across many sectors, recognizing the agricultural and wastewater management sectors as key areas for intervention. Crop and livestock production and untreated and inadequately treated domestic wastewater discharges from coastal cities and
communities are significant non-point and point-source contributors of nutrient loads to fresh and coastal waters. Frequency of occurrence and extent of harmful algal blooms (HABs) is increasingly exacerbated by land-based contributions of nutrients, shoreline physical development, and climate change drivers in the context of changing ocean dynamics. The proliferation of eutrophic and dead-zones worldwide is estimated to result in annual economic losses of approximately US$200 billion/year.

17. It should be noted that there is much work already in progress in many countries in the region, but they can benefit further from shared experiences and lessons learnt. The GEF-funded Global Nutrient Cycling Project has contributed to best practices in sustainable nutrient management through the expansion of the foundational knowledge base as can be seen from the demonstration projects in Chilika Lake, Odisha State in India, and in the Manila Bay and Laguna de Bay watershed in the Philippines. More work is needed to implement actions committed by countries to the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) in addressing the linkages between freshwater, coastal and marine environments.

**Session Recommendations**

18. **Make ocean a priority** in medium- and long-term economic development plans of countries and cities.

19. **Develop ocean economic-environmental accounts** for assessment of blue economy development, ecosystems and biodiversity, and opportunities for business and investments.

20. Design and agree on methodologies to **measure and capture natural capital values** and mainstreaming this approach in investment planning, PPP project structuring and evaluation, designing economic or market-based instruments, and assessing sustainability of cities and the ocean economy.

21. Develop and implement methodologies for measuring and reporting progress, gaps and solution options, and use the local, national and regional **State of Oceans and Coasts (SOCs)** as the reporting system. Promote the results at the national level, in social media, and in international summits to change mindsets, enhance collaboration, and get the blue economy as a global agenda.

22. **Apply the integrated coastal management or ICM** across the EAS region as a proven ecosystem-based management system to address blue growth, ecosystem and biodiversity protection, nutrient loading, and other complex coastal development challenges, facilitated by knowledge management, incentive mechanisms, intersectoral coordination, and partnership with the private sector, civil society and communities.

23. **Engage the PEMSEA Network of Local Governments (PNLG):**
   a) as the platform for sharing results, best practices and success stories, failures and challenges, and lessons learnt among cities and countries; and
b) in identifying blue economy investment opportunities.

24. **Develop a portfolio of business opportunities, service providers and funding options** for moving projects from concept to feasibility, based on real business rigor as a foundation for long-term sustainability. Refine, validate and build the list of possible investments identified by countries under the GEF/UNDP project.

25. **Coordinated global approach is crucial** to promote the ‘blue economy’ paradigm, sustainable cities, and sustainable management of nutrients, ecosystems and biodiversity. Partner with:

   a) *International organizations*. GEF, UN, World Bank, donors, and development agencies are urged to provide support in scaling up and replication of ICM, PPP, and best practices.

   b) *City Networks*, such as ICLEI, UCLG and other city networks. Through such networks, a clear set of targets for sustainable development at local level, climate change resiliency, and meeting global commitments, and assessment tools can be developed and disseminated.

   c) *Regional Seas Programmes* (RSPs). For instance, the South Asia Cooperative Environment Programme (SACEP), the Coordinating Body on the Seas of East Asia (COBSEA) and the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) should be entry points for the Global Partnership on Nutrient Management (GPNM) Asia Nutrient Platform. PEMSEA is a key partner to the GPNM, contributing technical and scientific inputs to advance best management practices.

   d) *Businesses and investors*. An East Asian Seas Sustainable Business Network can be established to push forward blue economy investments.

26. **Develop knowledge base, and enhance knowledge sharing, capacity development, and collaboration** for:

   a) Blue Economy assessment and SOC reporting, including ocean economy-environment accounting, and valuation of ecosystems services and environmental degradation;

   b) Ocean-related PPP and investments, including enabling conditions, performance-based contracts, financing mechanisms, environmental cost-benefit analysis, and latest trends and scientific knowledge relevant to business and investments related to coastal and ocean sustainable development;

   c) Governance mechanisms, including clear and appropriate mix of regulations and incentives, to support blue economy investments and PPP projects, address climate change, reduce nutrient loading and pollution, and protect coastal and marine ecosystems and biodiversity;

   d) Engaging private sector;
   e) Science-policy linkages;
   f) Nutrient management and ecosystem health reporting;
g) Monitoring the sustainability of cities, using clear targets, indicators and assessment tools; and
h) Reporting on progress of SDS-SEA implementation.