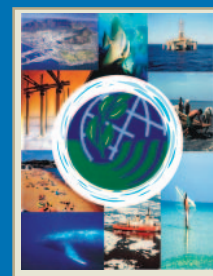

GLOBAL FORUM ON OCEANS, COASTS, AND ISLANDS

June 2006



Reports from the Third Global Conference on Oceans, Coasts, and Islands: Moving the Global Oceans Agenda Forward

**Biliana Cicin-Sain, Veerle Vandeweerd, Patricio A. Bernal,
Lindsey C. Williams, Miriam C. Balgos, and Julian Barbière**

**Co-Chairs' Report—Volume 2
Third Global Conference on Oceans, Coasts, and Islands
UNESCO, Paris, January 23-28, 2006**



Notes to Readers

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To obtain these publications, please contact Ms. Shelby Hockenberry, Gerard J. Mangone Center for Marine Policy, University of Delaware, Newark, Delaware 19716 USA, telephone: 1-302-831-8086, or via email at smhocken@udel.edu.

Third Global Conference on Oceans, Coasts, and Islands: Moving the Global Oceans Agenda Forward January 23-28, 2006, UNESCO, Paris

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GLOBAL FORUM ON OCEANS, COASTS, AND ISLANDS



***Co-Chairs' Report - Volume 2
Third Global Conference on
Oceans, Coasts, and Islands:
Moving the Global
Oceans Agenda Forward***

**January 23-28, 2006
UNESCO Paris, France**

***Biliana Cicin-Sain, Veerle Vandeweerd, Patricio A. Bernal,
Lindsey C. Williams, Miriam C. Balgos, and Julian Barbrière***

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FOREWORD



At the 2002 World Summit on Sustainable Development (WSSD) and in the Millennium Development Goals (MDG) (most recently reaffirmed in 2005), the world's political leaders adopted a far-reaching set of goals, targets, and time-tables to improve the quality of the ocean environment and the lives of people living in coastal areas and small islands.

At the *Third Global Conference on Oceans, Coasts, and Islands: Moving the Global Oceans Agenda Forward* (held at UNESCO, Paris, January 23-28, 2006), all parts of the global oceans community (403 participants from 78 countries, including 38 ministers) came together to determine: How are we doing in the fulfillment of these commitments? How can we do better?

This volume presents highlights of the Global Conference and summaries of discussions related to the attainment of major WSSD and MDG ocean goals, e.g.: achieving ecosystem-based and integrated coastal and ocean management; arresting declines in fisheries; advancing the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities; reducing poverty in Africa and in other developing areas; implementing the Mauritius Strategy for the sustainable development of Small Island Developing States (SIDS); establishing networks of marine protected areas; and developing a global marine assessment.

Also presented in this volume are highlights of conference discussions of the

Tsunami tragedy—one year later, and of emerging ocean issues, including marine areas beyond national jurisdiction, and issues related to oceans and climate.

It is clear from the discussions at the Global Conference that progress in fulfilling the international mandates on oceans has generally been slow, although in a number of areas there are encouraging signs of forward movement, both on the part of international initiatives and leadership from the national level. Some lessons clearly emerge from the Paris discussions, for example:

- Systematic monitoring and data collection on national and international efforts to implement the WSSD oceans mandates are needed, including to draw lessons learned and to develop best practices. This is especially the case with regard to progress on the cross-cutting goals (e.g. achieving ecosystem management and integrated ocean and coastal management), since these are not, at present, being tracked systematically.
- There is no regular collection and assessment of information on the social and economic well-being of coastal communities—the home of 50% of the world's population, making it very difficult to ascertain progress on Millennium Development Goals in the context of oceans, coasts, and SIDS.

Conference participants recommitted themselves to accelerate progress in the attainment of the international ocean targets, laying out a specific strategy for next steps and for promoting synergy and mobilizing active partnerships and coalitions to advance the global oceans agenda. A companion publication, *Meeting the Commitments on Oceans, Coasts, and Small Island Developing States Made at the 2002 World Summit on Sustainable Development: How Well Are We Doing?* will also be available in June 2006 and will be presented at the UN Informal Consultative Process on Oceans and the Law of the Sea. We hope the summaries in this volume capture the general nature of the discussions and provide a useful overview. Full coverage of the conference was provided by the Earth Negotiations Bulletin and is available at <http://www.iisd.ca/ymb/globaloceans3/ymbvol68num3e.html>. The conference presentations and other information may be found at <http://www.globaloceans.org/globalconferences/2006/index.html>.

All of us at the Global Forum on Oceans, Coasts, and Islands sincerely thank the Conference participants and sponsors for their dedication and leadership in promoting the sustainable development of oceans, coastal areas, and SIDS.

Dr. Biliana Cicin-Sain,
Co-Chair and Head of Secretariat,
Global Forum on Oceans, Coasts,
and Islands

HIGHLIGHTS FROM THE THIRD GLOBAL CONFERENCE

**Dr. Biliانا Cicin-Sain, Co-Chair and Head of Secretariat,
Global Forum on Oceans, Coasts, and Islands**

Background

The *Third Global Conference on Oceans, Coasts, and Islands: Moving the Global Oceans Agenda Forward*, organized by the Global Forum on Oceans, Coasts, and Islands, was held January 23-28, 2006 at the UNESCO headquarters in Paris, France. The Conference included over 400 participants from 78 countries, with 38 ministers and high level government representatives in attendance. The Conference brought together key national level officials, regional organizations, UN agencies, donors, industry, non-governmental organizations, and scientists to assess progress achieved and obstacles faced in the implementation of international targets on oceans, coasts, and small island developing states (SIDS), especially those related to the 2002 World Summit on Sustainable Development (WSSD), the Millennium Development Goals (MDGs), and other related agreements.

Assessment of Progress Achieved on World Summit on Sustainable Development Targets and Millennium Development Goals

Participants at the Third Global Conference agreed that progress toward implementation of global targets related to oceans, coasts, and islands has been slow, but there are some promising developments. Conference panelists and participants noted that:



Biliana Cicin-Sain, Co-Chair and Head of the Secretariat, Global Forum on Oceans, Coasts and Islands said the Conference provided a forum for a dialogue across regions. She said the discussions gave a mixed picture on WSSD targets and MDGs implementation and stressed the lack of data on this implementation.

- The targets of eliminating illegal, unreported and unregulated fishing, and fishing overcapacity by 2004 and 2005 have not yet been met, and 75% of fish stocks are classified by FAO as fully exploited, over exploited, or depleted. Participants said that while the WSSD targets had been set unrealistically early, there was particular concern over insufficient national actions implementing the fisheries targets. Participants did note that there has been recent promising action by several nations and also at the international level as some efforts have been launched to improve progress towards these targets.
- In many of the poorest countries, a cycle of extreme poverty coupled with excessive exploitation of the environment needed for survival still prevails, contributing to marine pollution, as the United Nations Special Advisor Jeffrey Sachs told the conference.
- SIDS, which have stewardship over vast ocean areas, are having difficulty enforcing conservation policies and controlling development in their marine environment due to logistical and financial constraints which have worsened due to declines in overseas development assistance.
- The goal of establishing representative networks of marine protected areas by 2012 will not be met until 2085 at the present rate of designation, according to a study discussed at the conference. Fortunately, some countries, such as Australia, Palau, the Cook Islands, and Costa Rica, have made significant progress in establishing marine protected areas with a view toward protecting marine and coastal biodiversity.
- Although half of the world's 43 SIDS, as well as a number of other countries, have adopted ecosystem-based management and coastal and ocean management programs, no international organization is responsible for tracking progress in the establishment of these programs. In addition, there is no regular collection of information on the social and economic well-being of coastal communities.
- While there are now more than 700 Integrated Coastal Zone Management initiatives in more than 90 nations around the

world, there are no standardized evaluation criteria for measuring their performance in achieving the MDG and WSSD goals, although there are efforts towards this direction.

- Sixty states have initiated national plans of action to address land-based sources of marine pollution under the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, which accounts for 80% of marine pollution.
- Regarding the implementation of Integrated Water Resource Management, encompassing both marine and land-based management: 14 countries demonstrated “good progress,” 51 have “taken some steps,” while 43 are in the initial stages of implementation.
- South-South cooperation on marine issues among SIDS has been increasing, notably with the establishment of a Consortium of Universities linking the Pacific, Caribbean, and Indian Ocean regions.
- The establishment of a process for regular, global reporting on, and assessment of, the marine environment, including socio-economic aspects - the Global Marine Assessment (GMA) - initially set for 2004, has finally taken off after initial delays related to differences in opinion among the countries concerned.
- According to the U.N. Millennium Project, urgent action is needed to achieve the MDGs, but it remains to be seen if sufficient action has occurred to move closer towards their achievement. Much effort has been put into the development of indicators to measure achievement toward the targets and goals, but little emphasis has been placed on oceans, coasts, and coastal populations.

Special Topics Discussion

Linking Freshwater to Oceans.

During the Third Global Conference, there was much emphasis on the need to link freshwater and coastal issues. There was particular focus on progress toward the implementation of the UNEP Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and preparations for the GPA Intergovernmental Review (IGR-2). Discussions largely concentrated on the need to address these interlinkages at two upcoming events, the 4th World Water Forum (WWF4) and the IGR-2. The meeting participants further agreed to suggest paragraphs on freshwater to oceans themes for inclusion in the Ministerial Declaration for the WWF4. It was ultimately recommended that the freshwater and oceans communities should create stronger partnerships, for example through collaboration between the Global Forum and the Global Water Partnership.

The Tsunami Disaster and Disaster Preparedness. Conference panelists and participants discussed the lessons learned from the December 2004 Indian Ocean Tsunami, including discussion of why some areas were impacted less severely than others. It was noted that the severity of impact varied considerably according to the specific physical parameters of the shores, and, as part of the process of risk assessment, there is a need for detailed mapping. In addition, efforts should be made to conserve and wherever possible rehabilitate mangroves, sand dunes and coral reefs as they provide a natural barrier against tsunamis and storm surges. In general, no effective warning systems were in place at the time of the December 2004 event. There are many basic education measures that can be undertaken without great cost, such as inclusion of hazard awareness and emergency procedures in high risk coastal communities. Putting in place well-co-

Global Conference Statistics

Total participants: 403

From:

78 countries (33% developing countries; 29% developed countries; 27% SIDS; 10% countries in transition)

38 Ministers/High Level participants

Background of participants:

33% from government organizations

30% from NGO and academic sector

24% from international organizations

7% from private sector

6% from journalism sector

ordinated emergency plans that are rehearsed by local authorities and communities is paramount, though the difficulty of maintaining the necessary level of awareness over the long-term is acknowledged. Participants emphasized the need for nations and local authorities to establish strategic land-use planning and implementation in the context of integrated coastal management.

Sustainable Development in Small Island Developing States.

A key aspect of the SIDS discussions at the Conference focused on efforts to implement the 2005 *Mauritius Strategy for the Further Implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States*. Discussions also recommended the formal institutionalization of the Alliance of Small Island Developing States (AOSIS) and the need to promote coordination, integration, and communication at the global, interregional, regional, national, and local levels for the implementation of the Mauritius Strategy. It was also noted that there is a need to deploy additional resources to assist in these efforts.

Linking National and Regional Efforts in Ocean and Coastal Management. African Perspectives. Panels and discussions related to ocean and coastal management in African

nations covered identification of next steps needed to further develop capacity and programs in coastal and ocean management, as well as ways to achieve synergy among existing regional and national efforts. Suggestions included the need to: build partnerships within the region and to use local expertise; strengthen African Universities and technical institutions to create a critical mass of ocean and coastal professionals; assist with boundary delineation of EEZs and continental shelves; promote a culture of transparency and disclosure among ocean users (industry, governments, development partners and civil society); and promote corporate responsibility through partnerships to address equitable benefit sharing from ocean use agreements.

Capacity Development. A variety of recommendations to improve capacity for ocean and coastal management were discussed at the Conference, including the development of ocean strategy workshops for decision makers, initially focusing on SIDS senior government executives; the promotion of South-South cooperation and exchange through: 1) the exchange of existing educational materials and curricula through an e-library or clearing house, and 2) the strengthening of the ocean and coastal components of the SIDS University Consortium and other regional scientific networks. A proposal to create a UN Goodwill Ambassador for the Oceans was also made.

Improving High Seas and Deep Seabed Governance. The panel and multi-stakeholder dialogue sessions on governance of areas beyond national jurisdiction were led by a Working Group which approached the issue from an ecosystem perspective and addressed issues relating both to the high seas and to the deep seabed, in particular, governance of high seas fisheries and genetic resources of the deep seabed. There were a number of suggestions for

further work, including improvement of regional governance arrangements (i.e. Regional Fisheries Management Organizations) and examination of public-private partnerships for marine biotechnology research. During the Conference, it was agreed that the Working Group would continue on as a “knowledge network” and would also consider the need for further research and analytical work. The session outcomes were presented at the UN Ad hoc open-ended informal working group to study issues relating to the conservation and sustainable use of marine biodiversity beyond national jurisdiction in February 2006.

Climate and Oceans. The Conference addressed the interlinkages between climate and oceans, and Conference participants discussed the fact that climate change mitigation is a major challenge, which includes energy, economic, technological, and development policy. The emerging threat of ocean acidification was also discussed due to concerns that it could undermine the marine food web and preclude coral development, among other things. Panelists noted that it is now apparent that, on top of pollution and overfishing, climate variability and change, including acidification, may pose significant threats to the productivity of oceans. The challenge is to understand the complex processes related to oceans and climate change and to develop adequate policies. It was also noted that on a global and regional level, climate change science and policy need to be inserted into the oceans agenda, and oceans science and policy need to be inserted in the climate agenda.

Follow-up Activities of the Global Forum

The Conference Co-Chairs Report, incorporating an assessment of progress on the oceans targets of the WSSD and MDG, will be released in June 2006. In addition, follow-

ing discussions at the Third Global Conference, several new efforts are underway. These include:

- Anticipation of important ocean issues that will be the subject of UN negotiations in the next decade, and preparation of policy analyses and multistakeholder policy dialogues before the negotiations to clarify the issues, develop options, lay out various perspectives, and identify possible avenues for consensus building among disparate interests.
- Focus on ocean use agreements (for oil and gas, fisheries) in developing country contexts, such as in African EEZs, with a view to enhancing local benefits, transparency, and environmental sustainability.
- Collaboration with SIDS nations in the implementation of the Mauritius Strategy, especially: collaboration with the SIDS University Consortium to enhance capacity development in ocean and coastal management and development of ocean strategy workshops for high-level SIDS decisionmakers.
- Development of a cooperative work program between ocean institutions and freshwater institutions to enhance oceans/freshwater linkages at global, regional, national, and local levels.
- Policy analyses and multistakeholder dialogues on issues related to marine areas beyond national jurisdiction.
- Development of a Media Roundtable, akin to the Business and Industry Leaders Roundtable and the Ocean Donors Roundtable.

THE ECOSYSTEM APPROACH TO INTEGRATED OCEAN AND COASTAL MANAGEMENT

Summary prepared by Charles Ehler, The World Conservation Union – World Commission on Protected Areas (IUCN-WCPA) and Chua Thia-Eng, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)



Integrated Ocean and Coastal Management and the Ecosystem Approach were considered throughout the Third Global Conference, and in particular through several dialogue sessions including the bottom line assessment dialogue chaired by Charles Ehler, IUCN-WCPA and Chua Thia-Eng, PEMSEA.

Background

The Johannesburg Plan of Implementation (JPOI) includes several goals relating particularly to the ecosystem approach and integrated management. These goals include:

- Encouragement of the application of the ecosystem approach by 2010 for the sustainable development of the oceans, particularly for the management of fisheries and the conservation of biodiversity.
- Promotion of integrated coastal and ocean management at the national level and encouragement and assistance to countries in developing ocean policies and mechanisms on integrated coastal management.
- Assistance to developing countries in coordinating policies and programmes at the regional and sub-regional levels aimed at conservation and sustainable management of fishery resources and implementation of integrated coastal area management plans, including through the development of infrastructure.

Ecosystem approaches, as adopted by many multi-lateral environmental agreements, provide an important framework for assessing

biodiversity and ecosystem services and evaluating and implementing potential responses. The Convention on Biological Diversity (CBD) refers to the ecosystem approach as “a strategy for the integrated management of land, water, and living resources that promotes conservation and sustainable use in an equitable way.” Application of the ecosystem approach involves a focus on the functional relationships and processes within ecosystems, attention to the distribution of benefits that flow from ecosystem services, the use of adaptive management practices, the need to carry out management actions at multiple scales, and inter-sectoral cooperation. A number of other established approaches, such as integrated water resources management and integrated ocean and coastal area management, are consistent with the ecosystem approach and support its application in various sectors or biomes, including coastal and marine environments.

In fact, the application of ecosystem approaches in the marine and coastal areas builds on the concept of integrated management, already widely used for the management of these areas. Integrated management involves comprehensive planning and regulation of human activities towards a complex set of multiple,

and often conflicting, objectives and aims to minimize user conflicts among uses and users while ensuring long-term sustainability. It recognizes the need to protect the ecosystem taking into account the effects of multiple uses, and acknowledges the limitations of the sectoral approaches and the linkages between inland, coastal and ocean uses. The ecosystem approach is an evolution of integrated coastal and ocean management, with a greater emphasis on ecosystem goals and objectives and their outcomes. Moving to an ecosystem approach should be considered an evolutionary step in integrated management and action, not a break with the past.

The most important direct driver of change in marine ecosystems over the last 50 years has been fishing, which affects the structure, function, and biodiversity of the oceans. *Fishing pressure is so strong in some marine systems that over much of the world, the biomass of fish targeted in fisheries (including that of both the target species and those caught incidentally) has been reduced by 90% relative to levels prior to the onset of industrial fishing.* In these areas, a number of targeted stocks in all oceans have collapsed – having been over-fished or fished above their maximum sustainable levels.

Recent studies have demonstrated that global fisheries landing peaked in the late 1980s and are now declining despite increasing effort and fishing power, with little evidence of this trend reversing under current practices.

On 21 March 2005, over 200 academic scientists and policy experts signed a consensus statement on the definition of marine ecosystem-based management (EBM): (1) emphasizing the protection of ecosystem structure, functioning, and key processes; (2) defining EBM as place-based or area-based in focusing on a specific ecosystem and the range of activities affecting it; (3) explicitly accounting for the interconnectedness within systems, recognizing the importance of interactions between target species or key services and other non-target species; (4) acknowledging interconnectedness among systems, such as between air, land, and sea; and (5) integrating ecological, social, economic, and institutional perspectives, recognizing their strong interdependence.

Several countries (e.g. Canada, Australia, and the United Kingdom) have begun to apply an ecosystem approach to large areas of their marine waters, including using marine spatial planning as a tool for implementing an ecosystem approach and the development of sea use plans. In 2004 UNEP's Regional Seas Programme agreed to promote a common vision and integrated management, based on ecosystem approaches, of priorities and concerns related to the coastal and marine environment and its resources.

