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Implementation of the Global Programme of Action
for the Protection of the Marine Environment
from Land-based Activities
Third session
Manila, 25–27 January 2012**

Global Conference on Land-Ocean Connections: summary by the Co-Chairs

Submission by the secretariat

The annex to the present note contains a summary of the Global Conference on Land-Ocean Connections, held in Manila on 23 and 24 January 2012. The summary was prepared by the Co-Chairs of the Conference and is presented as received, without formal editing.

Annex

Co-Chairs' summary of the Global Conference on Land-Ocean Connections held on 23 and 24 January 2012

The Global Conference on Land-Ocean Connections (GLOC) was a two-day gathering of scientists, experts, policy makers and NGOs, held in Manila, Philippines, from Monday 23 to Tuesday 24 January 2012, with the overall object of providing recommendations for the Third Session of the Intergovernmental Review (IGR-3) on the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) that immediately follows this meeting.

The objective of this conference was to bring together scientists, experts, policy makers and NGOs to discuss current and emerging issues in the marine and coastal sector with a focus on GPA related topics. The outputs of the conference will provide sound science-based and objective recommendations for the IGR-3 meeting, which immediately follows the GLOC, as well as a draft key message for addressing GPA related issues and actions at Rio+20.

The GLOC was structured around the proposed priority themes for the GPA: water quality (nutrients and wastewater); marine litter, and integrated coastal zone management at regional, national and sub-national levels, as a platform for mainstreaming the GPA and associated National Programmes of Action (NPAs). The GLOC was attended by over 450 participants from 72 countries with 155 government delegates, 76 IGOS/NGOs and industry representatives and 228 delegates from the Philippines.

Over the course of the two-day conference, 9 breakout groups were held. Specialist presentations were made by science, industry and policy representatives. These presentations stimulated active discussions that were focused on identifying issues, including any emerging issues that participants felt the GPA should address in the period 2012-2016 and should include in the Manila Declaration. Recommendations have been compiled and will be made available to IGR-3 for discussion.

On Monday, in an opening ceremony participants were welcomed to the conference by Secretary Ramon Paje, Department of Environment and Natural Resources (DENR), the Philippines; Mr. Ibrahim Thiaw, Director, Division of Environmental Policy Implementation, UNEP; and the former President of the Philippines, his Excellency Fidel V. Ramos. The conference was co-chaired by Dr. Wendy Watson-Wright, Assistant-Director General and Executive Secretary of the International Oceanographic Commission of UNESCO, and Attorney Rafael Lotilla, Regional Programme Director for the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA).

Professor Joseph Alcamo, Chief Scientist, UNEP, presented the UNEP's Foresight Process to Identify Emerging Global Issues. He outlined the process for expert consultation that had taken place and noted that the process had benefited from detailed input by over four hundred environmental scientists and experts. Through the process twenty one emerging issues have been identified and prioritized.

The conference then split into breakout sessions for in-depth discussions of specific issues, including: managing the global nutrient cycle; marine litter; coastal ecosystems; wastewater; and deltas. The breakout sessions were organized around speakers, panel sessions and discussions.

The breakout group on managing the global nutrient cycle was chaired by Atty. Analiza Rebueta-Teh, Under Secretary, Department of Environment and Natural Resources, Government of the Philippines, and moderated by Mark Sutton, Centre for Ecology and Hydrology, Natural Environment Research Council of the United Kingdom (CEH/NERC). Panelists included: Clement Lewsey, NOAA, USA; Kaj Sanders, Dutch Ministry of Infrastructure and Environment; Daniel Amlalo, Environment Protection Agency, Ghana; Gil Jacinto, University of the Philippines; Kilaparti Ramakrishna, UNESCAP; Angela Olegario, International Fertilizer Industry Association; Amit Roy, International Fertilizer Development Centre; Roland Scholz, Swiss Federal Institute of Technology; Alfred Duda, GEF; Vladimir Mamaev, UNDP; Thomas Sims, University of Delaware; and Jan Willem Erisman, The Netherlands Energy Research Centre.

The breakout group on marine litter was chaired by Elik Adler, Coordinator, Coordinating Body of the Seas of East Asia (COBSEA). Panelists included: Nancy Wallace, NOAA, USA; Mushtaq Memon, UNEP; Biliana Cicin-Sain, Co-Chair and Head of Secretariat, Global Forum on Oceans, Coasts and Islands; Heidi Savelli, UNEP; Jan-Erik Johansson, Plastics Europe; and Chris O'Brian, UN Food and Agricultural Organization (FAO).