By far, the most extensive applications of the ecosystem approach are the Large Marine Ecosystem (LME) projects funded by the Global Environmental Facility (GEF) that aim to develop sub-regional cooperation toward ecosystem-based management of marine resources. LMEs represent a pragmatic way to assist over 120 countries in

operationalizing the ecosystem approach within an area sufficiently large to include trans-boundary considerations. The projects cover the Red Sea and Gulf of Aden, the Mediterranean, the Black Sea, the Baltic Sea, the Patagonian Shelf, the Benguela Current, the Guinea Current, Pacific small island developing states, the Yellow Sea, and the South China Sea/Gulf of Thailand. Projects are under preparation for the Canary Current, the Caribbean, Agulhas and Somali Currents, Bay of Bengal, the Humboldt Current, and the Gulf of Mexico.

Despite contemporary definitions of ecosystem management that include humans (and which recognize that ecosystem management is actually the management of human activities that affect ecosystems and not the management of ecosystems or their natural components), *many projects that take an ecosystem approach do not take humans into account*. One example of an exception is a World Bank project in Tanzania and Zanzibar (Marine and Coastal Environmental Management Project (MACEMP) or "Blueprint 2050") that tackled the problem of ecological protection, marine protected area network design (protection of 10% of its seas by 2012 and 20% by 2025), while at the same time alleviating poverty and ensuring financial sustainability for the project.

Another gap in implementing ecosystem-based management is the lack of monitoring data for key ecological and socio-economic indicators at ecosystem scales, including lack of baseline data. Only a few large marine ecosystems have systematic, long-term data about status and trends of natural and social systems. With regard to coastal communities, there are no periodic assessments of socio-economic conditions, making it impossible to measure progress on the MDG goal of alleviating poverty in the context of coastal areas.

Integrated coastal and ocean management (ICM) has been the recommended framework for dealing with coastal issues under the UN Conference on Environment and Development (1992), including Agenda 21, the Rio Declaration of Principles, the Climate Change Convention, the Biodiversity Convention, the Global Programme of Action on the Protection of the Marine Environment from Land-Based Activities, and the Programme of Action for the Sustainable Development of Small Island States. Because of this international guidance and subsequent investments of substantial resources by international donors, ICM has now been implemented in about 100 countries around the world. However, many of these initiatives have been focused on estuaries and small areas of coasts instead of national programs. Successful pilot projects should now be scaled up to national efforts on ICM.

Integrated oceans management, incorporating the 200-mile Exclusive Economic Zone (EEZ), entails the development of new concepts, procedures, and structures, and as such, nations could benefit from working with one another, sharing and drawing on lessons and best practices. As they embark on national ocean policy formulation, many nations, in particular small island developing states (SIDS), will need assistance in mapping and delimiting their EEZs and developing new institutions and procedures. A recent analysis of national actions taken towards the Barbados Programme of Action (Loper et al. 2005) indicates that integrated coastal management programs have been established only in a few SIDS countries in the last decade, thus making this area a top need for the next phase. At *The Ocean Policy Summit* held in Lisbon, Portugal, October 10-14, 2005, about 40 countries reported on their efforts to develop integrated ocean policies to deal with multiple use conflicts among uses, users, and management

agencies, degradation of marine resources, and missed opportunities for economic development. These different national policies are remarkably congruent in terms of overall principles and most recognize the need for transparency, public and stakeholder involvement, incentives for cooperative action, and a national ocean office with clearly articulated responsibilities. The GEF is also supporting initial development of regional ocean policies focusing on shared transboundary resources in 15 Large Marine Ecosystems (LMEs).

Regional organizations, such as UNEP's Regional Seas Programme, have a very useful role to play in assisting states in developing national policies for their oceans. Significant work along these lines is already taking place in the Pacific Islands region, the East Asia region (through Partnership in Environmental Management for the Seas of East Asia (PEMSEA) and with GEF funding), the Asia Pacific Region (through APEC), and through the European Union. With over 30 years of experience, UNEP's Regional Seas Programme and its partners encompass 18 marine regions and include participation by over 140 coastal states and territories. Fourteen regional conventions have been signed and over 20 protocols addressing oil spill response, pollution from ocean dumping, and pollution from land-based sources have been ratified. While initially focused on offshore issues, over the past 20 years, the Regional Seas Programme has increasingly worked on coastal management and coastal governance. Most recently, the Mediterranean Regional Seas Programme has drafted a protocol on integrated coastal management. An interesting and productive development has been a recent partnership between the Regional Seas Programme and Large Marine Ecosystem projects funded by the GEF to bring a more focused ecosystem-based approach to the Regional Seas Programmes.



Conclusions

Both ecosystem management and integrated coastal and ocean management adopt a holistic, integrated approach covering both environmental and socio-economic dimensions, and are basically similar; however, the scale of operation and level of management intervention might vary with respect to geographical scale. There has been a marked increase in the application of the concept of ecosystem-based management and integrated coastal and ocean management in addressing cross-cutting environmental and sustainable development issues worldwide. Financial support from GEF and multilateral and bilateral institutions has contributed to the increased efforts in applying this concept and approach at subnational, national, and regional levels. To date, though, most efforts tend to be at the level of studies and projects, focusing on planning and exploratory stages – in particular those related to LME and integrated coastal management at the local level – with few of the projects moving to actual implementation.

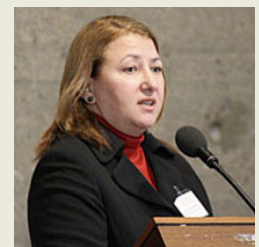
A promising development is the application of terrestrial land use planning techniques to marine areas, e.g. sea use planning and zoning; new efforts to develop marine spatial plans (sea use plans) and marine zoning in the North Sea (Belgium, The Netherlands, and Germany), the Irish Sea (UK), and Xiamen (China) are all prototypes that integrate coastal and ocean management.

The difficult job of measuring progress on implementing the WSSD and Millennium Development Goals related to ecosystem

management and integrated coastal and ocean management is even more challenging, because no one institution is responsible for tracking developments in these areas. While there are now more than 700 ICM initiatives in more than 90 nations around the world (Sorenson 2002), there are no standardized evaluation criteria for measuring their performance in achieving the MDG and WSSD goals, although there are limited efforts toward this direction.

In addition, no international organization is responsible for tracking the progress of ICM planning and implementation activities, and, therefore, monitoring and evaluation progress is carried out on an ad hoc basis. International coordination is one of the major difficulties confronted in the implementation of action plans for integrated management of large marine ecosystem or coastal and marine areas due to the typical lack of existing agencies with the mandate or function to coordinate coastal and ocean management issues. Although some countries have made progress in achieving inter-ministerial or interagency arrangements at the national level, the efficiency, effectiveness, and benefits of such institutional arrangements have yet to be fully demonstrated.

While there are relatively few successful case studies in integrated coastal management that stand the test of time (e.g. more than a decade of operation), sufficient experience and lessons have been ac-



Ellen Pikitch, Pew Institute for Ocean Science, introduced the Report on the UN Millennium Project and listed the obstacles to and recommendations for achievement of environmental sustainability.



On benefiting people and coastal communities through ecosystem management, Indumathie Hewawasam, World Bank, stressed that if ecosystems are managed wisely, pro-poor growth and poverty reduction are possible.

quired to allow the application of the driving forces of integrated management for addressing use conflicts, environmental quality degradation, habitat damage, coastal erosion, adaptation to climate change, and many other environmental threats, thus enabling local and regional authorities to achieve environmental sustainability and the goal of sustainable development.

With the increase of use conflicts in coastal and marine areas, severity of pollution, and heightened threats of dwindling marine resources, more countries will be looking to the application of integrated management models for solutions. It is an opportune time to intensify international efforts in the development of working models and good practices in integrated coastal and ocean management. In addition, interagency/inter-ministerial coordination is a major obstacle that requires strong political will and appropriate incentives to develop the willingness among agencies or ministries to work together.

The Strategic Action Programmes of Large Marine Ecosystems, as well as those at the local level, provide useful management frameworks and processes for intergovernmental, interagency, and cross-sector partnerships and cooperation at the regional, national, and sub-national levels. They also provide a useful platform for developing strategic partnerships among various multilateral and bilateral financial institutions, as well as donor communities, in mobilizing the needed financial resources for environmental improvement projects, capacity development, and implementation of international instruments.

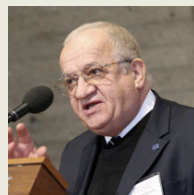
While a timetable exists for applying the ecosystem approach (2010), no similar target exists for promoting integrated coastal and ocean management at the national level. A timetable for ICM should be established.

Finally, individual nations are increasingly asked by international organizations to develop and implement programs that deal with coastal and ocean management, land-based pollution, integrated water resources management, fisheries, networks of marine protected areas, adaptation to climate change, and so on – usually with little or no additional financial support. Guidance on figuring out how to coordinate, integrate, or “nest” these various international commitments and demands should be developed. A more active role by the Regional Seas Programme in coordinating these requirements could be a way forward.

Recommendations to National Governments:

- Adopt integrated coastal and ocean management/ ecosystem-based management approach and frameworks to address use conflicts, transboundary issues, resource depletion and environmental degradation with adequate consideration of the socio-economic dimensions of the coastal communities and their active participation throughout the management process;
- Address interagency conflicts at national and sub-national levels through the development of inter-ministerial or interagency coordination mechanisms to enable the integrated planning and implementation of policy and management interventions for addressing the increasing depletion of their coastal and ocean resources; and

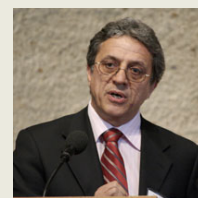
Awni Behnam, International Ocean Institute (IOI), argued that a partnership approach, including all stakeholders and emphasizing information sharing, is essential to the proper enforcement and implementation of oceans, coasts and islands conventions.



- Increase capacity development in the areas of coastal and ocean governance to develop a critical mass of coastal and ocean managers at local and national levels to plan and manage their coastal resources.

Recommendations to the International and Donor Communities:

- Develop more case studies to demonstrate the effectiveness of an integrated management approach, in particular, demonstrating the socio-economic benefits of such approaches in achieving environmental sustainability;
- Develop an appropriate and tested monitoring program to track the performance of integrated coastal and ocean management/LME programs/projects at the international level; and
- Pool resources in developing strategic partnerships using ICM/ecosystem management as the integrated framework and processes to provide a policy environment at local and national levels to enable the effective mobilization and utilization of the financial resources in achieving the goals of sustainable development.



Hamid Ghaffarzadeh, Project Manager, Caspian Environment Programme, said the ecosystem approach should include socioeconomic considerations, including emphasis on the cost of environmental degradation.

Salif Diop, UNEP, elaborated on the work of, and challenges faced by, the steering committee of the Global Marine Assessment.



GLOBAL ENVIRONMENT FACILITY AND ECOSYSTEM-BASED MANAGEMENT

Alfred M. Duda, Senior Advisor, International Waters
Global Environment Facility



Introduction

Interlinked crises of freshwater depletion, food insecurity, pollution loading, and ecosystem decline stand in the way of poverty reduction and sustainable development. These crises are made worse by changes in climatic regimes and associated disasters from floods, droughts, and storms that further marginalize the world's 2.7 billion people living in poverty. The planet's oceans and their coastal interfaces are especially at risk with livelihoods, food security, international trade, and relations among sovereign nations are all at stake. Increased vulnerability of burgeoning coastal urban areas and the expanding footprint of coastal resource depletion are becoming increasingly significant economic liabilities. It is precisely at the coast that unsustainable development is creating the most risk for stability, security, and economic progress.

Traditional sector-by-sector development strategies at the coasts of both developed and developing nations have exacerbated the situation. Traditional development strategies fail to recognize the importance of maintaining natural ecosystems for their value as life and economic support systems for our societies, and the need to adapt to change is often ignored until disaster strikes. When problems arise, specialists often handle them thematically rather than in an integrated, place-based fashion that some might term "ecosystem-based approaches." Actions in economic sectors such as fisheries

and environmental themes such as pollution constitute ways in which our societies work. However, the crisis of oceans, coasts, and small island developing states (SIDS) will just get worse unless place-based, ecosystem approaches to environmental management are part of the desired transition to sustainability.

Global Environment Facility

Global commitments that have been agreed to since 2000 at Doha, Monterrey, and Johannesburg represent the potential for a political turning point in reversing the degradation of coastal and marine ecosystems. International finance institutions, bilateral donor agencies, international organizations, and governments of the North and South all must realign their policies and programs if progress is to be made. Since 1992, the Global Environment Facility (GEF) has supported countries in addressing Chapter 17 of Agenda 21. Many thematic actions GEF has supported on a pilot basis have been incorporated into the WSSD Plan of Implementation (POI), and, in early 2003, GEF adjusted its strategic priorities to align with WSSD goals.

The GEF is an international financial entity that unites its 176 member governments in partnership with its three implementing agencies (UNDP, UNEP, and the World Bank), a number of executing agencies, NGOs, and the private sector to address global environmental con-

cerns while supporting national sustainable development initiatives. While best known for serving as the financial mechanism for global conventions such as the conventions on biological diversity and climate change, it also addresses concerns of oceans, coasts, and SIDS in its international waters focal area. GEF realigned its priorities with the outcomes of WSSD in 2002 and in the international waters areas has been aligned with Chapter 17 of Agenda 21 since Rio. Since 1992, GEF has approved 58 projects addressing oceans, coasts, and SIDS in international waters for \$553 million GEF and \$2.34 billion in total cost as well as 67 projects in its biodiversity focal area for \$384 million from GEF and \$1.43 billion in total cost for some 134 countries supporting marine ecosystem interventions described in paragraphs 30-34 and 58 of WSSD's POI.

Large Marine Ecosystems (LMEs)

In 1995, the GEF Council included the concept of LMEs in its Operational Strategy as a vehicle to foster ecosystem-based approaches to the management of coastal and marine resources and address the land-sea interface. LMEs are regions of ocean space encompassing coastal areas from river basins and estuaries to the seaward boundaries of continental shelves, enclosed and semi-enclosed seas, and the outer margins of current systems. They are large regions on the order of 200,000 km² or greater, characterized by distinct

bathymetry, hydrography, productivity, and trophically dependent populations. LMEs are where land-based pollution occurs, habitat losses are evident, ports are located, and 93% of all marine fisheries are harvested.

The GEF uses LMEs as units for facilitating integration across sectors, developing adaptive management frameworks with site-specific targets, and providing tools for engaging stakeholders. This allows sound science to inform policy-making and provides a practical approach to build trust and confidence among governments as well as integrated approaches across sectors. Without place-based participative processes engaging governments and stakeholders in understanding what is needed for integrated management and building capacity to implement these activities, marine science has often remained confined to the science community or has not been embraced in policy-making. With GEF assistance, 121 different nations are cooperating to improve place-based management for 12 LMEs, with projects for another 4 LMEs under preparation. GEF projects illustrate interventions at different scales as part of its ecosystem-based approach to address World Summit on Sustainable Development (WSSD) targets.

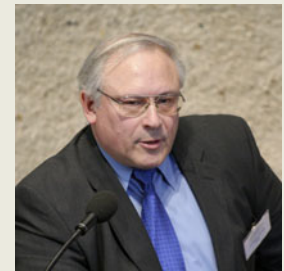
Developing Partnerships for Actions at Different Scales

For the GEF, LMEs represent a pragmatic way to assist countries in getting started in operationalizing the “ecosystem approach” with an area sufficiently large to include transboundary considerations. GEF also utilizes support at other appropriate geographic scales ranging from integrated coastal management (ICM) for individual municipalities to support in its biodiversity focal area at the specific reef or coastal ecosystem scale for protected areas or community-based sustainable use. Sector-specific demonstrations with fisheries, pollution reduction, and

ship contaminants complement this place-based approach. Scaling between the LMEs and ICM or individual biodiversity sites determines which GEF focal area is appropriate so that both transboundary resources and globally significant biological diversity are addressed.

We need to develop long-term, place-based partnerships for enacting reforms among countries of the South and the North that use particular areas of sea space and adjacent basins. Without this integrated approach working at several scales of action, there is little chance to meet Millennium Development Goals (MDGs) and WSSD targets. Adopting such science-driven, ecosystem-based approaches to managing human activities involving coastal/marine systems takes time, capacity, and money. It must also be integrated with poverty reduction and climate change adaptation efforts.

Through the GEF, countries are cooperating in establishing adaptive, joint management institutional structures with their own LME and ICM-specific ecosystem targets to track on-the-ground progress related to the WSSD goals. The broad WSSD targets are important to achieve, but more customized, focused targets adopted by GEF projects may be useful to stimulate action. The GEF is bringing the North and South together around their shared LMEs to jointly adopt reforms and undertake pilot investments through a new modality known as a GEF Strategic Partnership. This is a tool for achieving coherence in development assistance funding. Currently, the GEF has approved 3 of these partnerships: (a) 16 basin countries of the Danube/Black Sea LME, (b) land-based pollution reduction for the 5 LMEs of East Asia, and (c) sustainable fisheries for the 5 LMEs of Sub-Saharan Africa. A fourth partnership for the Mediterranean Sea LME is under final preparation. These Strategic Partnerships are based on country-driven action programs aimed at particular targets. It has been the GEF



Al Duda, Senior Advisor, International Waters, GEF, outlined GEF support at different scales for large marine ecosystems (LMEs).

position since the Johannesburg Summit that long-term, ecosystem-based partnerships among rich and poor nations sharing benefits from particular land/sea spaces are necessary to meet sustainable development goals.

Our planet’s fragile oceans and coasts are too economically and socially valuable to allow resource depletion to continue and threats to sustainability to rise. Many coastal communities and nations are simply living on borrowed time before the \$60 billion dollar annual international trade in fisheries collapses, depleted groundwater supplies for coastal cities run dry, changing climate swamps coastal communities, and burgeoning coastal urban populations overwhelm their degraded and polluted natural resource base. Action is needed yesterday, not tomorrow.

SPECIAL PRESENTATION: POVERTY REDUCTION AND ENVIRONMENTAL SUSTAINABILITY MILLENNIUM DEVELOPMENT GOALS: WHY IS SO LITTLE PROGRESS BEING MADE?



**Dr. Jeffrey Sachs, Director, Earth Institute at Columbia University
and Director, UN Millennium Project and Special Advisor to
the UN Secretary-General on the Millennium Development Goals**

Dr. Jeffrey Sachs is the Director of the Earth Institute at Columbia University and serves as the Director of the UN Millennium Project and Special Advisor to UN Secretary-General Kofi Annan on the Millennium Development Goals. In 2004 and 2005 he was named among the 100 most influential leaders in the world by Time Magazine, and is the 2005 recipient of the Sargent Shriver Award for Equal Justice. His recent book, *The End of Poverty: Economic Possibilities for Our Time*, addresses issues of divergent global economic conditions which have resulted in debilitating poverty in many parts of the world and seeks to encourage sustainability despite these conditions.

Dr. Sachs gave the special presentation on reducing poverty and environmental sustainability to the Third Global Conference on Oceans, Coasts, and Islands live by video link.

International goals should be stated and have actual follow through, implementation, and achievement, which certainly applies to the Millennium Development Goals, as it does to almost every environmental objective that we have for the planet. We are having a very hard time following through on our very nice words. This is certainly the case across the board in environmental matters, but it is also certainly the case across the board in poverty reduction issues. If you put those two pieces together, the environment and poverty, which are so inextricably linked with causation running in both directions from poverty to environmental degradation and environmental difficulties to an increase in poverty, there's a tremendous amount of neglect and an inability to move forward on promises that have been made.

Among the Millennium Development Goals themselves, goal number seven is environmental

sustainability. It was recognized by the adopters of the Millennium Development Goals, in September 2000, that there could not be a fight against poverty without a fight for environmental sustainability. As a practical matter, and as someone very much engaged day-to-day in watching national policy making, the environmental component of the fight against poverty is probably the most neglected of all of the aspects of the Millennium Development Goals. This has many reasons, but even the basic structure of governance in poor countries leaves the environment minister far out of the inner circle of these concerns. The inner circle of concerns center on the budget and go out to some core ministries, with the environment minister typically on the outskirts of power. This means that, in the core documentation of poverty reduction strategies, including those that the IMF and the World Bank are so engaged in - the poverty reduction strategy papers (PRSPs), the envi-

ronment is almost inevitably a deeply neglected factor that sometimes does not appear at all. This is in the context of massive coastal erosion, destruction of mangrove areas, destruction of corals, over fishing, toxics, you name it - these issues often do not even appear in national policies to a very large extent. In our reviews and our continuing work - I just got back from a six country tour in Africa- this remains the case. We are not succeeding in integrating environmental thinking into national development strategies.

There are at least four factors that we should keep in mind. First is the syndrome of the poorest of the poor, of which I want everyone to be very conscious. The poorest of the poor comprise at least one billion people on the planet. Those that are way off track in achieving the Millennium Development Goals are literally struggling for survival every day. While they depend on the environment, they are pretty much systematically mining the environment.

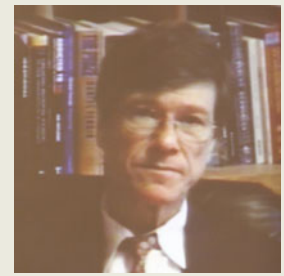
They are not building environmental capital, but depleting it as a desperate part of staying alive. I've just been in rural areas, as I mentioned, in six countries- Kenya, Malawi, Ghana, Mali, Nigeria, and Senegal- and everywhere, the environmental degradation is preceding deforestation in coastal areas. In Senegal, where I was a couple of days ago, a tremendous population increase is putting great pressure on coastal resources, and the communities do not have the wherewithal to save for environmental conservation. Soils are being depleted of nutrients, landscapes are being degraded, forests are being cut down, fisheries are being depleted, and, even when it's understood that vital resources such as Lake Victoria, on which hundreds of millions of people depend for their nutrition, for their livelihoods, for their long-term well-being, there's very little ability to make investments in these poorest countries. That is item number one that I would stress; the iron law of extreme poverty is environmental mining simply to survive. Without more help for the poorest of the poor, we will not turn the corner on environmental degradation. This is not only a matter of their awareness; it is a matter of the brutal realities of extreme resource deprivation.

Second, of course, are vested interests. Wherever one finds poor country settings, areas of natural resource wealth, including coastal or fisheries wealth, powerful interests definitely out compete long-term sustainability interests. This is true of fisheries and the arrangements made between African countries and powerful fisheries countries. There is a very big problem of the ability to put the long-term sustainable agenda in front of very powerful short-term financial claims; and we're not succeeding in that area either.

Third, global economic pressures are phenomenal and they are not going away. The successful developing countries, the Asian countries

that are achieving so much growth, are adding increasing environmental stress, in addition to the existing enormous environmental stresses coming from the consumption in very wealthy countries. Global forces are only conducive to even more environmental degradation, because we have not been able to delimit conservation areas and protected areas, among others, that we have been discussing for so long, but have yet to be implemented.

The fourth point, in addition to extreme poverty, to the vested interests, and the powerful global drivers, is the lack of scientific knowledge in the poorest countries - the lack of mobilization of the best science to even understand the ecosystem dynamics. Most of these countries are presently overwhelmed with the daily tasks of governance, much less the tasks of achieving basic economic development goals, much less the task of understanding complex interactions of climate change, environmental pollution, economic drivers, changing nutrient load cycles, demographic dynamics, exotic species introduction, pathogens, and the whole host of interconnected ecological phenomena that are impinging on these countries. In short, one of the reasons why these factors are not included in poverty reduction strategies is that the scientific base to say 'here's what's happening in this area of your country,' to understand how climate change, demographic pressures, and economic pressures are interacting to produce these outcomes, simply does not exist right now in a concerted and consistent way at the national level. Most of these governments do not have science advisory councils, much less ecological advisory units that can actually help them in these areas. Creating on-going scientific networks on these issues that scale down to country level in low-income settings would be extremely useful as well. In other words, getting ecosystem assessments not only at the global scale that tell us all of the fish-



Addressing the conference via a live video connection from Africa, Jeffrey Sachs, Director, Earth Institute at Columbia University, Director of the UN Millennium Project and Special Advisor to the UN Secretary-General on the MDGs, argued that despite the plethora of statements, goals and laws aimed at poverty reduction and environmental protection, there is little follow through on work programmes.

eries disasters, but right down to the conditions in coastal Senegal or coastal Ghana or coastal Kenya so that these are regularly being monitored and reviewed is crucial. We need a regular cycle of global scale ecosystem assessments, but ones that scale down to national level quite systematically. It's an expensive proposition, but I can't think of a better investment in applied science than this one, and, as far as I can see it, also is not presently applied.

I've just written a book about the end of poverty, not about the expansion of poverty, because, I believe, we have very powerful tools to make a change. I'm not meaning to give a short intervention of doom and gloom, but it is to alert the ecological community that is represented in the room of the realities that exist. We are not at all on track to get these considerations into national policy-making. It's just not happening, and it's a very serious problem. Governments do not know how to do it, they can't face the vested interests, and they can't keep these problems in the forefront when the pressure of daily life and demographic pressures are so extreme. I've been, of course, trying to think of any ways that I can to put this into decision-making right now. One thing that

Walt Reed and I have recently taken up the idea of trying to build on the Millennium Ecosystem Assessment and the Millennium Project Report as two absolutely convergent visions to these challenges. We have taken the idea of trying to build up a Millennium Ecosystem Fund to help very poor countries mobilize the expertise they need to address these issues within their national development strategies. They literally can't do this right now; and they don't do it. Even if a few donors would come forward and just build an adequate fund of some tens of millions of dollars merely to provide the wherewithal to get this kind of analysis systematically into the forefront - in front of the finance minister who needs to understand it, in front of the IMF which needs to understand it and absolutely has no idea about it, unfortunately, and into the World Bank's thinking. All of this could make a difference in getting a seat at the table for these issues when budgets are allocated and when donor assistance is discussed. So that is issue number one in my view - we've got to get all of these environmental considerations into national development strategies, year-by-year, systematically, and help these countries.

On all of the Millennium Development Goals, we face the funda-

mental challenge that there are a lot of nice words and pretty much all promises that need to be made have been made. However, we are way off track on actually doing what needs to be accomplished. It's just not happening, and we're not able to turn these words into substantive action, get the feedback, and get the follow through. The reason I'm an optimist is that we have such powerful tools, such powerful interventions, whether it's in food production or disease control or environmental management and environmental engineering, that problems that might appear insurmountable, in my view, are actually quite addressable. We could get disease burdens down sharply, we could preserve habitats that are under tremendous stress, but it will not happen on its own, market forces are certainly not going to do it, and the poorest of the poor cannot do it by themselves. There is just not a prayer in the world that they can do this on their own. No matter how many lectures or speeches are given, they need resources both to do analyses and rise above the mere survival level to a margin in which they can invest in the long-term future.

*Transcribed by: Amanda Wenczel,
Global Forum on Oceans, Coasts,
and Islands.*



AFRICAN PERSPECTIVES ON LINKING NATIONAL AND REGIONAL EFFORTS IN OCEAN AND COASTAL MANAGEMENT

Summary prepared by Bernice McLean, Independent Consultant, South Africa

This summary outlines the main points emerging from the informal discussions and dialogue sessions on Africa and Poverty Reduction as well as from presentations given in Panel 7 of the Third Global Conference: Linking National and Regional Efforts in Ocean and Coastal Management: African Perspectives. In Panel 7 African ministers were invited to address two key goals:

- Identify options and models for further development of EEZ management in Sub-Saharan Africa through ecosystem-based management approaches aimed at poverty reduction and enhanced social development;
- Identify how synergy among LME projects, Regional Seas programmes and the activities of national and multinational/NGOs can be achieved to reduce poverty, achieve environmental targets in Sub-Saharan Africa.

The specific outcomes expected of the session were to identify steps to be taken to further develop capacity for and actual programs in coastal and ocean management, and to achieve synergy among existing regional and national efforts in this area.

Panel 7 was chaired by Dr. Magnus Ngoile, National Environment Management Council, Tanzania and included presentations from: Prof. Albert Owusu-Sarpong, Ambassador of Ghana to France; Honorable Dr. Aristides Ocante da Silva, Minister of Natural Resources,

Guinea-Bissau; Honorable Joseph Konzolo Munyao, M.P., Ministry of Livestock and Fisheries Development, Kenya; Honorable Mrs. Rejoice Mabudafhasi, Deputy Minister of Environmental Affairs and Tourism, South Africa; H.E. Victor Manuel Borges, Deputy Minister of Fisheries, Mozambique; Honorable Mr. Thierno Lo, Minister of Environment and Natural Protection, Senegal; Ms. Rahma Mshangama, Principal Secretary, Ministry of Agriculture, Natural Resources Environment and Cooperatives, Zanzibar, Tanzania; and Mr. Rolph Payet, Principal Secretary, Ministry of Environment and Natural Resources, Seychelles and Interim Coordinator, Regional Coordinating Unit for Eastern African Action Plan. The related dialogue sessions were chaired by: Ali Mohammed, Regional Coordinator, Coastal and Marine Secretariat, New Partnership for Africa's Development (NEPAD); Tim Bostock, Senior Fisheries Adviser, Policy Division, Department for International Development (DFID), UK; Carl Lundin, Head, Marine Programme, IUCN; and Magnus Ngoile, National Environment Management Council, Tanzania.

Background

The African continent has an extensive coastline of some 40,000 km. Coastal and marine resources contribute significantly to the economies of many countries, mainly through fishing and tourism. For instance, the total marine fish exports from Africa

in 1997 yielded US\$445 million. These resources also provide the basis of livelihoods for poor coastal communities, and, while Africa is rich in natural resources, coastal African nations remain amongst the poorest in the world. In these countries where poverty is crippling, many coastal populations are vulnerable to natural disasters such as floods and droughts and experience extended hunger and rampant disease. Poverty has negative impacts on coastal and marine areas that contribute to coastal erosion, pollution, and degradation of resources through destructive practices, a lack of appropriate infrastructure, weak institutional and governance capacity, and vested interests in coastal and marine industries. These are some of the major challenges hindering the poorest of the poor from breaking out of the cycle of poverty. Many ocean-related problems experienced by African nations translate into regional problems but still require action at the national level.

Attention to marine and coastal issues has increased considerably since the early 1990s. A variety of different regional platforms are being used to address ocean and coastal-related issues in the African subregion. The two Regional Seas Conventions serve to maintain efforts of ocean and coastal governance, namely the Nairobi Convention for the Protection, Management, and Development of the Marine and Coastal Environment of the Eastern African Region and the Abidjan

Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region and Related Protocols. These conventions received a major boost prior to and immediately following the WSSD through the efforts of the African Process for the Protection and Development of the Marine and Coastal Environment. They remain, however, primarily environmental agreements and are administered separately from other sectors such as fisheries, mineral exploitation, and transport. Discussions continue to be fragmented, and no mechanism exists to bring all sectors together.



Relation to the WSSD/ MDG Goals

The MDG goals relating to poverty reduction and environmental sustainability underpin all issues experienced by African coastal countries. The Johannesburg Plan of Implementation (JPOI) of the WSSD proposes a number of actions for Africa in section VIII: Sustainable development for Africa. Specific reference is made to marine and coastal issues, the JPOI suggests the development of "...projects, programmes and partnerships with relevant stakeholders and mobilize resources for the effective implementation of the outcome of the African Process for the Protection and Development of the Marine and Coastal Environment" (JPOI Paragraph 56(i)).

Progress on the Issues

There is a growing realization of the opportunities presented by good governance of oceans and coastal areas. Some countries are moving forward by strengthening institutions that govern these areas and resources. For example, Kenya established the Ministry of Fisheries, Mozambique is currently developing a legal and institutional framework, and Tanzania has developed a comprehensive and integrated Marine and Coastal Environmental

Management project aimed at poverty reduction and sustained growth. Increased regional efforts have also proven useful in increasing country ownership, promoting compliance, strengthening alliances, and addressing emerging issues such as the co-operative fisheries observation, monitoring, control and surveillance efforts among South Africa, Mozambique, Namibia, Angola, and Tanzania. Projects of various scales are under preparation or recent implementation. Selected initiatives include:

Regional Programs

- Large Marine Ecosystem projects (funded by the Global Environment Facility):
 - Guinea Current Large Marine Ecosystem (Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon, Equatorial Guinea, Sao Tome and Principe, Gabon, Republic of the Congo, Democratic Republic of the Congo, and Angola).
 - Benguela Current Large Marine Ecosystem (Namibia, Angola and South Africa).
 - Canary Current Large Marine Ecosystem (Morocco, Mauritania, Senegal, Guinea-Bissau, the Canary Islands (Spain), Gambia, Cape Verde and Western Sahara - under preparation).
 - Agulhas Current (South Africa, Mozambique, Madagascar, the Comoros Islands, the Seychelles and Mauritius - under preparation) and Somali Current (Yemen, Somalia, Kenya and

Tanzania - under preparation) Large Marine Ecosystems.

- West African countries looking at the effects of climate variability on shoreline - Mauritania, Gambia, Guinea Bissau, Cape Verde, Senegal (UNDEP/GEF/ UNESCO-IOC).
- Impacts of Land-based pollution in the Western Indian Ocean (WIOLAB) – Somalia, Kenya, Tanzania, Mozambique, South Africa, Comoros, Madagascar, Mauritius, France (La Reunion), Seychelles (Supported by Norway, GPA, GEF and Nairobi Convention parties).
- Western Indian Ocean Marine Highway Development and Coastal Contamination Prevention Project - Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania (GEF, IDA, EC, DANIDA).
- Sustainable coastal tourism project - Senegal, Gambia, Nigeria, Ghana; Kenya, Tanzania Mozambique, Seychelles.
- Sub-regional programme to combat coastal erosion of the West African Economic and Monetary Union - Senegal, Benin, Togo, Cote d'Ivoire, Guinea Bissau, Ghana, Gambia.
- Western Indian Ocean Marine Science Association (WIOMSA) - Somalia, Kenya, Tanzania, Mozambique, South



Albert Owusu-Sarpong, Ambassador of Ghana to France, highlighted the rapid degradation of vulnerable coastal and offshore habitats due to local sources of pollution, which is exacerbated by regional oil spills.



Aristides Ocante da Silva, Minister of Natural Resources, Guinea Bissau, highlighted domestic activities to improve oceans management, including: creating and managing new MPAs; improving maritime surveillance systems; and carrying out research on erosion.

Africa, Comoros, Madagascar, Seychelles, Mauritius, France (La Reunion).

- Coral Reef Degradation in the Indian Ocean (CORDIO) – Kenya, Tanzania, Mozambique, Madagascar, Seychelles, Reunion, Comoros, Mauritius, Maldives, India, and Sri Lanka (Sida, FRN (The Swedish Council for Planning and Co-ordination of Research), MISTRA (Foundation for Strategic Environmental Research), WWF-Sweden, World Bank through Dutch Trust Funds, and the Government of Finland).
- East African Marine Ecoregion (EAME) – Somalia, Kenya, Tanzania, Mozambique, South Africa (Supported by WWF).
- SADC MCS - South Africa, Mozambique, Namibia, Angola, and Tanzania.
- Community of the Portuguese Speaking Countries (CPLP) Strategy for the Seas of CPLP (under development).
- Mozambique Transboundary networks of marine protected areas in East Africa (TRANSMAP) – Tanzania, Mozambique, South Africa (EU).

National Efforts

Within countries efforts, while numerous, are largely project-based and of limited timeframes and budgets. Donor involvement in coastal and marine research and management in Africa has a relatively long history yet few of these efforts have resulted in sustained institutional strengthening. Some countries have developed (Tanzania and South Africa) or are developing (Mozambique and Namibia) national policies and regulatory frameworks for coastal and ocean governance. Recent donor-supported efforts at the national level, in particular the Tanzania Marine and Coastal Environmental Management Project

(MACEMP), are attempting to adopt a more integrated approaches that address a multitude of issues to strengthen governance of a multitude of marine-related sectors such as fisheries, coastal management, livelihood generation and poverty reduction, and private sector involvement.

Outstanding Questions/ Challenges

The major challenges in ocean and coastal management in Africa relate to governance, capacity building, and communication. While many countries are attempting ocean and coastal governance initiatives, efforts are still insufficient or uncoordinated. Existing scientific efforts and assessment processes have tended to be very sectoral in nature and have failed to bring about effective change. A concerted effort at the local level for poverty reduction is essential. In addition, more attention needs to be paid to the targeted strengthening of existing capacities for all aspects of ocean and coastal governance. There is a need to realize that for Africa the issue is not only capacity development, but also capacity realization, nurturing of champions, capacity retention, and leadership development among the younger generations.

The production, dissemination, and use of information for the empowerment of people to engage the authorities and decision-makers plays a big role in creating the demand for good governance and reducing the impact of vested interests. Disclosure of information to civil society on issues related to resource exploitation (such as fisheries access agreements, mineral extraction permits, property leases for tourism purposes, etc.) and the benefits thereof is thus very important. Another aspect of information that is needed is related to defining and articulating priorities appropriately for all levels of decision-making. Regional cooperation is needed on a much larger scale with respect to fisheries access agreements and

other extractive industries to encourage equitable, transparent, and sustainable industries.

More consideration is needed for existing marine and coastal governance efforts, such as science and conservation, and investigation of how these can contribute more meaningfully to poverty reduction at the local level. For instance, much emphasis has been placed on the establishment of marine protected areas, but a balanced approach is needed that takes into consideration equity, cultural, and socio-economic issues. Similarly, more attention should be given to how to translate the riches from extractive industries to poverty reduction and livelihood security at the local level. Another challenge is the linking of national and regional efforts to reveal governance gaps at the national level. In this respect, linking science to policy is critical and a large challenge remains in incorporating the findings from science into effective governance at all levels. It would help to identify key areas in need of attention in the continent and how these can be addressed within existing long-term frameworks such as NEPAD. There is also a need to frame simple messages as to what activities are priorities to be funded, along with realistic focal-point implementers for practicality and accountability.

A lack of coordination among and between donors and governments continues to hamper efforts. Interventions implemented in isolation result not only in duplication of efforts but also reduce opportunities for success and replication and scaling up of efforts. Alternative approaches to assistance could be investigated, such as basket funding or budget support. There is also a need to investigate innovative means of acquiring large-scale investments to deal with coastal initiatives in the long-term rather than relying on small-scale, time-bound project support from development partners.

One major challenge to the attainment of the Millennium Development Goals is the enormous debt burden faced by individual countries in Africa. For example, over 30% of annual GDP in Kenya is allocated to debt repayment.