The breakout group on coastal ecosystems was chaired by Jerker Tamelander, Head, Coral Reef Unit, UNEP. Panelists for the session included: Tundi Agardy, Director, Marine Ecosystem Services Program (MARES), Forest Trends; Linwood Pendleton, Director of Ocean and Coastal Policy, Duke University; and Richard Kenchington, Australian National Centre for Ocean Resources and Security.

The breakout group on wastewater was chaired by the GPA Coordinator, Vincent Sweeney. Panelists included Takehiro Nakamura, UNEP; Alan Baird, Asian Development Bank; Bert Diphorn, UN-HABITAT; Christopher Corbin, UNEP-CEP; and Olivia La O'Castillo, UN Secretary-General's Advisory Board on Water and Sanitation (UNSGAB).

The breakout group on deltas was chaired by Christian Severin, GEF. Panelists included: Gordon Young, President, International Association of Hydrological Science; Wim van Driel, Delta Alliance; R. Ramesh, National Centre for Sustainable Coastal Zone Management, India; Isabelle Van der Beck, UNEP; and Biliana Cicin-Sain, Co-Chair and Head of Secretariat, Global Forum on Oceans, Coasts and Islands. The full recommendations to the IGR-3, made at each session, are provided as an annex to this report.

On Tuesday, the morning began with a moderated plenary session to consider the reports from the breakout sessions that took place on Monday. This was followed by a moderated expert panel discussion in the plenary, which addressed "a green economy in a blue world - the contribution of marine and coastal ecosystems and management to move towards higher use efficiency, sustainable food, and water security and improved water quality". The discussions were moderated by Linwood Pendleton, Duke University. Andrew Farmer, Institute for European Environmental Policy, gave a keynote speech on marine and coastal ecosystems' contribution to the transition towards a green economy. Panelists included Zhen-RenGuo, South China Institute of Environmental Sciences; Annadel Cabanban, Senior Fisheries Expert, Sustainable Fisheries Management Project, UNDP Philippines; and Dr. Ajit Pattnaik, Chief Executive, Chilika Development Authority, India.

Main conclusions and recommendations from this plenary panel were that a Green Economy Approach includes the promotion of low carbon economic activities and green industries (e.g. renewable energy), a more circular economy in which re-use and recycling are key components, and an ecologically-based economy - in which an ecosystem-based approach is followed and values for market and non-market activities, resources, and conditions are considered.

A Green Economy approach requires that we change our view from one in which environmental protection and management are weighed against economic growth to one in which environmental concerns are essential to guarantee a growing and resilient overall level of economic well-being. Examples for moving forward with a Green Economy approach were provided for China, the Philippines, and India. The examples included:

- Setting more stringent standards for water quality, nutrients, and pollutants.
- The creation and dissemination of best management practices (e.g. for waste water treatment) and codes of conduct (e.g. Code of Conduct for Sustainable Fisheries)
- Monitoring of environmental and ecological conditions
- Sharing information
- Better planning (integrated fisheries planning, coastal nutrient planning, restoration planning)
- Flexible approaches

The panel discussion highlighted the importance of harnessing the interests of business (e.g. fisheries, aquaculture, and eco-tourism) to demand and promote reductions in water pollution and reversals in environmental degradation.

Participants then split into breakout sessions dealing with Global Environment Facility (GEF), UN Water and UN Oceans collaboration; integrated water resources management (IWRM) – linking IWRM and the coastal zone; ecosystem-based coastal planning and management; and partnerships at the regional level – experiences from the Regional Seas Conventions and Action Plans. The breakout sessions were organized around speakers, panel sessions and discussions.

The breakout group on GEF, UN Water and UN Oceans collaboration was chaired by Biliana Cicin-Sain, Co-Chair and Head of Secretariat, Global Forum on Oceans, Coasts and Islands. Panelists included Bert Diphorn, UN-HABITAT and Deputy Coordinator of UN-Water; Jacqueline Alder, Coordinator, Freshwater and Marine Coastal Ecosystems, UNEP and Deputy Coordinator, UN-Oceans; and Alfred Duda, Senior Advisor, International Waters.