Strengthening African institutions for ocean governance is essential. Meaningful participation at large international fora (such as the Global Conferences on Oceans, Coasts, and Islands) helps to create and maintain dynamism for oceans at the national and regional level. To maximize this opportunity, there is a need to develop mechanisms at the national level to prepare for meaningful participation at the fora and follow-up at the national level subsequent to the meetings.

Next Steps

- Targeted and sustained efforts to address the issues and take advantage of opportunities;
- Promote the NEPAD programme and the efforts of the African Union which provide regional coordination and ensure that environmental ministers come together;
- Take notice of the recommendations of the Mauritius Strategy;
- Promote corporate social responsibility through partnerships that:
 - Support equitable benefit sharing,
 - Move towards environmental governance (minimizing impacts, innovations for efficiency), and
 - Promote emphasis on the social agenda in all ocean programs;
- Promote and facilitate harmonization of programs and processes;
- Look beyond national political boundaries to include regional and international perspectives

to adequately address ocean-related issues and develop effective and sustainable solutions;

- Promote a culture of transparency and disclosure among ocean users: industry, governments, development partners, and civil society;
- Request assistance in strengthening governance such as strengthening fisheries monitoring, control, and surveillance (MCS) and for conflict management;
- Apply integrated and comprehensive models such as Tanzania's MACEMP in other countries and regions;
- Develop a framework for results of the many projects and initiatives to see how they are addressing the priorities and to incorporate the outcomes of the projects into governance;
- Build partnerships within the region and use local expertise;
- Facilitate assistance with EEZ and continental shelf boundary delineation as well as for effective MCS;
- Develop strategies to prepare for and address natural disasters such as drought, coastal storms, and flooding; and
- Support effective EEZ management and more equitable and locally beneficial access agreements for fisheries and oil and gas.

Specific suggestions to the Global Forum for assistance in strengthening ocean governance in Africa and contributing to poverty reduction include:

1. Support the development of a strategy for highlighting the values and opportunities offered by oceans and coasts to promote growth and alleviate poverty in Africa;

Joseph Konzolo Munyao, Minister of Livestock and Fisheries Development, Kenya, explained that African countries' international debts fetter their ability to achieve the MDGs and WSSD targets.



Outlining actions taken in the context of the Eastern Africa Regional Seas Programme, Rejoice Mabudafhasi, South African Deputy Minister of Environmental Affairs and Tourism, said the main challenge lies in developing adequate legal frameworks and policies.

Victor Manuel Borges, Deputy Minister of Fisheries, Mozambique, outlined national marine and coastal management initiatives, including the development of a legal and institutional framework, and the establishment of MPAs. Addressing regional projects, he highlighted monitoring, control and surveillance initiatives as well as fisheries cooperation protocols.



2. Support monitoring and information sharing for existing projects;
3. Support participation in ocean-related gatherings by African journalists and communicators in order to develop expertise to support ocean governance such as through participation at the Second Intergovernmental Review of the Global Program of Action for the Protection of the Marine Environment from Land-based Activities (IGR-2) in Beijing in 2006, and the Cape Town meeting in 2007;
4. Help to mobilize commitment of donors, private sector, and

national governments to disclose access agreements and concessions for oil and gas development, fisheries, and to develop more equitable and locally beneficial access agreements. Disclosure should not end with the national government but should involve engagement of civil society;

5. Provide support to revisit components in existing programs for communication. Support project managers to come together to discuss the capacity building and communication components of projects;
6. Strengthen African Universities and technical institutions to create a critical mass of ocean and coastal management professionals; and
7. Promote advocacy for debt relief – linking ocean governance, debt burden, poverty, and innovative mechanisms for debt relief.

Thierno Lô, Minister of Environment and Natural Protection, Senegal, underscored his country's support for the African Process for the NEPAD/Environment Action Plan and detailed Senegal's involvement in coastal programmes.



Rahma Mshangama, Ministry of Agriculture, Natural Resources, Environment and Cooperatives, Tanzania, explained that a lack of funding and expertise hampers poverty reduction through the sustainable use of natural resources.

Rolph Payet, Interim Coordinator, Regional Coordinating Unit for Eastern African Action Plan (EAF/RCU), indicated how the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region impacts oceans management in the region.



PROGRESS ON FISHERIES-RELATED GOALS

Summary prepared by Lori Ridgeway, Director-General, International Coordination and Policy Analysis, Department of Fisheries and Oceans, Canada and Serge Garcia, Director, Fishery Resources Division, Fisheries Department, Food and Agriculture Organization



This summary provides an overview of the discussions during the informal dialogue session on progress towards implementation of fisheries related goals from the 2002 World Summit on Sustainable Development. The discussion followed the outline of the draft document provided to conference participants — *Information on Progress Achieved in the Implementation of World Summit on Sustainable Development Targets and Millennium Development Goals on Oceans, Coasts, and Small Island Developing States*¹ — quite closely in framing the dialogue. The draft document was focused particularly on the following goals laid out in the JPOI:

- Implement the FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing (IUU) by 2004.
- Implement the FAO International Plan of Action for the Management of Fishing Capacity by 2005.
- Maintain or restore depleted fish stocks to levels that can produce their maximum sustainable yield on an urgent basis and where possible no later than 2015.
- Eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to overcapacity.

The discussion began by noting that while these WSSD goals relate specifically to fisheries issues, there are others goals in the Plan of Implementation with indirect, but significant, implications for fisheries. These include goals related to biodiversity and protected areas as well as the ecosystem approach. The session also recognized that the fisheries goals incorporate a somewhat odd collection of goals ranging from implementing specific instruments, achieving an optimal state of resources, and eliminating a wrong incentive.

The session recognized that, only three years after the goals have been adopted, the feeling in the international community is that there are big gaps in implementation. The questions, however, are: (i) are we looking at a real lack of progress? (ii) did the POI reflect unrealistic expectations in relation to goals that are very difficult to achieve? The goals are not very specific, and, for example, they do not indicate which degree of implementation of the instruments is required or what proportion of world stocks should be rebuilt by 2015. The goal related to the restoration of stocks to their maximum sustainable yield is viewed as something to strive towards, but not necessarily something that is going to be achievable everywhere, given the reality of what needs to be put in place to get there. It is important to think about what the historical baselines are, the present situation,

the country capacities, and the costs of transition to adopt realistic fisheries goals. There is a need for indicators to be able to measure progress toward the goals, but there are already a large number of efforts to define indicators underway in organizations such as the CBD and UNESCO, as well as under the Millennium Development Goals. It was noted that an effort to bring together some of this work would be particularly helpful.

Implementation Responsibility

While it is important to address fishing issues on the high seas, it must also be noted that 90% of the production originates from within Exclusive Economic Zones (EEZs) and, therefore, an important part of the overfishing problem happens under the direct control and responsibility of national governments. Outside of EEZs, management has to occur through cooperation and Regional Fisheries Management Organizations (RFMOs). Well managed domestic fisheries are extremely important, because poor national fisheries management leads to spillovers and pressures on the high seas, which can undermine international cooperation.

National governments are responsible for good national fisheries and are also responsible for fisheries management through the RFMOs. National governments are also accountable for some of the interna-

tional targets, such as implementing the hard law and soft law frameworks. The national level is also where the responsibility to cooperate lies. It is important to be aware that, while RFMOs are often talked about as independent entities, they are really just the sum of the will of member states, which again comes down to national action. International Plans of Action (IPOAs) are tools to help organize governments around the issues, and, through these efforts, FAO is responsible for raising awareness and creating a good environment for implementation. Currently, flag states are really the only point of management, and they must be doing much more as the nations responsible for the behavior of their vessels. There is also a role for port states and market states in addressing the fisheries targets, but it must also be noted that fisheries involve the most globally diverse markets and are, therefore, not easily controllable.

Progress Toward Implementation

In regard to whether progress is being made, it is important to note that, while specific goals may not yet have been met, there is a considerable amount of work and progress going on below the surface. It is essential that the international community recognizes, for example, that the actions taken to move toward implementing a national plan of action are ultimately more important than the adoption of the document alone. Many of the goals and targets in these plans are written in terms of delivery of a paper product, so it can be difficult to gauge the real picture of all that is occurring.

There is no question that we still think there is a great deal to do in terms of improving management, cooperation, and oversight, but it is important to recognize that many of these high-level goals require significant behind-the-scenes action and the alignment of many factors.

While there is no question that there are large gaps, there is also the risk of being too pessimistic if looking at too narrow a picture.

As of March 2006, Australia, Canada, Chile, and the United States have submitted their National Plans of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing to FAO.² In addition, the U.S. has submitted its National Plan of Action for the Management of Fishing Capacity.³ Although only four states have logged the IUU plans with FAO, and only one state has logged a capacity plan, there is much action going on to build toward these national plans of action which must also be recognized. At the moment, according to FAO, national plans of action (NPOA-IUU) have been formally developed in Namibia, Seychelles, Tanzania, Federated States of Micronesia, Tonga, Tuvalu, Ghana, The Gambia and Oman has recently requested FAO assistance to develop their own.

The issue of subsidies is connected to that of overcapacity and IUU and remains hotly debated. A number of organizations are collaborating on it (e.g. WTO, OECD, UNEP and FAO) and a number of regional meetings have been held on the subject by ASEAN, CARICOM, and CPPS to exchange information on the respective programmes. At present, subsidies have been identified and classified in categories, in terms of their original intent but no general agreement has emerged regarding their classification in relation to their impact on fisheries.⁴ The main agreement perhaps is that fishery management expenses are generally considered as “good subsidies.”

As of March 2006, 149 nations have ratified the Convention on the Law of the Sea and related Agreements. Eleven of these ratifications have occurred since the closing of the World Summit on Sustainable Development.⁵ In addition, of the

57 signatories to the “Agreement for the implementation of the provisions of the Convention relating to the conservation and management of straddling fish stocks and highly migratory fish stocks” (UN Fish Stocks Agreement), 26 nations signed on following the World Summit on Sustainable Development.⁶ While many nations have signed and ratified these and other related international agreements, there is still a large gap and a need for more countries to sign, ratify, and implement these agreements.

The FAO Commission on Genetic Resources for Food and Agriculture has only started to address aquatic genetic resources. By examining the status and trends of biodiversity and genetic resources in fisheries, aquaculture, and the deep sea, and how modern biotechnology and socio-economic factors influence their use, the Commission will help identify key issues and policy considerations in order to develop a program of work to assist countries and the international community deal with aquatic genetic resources.

There is also some progress in national reform of fisheries management, especially with new market measures, such as ecolabelling, that are being adopted both in developed and developing countries. In addition, there is progress on reform of national legislation. For example, FAO has been working with 85 developing countries on legislative reform. There has also been a lot of momentum on the illegal, unregulated, unreported (IUU) fishing issue, including research as well as independent efforts such as the High Seas Task Force, a ministerially-led task force on IUU fishing on the high seas. There has been a significant change in momentum with respect to political will to address IUU fishing, for example, through the 2005 FAO Ministerial Meeting where the “2005 Rome Declaration on Illegal, Unreported and Unregulated Fishing”⁷ was adopted and the St. John’s “Conference on the Governance of

High Seas Fisheries and the UN Fish Agreement” which was attended by Ministers from 18 countries and the EU, and resulted in a ministerial declaration including commitments to 16 specific actions to improve the governance of high seas fisheries by the ministers in attendance.⁸

RFMO reform continues to be an issue, but there has been some progress. In the recent months there have been two major reform efforts launched—one in the North Atlantic Fisheries Organization (NAFO) and another one in the International Commission for the Conservation of Atlantic Tuna (ICCAT).

There is also work going on related to fishing subsidies. For example, during the recent WTO negotiations there was an agreement to continue working to make progress in the area of fisheries subsidies. There has also been recognition that fisheries subsidies is a very difficult topic to address. For example, you cannot look at subsidies just in terms of total payments, because, in a common property resource, such as fisheries, a lot of the payments are going to management. Recent OECD work shows that two thirds of what is spent in transfers is actually going to management.

When looking at the range of activities underway, such as regional efforts, GEF projects, market-based measures, Marine Stewardship Council (MSC) certification, and High Seas Task Force efforts, it becomes clear that there is a whole set of activities that are focused on accelerating progress on the WSSD goals.

Obstacles Faced

While there has been progress, there are also a variety of obstacles faced in implementing fisheries-related goals and targets. Obstacles faced and policy areas of debate include cooperation and political will, especially for national efforts. There are also technical obstacles, such as lack

of scientific information, and, especially, a lack of aggregated information. In particular, there is a lack of knowledge of some of the interrelationships between fishery species and the underlying natural system as well as between these and the human system, including its private sector and governance components.

There is also still weak national management, notwithstanding the improvements noted. As long as weak national management continues, overdependence on the resources, and overcapacity will continue to occur. Relating to efforts to reduce overcapacity, the issue of the cost of transition away from fishing must also be addressed. The cost of transition from irresponsibly managed fisheries to responsibly managed fisheries no doubt means displacing fishermen. There is a real need to discuss alternative livelihoods and management of the transition. There is also a real need for industry buy-in and participation of fishermen in these processes. There is a need to further advance the participatory framework and consider ideas like co-management (for example in Japan where quotas go to a whole community in some cases). Capacity building is also key, both technical and management capacity and also capacity building in order to enable cooperation.

It must also be noted that corruption is a significant problem that needs to be addressed in order to have effective fisheries management. This is particularly relevant to problems of organized corruption to launder illegal catch, but also relates to the issue of flags of convenience and flags of non-compliance.

Several obstacles that the international community can help remove or deal with include:

- Unreliable, incomplete or poor quality data;
- Insufficient capacity development (for management, cooperation, etc);

- Inadequate legislation (such as loopholes, weak laws, and corruption);
- Insufficient political will;
- Lack of transparency;
- Vested interests of different players;
- Lack of international cooperation;
- Lack of effective flag state control, particularly in the high seas but not only there; and
- Continued use of flags of convenience (consideration of ports of convenience as well).



Next Steps

There is much to be done to continue the momentum towards improving fisheries management and reaching the international goals and targets that have been set. These steps include:

- Emphasis on international cooperation for transboundary and high seas stocks;
- More regular and rigorous discussion of progress on implementation (e.g. with indicators);
- Better use of the meetings of the parties (to monitor progress and take action);
- Encouragement of donors to help developing countries (example of ProFish and of the FAO FishCode umbrella programme);
- Consideration of ex-ante impact assessment before development of new fisheries (concern was noted that there was more capacity for assessment in the 1980s than there is today,

particularly in the developing world);

- Encouragement for the adoption, ratification and implementation of international agreements; and
- More systematic assistance and capacity building.

There continues to be some disagreement regarding several issues. For example, while many people agree that some form of RFMO reform is necessary, there is no agreement over what precise role they might play or how they might relate to something broader as part of integrated solutions such as the idea of “regional ocean management organizations.” There is agreement that there is a need for oversight and accountability, but there was no agreement on the mechanisms. Another issue where there is still debate is the issue of protection of vulnerable areas against destructive practices. Most agree that protection of vulnerable areas from destructive practices is important, but the mechanisms to do this remain unresolved.

There is no doubt that progress has been mixed, there have been some improvements and some setbacks, but it is important to get the enabling framework in place before progress can be made. It is important to be realistic, but it is also essential to acknowledge that things are happening and progress is being made in some areas.

Fisheries Dialogue Session Participants

Tim Adams, Secretariat of the Pacific Community

Alfonso Ascencio, Permanent Mission of Mexico to the United Nations

Richard Ballhoun, Foreign Affairs, Canada

Elizabethann English, NOAA Fisheries, United States

Patricia Gallagher, Center for Coastal Studies, Simon Fraser University, Canada

Serge Garcia, Food and Agriculture Organization

Matthew Gianni, Deep Sea Conservation Coalition Consultant

Ernesto Godelman, CeDePesca Argentina (Center for Development of Sustainable Fisheries)

Barbara Hanchard, Forum Fisheries Agency

Marea Hatzios, World Bank

Paul Holthus, Marine Aquarium Council

David Johnson, Southampton Solent University

Konstantinos Kalamantis, European Bureau for Conservation and Development (EBCD)

David Leary, Centre for Environmental Law, Macquarie University

Bernice McLean, Environmental Consultant, South Africa

Carol Phua, WWF, European Policy Office

Alfredo Picasso, Permanent Delegation of Peru to UNESCO

Lori Ridgeway, Fisheries and Oceans, Canada

Renée Sauv , Fisheries and Oceans, Canada

Hance Smith, Cardiff University

Geoff Tingley, Centre for Environment, Fisheries & Aquaculture Science (CEFAS)

Lindsey Williams, Global Forum on Oceans, Coasts, and Islands

Footnotes:

¹ Global Forum on Oceans, Coasts, and Islands. 2006. Information on Progress Achieved in the Implementation of World Summit on Sustainable Development Targets and Millennium Development Goals on Oceans, Coasts, and Small Island Developing States. Available: <http://www.globaloceans.org>.

² International Institutions and Liaison Service (FAO-FIPL). 2006. *International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing*. FI Programme Websites. FAO - Rome. 2006. Available via FIGIS from <http://www.fao.org/>.

³ Development Planning Service (FAO-FIPP) 2006. *International Plan of Action for the Management of Fishing Capacity*. FI Programme Websites. FAO - Rome. Updated Tue Mar 07 12:22:16 CET 2006. Available via FIGIS from <http://www.fao.org/>.

⁴ Identifying the impact is the approach followed by FAO following the request of COFI (in March 2005) that FAO give consideration to undertaking studies and assessments to determine the impact of subsidies on fishing capacity, illegal, unreported and unregulated (IUU) fishing and on fisheries management generally.

⁵ United Nations. 2005. *Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements as at 20 September 2005*. UN Division on Oceans and Law of the Sea web site. Accessed: January 2006.

⁶ United Nations. 2005. *Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements as at 20 September 2005*. UN Division on Oceans and Law of the Sea web site. Accessed: January 2006.

⁷ FAO. 2005. *2005 Rome Declaration on Illegal, Unreported and Unregulated Fishing*. Available: <ftp://ftp.fao.org/fi/DOCUMENT/ministerial/2005/iuu/declaration.pdf>

⁸ Department of Fisheries and Oceans, Canada. 2005. *Conference on the Governance of High Seas Fisheries and the United Nations Fish Agreement – Moving from Words to Action* Web site. Accessed January 2006.

FRESHWATER TO OCEANS LINKAGES EMPHASIZED DURING PARIS CONFERENCE

Summary Prepared by **Kateryna Wowk,**
Global Forum on Oceans, Coasts, and Islands



The Global Forum's Freshwater to Oceans Task Force, composed of experts in both watershed management and integrated coastal and ocean management from various organizations and regions, and co-chaired by Patricia Muñoz, National Polytechnique Institute, Mexico, former chair of the Consejo Consultivo del Agua of Mexico, and Tom Laughlin, U.S. National Oceanic and Atmospheric Administration, organized a number of events both to foster multistakeholder dialogues on improving interlinkages between freshwater and oceans issues, and to assess progress on the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)/World Summit on Sustainable Development goals.

At the Paris conference, a panel of experts presented specific case studies which led to thoughtful dialogue from conference participants, including Al Duda, International Waters, Global Environment Facility (GEF); Margaret Catley-Carlson, Global Water Partnership; Peter Bridgewater, Ramsar Convention; Hon. Mr. Erik Llandikov, Vice-Minister, Ministry of Environmental Protection, Republic of Kazakhstan; Porfirio Alvarez-Torres, Ministry of Environment and Natural Resources, SEMARNAT, Mexico; Veerle Vandeweerdt, Regional Seas Programme, United Nations Environment Programme (UNEP), and Global Programme of Action for the Protection of the Marine Environ-

ment from Land-Based Activities, The Hague; Ivan Zavadsky, GEF Danube-Black Sea Basin Strategic Partnership, and Shammy Puri, International Hydrological Programme, UNESCO. Discussions continued in multistakeholder dialogues on the intergovernmental review of the GPA (see the GPA/IGR-2 section of the newsletter).

Integrated Water Resources Management

The panel convened to: review the linkage between freshwater, oceans, and coasts; identify opportunities to advance the linkage between Integrated Water Resources Management (IWRM) and coasts; and identify new opportunities for partnerships between freshwater and oceans organizations.

The Global Water Partnership (GWP) aids nations in improving their water resources management to provide for improved integrated management. It is well known that integrated management involves ecologic and scientific components, but it has only recently become apparent that integrated management equally involves human, social, and political components.

An effective IWRM strategy will include the following principles in a scientific and political analysis:

1. Involve all relevant stakeholders;
2. Identify the most urgent issues (and their costs), and prioritize those issues;
3. Secure political commitment;
4. Establish a common knowledge/information platform for all stakeholders;
5. Facilitate knowledge/awareness raising to build support;
6. Encourage some institutional development, including financial resources.

Note that in these principles for an effective strategy, water is not mentioned once. The greatest imperative in this process is to mobilize political support. Only then can freshwater and coastal agencies join together in an integrated strategy for the management of land, freshwater resources, coasts, and oceans.

Linking Freshwater, Coasts, and Oceans: Addressing Wetlands

Ramsar is the oldest of the global environmental conventions, covering a wide range of wetlands – from coral reefs to mountains to vast inland swamps. With 150 contracting parties, 1,558 wetlands have been identified as sites of International Importance, of which more than a third are coastal wetlands. Convention actions are implemented according to three pillars: the wise use of wetlands; wetlands of international importance; and international cooperation. All emphasize catchment management and integrated management across systems by using the ecosystem approach.

No one agency, by itself, can implement the strategies of inte-

grated management. Synergy is needed across and between existing structures. The ecosystem approach of the Convention on Biological Diversity is a framework for integrated management of land, water and biological resources. It has the following key principles:

- Management objectives are a matter of societal choice.
- Management should be decentralized to the lowest level.
- Management must recognize that change is inevitable.

The ecosystem approach can help improve existing management structures by integrating all relevant sectors and disciplines, national and international. It can aid in identifying those cultural, technological, and environmental aspects that are inherent to specific ecosystems and allow for society to change the way it manages water and land resources.

Linking Freshwater, Coasts, and Oceans: Addressing Aquifers

Aquifers constitute 99% of all accessible freshwater globally. The seaward discharge from aquifers to coastal ecosystems and their role in delivering nutrients and other dissolved constituents is becoming increasingly recognized. Large amounts of groundwater continually discharge into the sea, amounting to 5-10% of all freshwater input into the oceans. For truly integrated management of water resources, the interconnections between aquifers and the oceans must be realized. Additionally, aquifers flowing into mangroves, coastal lagoons, and salt marshes may be very significant for the preservation of marine biodiversity.

Several GEF-supported studies have been initiated to address the issue of aquifer discharge to the coasts, and many other GEF partners are supporting efforts in an attempt to integrate IWRM with coastal and

oceans management. There is a need to continue to foster the development of these linkages and relationships, nationally and internationally.

Case Study: The Caspian Sea

The Caspian Sea has been deteriorated by increasing anthropogenic pressure, coupled with natural disasters. As a result, there is an increase of eutrophication, water pollution by heavy metals, chemical pollution, and overexploitation of the many types of Caspian flora and fauna. In the beginning, activities for the protection of the Caspian Sea included some regional strategies for capacity building. However, most of the problems of the area are transboundary in nature, and require the inclusion and support of all surrounding nations.

One promising result of regional efforts occurred when the UNEP assisted the region in developing the basic elements for a Framework Convention for the Protection and Sustainable Management of the Caspian Environment and its Resources. The Framework Convention includes pollution prevention, reduction and control; protection, preservation and restoration of the marine environment; procedures to fulfill the obligations contained in the Framework Convention; and formation of the Organization for the Protection of the Sustainable Management of the Caspian Environment and its Resources. In 2005, Kazakhstan became the fourth nation to sign the Convention, and, after Azerbaijan signs, the Convention will come into force.

Case Study: The Danube/Black Sea Region

The Danube-Black Sea Region is the most international river basin in the world. The management of this region serves to exemplify successful policy-building, showing how to advance an issue. Pollution of the Black Sea by nutrient overloading

led to the degradation of the ecosystem and reduced biodiversity, resulting in a large economic loss. The GEF contributed in the early stages of the management process, beginning with institution building in the region. This helped lead to the Danube Convention (1998), the Black Sea Convention (1994), and the GEF Danube – Black Sea Strategic Partnership (2001).

The management scheme was aimed at new policies, institutional and regulatory measures, investment projects, capacity building including monitoring systems, legal mechanisms at national and regional levels, implementation of pilot projects, and stakeholder involvement. Strategic partnerships were developed to support country-related investment projects, most notably the World Bank-GEF Investment Fund for Nutrient Reduction, the UNDP/ UNEP Black Sea Ecosystem Recovery Project, and the UNDP Danube Regional Project. In a Memorandum of Understanding, long-term and intermediate goals were identified among partners, assuring comparable assessment and reporting on ecological status and input loads and the adoption of strategies for pollution reduction. There will not be an analysis of results achieved until 2007, but the Black Sea does appear to be recovering.

Recommendations

Integrated management of water resources cannot occur without realizing the natural linkages between freshwater, coasts, and oceans. An effective management scheme must take these linkages into consideration, and secure political and societal commitment among stakeholders.

It was ultimately recommended that the freshwater and oceans communities should create stronger partnerships. There is a need to work across and between freshwater, coastal, and oceans organizations, at the national and international levels. Among these opportunities are col-

laborations between the Global Water Partnership (GWP) and the Global Forum

on Oceans, Coasts, and Islands.



Improving Interlinkages between Freshwater, Coasts, and Oceans

A preparatory meeting on freshwater to oceans linkages was held at the International Workshop on Freshwater-Coastal-Marine Management Interlinkages, January 10-11, 2006 in Mexico City, organized by the Consejo Consultivo del Agua, Mexico, SEMARNAT, Mexico, Centro EPOMEX, the Global Forum on Oceans, Coasts, and Islands, UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and other collaborating organizations. Thirty-nine experts from 29 countries participated in the workshop. The salient points discussed and recommendations put forward at the workshop are presented below.

Mexico City International Workshop on Freshwater-Coastal-Marine Management Interlinkages, January 10-11, 2006

Background

Continental waters stored in surface waters (rivers, lakes, wetlands) represent less than one percent of the Earth's water resources. Ninety-seven percent is stored in the oceans and the remaining 2 percent is sea ice, snow, glaciers, and permafrost. However, this small percentage of the Earth's total water resources that is freshwater is disproportionately important to people. The watersheds that integrate the surface water runoff of entire drainage basins play a critical role as sources of water, food,

energy, recreation and transportation. Watersheds provide habitat and a host of other ecological services from water purification to flood control and nutrient recycling—all important to people. Watersheds also provide a critical link between the land and sea.

Increasingly, watersheds are under stress from structural modifications (dams, flood control, canalization), habitat degradation (deforestation, urbanization, agriculture), freshwater withdrawals, pollution, and loss of freshwater biodiversity. For example, large rivers such as the Colorado, Ganges, and Yellow Rivers often no longer flow to the sea during the dry season. In the Nile Delta, 30 of 47 commercial fish species have become extinct due to the Aswan High Dam. Reducing the flow of freshwater to the sea can also lead to the intrusion of salt water into previously fresh surface water and groundwater—rendering them undrinkable. On the other hand, according to UNEP, large amounts of river-borne nutrients flowing from the land to the sea have created over 150 oxygen-depleted “dead zones” in the Gulf of Mexico, the Black Sea, the Baltic Sea, the Chesapeake Bay, and the northern Adriatic Sea.

Around 2000 BC, two city-states concluded a treaty to settle conflicts over water uses of the Tigris River. Four thousand years later, we are still learning how to manage human uses of rivers, river basins, watersheds, and coastal areas. Today, much of the focus is on integration. We have integrated river basin management defined by the Global Water Partnership as “the process of coordinating conservation, management, and development of water, land, and related resources across sectors within a given river basin, in order to maxi-

mize the economic and social benefits derived from water resources in an equitable manner while preserving and, where necessary, restoring freshwater ecosystems.” Integrated coastal management uses almost the same definition, but with an emphasis on estuarine and marine (saltwater) ecosystems. While institutional arrangements have been designed and implemented to address either freshwater or saltwater issues, rarely have institutions worked on the linkages between freshwater and saltwater.

Occasionally, a river basin management plan will address the “downstream” effects of “upstream” activities. Occasionally, a coastal management project will address the effects of upstream activities and river inflows. Increasingly, international programs such as the GPA, the Global Environmental Facility, and Large Marine Ecosystems are beginning to address linkages. But what have been the collective experiences of these efforts?

What institutional arrangements across freshwater and coastal management institutions have worked and why? What incentives have provided appropriate changes in institutional and personal behavior? What kinds of “nested” institutional arrangements (global, regional, and national) have been most effective? How have non-governmental organizations contributed? What has been the role of the private sector? What are the lessons about effective stakeholder involvement? What are the long-term economic and social benefits, as well as the ecological benefits, of linking river basin and coastal management? Is there



Porfirio Alvarez-Torres, on behalf of Antonio Diaz de Leon, Director-General for Environmental Policy Regional and Sectoral Integration, Mexican Ministry of Environment and Natural Resources, reported on a freshwater-coastal-marine management interlinkages workshop held in Mexico City in January 2006.

an adequate natural and social science base for assessing these linkages? Can “best practices” be identified and documented?

In 1999 the United Nations declared the World Day for Water theme, “Everybody Lives Downstream,” which drew attention to the conflicts of equally legitimate water-related interests and relationships between those living “upstream” and those living “downstream.”

The World Summit on Sustainable Development (WSSD) in 2002 called for all countries to develop Integrated Water Management Strategies by the end of 2005. These strategies are intended to build national and regional efforts to tackle specific water challenges, such as pollution prevention, controlling flooding, mitigating the effects of drought, expanding access to water and sanitation, and addressing increasing competition for water and water scarcity. Similarly, the WSSD, as well as the Millennium Development Goals, called for all countries to create systems for integrated coastal and ocean management to address downstream issues in coastal areas (the home of 50% of the world’s population), in oceans (incorporating 70% of the earth’s surface area and 97% of the world’s water), and in Small Island Developing States or SIDS (43 of the world’s nations are SIDS that are especially dependent on ocean, coastal, and freshwater resources).

Today, it is important to address the challenge of linking freshwater to coasts and oceans from a new collaborative perspective that examines how decision-making and institutional arrangements can be aligned to achieve a true “hydro-solidarity” between “upstream” and “downstream” stakeholders. Finding models for how these interests can be reconciled is an urgent and challenging task that can be made more concrete by analyzing a set of case studies of river basins and their associated coastal zones from a management perspective.

A Shared Agenda of Freshwater and Coast/Ocean Management

Important shared issues on the policy and management agenda of freshwater resources and coastal/ocean management need to be identified and recognized. Some significant examples should be mentioned:

Freshwater flows are critical to the health and productivity of estuaries and coastal waters. Increasing freshwater demands, mainly for irrigated agriculture (80%) and urban development, are depleting freshwater flows and damaging coastal ecosystems and their vital functions as spawning and nursery area for coastal fisheries. Nutrient over-enrichment, eutrophication of estuaries and coastal/ marine waters and coastal “dead zones” are emerging issues, primarily related to increased agricultural activities in river catchments.

Other examples include:

- Pollution of river basins and its consequences for human and ecosystems health in coastal waters and oceans, due to municipal and industrial waste water;
- Degradation of freshwater and coastal habitats caused primarily by changes in flow characteristics by damming and river flow regulation;
- Increased coastal erosion by reduction of sediment flows from rivers as a result of dams and water diversion schemes;
- Lack of knowledge about complex interactions in the coastal/ocean ecosystem and watershed, and lack of understanding of the benefits of an integrated management approach; and
- Increased water demands, land use practices, river regulation works and water resources development projects have crucial impacts on principal coastal and oceans resources

and are placing the viability of coastal economic activities at risk.

Meeting Challenges and Constraints

We do not lack experience in trying to link freshwater and ocean management activities. About 100 nations are currently experimenting with some form of integrated coastal management; 18 Regional Seas Programmes exist within 140 countries; well over 60 countries are completing National Plans of Action for land-based sources of marine pollution; and almost 20 Large Marine Ecosystem projects are funded by the Global Environmental Facility. Tens of millions of dollars have been invested by the Global Environmental Facility and others in linked management approaches. Then why is it so difficult to achieve commitment, coordination and even communication on linked management of catchments and coasts/oceans? Several challenges and constraints have to be faced, such as:

- **Different cultures:** River basin management/ integrated water resources management and coastal/ ocean management policies represent two different traditions, with different disciplines, different networks, and little communication;
- **Institutional inadequacies:** Integrated management is not common practice. In most cases, river basin management and the authority of basin organizations stop at the estuary or are not practiced beyond the border of the estuary. In many countries coastal zone management has not yet reached a mature stage. Responsibilities are divided among various sectoral ministries and a high priority is the implementation of effective institutional arrangements;

• **Water policy and legislation:**

The major problem is the absence of a comprehensive water policy accommodating integrated water resources management (IWRM) in the context of harmonizing national economic development plans and water sector plans. Such a policy should be effective, efficient, and equitable across geopolitical borders. A formal protocol between river basin authorities and coastal authorities would go a long way to promote integrated management. Deficiencies in the regulatory system have to be mentioned, including lack of enforcement capacity.

• **Inadequate attention to the full range of socio-economic factors:**

It is impossible to define ecological functions in only monetary terms. The profits of freshwater for irrigation are much easier to quantify than freshwater flows required for productive and healthy coastal ecosystems. The valuation of goods and services the coastal and marine environment provides is of crucial importance. Often there is an imbalance in socio-economic development and political attention between upstream and downstream regions;

• **Lack of thorough analysis of linked issues:**

A lack of ecological information (pressures, driving forces) has to be mentioned – for example, what is the impact of dams on the degradation of mangroves vis-à-vis the impacts of activities in the estuary itself? Also the perspectives of mid term-economic development are not being analyzed; and

• **Lack of awareness:**

The vision of freshwater, coast and oceans communities must be broadened and should overcome traditional principles such as ‘Each drop of freshwater that

makes it to the sea is lost.’ Stakeholders competing for the same resources will have different visions.

The Obvious Benefits of Linked Management

The major benefit of linked management is the scope it provides to ensure that development activities upstream are planned and implemented with full knowledge of the potential impacts on the ecosystems and economic activities and livelihoods in the coastal and marine areas. This is essential to assure the integrity and health of the ecosystems and the water cycle, and to promote the sustainable development of both the higher and lower watershed areas.

The costs of inaction are high. It is known from river rehabilitation practices that the costs of ignoring upstream-downstream management linkages have been enormous—the costs of rehabilitation are much higher than the costs of prevention!

Management Options - What Could Be Done?

At the global scale:

- Link the coastal/ocean and freshwater communities at important events by creating shared agendas, e.g., at the World Water Forum series, at CSD when follow-up on the water agenda and the oceans agenda takes place, at the World Water Weeks in Stockholm, etc.;
- Develop a program of collaboration between global oceans organizations and global water organizations (e.g. partnerships such as the Global Water Partnership, the Global Forum on Oceans, Coasts and Islands; and UN entities such as UNEP, UNESCO, UNDP, etc.)
- Operationalize the intended management link in the concrete support of such initiatives/ targets like IWRM 2005 through, e.g., the IWRM InfoForum; in

updating the definition of ICZM, broadening the scope from the terrestrial zone to watersheds and oceans; and

- Enforce the development of capabilities and common standards, methodologies, and indicators in linking freshwater to coasts and oceans.

At the regional/national scale:

- Focus not only on assessment of the interlinkages but take concrete next steps to establish multi- sectoral policies, institutional frameworks, stakeholder participation in policy making, and planning across the freshwater-coastal interface, e.g., through establishing freshwater coastal networks in connection with the regional IWRM networks and through a focus on the freshwater/coast interlinkages in IWRM 2005 target support programs, e.g. UNEP, UNDP, and other organizations;
- Promote GPA National Programmes of Action in the context of IWRM and Water Efficiency plans and Large Marine Ecosystem initiatives; and
- Consider and respond to the difficulties that national authorities face in implementing multiple mandates: e.g., creating IWRM plans, ICZM plans, National Plans of Action for the Control of Land-Based Activities, as well as national actions related to regional programs such as the Regional



Margaret Catley-Carlson, Chair, Global Water Partnership, emphasized that human, social and political aspects are as important as science in achieving sustainable management.



Peter Bridgewater, Secretary General, Ramsar Convention on wetlands, indicated that over a third of all Ramsar sites are coastal or marine.



Erik Llandikov, Vice Minister, Ministry of Environmental Protection, Republic of Kazakhstan, listed the environmental threats faced by the Caspian region and the remedial actions taken by his country.

Seas Programmes and the Large Marine Ecosystem Programs. What support do national authorities need to successfully integrate such a wide-ranging set of actions? What specific support/guidance/facilitation might be needed?

Guchte, Nancy Bennet, United Nations Environment Programme Global Programme of Action
Margarita Astralaga, Ramsar Convention Secretariat

Steven Olsen, University of Rhode Island
Biliana Cicin-Sain, Miriam Balgos, Kateryna Wowk, Global Forum on Oceans, Coasts, and Islands

Global Forum on Oceans, Coasts, and Islands Freshwater to Oceans Task Force

Initial Members:

Co-Chair: Patricia Munoz, National Polytechnique Institute, Mexico

Co-Chair: Thomas Laughlin, United States National Oceanic and Atmospheric Administration (NOAA)

Antonio Diaz de Leon, Ministry of Environment and Natural Resources, SEMARNAT, Mexico

Porfirio Alvarez, Ministry of Environment and Natural Resources, SEMARNAT, Mexico

Evelia Rivera-Arriaga, Centro Epomex- Universidad Autónoma de Campeche, Mexico

Isaac Azuz-Adeath, Cety's University, Mexico

Gonzalo Cid, Jennifer Winston, Elizabeth Mclanahan, Ed Kruse, NOAA

Julian Barbieri, Stefano Belfiore, Intergovernmental Oceanographic Commission of UNESCO

Alice Aureli, Annuka Lipponen, Division of Water Sciences, UNESCO

Charles N. Ehler, UNESCO

Niels Ipsen, UNEP Collaborating Centre on Water and the Environment

Martin Adriaanse, Cees van de



Veerle Vandeweerd, Head, UNEP Regional Seas Programme, and Coordinator, UNEP-GPA, elaborated on GPA objectives and actions in preparation for GPA's second intergovernmental meeting, to be held in Beijing, China, in October 2006.