The breakout session on IWRM was chaired by Peter Bjornsen, UNEP-DHI Centre for Water and Environment. Panelists included: Gordon Young, International Association of Hydrological Sciences; Chuck Chaitovitz, Global Environment and Technology Foundation; Vincent Sweeney, GPA Coordinator; Jessica Salas, Philippine Water Partnership; and Adrian Ross, PEMSEA.

The breakout group on ecosystem-based coastal planning and management was introduced by Takehiro Nakamura, Chief, Marine Ecosystems Unit, UNEP, and was chaired by Richard Kenchington, Australian National Centre for Ocean Resources and Security. Panelists included: Tundi Agardy, Director, Marine Ecosystem Services Programme, Forest Trends; Eugene Nixon, Marine Institute, Ireland; and Peter Jones, University College London.

The breakout session on the regional seas conventions and action plans was chaired by David Johnson, Coordinator, OSPAR. Panelists included: Lucien Chabason, former coordinator of the UNEP-Mediterranean Action Plan; Elik Adler, COBSEA; Christopher Corbin, UNEP-CEP; and Dixon Waruinge, Nairobi Convention Secretariat. The full recommendations to the IGR-3, made at each session, are provided as an annex to this report.

In the afternoon a moderated plenary session to consider reports from the day two breakout sessions took place, and a final plenary session to discuss on the draft elements to be included in the GLOC Chairs' Summary, to be presented to the IGR-3, was held.

The GPA Coordinator, Vincent Sweeney, presented closing remarks and the Co-Chairs declared the meeting closed.

Global Conference on Land-Ocean Connections
Breakout Sessions

I. Key recommendations

Marine litter – the role of a global partnership

- The establishment of a Global Partnership on Marine Litter facilitated through:
 - Online marine litter forum/network to facilitate information flow, knowledge sharing and promotion of the Honolulu Commitment and Strategy.
 - Wide Sign-up for the Honolulu Commitment (governments, organizations, civil society, industry, individuals).
 - Input to be provided on project activities, best practices and reporting on the implementation of the Honolulu Strategy.
 - New regional policy instruments aligned with the Honolulu Strategy through the Regional Seas conventions and action plans.
 - Market-based instruments developed and adopted.
 - Consider the use of Rio+20 as an opportunity to launch partnership.
 - Take account of the negative effects of plastic marine litter on biodiversity, with special attention to micro-plastics.
 - There is a need to look into the effects of plastic marine litter on the food chain and human health.
 - Use opportunities for addressing marine litter through linkages to sustainable development goals that promote resource efficiency and the principles of a green economy, such as improved life-cycle design and sustainable packaging; extended producer responsibility; safe and efficient fishing and maritime transport practices; and the development of integrated waste management infrastructure that supports recycling and energy recovery programmes and zero-waste strategies.

Deltas – managing the unique interface between freshwater and coasts

- Need to develop adaptive measures to address increased intensity and frequency of flooding events, salinisation of coastal areas, and droughts.
- Adaptive measures should cover economic, institutional, technological and ecological aspects.
- Need to develop indicators for better delta management.
- IGR3 may want to consider using the GPA as a platform to promote delta management, delta cooperation, inter-delta cooperation.
- UNEP and the GPA should promote 2013 as the “International Year of Deltas”.

Coastal Ecosystems – the value of the ecosystem services

- As regards to coastal carbon services, there is a need to raise awareness of the opportunities, and develop tools for utilizing coastal carbon services in management and financing.
- Need to use natural infrastructure for climate change mitigation and adaptation.
- Creation of innovative financing mechanisms such as payment for ecosystem services while ensuring equity of benefit sharing.

Managing the Global Nutrient Cycle

- It is deemed that setting quantitative target(s) for improved nutrient management provide a powerful incentive for action; even on a voluntary basis, such targets would be useful in encouraging change.
- To create a consensus around the need for effectiveness in achieving behavioural changes (e.g., improving management practices and avoiding over-consumption).

- Encourage countries to set targets of improving nutrient management according to their national priorities and capacities.
- In the longer term, further efforts may be made in developing nutrient balances to calculate surpluses and to calculate nutrient inputs into different marine areas (these have benefits but require further data to support their calculation).
- To promote information exchange of best practices and transfer of technologies.
- Facilitate and deepen sharing of experience and progress among countries on nutrient management.