Ivan Zavadsky, Regional Programme Director, GEF-Danube Black Sea Basin Strategic Partnership, noted that the region's environmental degradation has led to reduced biodiversity and economic loss.



Shabby Puri, UNEP-DGEF Task Manager 'Groundwaters' and Liaison Officer to UNESCO-IHP, elaborated on the long-term and irreversible dangers that polluted terrestrial aquifers pose to coastal regions.

TOWARD THE UNEP/GPA IGR-2 IN BEIJING

Summary prepared by Tom Laughlin (NOAA),
and Dr. Porfirio Alvarez-Torres (SEMARNAT)



Adopted in 1995 in Washington, D.C. by 108 Governments and the European Community, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) is the only global program that addresses the interactions between the freshwater and coastal environments; it is a comprehensive action program in response to the fact that some 80% of all marine pollution comes from land-based activities. Implementation of the GPA is, in the first place, the task of national governments, though the importance of stakeholder participation should not be overlooked.

As noted by Dr. Veerle Vandeweerd (Coordinator, UNEP/GPA) at the Paris Conference, the First Intergovernmental Meeting, hosted by Canada in 2001, moved the GPA from planning to action with the adoption of the Montreal Declaration and Programme of Work for the GPA office, 2001-2006. Significant progress has been made since the Declaration, largely with support from the Global Environment Facility (GEF). The Second Intergovernmental Review of the UNEP-GPA (IGR-2) will be held October 16-20, 2006, in Beijing, People's Republic of China. IGR-2 will focus on the need to incorporate an ecosystem approach into Integrated Water Resources Management, as well as the need to develop domestic financing, legislation, and institution building. IGR-2 will contribute to shaping the international policy agenda on fresh-

water, coasts, and oceans, advancing the implementation of targets the international community has adopted, and forging partnerships for presentation at IGR-2, including the Global Forum on Oceans, Coasts, and Islands.

At the Paris conference, participants discussed preparations for upcoming events highlighting freshwater to oceans issues: the Fourth World Water Forum, March 16-21, 2006, Mexico City, and IGR-2. Suggestions put forward at the Paris conference are presented below.

Workshops on Review of the GPA and the Montreal Declaration on the Protection of the Marine Environment from Land-Based Activities

Summary prepared by Tom Laughlin (U.S. NOAA) and Dr. Porfirio Alvarez-Torres (SEMARNAT, Mexico)

Two workshops were convened to evaluate how well the WSSD goal concerning the implementation of the GPA is being met, and to provide input into the 4th World Water Forum and the 2nd Intergovernmental Review of the GPA. The sessions were chaired by Tom Laughlin (NOAA), Dr. Porfirio Alvarez-Torres (SEMARNAT), and Dr. Patricia Munoz (Instituto Politecnico Nacional, Mexico), with assistance from Dr. Veerle Vandeweerd (UNEP GPA).

Background

The Johannesburg Plan of Implementation calls for “advance implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and the Montreal Declaration on the Protection of the Marine Environment from Land-based Activities, with particular emphasis in the period 2002-2006 on municipal wastewater, the physical alternation and destruction of habitats, and nutrients, by actions at all levels to:

- Facilitate partnerships, scientific research and diffusion of technical knowledge; mobilize domestic, regional, and international resources; and promote human and institutional capacity building, paying particular attention to the needs of developing countries;
- Strengthen the capacity of developing countries in the development of their national and regional programmes and mechanisms to mainstream the objectives of the Global Programme of Action and to manage the risks and impacts of ocean pollution;
- Elaborate regional programmes of action and improve the links with strategic plans for the sustainable development of coastal and marine resources, noting in particular areas which are subject to acceler-

ated environmental changes and development pressures;

- Make every effort to achieve substantial progress by the next Global Programme of Action conference in 2006 to protect the marine environment from land-based activities.”

To help foster these goals, a multi-stakeholder group convened an International Workshop on Freshwater-Coastal-Marine Management Interlinkages, held in Mexico City in January 2006 (see discussion in Freshwater to Oceans section of the newsletter). The group found that “The major benefit of linked management is the scope it provides to ensure that development activities upstream are planned and implemented with full knowledge of the potential impacts on the ecosystems and economic activities and livelihoods in the coastal and marine areas. The costs of inaction are high. It is known from river rehabilitation practices that the costs of ignoring upstream-downstream management linkages have been enormous – the costs of rehabilitation are much higher than the costs of prevention!”

Progress Towards Achievement of the WSSD Goals

Progress has been made toward the WSSD goal on a variety of levels. Internationally, the GPA notes that “the GPA and the international community have been working to provide guidance, support, and funding to nations in their attempts to devise and implement NPAs.” Other progress at the international level has included: conclusion of the Stockholm Convention on Persistent Organic Pollutants; regional GPA meetings; capacity building and outreach programs; and partnership development through venues such as White Water to Blue Water.

At the national level, over 60 nations have initiated National Programs of Action. In addition, coun-

tries are working together to develop mechanisms for regional coordination (see table below).

Next Steps

Specific suggestions to further the WSSD goal included fostering freshwater coast linkages at the 4th World Water Forum held in Mexico City in March, 2006. To do this, the Global Forum, UNEP/GPA, and NOAA will jointly host a session to address these linkages. In addition, the meeting participants suggested paragraphs including the following themes in the Ministerial Declaration from the WWF4:

1. The goals of sustainable development cannot be met without linking freshwater to coasts and oceans. This is particularly true in small island developing states.
2. Because impacts collect and are concentrated in coastal zones, a key goal of integrated water resource management is to address coastal and oceans impacts.
3. Actions are needed at the local level throughout the watershed.

To build upon the momentum of the 4th World Water Forum and other

international events discussing freshwater oceans linkages, the 2nd Intergovernmental Review of the GPA will include a Partnership Day that will be modelled after WW2BW. Meeting participants made the following suggestions for inclusion in the Partnership Day:

1. Reports and recommendations from the Freshwater to Oceans sessions at the World Water Forum in order to establish a common vision of actions to manage watersheds and coastal areas.
2. Discussion of future directions/modalities of the Global Forum.
3. Use of the IOI network to advocate GPA-related approaches and to distribute lessons learned from the GPA.
4. Showcasing Strategic Partnerships as an opportunity for other regions.
5. Highlighting the link between land-based activities and the ecological health of marine ecosystems, possibly by partnering with the ICES Conference on Coastal Zone Management which will be held in Norway in 2007.
6. Conclusion of a GPA/Ramsar cooperative agreement.

Regional Plan

Wider Caribbean Prog.
SPREP
Black Sea
Southeast Pacific
Cartegena Protocol
Barcelona Convention

Implementation Status

Protocol exists
Protocol being developed
Protocol being developed
Protocol exists
Protocol exists
Convention exists

SMALL ISLAND DEVELOPING STATES AND THE MAURITIUS STRATEGY

Summary prepared by LaVerne Walker, St. Lucia



During the Third Global Conference, a panel reviewed progress achieved and the obstacles faced by States in their efforts to implement the ocean and coastal components of the BPoA and also to review specific strategies for implementing the actions identified in the 2005 Mauritius Strategy. Several discussion sessions also addressed progress and next steps for SIDS. Acknowledging that the Mauritius Strategy builds on the WSSD, the MDGs as well as the Barbados Programme of Action, and that it further provides more targeted actions for SIDS, the discussion focused on the implementation of the Mauritius Strategy and identified next steps.

Panel 5: Implementation of the Mauritius Strategy for Small Island States was chaired by Ambassador Jagdish Koonjul, Foreign Affairs, Mauritius, Outgoing Chair, Alliance of Small Island States (AOSIS), and included presentations from: Mr. Willie John, Chief Executive Officer, Cook Islands; Mr. Fernando Trindade, on behalf of Celestino Andrade, Ministry of Environment, São Tomé and Príncipe; Mr. Rolph Payet, Principal Secretary, Ministry of the Environment, Seychelles; Mr. Vincent Sweeney, Executive Director, Caribbean Environmental Health Institute, St. Lucia; Mr. Nelson Andrade, Director, UNEP Caribbean Programme, UNEP/UNDP/GEF IWCAM Programme on Integrated Water and Coastal Area Management for SIDS; Ms. Dominique Benzaken, Coastal Man-

agement Adviser, Secretariat of the Pacific Regional Environment Programme; Ambassador Enele Sopoaga, Permanent Representative of the Mission of Tuvalu to the UN; and Ms. Marina Silva, Independent Consultant, Cape Verde. Dialogue sessions related to SIDS were chaired by: Mr. Tim Adams, Secretariat of the Pacific Community; Mr. Nelson Andrade, UNEP Caribbean; Mr. James Hardcastle, Nature Seychelles; Mr. Franklin McDonald, UNEP Caribbean; Marina N'Deye, Cape Verde; Mary Power, South Pacific Applied Geoscience Commission (SOPAC); and Mr. Dirk Troost, Chief, Coasts and Small Islands Platform, UNESCO.

The unique and special challenges facing SIDS were also underscored by Professor Jeffrey Sachs, Director of United Nations Millennium Project, in his address to the conference. He acknowledged the necessity of better reflections on these challenges facing SIDS in meeting the MDG and WSSD goals, particularly addressing the impacts of climate change and other global issues, in particular trade liberalization.

Background

Small island developing states (SIDS) are characterized as large ocean States due to establishment of 200 mile Exclusive Economic Zones (EEZs), resulting in these small islands being custodians of much of the world's ocean space. Despite the

fact that SIDS have large ocean areas rich in resources (fisheries, oil and gas, minerals, renewable energy), many island States are unable to benefit from the existence of these resources within their EEZs a result of inadequate technical and management capacity. For example, SIDS often lack the technologies necessary for development of ocean resources. Another issue of major concern to SIDS is the threat of climate change and the associated sea level rise predictions. The significant vulnerability of the natural environment, economy, and social structure of SIDS has been well established. Even though similar problems are present in most or all developing countries, because of the inherent characteristics of SIDS, they are felt more acutely by these countries.

Being cognizant that the development needs of SIDS differ from other developing countries, the Barbados Programme of Action (BPoA), a fourteen point program identifying priority areas for action, was adopted at the United Nations Global Conference on the Sustainable Development of Small Island Developing States, held in Barbados in 1994. In 2005, at the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States in Mauritius, many of the actions listed under the BPoA were reprioritized by SIDS for further action.

Ten years after the adoption of the BPOA, national and regional assess-

ments indicate that some SIDS have managed to effectively address and manage certain aspects of their vulnerability and have clearly progressed in specific areas related to their development. Unfortunately there are other states that have regressed. One major reason for the lack of implementation of the BPOA has been the decline in international support and resources. Reviews indicate a 50% reduction in Official Development Aid (ODA) to SIDS in the period 1994-2004 (Chowdhury, 2004).

Progress Toward Implementation of Ocean and Coastal Management in SIDS

General Trends Prior to the Mauritius International Meeting¹

- 20% of SIDS nations (8 nations) have developed specific institutions or inter-agency mechanisms for the coordination of integrated coastal and ocean management;
- 44% of SIDS nations (18 nations) have entrusted the coordination of marine and coastal issues to national environmental institutions. Some of these mechanisms and environmental institutions are part of the National Sustainable Development Plan coordination (6 countries of 18, or 15% of the total).
- No SIDS has delimited its EEZ and deposited EEZ coordinates with the UN Division of Ocean Affairs and Law of the Sea (DOALOS), nor has any SIDS filed an extended continental shelf claim.
- Several countries have enacted relevant legislation regarding marine management. Most of the enactments are under jurisdiction or coordination of national environmental institutions, most notably, National Environmental Acts (63% of SIDS or 26 countries) and laws that provide for Environmental Impact Assessment (32% of SIDS, or 13 countries). The Environmental Acts often encompass waste and watershed or pollution-related issues, and to a lesser extent legislation on marine protected areas (MPAs) and fisheries management.
- 44% of SIDS (18 countries) have developed National Sustainable Development Plans and Biological Diversity National Strategies. The Cook Islands, Marshall Islands, and Samoa have developed Marine Resources Plans.
- 7% of all SIDS (or 3 countries from the Caribbean) have enacted National Coastal Zone Acts (Barbados, Belize, and Cuba).
- 46% of SIDS (19 countries) have developed national initiatives for integrated coastal management, which are in the form of national plans (17% or 7 countries); national strategies (17% or 7 countries); and national programs (12% or 5 countries).
- 27% of SIDS (11 of 41) have enacted legislation on watershed planning, which includes coastal watershed management. These are the Cook Islands, Marshall Islands, Samoa, Barbados, Belize, Dominican Republic, Jamaica, St. Lucia, Antigua & Barbuda, and Suriname.
- Other initiatives closely related with integrated coastal management are the establishment of MPAs. 61% of SIDS, or 25 countries, have established MPAs while at least seven more have recommended or proposed MPA development. Only five SIDS have not established or recommended the establishment of MPAs, and information is needed for six SIDS. Interestingly, the Cook Islands and Samoa have declared their entire EEZs as MPAs, presenting a unique solution for management.

Progress Following the 2005 Mauritius International Meeting

- Three regional meetings were organized by UNDESA-SIDS Unit to examine the progress of implementation of the Mauritius Strategy.
- An inter-regional meeting took place in Rome in 2005 to determine next steps on the implementation of the Mauritius Strategy.
- The Cook Islands have made positive strides in meeting the Millennium Development Goals, particularly those related to management of waste and monitoring biodiversity.
- The Cook Islands have developed a National Development Plan and a draft Tourism Master Plan to assist the country with the implementation of the Mauritius Strategy.
- Sao Tome and Principe is currently in the implementation phase of a Large Marine Ecosystem Project and in the process of preparing a National Programme of Action for addressing land-based sources of marine pollution.
- Many islands in the Caribbean have put mechanisms in place to address management of waste and water pollution, such as:
 - o Establishing Solid Waste Management Authorities;
 - o Developing Marine Pollution Acts;
 - o Acceding to relevant IMO instruments;



- o Establishing sanitary land filled sites;
- o Conducting public awareness and sensitization campaigns on waste management issues.
- Many Caribbean governments are committed to the Integrated Watershed and Coastal Area Project, funded by GEF, being executed by the Caribbean Environment Programme and the Caribbean Environment Health Institute.
- Pacific SIDS are in the process of developing National Sustainable Development Strategies, and some have already completed theirs. There is a need for additional financial support to implement and complete the strategies.
- Development of a Pacific Islands Regional Ocean Policy was endorsed by the Ministers in 2002 and is currently being implemented at the national level.
- During the thirteenth session of the Commission on Sustainable Development (CSD) it was decided that, during future meetings of the Commission, one full day will be committed to addressing SIDS issues.

Obstacles

- Lack of accountability outside island/mission/mandate.
- Maintenance of capacity within SIDS on pertinent issues needed to assist in the development of the Mauritius Strategy.
- Given the recognition of special status of SIDS, there is

still inadequate follow-up in practical terms.

- Lack of human resource on the ground to facilitate the implementation of Mauritius Strategy.
- Development aid to SIDS has declined making access to financial resources more difficult.
- Many of the pledges made to assist SIDS in implementing the Mauritius Strategy have not been met to date.
- Lack of a formalized integration, coordination and monitoring mechanism to assess implementation of the Mauritius Strategy at the national and regional level.
- AOSIS has not been formalized.
- SIDS Consortium of Universities (established during the Mauritius International Meeting) lacks financial resources.
- Natural disasters in 2005 have impacted the progress of some SIDS on the implementation of the Mauritius Strategy.
- No SIDS has submitted any co-ordinates to United Nations Division on Ocean Affairs and Law of the Sea regarding EEZ delimitation and claims for an extended continental shelf.
- Appreciation of the uniqueness of SIDS issues is not well received by the international community. 'One size fits all concept' does not fit SIDS.
- Difficult for many SIDS to meet the eligibility criteria of international donor agencies, such as GEF, to access funds to

assist in the implementation of the Mauritius Strategy.

Next Steps Proposed During Panel Session

Implementation

- Need to focus on the implementation of the Mauritius Strategy.
- Support the implementation of the SIDS Consortium of Universities.
- Formalize the Alliance of the Small Island States (AOSIS).
- Build more partnerships with organizations to assist in the implementation of the Mauritius Strategy.
- Define and implement of contingency plans for marine pollution.
- Address the CBD Program of Work on Island Biodiversity and implementation constraints or issues faced by SIDS and elaborated in the Mauritius Strategy, as key drivers for partnership and implementation at the local level.

Coordination

- Establish partnerships with companies involved in the production of Ocean Thermal Energy Conversion (OTEC) type energy technologies.
- Integrate the Mauritius Strategy into the work programmes of relevant United Nations organizations.
- Develop and establish integrated approaches towards waste management.
- Raise awareness of the issue of climate change and its

impact in SIDS and the urgent necessity to implement adaptation activities in SIDS.

- Raise awareness of the issue of energy requirements and uses and the impact of SIDS development.
- Increase coordination and integration of policies and projects.

Monitoring

- SIDS need to establish their own monitoring and evaluation methodology at the national level to assess their implementation of the Mauritius Strategy.
- Creation of a focal point for the Atlantic SIDS: Cape Verde has been recommended.
- Establish indicators for progress on the implementation of the Mauritius Strategy.
- Recognize the important role of oceans as an economic driver towards the economic advancement of SIDS.

Other

- Support of the Global Forum on Oceans, Coasts and Islands in assisting SIDS with the advancement of ocean related issues such as the delimitations of their EEZ.



Panel Chair Ambassador Jagdish Koonjul, Mauritius Ministry of Foreign Affairs, and outgoing Chair, Alliance of Small Island States (AOSIS), highlighted progress in implementing the Mauritius Strategy and identified challenges, including funding, monitoring, capacity building and cooperation among SIDS.

- Recognition by the international community that SIDS do not have the same needs and requirements of other developing countries resulting in differentiated treatment.
- The need to establish a physical presence of international representation, in particular the United Nations in SIDS, such as the Pacific SIDS currently without UN presence.

Recommendations and Next Steps Proposed in Dialogue Sessions

Local

- Launch of the civil society platform;
- Establish adult and school learning programs;
- Awareness raising at the national level about the Mauritius Strategy and its importance to SIDS;
- Ensure that Mauritius Strategy is accessible and used by all stakeholders by popularizing Mauritius Strategy through a multi-media toolkit;
- o An annotated version of the Mauritius strategy for civil society and policy makers
- o A pedagogic curriculum aid for schools and a poster leaflet in different languages



Willie John, Chief Executive Officer, Cook Islands, pledged his country's commitment to the Barbados Plan of Action and the Mauritius Strategy. Regarding progress achieved on the MDGs, he highlighted the successful conservation of natural resources and associated traditional knowledge and the development of a national environmental strategic action framework.

- Encourage the empowerment of local people and communities with regards to the Mauritius Strategy;
- Promote increased coordination and communication at the local level;
- Increase access to financial resources;
- Integrate the need for environmental management with poverty alleviation and socio-economic advancement;
- Facilitate understanding and action to address local needs, concerns and interests in the conservation and sustainable use of island biodiversity;
- Assist in achieving the biodiversity targets of WSSD and CBD, related MEAs and their regional agreements and the Regional Seas Programmes;
- Identify and support island leaders championing major conservation and sustainable livelihood initiatives;
- Stimulate common pathways for action between Governments and civil society;
- Develop connections between community based initiatives (e.g., Small Islands Voice (SIV), Youth Visioning for Island Living and networks with a social, cultural and economic focus relevant to islands).

Regional

- Improve coordination for SIDS issues at the regional and sub-regional level;
- Develop and strengthen networks and initiatives, such as the Task Force on Island Conservation and Protected Areas (TAFICOPA), IUCN Species Survival Networks, the International Coral Reef Initiative, Micronesians in Island Conservation network, to enhance coordination,

information sharing and to catalyze action in islands and within and among SIDS;

- Develop of a database on SIDS civil society organizations and stakeholders;
- Facilitate better integration and appropriate use of multi-lateral environmental agreements (MEAs) as instruments for local and regional implementation, through species, place or issue focused agreements and projects, and in particular recognizing the potential and benefits of both the Convention on Migratory Species (CMS) and World Heritage;
- Enhance policy integration at the national and regional level through mainstreaming biodiversity conservation into existing national policies like National Sustainable Development Strategies or the Regional/National Oceans Policies;
- Creation of regional events to showcase developments and examples of sustainable living.

Caribbean

- Support the formalization of the Caribbean Development Cooperation Committee (CDCC) as the intergovernmental forum to coordinate the implementation of the Mauritius Strategy.

AIMS

- Work towards getting the Atlantic SIDS working more closely with the Indian Oceans SIDS (increased integration between the two regions).
- Support Cape Verde becoming the focal point for the Atlantic SIDS.
- Establish an AIMS civil society regional coordination mechanism.
- Strengthen Indian Ocean Commission and incorporate other members of the Indian

Ocean Region (e.g. Maldives and Bahrain).

Pacific

- Integrate the Mauritius Strategy into regional programmes and National Sustainable Development Strategies including in the elaboration of the Pacific Plan recently endorsed by Pacific Island Leaders in their 2005 Summit.

Inter-Regional

- Increased South-South cooperation amongst SIDS (e.g., SPREP model can be emulated to fit Caribbean needs);
- Promote increased coordination and communication at the inter-regional level;
- Improve coordination and dialogue between the global, regional and national level.

International

- Support the formal institutionalization of the Alliance of Small Island States for the implementation of the Mauritius Strategy;
- Follow-up on United Nations Resolution which allows for UN departments to appoint a focal point within their agencies which are responsible for SIDS issues;
- Urge UNDESA to establish and inter-agency coordinating mechanisms to follow-up after Mauritius;
- Identify funding to ensure the continuation of SIDSNET;
- Collaboration between SIDSNET and the Global Forum in the advancement of the SIDS agenda globally;
- Establish a SIDS NGO Directory;
- Develop a global ocean forum trustee council given charge of the world's "isolated/fragile" areas including SIDS, Antarctica, and Oceans;

- Support the revision of the GEF criteria for funding eligibility;
- Further the development of the SIDS Consortium of Universities;
- Encourage UN system and other international organizations and programmes for the implementation of the Mauritius Strategy;
- Utilize international events to promote and recognize island conservation leadership in the conservation and sustainable use of island biodiversity;
- Recognize the existence of many international instruments relevant to SIDS but that island representation and participation within international processes and UN presence in country is not sufficient to link the international level to on-the-ground communities;
- Recognize the need for a global body or effective enforceable regime for seamount protection;
- Support the strengthening of national capacity for follow-up and implementation and in particular the lack of access to financial resources;
- Recommend that UNEP consider elaborating its 'Global Programme of Action for the Protection of the Marine Environ-



Fernando Trindade, on behalf of Celestino Andrade, Ministry of Environment, São Tomé and Príncipe, emphasized his country's vulnerability to pollution from land-based activities, noted regional cooperation, and said a national LME project had been prepared as part of a national action plan under the GPA.



Rolph Payet, Director, Ministry of the Environment, Seychelles, underscored the fact that SIDS require assistance to submit their maritime delimitations as provided under UNCLOS.



Vincent Sweeney, Executive Director, Caribbean Environmental Health Institute, St. Lucia, outlined the domestic waste management situation and listed recent improvements, including: stronger legal and institutional backing; the construction of sanitary landfill sites; and increased recycling and public awareness.

ment from Land-based Activities' to give special attention to the needs of SIDS;

- Urge SIDS to join the Convention on Migratory Species;
- Develop a 'global vision for local action' for the implementation of the conservation and sustainable use of island biodiversity at the local/national level through a **Global Island Partnership** – a linked collection of partnership activities at local, national and international levels and built upon existing networks, institutions and initiatives.

Conclusion

Small Island Developing States have made strides in the implementation of the Mauritius Strategy; however they face many challenges that hinder the rate of implementation. SIDS continue to be vulnerable to natural disasters and environmental degradation due to their small scale and geographical location, which also makes it difficult to compete aggressively on the global market due to their isolation from major international shipping routes.

Successful implementation of the Mauritius Strategy cannot occur in the absence of effective integration, coordination and monitoring mechanisms established at the global, regional, and national levels and this can be enhanced through the formalization of the AOSIS to monitor implementation of the Mauritius Strategy.

Small Island Developing States Dialogue Session Participants

Small Island Developing States Side Meeting Monday, 23 January, 2006

Celestino Andrade, Minister Advisor, Ministry of Environment, Natural Resources and Infrastructure, Sao Tome and Principe

Dominique Benzaken, Secretariat of the Pacific Regional Environment Programme

Joannes Berque, UNESCO-IOC

Paola Deda, Convention on Migratory Species

E. Desa, UNESCO- IOC

James Hardcastle, Nature Seychelles

Willie John, CEO, Minister of Marine Resources Office

John Low, Director, APA Consultancy

Franklin McDonald, UNEP-CAR/RCU

Robin Mahon, University of the West Indies, Barbados

Magdalena Ak Muir, EUCC – Coastal Union and Arctic Institute of North America

Gerald Miles, The Nature Conservancy

Marina N'Deye, Independent Consultant

Rolph Payet, Ministry of Environment and Natural Resources, Seychelles

Mary Power, South Pacific Geo-Science Commission

Ann Powers, Pace Law School-NY/USA

Margi Prideaux, Whale and Dolphin Conservation Society

Peter Prows, Permanent Mission of Palau to the UN

Enele S. Sopoaga, Tuvalu Mission to the UN

Norma Taylor Roberts, Permanent Mission of Jamaica to the UN

Vaia Tuuhia, Delegation Polynesie Fiang

Fernando Trindade, Geographical and Surveying Directorate, Ministry of Environment, Natural Resources and Infrastructure, Sao Tome and Principe

LaVerne Walker, Coastal Zone Unit, Ministry of Physical Development, Environment and Housing, St. Lucia



Bottom-line Assessment Dialogue Session: Small Island Developing States: 25 January, 2006

Nelson Andrade, UNEP-CAR/RCU

Dominique Benzaken, Secretariat to the Pacific Regional Environment Programme

Fathimath Ghina, UNESCO-CSI

Arthur A. Gray, Organisation of Eastern Caribbean States

Jens Ambsdorf, Lighthouse Foundation

Josephine Langley, Fisheries/Socio-Economic Consultant, Mauritius and UK

David Leary, Center for Environmental Law, Macquarie University

Robin Mahon, University of the West Indies, Barbados

Gerald Miles, Nature Conservancy

Peter Neill, World Ocean Observatory

Mary Power, South Pacific Geoscience Commission

Margi Prideaux, Whale and Dolphin Conservation Society

Peter Prows, Palau Mission to the UN

Sunil M. Shastri, University of Hull, UK

Vincent Sweeney, Caribbean Environmental Health Institute

Norma Taylor Roberts, Jamaica Mission to the UN

LaVerne Walker, Coastal Zone Unit, Ministry of Physical Development, Environment and Housing, St. Lucia

Next Steps in Small Island Developing States Dialogue Session: 26 January, 2006

Nelson Andrade, UNEP/CAR

Dominique Benzaken, Secretariat to the Pacific Regional Environment Programme

Paola Deda, UNEP/CMS

Fathimath Ghina, UNESCO/CSI

Arthur Gray, Organisation of Eastern Caribbean States

J D Hache, Conference on the peripheral maritime regions of EU (CPMR)

James Hardcastle, Nature Seychelles

Christy Loper, NOAA-US

John Low, APA consultancy, Cook Islands

Gerald Miles, The Nature Conservancy

Marina N'Deye, Independent Consultant, Cape Verde

Rolph Payet, Minister of Environment, Seychelles

Lelei Peau, Department of Commerce, American Samoa

Judith Priam, PhD student, Guadeloupe

Margi Prideaux, Whale & dolphin Conservation Society

Anne Rogers, UN/DESA

Enele Sopoaga, Permanent Mission of Tuvalu to the UN

Vincent Sweeney, Caribbean Environmental Health Institute

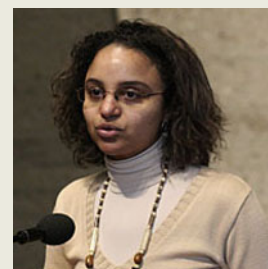
Dirk Troost, UNESCO/CSI

Nelson Andrade, Director, UNEP Caribbean Programme, UNEP/UNDP/GEF Programme on Integrated Water and Coastal Area Management (IWCAM) for SIDS, presented the objective and components of the IWCAM.



Dominique Benzaken, Coastal Management Adviser, Secretariat of the Pacific Regional Environment Programme, argued that in order to achieve healthy oceans and sustainable livelihoods in the Pacific, the Pacific Islands Regional Oceans Policy (PIROP) requires prompt implementation.

Enele Sopoaga, Permanent Representative of the Mission of Tuvalu to the UN, called on States and international organizations to recognize the special vulnerabilities of SIDS.



Marina N'Deye, independent consultant, urged Atlantic SIDS to identify priority actions to implement the Barbados Plan of Action (BPOA). She acknowledged Cape Verde's offer to become a focal point for the BPOA and stressed the importance of linguistic diversity to increase local involvement.

Footnote:

¹From: Loper, Christen E., Miriam C. Balgos, Janice Brown, Biliana Cicin-Sain, Peter Edwards, Christina Jarvis, Jonathan Lilley, Isabel Torres de Noronha, Adam Skarke, Joana Flor Tavares, and LaVerne Walker. *Small Islands, Large Ocean States: A Review of Ocean and Coastal Management in Small Island Developing States since the 1994 Barbados Programme of Action for the Sustainable Development of Small Island Developing States (SIDS)*. Toward Mauritius 2005 Paper Series No. 2005-1. Global Forum on Oceans Coasts and Islands: University of Delaware, Newark, USA (2005).

RESULTS OF THE DIALOGUE ON ISLAND BIODIVERSITY

Prepared by Gerald Miles, The Nature Conservancy

This session was co-sponsored by the Secretariat of the Convention on Biological Diversity, the UNEP/Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Secretariat for the Pacific Regional Environment Program (SPREP), The Nature Conservancy, and the IUCN/WCPA Taskforce on Islands Conservation and Protected Areas (TAFICOPA).

We have a vision. We have agreed goals. We have great knowledge and ever-greener technologies. What we need is high-level political commitment for marine conservation and protection areas....

Let us work together: to protect the oceans and coastal zones; to help small islands survive and prosper; and to ensure that all people enjoy a sustainable future.
Kofi Annan, Port Louis, 13 January 2005

Significance of Island Biodiversity

The Earth is home to more than 130,000 islands, which host more than 500 million people. They are stewards for more than one-sixth of the Earth's total area. Half of the tropical marine biodiversity is found in islands, with 12 of the 18 centers of marine endemism and seven of the ten coral reef hotspots surrounding islands. Terrestrially, islands are home to half of the recognized Endemic Bird Areas, a quarter of the terrestrial Global 200 Ecoregions, and a third of the biodiversity hotspots. Islands also claim the

greatest number of extinctions in the world and today island species are often highly threatened. Small Island Developing States are home also to great diversity of cultures that depend on island biodiversity for their livelihoods and development. They face particular challenges in the conservation and sustainable use of island biodiversity.

Recommendations

To advance the conservation and sustainable use of island biodiversity, the Dialogue identified the need to:

- Develop a 'global vision for local action' for the implementation of the global policy processes at the local/national level through a **Global Island Partnership** – a linked collection of partnership activities at local, national, and international levels and built upon existing networks, institutions, and initiatives – that will:
 - a) Address the CBD Program of Work on Island Biodiversity and implementation constraints or issues faced by SIDS and elaborated in the Mauritius Strategy, as key drivers for partnership and implementation at the local level;
 - b) Facilitate understanding and action to address local needs, concerns, and interests in the conservation and sustainable use of island biodiversity;
 - c) Assist in achieving the biodiversity targets of WSSD and CBD, related MEAs and their regional agreements, and the Regional Seas Programmes;
 - d) Develop and strengthen networks and initiatives, such as TAFICOPA, IUCN Species Survival Networks, the International Coral Reef Initiative, and Micronesians in Island Conservation network, to enhance coordination, information sharing, and catalyze action in islands and within and among SIDS;
 - e) Develop connections between conservation networks (e.g. Small Islands Voice (SIV), Youth Visioning for Island Living, and networks with a social, cultural, and economic focus relevant to islands;
 - f) Identify and support island leaders championing major conservation and sustainable livelihood initiatives;
 - g) Stimulate common pathways for action between governments and civil society;
 - h) Improve access to adequate financial resources and capacity building mechanisms;
 - i) Facilitate better integration and appropriate use of MEAs as instruments for local and regional implementation, through species, place, or issue focused agreements and projects, and, in particular, recognize the potential benefits of both CMS and World Heritage;

- j) Enhance policy integration at the national and regional level through mainstreaming biodiversity conservation into existing national policies like National Sustainable Development Strategies or the Regional/National Oceans Policies;
- k) Encourage UN system and other international organisations and programmes (for example WCMC) to give priority to actions that support the collection and management of information in support of the effective conservation and sustainable use of island biodiversity;
- l) Utilize international events to promote and recognize island conservation leadership in the conservation and sustainable use of island biodiversity.

More broadly, it was agreed:

- 1) To recognize many international instruments to SIDS but that island representation and participation within international processes and UN presence in countries is not sufficient to link the international level to on-ground communities;
 - 2) A global body or effective enforceable regime for Seamount protection, including the support for a total ban of unregulated high sea bottom trawling;
 - 3) The need for the strengthening of national capacity for follow-up and implementation, and, in particular, the lack of access to financial resources;
 - 4) To recommend that UNEP consider elaborating its 'Global Program of Action for the Protection of the Marine Environment from Land Based Activities' to give special attention to the needs of SIDS, and, in particular, the protection of coral reefs from land based sources of pollution.
- With specific reference to the upcoming Eighth Conference of the Parties (COP8) to the Convention on Biological Diversity, it was agreed to recommend that Parties to COP8:
- a) Adopt a strong Programme of Work on Island Biodiversity;
 - b) Ensure that the strong links between sustainable livelihoods and poverty reduction that are fundamental to island conservation are an integral part of the implementation of the Programme of Work;
 - c) Call upon the GEF during its 'Resource Allocation Framework' readjustment, should give consideration to providing a special window and develop appropriate access and implementation procedures for SIDS in relation to island biodiversity conservation;
 - d) Take advantage of the opportunity presented within the Island Dialogue for community leaders and delegates to identify approaches for partnerships that will advance the conservation and sustainable use of island biodiversity;
 - e) Support opportunities offered at the regional level, such as the Island Life Campaign in the Pacific Islands Region, to enhance implementation of the conventions programs of work at the national level;
 - f) Welcome the 'Micronesian Challenge' as an important contribution to implementing global policy at the local and regional level and to the CBD 2010 targets;
 - g) Identify the ways and means for the effective integration of the Mauritius Strategy into CBD Programs of Work, in particular the PoW on Island Biodiversity;
 - h) Comprehensively integrate the ecosystem approach into the

PoW on Island Biodiversity;

- i) Request that UNEP WCMC, in collaboration with TAFICOPA and other relevant organizations, develop a global database for island biodiversity on the level of ecosystems and species in order to facilitate decision-making, comparative studies, and sharing of homogeneous information.

The Dialogue was guided by brief statements from representatives of the UNEP/CBD, Tuvalu on behalf of AOSIS, Seychelles, Palau, TAFICOPA, UNEP/CMS, UNESCO/WHC, SPREP, and The Nature Conservancy.

Participants

- Jens Ambsdorf, Lighthouse Foundation
- Dominique Benzaken, Coastal and Marine Adviser, Secretariat for the Pacific Regional Environment Programme
- Paola Deda, Interagency Liaison Officer, UNEP/Convention on the Conservation of Migratory Species of Wild Animals (CMS)
- Christian Depraetere, Member, IUCN/WCPA Taskforce on Island Conservation and Protected Areas
- Fathimath Ghina, Assistant Programme Specialist, UNESCO/Coastal and Small Islands
- James Hardcastle, Technical Adviser, Nature Seychelles
- Marjaana Kokkonen, Marine Heritage Specialist, UNESCO World Heritage Centre
- Gerald Miles, Senior Adviser/Conservation Finance and Policy, The Nature Conservancy
- Rolph Payet, Principal Secretary/Environment, Seychelles
- Margi Prideaux, Global CMS Programme Leader, Whale and Dolphin Conservation Society (WDCCS)
- Peter Prows, Adviser, Permanent Mission of Palau to the United Nations
- Lauren Salm, Marine Programme, UNESCO World Heritage Centre
- HE Enele Sopoaga, Ambassador Permanent Mission of Tuvalu to the United Nations and Vice Chair of the Alliance of Small Island States (AOSIS)
- Marjo Vierros, Programme Officer/Marine and Coastal Biodiversity, Secretariat of the UNEP/Convention on Biological Diversity

CAPACITY DEVELOPMENT FOR OCEAN AND COASTAL MANAGEMENT: MOBILIZING TO ADDRESS NEEDS

Summary prepared by Indumathie Hewawasam, The World Bank; Mary Power, South Pacific Applied Geoscience Commission; and Margarita Astralaga, Ramsar Convention Secretariat

Capacity development for ocean and coastal management was one of the twelve major topics addressed at the Third Global Conference. Enhancing capacity development in ocean and coastal management is a major concern and priority of developing countries, small island developing states (SIDS), and countries with economies in transition. This issue has been a priority theme for discussion at the two previous Global Conferences, and has been a major concern of the Global Forum on Oceans, Coasts, and Islands. The following is intended to provide a summary of the formal and informal discussions that took place at the Third Global Conference on Oceans, Coasts, and Islands dealing with issues in moving forward with capacity development.

The panel was chaired by Indumathie Hewawasam, World Bank and Ralph Cantral, National Ocean Service, U.S. National Oceanic and Atmospheric Administration and included the following panelists: Margarita Astralaga, Ramsar Convention Secretariat; Awni Behnam, International Ocean Institute; Chua Thia-Eng, Partnerships for Environmental Management in the Seas of East Asia (PEMSEA); Ehrlich Desa, UNESCO; Anamarija Frankic, University of Massachusetts Boston, and Ministry of Culture, Croatia; James Hardcastle, Nature Seychelles; Robin Mahon, Caribbean Large Marine Ecosystem Programme; Franklin McDonald, UNEP Caribbean Programme; Ali Mohamed, New Partnership for

Africa's Development (NEPAD); Marina N'Deye, Cape Verde; and Mary Power, South Pacific Applied Geoscience Commission (SOPAC).