Wastewater – collaborative approaches to accelerate global efforts to address wastewater

- To overcome cultural and psychological barriers to wastewater reuse.
- To approach wastewater as a resource through affordable and appropriate technology, wastewater recycling, nutrients recycling, etc.
- To demonstrate the potential economic returns on investment for the private sector.
- To encourage closer linkages between water utilities and wastewater treatment.
- To advocate for cross-sectoral collaboration and closer integrated wastewater management.
- To advocate for improved wastewater management within national programmes and deliver relevant training.
- To expand opportunities for information sharing.
- To promote benefits out of alternative technologies.
- To identify opportunities for putting wastewater on the international agenda (which could lead to a global partnership).
- To develop a global vision with internationally agreed targets and monitoring.

Integrated Water Resource Management

- To take into account that the call for integrated approaches to water resources management made in Agenda 21 is more relevant than ever.
- EBM, ICM and IWRM are mutually consistent concepts but need to be combined, simplified and adjusted to each specific location.
- The notion of scale and spatial dimension are critical when considering an integrated approach to the management of water resources.
- The GPA should promote these integrated approaches and should reflect more explicitly the upstream management of freshwater resources in policy documents.
- It is more challenging to integrate upstream-downstream linkages at large scale.

GEF, UN Water and UN Oceans collaboration

- UNEP, On behalf of UN Oceans, in collaboration with UN Water (UN HABITAT) to draft one or two page concept note on payments for ecosystem services based on the GEF Blue Forest Project with links to freshwater.
- The above concept note would be circulated to members of UN Oceans and UN Water for further development and ultimate implementation.

Ecosystem-based coastal planning and management

- Further develop trade-off analysis approaches and tools to balance different uses and objectives in an equitable and transparent way, and build capacity to use them.
- Focus on the development of resilient EBM governance frameworks. This requires “institutional connectivity” across stakeholder groups, with strong political will and leadership.
- Recognise the GPA is an important framework to apply the ecosystem-based approach to management, and that capacity development and financial and technical resources are required to apply this successfully, particularly in developing countries.

Partnerships at the regional level – experiences from the Regional Seas Conventions and Action Plans

- To raise the visibility of Regional Seas achievements and future potential as platforms for partnership.
- To strengthen the Regional Seas systems – compliance committees, peer review, resources.
- To encourage bilateral cooperation between Regional Seas Conventions providing mutual support and capacity building.
- To focus the work of Regional Seas Conventions on GPA global partnership themes by making available targeted project funding within existing programmes.
- To acknowledge wider brief than GPA priorities.
- To ensure Rio+20's political commitments to sustainable oceans recognise the role of Regional Seas.

II. Issues participants felt GPA should address in the period 2012-16 - Consideration for inclusion in the Programme of Work and the Manila Declaration

Marine litter – the role of a global partnership

- Promote use of the ‘Honolulu Strategy’ to reduce the amount of marine debris from land-based sources focused on the following:
 - Conduct education and outreach on marine debris and solid waste minimization and management;
 - Employ market-based instruments to support solid waste minimization and management.
 - Employ infrastructure and best practices for storm water and solid waste minimization and management.
 - Develop and enact legislation and policies to support solid waste minimization and management;
 - Improve the regulatory framework regarding storm water, sewage systems, and debris in tributary waterways.
 - Build capacity to monitor and enforce compliance with regulations and permit conditions regarding litter, dumping, solid waste management, storm water, and surface runoff.
 - Conduct targeted cleanup efforts on coastal lands, in watersheds, and in waterways.
- To develop and consolidate this Global Partnership on marine litter there is a need to engage and involve interested countries, international organizations, MEAs, Regional Seas Conventions and Action Plans and relevant non-governmental stakeholders, including the private sector, to address land-based and sea-based sources of marine litter.

Deltas – managing the unique interface between freshwater and coasts

- Support integrated approaches as regards deltas should address ecosystem sustainability, economic output and human well being.
- Promote more inter-delta cooperation
- Need to work with the industry.
- Establishment of more partnerships with the Ramsar Convention since deltas as wetlands are very connected to upstream activities.
- GPA should focus on deltas to help accelerate the connection between upstream and downstream.

Coastal Ecosystems – the value of the ecosystem services

- To maintain GPA source category prioritization.
- To increase emphasis on an ecosystem service approach to address the GPA source categories; valuation (economic, otherwise) and application in decision making.
- To ensure synergies with other initiatives for ecosystem resilience, particularly in the face of climate change.
- To emphasize the importance of coastal ecosystem adaptation and mitigation values.
- To support restoration activities in rebuilding and maintaining ecosystem services considering the potential gain from management measures that prevent ecosystem degradation while recognising the considerable losses of critical coastal ecosystems.
- To develop innovative financing mechanisms to complement existing financing of management.
- To establish partnerships and multi stakeholder platforms that include the private sector to enable better management outcomes by integrating market-based approaches.
- To address the complexities of tenure in the coastal zone through the application of market-based mechanisms in a fair and equitable manner.
- To promote regional cooperation to foster shared goals and objectives, accountability, and knowledge exchange across connected systems, and coherent national implementation.
- To prioritise efforts to develop fit-for-purpose and interoperable datasets in order to enable adaptive management.

- To develop platforms to catalyse dialogue at the science-policy interface.

Managing the Global Nutrient Cycle

- To set global policy goals for sustainable nutrient management and greening of economies.
- To improve quantification of nutrient cycles at the national and regional levels.
- To work with diverse stakeholders to demonstrate co-benefits from improved nutrient management across sectors (e.g. coastal-marine ecosystems, food security, energy security, climate change mitigation, protection of the quality of water, air and soil, health and biodiversity).
- To facilitate sharing of best practices for improving nutrient management practices, including technologies and development of guidance documentation.
- To establish global and regional partnerships and facilitate training of best practices.
- To launch research projects and demonstration sites for improving nutrient management.

Wastewater – collaborative approaches to accelerate global efforts to address wastewater

- To promote national wastewater management programmes.
- To support policy development processes.
- To encourage investment in wastewater.
- To develop partnerships that includes media, academia and civil society.

Integrated Water Resource Management

- It is proposed to give the GPA a specific mandate to facilitate integration between EBM, ICM and IWRM and harmonize methodologies
- GPA should encourage interactions and promote dialogue between ICM and IWRM communities of practice
- GPA should develop incentive mechanisms (e.g. incentive for measures – compensation for services recognizing the importance of an integrated approach to measures) for the inclusion of marine and coastal considerations into the management of upstream freshwater resources
- GPA should identify and disseminate good practices, raise awareness and support capacity building for the linking of upstream and coastal water management
- The GPA should continue provide technical support to countries for the management of water resources.

Ecosystem-based coastal planning and management

- Maintain GPA source category prioritization which include impacts of particular importance for managing cumulative impacts, particularly PADD; nutrient run-off and wastewater; debris inputs from rivers.
- Recognising that EBM concepts can be applied along a continuum, and that in order to move towards achieving EBM, in many situations it will currently be impractical to attempt to address all threats simultaneously, but that small but valuable steps should be taken to move incrementally towards EBM.
- Recognising the growth of trade-off analysis approaches and tools, using both qualitative and quantitative techniques and using a range of data, information and knowledge, including traditional knowledge, and that initiative should be taken to further develop trade-off analysis tools, as well as to build capacity and better apply such approaches and tools, and to guide EBM can facilitate a more transparent and equitable decision-making process across sectors and among ecosystem services.
- Recognising that effective governance is a key component of EBM, and that initiatives are needed to strengthen institutional connectivity and incentives to develop resilient governance frameworks.
- Provide capacity building for implementation of EBM, including an advisory platform and/or mentoring peer networks for sharing of lessons learned and good practice, in a language that is accessible to decision-making communities.
- Building monitoring capacity, particularly in developing countries, to develop the necessary datasets for EBM, and requesting government support for science- and management-based research and relevant technical capacity building.

- Develop and implement a mechanism for reporting on the effectiveness of management measures in achieving cross-sectoral EBM.

Regional Seas

- The GPA should harness global consensus on themes and facilitate partnership building on the agreed and prioritised themes.
 - The GPA should support the application of ecosystem approach and support the implementation of global partnership strategies.
 - The GPA should support the Regional Seas programmes by showcasing best practice examples and success stories.
 - The GPA should support and engage with governments to avoid fragmentation of marine governance. .
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