Background

In 2005, the Global Forum carried out a number of analyses related to ocean and coastal management in SIDS countries, including four analyses focused on assessing progress achieved in ocean and coastal management in the major small island developing States (SIDS) regions since 1994 (see reports at <http://www.globaloceans.org/sids/index.html>) and rapid assessments on the specific steps that can be taken to rapidly implement the Mauritius Strategy in four SIDS regions, including specific steps that need to be taken to enhance capacity development in each region (see reports at <http://www.globaloceans.org/capacity/index.html>). The SIDS experts who prepared the rapid assessments with the support of various governmental and nongovernmental partners, were part of the conference panel on capacity building.

Four rapid assessments (Pacific region, Caribbean region, Indian Ocean region and Atlantic SIDS region) were conducted on the specific steps that can be taken to rapidly implement the Mauritius Strategy in four SIDS regions, including specific steps that need to be taken to enhance capacity development in each region (prepared by local SIDS consultants with the support of various governmental and nongovern-

mental partners, and especially the Global Environment Facility). The assessments are available in the report distributed at the Third Global Conference *Capacity Building Assessments in Small Island Developing States in the Pacific, Caribbean, Indian Ocean, the Atlantic, and the Community of Portuguese-Speaking Countries* (available at <http://www.globaloceans.org/>).

Four analyses were also conducted focusing on assessment of progress achieved in ocean and coastal management in the major SIDS regions since 1994:

Island Bellwether: Climate Change and Energy Policy Strategy for Small Island Developing States Toward Mauritius 2005 Paper Series No. 2005-2

Small Islands, Large Ocean States: A Review of Ocean and Coastal Management in Small Island Developing States since the 1994 Barbados Programme of Action for the Sustainable Development of Small Island Developing States (SIDS) Toward Mauritius 2005 Paper Series No. 2005-1

Global Multilateral Environmental Agreements and Small Island Developing States Toward Mauritius 2005 Paper Series No. 2004-2

Voluntary Partnership Initiatives from the 2002 World Summit on Sustainable Development and Small Island Developing States Toward Mauritius 2005 Paper Series No. 2003-1



Capacity Building Discussions at the Global Conference

The session on capacity building was structured in the form of a panel with one overview presentation and all panelists serving as resource persons during the ensuing discussion. The discussion points generated during this panel session were captured and further addressed in the subsequent dialogue session.

The session aimed to identify specific capacity development needs for further advancing capacity in ocean and coastal management in developing countries, SIDS, and countries with economies in transition. The session was expected to produce specific steps to advance capacity building in these regions in the next year, and a specific plan for mobilization of resources to get these accomplished.

Panel Session

The overview, presented by Indumathie Hewawasam of The World Bank, chair of the Global Forum's Working Group on Capacity Building, which met in a pre-conference meeting on January 23, 2006, reported on the outcome of that meeting and addressed implementation issues in capacity building, emphasizing the need to define specific first steps to improve implementation of capacity building initiatives. The overview emphasized the following points for discussion:

- There is progress in various aspects of capacity building in terms of human and institutional capacity at the global level; number of active partnerships; public awareness on the role of the ocean; scientific knowledge and application; stakeholder

participation in decision-making; and political will for marine governance. However, progress in these areas could not catch up with the increasing capacity required to meet the goals of sustainability, which remains a moving target, as evidenced by:

- Accelerating degradation from population pressures;
- Increase in the complexity of issues;
- Decreasing levels of funds relative to the number/complexity of issues;
- Lack of appreciation of the long-haul, multi-layered, multi-institutional aspects of capacity development;
- Difficulty in accepting the reality of "one shoe does not fit all" particularly among regions, such as the SIDS regions.
- The moving target of sustainability can be achieved by stimulating ocean-related capacity-development through promotion of partnerships and mobilization of resources, through the Global Conference and similar 'Davos of the Oceans' meetings.
- The following set of principles could guide the implementation of capacity building:
 - Improve ability to identify issues (self-driven capacity-development) ;
 - Focus on a structured, nation-specific, approach to capacity development;
 - Improve management skills among people, processes, and institutes;
 - Nurture ocean champions

and create a critical mass supportive of sustainability.

- Based on the above principles, some possible first steps of implementation may include:
 - Supporting leadership training at four levels: program directors, practitioners, decision-makers, and civil society;
 - Supporting national science and policy leaders to focus on local priorities;
 - Promoting technical skills to prepare and package the demand for sponsors;
 - Supporting advocacy to raise the profile of oceans locally, nationally and regionally;
 - Mobilizing funds for institutions and processes.

Discussion

The following salient points were raised in response to the overview presented:

- There is a need to develop strategies to retain trained manpower that imparts a sense of ownership by supporting students to study in local academic institutions.
- Individual skills should be built in the context of organizational and societal requirements.
- There should be a balance of focus to make sure that the elements of capacity development as well



Introducing the session, Co-Chair Indumathie Hewawasam, World Bank, reported from the Capacity Development Task Force, and urged implementation of the Task Force's recommendations



Co-Chair Ralph Cantral, Chief, National Policy and Evaluation Division, Office of Ocean and Coastal Resource Management, National Ocean Service, US NOAA, explained that the panel would respond to questions and comments from the floor.

- as its broad goals are met through multi-level, needs-based strategy.
- Current capacity seems to be operating at optimum level although there is a lag between skills required and training programs.
- There is a need to focus on developing leadership at the decision-maker level since they make the major difference, through training programs that are adapted to site-specific language and issues.
- A critical mass in support of various issues is essential to help local civil society engage in the management process.
- The strategy proposed, being an issue-based process, needs specific details in order to make it happen: what, when, who, and where. For example, leadership training for SIDS decision makers; university-based academic programs in marine policy; training on oceans issues for the media; replication of successful capacity development programs such as the U.S. National Sea Grant College Program; and working with partners who have funding.
- Always assess local needs before starting a capacity development program aimed at developing local entrepreneurs.
- A regional approach to capacity development should be encouraged in small developing countries that do not have a critical mass of trained human resources.
- South-South cooperation in capacity development should be encouraged.
- Lessons learned from successful partnerships should be documented, including ways by which local needs in capacity building are met and

the major skills required.

- There is a need to harmonize the capacity development initiatives of all major players working in major agencies.
- There is a need for synergy among various efforts that address cross-cutting issues in post-conflict situations, e.g., the tsunami disaster in Asia.

Dialogue Session on Next Steps

The dialogue session, which followed the panel session in the afternoon of January 26, focused more broadly on how to go about implementing existing activities and projects in capacity development in more efficient and effective ways.

At issue was not just the start up of capacity development initiatives but also capacity mobilization, which is the optimization of the use of existing capacity and creating the environment and incentives to ensure capacity retention, through various means, such as promotion of indigenous regional capacity, development of community associations, and enlisting the involvement of governments as well as the private sector.

It is critical that needs assessments and capacity stocktaking be carried out in order to have targeted efforts that use appropriate approaches. A capacity development framework answers the practical questions:

- What is the training about?
- Who are to be trained and for what?
- Where and how often should the training be conducted?
- How much funding is needed to support the training program?
- What are the funding sources?
- How to make it happen?

There is a need to bring capacity development down to the grass roots, to the community level and find ways to empower local communities to engage in the dialogue (with

government and the private sector) and to establish mechanisms for their participation. Existing programmes need to be reviewed to ensure that communities are empowered to find their own solutions to problems.

Transparency and accountability are significant issues in terms of community empowerment and participation as well as equity in resource allocation and benefit sharing. There is a need to make government processes more transparent in relation to resource access arrangements and contracts with third parties, particularly in the oil and gas industry and in fisheries.

There is a need to improve the way by which the message about the oceans is communicated across to various audiences, particularly in translating science and policy into a language that communities can understand and in reaching the younger generations in order to create an informed public. Developing environmental curricula in national languages and school kits on ocean/coastal governance issues are some examples.

In many cases there may be merit in taking the regional approach to addressing skills shortages as it may not be feasible for each SIDS country to support the required skills base in government and ocean governance.

Specific Steps for the Global Forum for the Next Year

Discussions have been initiated regarding the development of a capacity development program for senior executives of SIDS countries with a focus on ocean governance and strategy/policy development. Another approach that is also being pursued is the improvement of South-South partnerships in developing capacity in ocean and coastal management education especially through strengthening of the ocean and coastal management curriculum of the SIDS University Consortium.

For the next Global Conference, it would be opportune to organize a “Young Professionals” forum in order to bring in a group of early career professionals from the various regions to take part in the Summit and also to establish their own peer network. This is considered important since the next generation of oceans entrepreneurs need to be engaged to actively participate in dealing with the oceans agenda.

Both initiatives can help in setting up a professional cadre of “movers and shakers” in ocean issues, through the development of new academic and other capacity development programmes in participating universities and organizations such as the Pew Fellows on Ocean and Marine Affairs, the UN Goodwill Ambassadors, “OPEC” (the Ocean Policy Entrepreneurs Club), and the capacity development programme of UNCTAD.

Developing a media training program for journalists in SIDS regions to sensitize them to ocean issues; developing educational materials on tsunamis and other natural hazards; supporting IOI courses on oceans issues; and promoting the use of the Ocean Portal (www.oceanportal.org) are also among the specific recommendations put forward for the Global Forum.

Pre-conference Meeting of the Task Force on Capacity Development: 23 January 2006

Chair: Indumathie Hewawasam, World Bank

Participants:

Akinlabi Awobamise, Federal Ministry of Environment, Nigeria

Miriam Balgos, Global Forum on Oceans, Coasts and Islands

Awni Behnam, International Ocean Institute

Victor Manuel Borges, Ministry of Fisheries, Mozambique

Chua Thia-Eng, Chua Thia-Eng, Partnerships for Environmental Management in the Seas of East Asia (PEMSEA)

Nguyen Chu Hoi, Vietnam Institute of Fisheries Economic and Planning, Ministry of Fisheries, Vietnam

Bruno Correard, Carrefour Group, France

Carlos Costa, Embassy of Mozambique in France

Jordi Galofre, Coastal Directorate, Ministry of Environment, Spain

Domingos Z. Goue, Fisheries Research Institute, Mozambique

James Hardcastle, Nature Seychelles

Robin Mahon, Caribbean Large Marine Ecosystem Programme

Bernice McLean, South Africa

Shavhani Mukwevho, Ministry of Environmental Affairs and Tourism, South Africa

Mary Power, South Pacific Applied Geoscience Commission (SOPAC)

Judith Priam, Universite de Versailles St. Quentin, France

LaVerne Walker, Coastal Zone Management Unit, St. Lucia

Nguyen Viet Thang

Dialogue Session: Next Steps in Capacity Development: 26 January, 2006

Co-Chairs: Margarita Astralaga, Ramsar Convention and Mary Power, SOPAC

Participants:

Miriam Balgos, Global Forum on Oceans, Coasts, and Islands

Rhoda Ballinger, Cardiff University

Chua Thia-Eng, PEMSEA

Ehrlich Desa, UNESCO

Salif Diop, UNEP

Anamarija Frankic, University of Massachusetts Boston, and Ministry of Culture, Croatia

Robin Mahon, Caribbean Large Marine Ecosystem Programme

Franklin McDonald, UNEP Caribbean Programme

Cesar Toro, IOC Sub-Commission for the Caribbean and Adjacent Regions

Timothy Stojanovic, Cardiff University

Marina N’Deye, Cape Verde



Co-Chair Chua Thia-Eng, Regional Programme Director, PEMSEA, called on donors and multilateral lending agencies to engage with countries whose “democratic space” has newly opened up.



Robin Mahon, Caribbean LME Programme, argued that indigenous academic institutions in SIDS should encourage their students to remain in-country to contribute to domestic development.



Mary Power, South Pacific Applied Geoscience Commission, suggested that professionals who have emigrated make a positive contribution by exerting influence in international fora.



James Hardcastle, Technical Advisor for Island Conservation, Nature Seychelles, underlined the need to engage with community members that have the power to persuade others.

THE TSUNAMI DISASTER AND DISASTER PREPAREDNESS: ONE YEAR LATER

Summary prepared by Stefano Belfiore,
Intergovernmental Oceanographic Commission, UNESCO

The Global Conference considered the issue of tsunami and disaster preparedness, using the goals of: reviewing progress achieved and obstacles faced in the process of reconstruction and the development of capacities for disaster preparedness in the countries of the Indian Ocean affected by the tsunami of 26 December 2005; learning lessons on reasons why some coastal communities may have fared better than others in the tsunami disaster (e.g., use of building codes, coastal protection measures, public education, etc.); and examining progress with the establishment of tsunami warning and mitigation systems in four main regions of the world (Indian Ocean, Pacific, North Eastern Atlantic, Mediterranean and connected seas, Caribbean). The expected outcome from the panel was further opportunities and next steps for mainstreaming an integrated, multi-hazard approach to address vulnerability, risk assessment and disaster management, including public awareness, prevention, mitigation, alerts, preparedness and response into the global ocean and coastal agenda, in particular into strategic, long-term coastal planning.

The panel was co-chaired by: William Brennan, Deputy Assistant Secretary for International Affairs, United States National Oceanic and Atmospheric Administration (NOAA); and François Schindelé, former Chair, Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the Indian Ocean (ICG/

IOTWS). Panel participants included: Maitree Duangsawasdi, Director General, Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Thailand; Franklin McDonald, UNEP Adviser, former Director, Jamaican National Environment and Planning Agency, and former Project Manager, Pan-Caribbean Disaster Preparedness and Prevention Project; Russell Arthurton, Consultant, Coastal Geoscience, and formerly British Geological Survey; Lahsen Ababouch; Chief, Fish Utilization and Marketing Services, FAO; and Stefano Tinti, Chair, Intergovernmental Coordination Group for the Tsunami Early Warning and Monitoring System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS).

The dialogue session was led by: Arvind Anil Boaz, South Asia Co-Operative Environmental Programme; Ezio Bussoletti, Italian Delegation to UNESCO; and Stefano Belfiore, Intergovernmental Oceanographic Commission, UNESCO. Participants included: Lahsen Ababouch, Chief, Fish Utilization and Marketing Services, FAO; Bernardo Aliaga, Intergovernmental Oceanographic Commission, UNESCO; Russell Arthurton, Consultant, Coastal Geoscience and formerly British Geological Survey; Alessandra Cavaletti, Italian Ministry of Environment and Territory; Bernhard Glaeser, Social Science Research Center, Berlin; Marion Glaser, Center for Tropical Marine

Ecology; Stefano Tinti, Chair, Intergovernmental Coordination Group for the Tsunami Early Warning and Monitoring System in the North Eastern Atlantic, the Mediterranean, and Connected Seas (ICG/NEAMTWS); and Uli Wolf, Intergovernmental Oceanographic Commission, UNESCO.

Challenges in Reconstruction

The panel addressed progress with respect to (a) the process of reconstruction and the development of capacities for disaster preparedness in the countries of the Indian Ocean; and (b) the establishment of regional early warning systems for tsunamis and other marine hazards in four regions of the world and their contribution to a global system. The panel also considered challenges and opportunities for enhancing mitigation of marine hazards and lessons learned from coastal disasters in the last year. The role of the IOC and the International Strategy for Disaster Reduction (ISDR) and other organizations was commended in developing and coordinating early warning systems for tsunamis and other marine hazards.

A review was given of the progress of reconstruction and rehabilitation in the areas affected by the December 2004 tsunami in Thailand. This process has involved the creation of emergency relief centers and important operations of beach clean up and forest and coral reef restoration. Resorts have been restored as



best as possible and water resources have been rehabilitated. Measurement of water quality is also showing improvements. Thailand is actively engaged in the establishment of an early warning system for multiple marine hazards and new approaches to coastal planning and management. This includes the installation of buoys and warning-news broadcast towers, medium- and long-term environmental impact assessments for coastal infrastructure, recovery of livelihoods in the coastal zone, rehabilitation of the lifeline of mangroves and coastal forests, and the adoption of ecosystem-based management.

Progress Achieved and Obstacles Faced After the Tsunami of 26 December 2004 in the Indian Ocean – A Regional Overview

Clean-up and reconstruction operations are now well advanced in many of the worst affected impact sites. However, the clean-up operations have themselves created many additional problems. The haphazard disposal of waste and debris has led to the degradation or destruction of sensitive ecosystems. Relief camps have also been sited in sensitive ecological areas. The high demand for timber for reconstruction of settlements and boatbuilding has caused local destruction of coastal forests and woodlands.

Some progress has been made with the rehabilitation of coral reefs where these have not become exposed, but soil degradation and the pollution and disruption of water supplies from coastal aquifers are

still widespread. Desalination plants have been installed on some of the islands.

Although there has been a rapid and generous response to the replacement of destroyed fishing boats and gear, there are concerns that the number of vessels are now in excess of those pre-tsunami and that this is leading to overcapacity, putting even more pressure on already dwindling fish stocks in coastal waters. Opportunities for co-management do not appear to have been taken. There is also concern over the safety of many of the rapidly built boats because of poor construction methods. There have been serious problems of coordination of the relief effort with so many different organizations with no fisheries technical background involved. There have been significant differences in the guidelines used by the various actors resulting in confusion and wasted or duplicated effort.

Lessons Learned - Why Some Communities Fared Better

The severity of the impact on affected coasts has varied considerably according to the specific physical parameters of the shores, such as facing direction, headland protection, the nearshore shoaling, funneling, etc.; also the existence of barriers such as strongly founded buildings, mature trees, etc. at the backshore or on beach plains. As part of the process of risk assessment there is a need for detailed mapping of the nearshore, foreshore, and backshore zones in order to determine the susceptibility of specific

coasts to inundation by extreme waves.

Generally no effective warning systems were in place at the time of the 26 December 2004 event, even though for several countries the lead-times were sufficiently long enough for emergency evacuations to have been successful. The case of Kenya was an exception where the local police were mobilized and provided warnings to coastal communities. Indigenous knowledge amongst the population of the Nicobar Islands is reported to have been instrumental in the small number of casualties sustained there. This type of knowledge needs to be mainstreamed in the education and training of coastal communities in susceptible areas.

The need for well-coordinated emergency plans to be in place and rehearsed by local authorities and communities are paramount, though the difficulty of maintaining the necessary level of awareness over the long-term (perhaps several generations) is acknowledged. The need for nations and local authorities to establish strategic land-use planning and implementation in the context of integrated coastal management is strongly accepted.

Fisheries

Progress and challenges were addressed in rebuilding fisheries in Indian Ocean countries affected by the tsunami. From Indonesia to Somalia and Yemen, an estimated 35,000 fishermen died. The direct loss to the fishery sector amounted to US \$520 million, with 111,000 boats and 1.7 million of fishing gear units destroyed. FAO made a flash appeal

for reconstruction and rehabilitation of the sector and currently 45 projects on fisheries, agriculture, and forestry have been launched totaling \$55 million with 20 more projects in the pipeline. 60-70% of these projects concern fisheries and aquaculture, and generous contributions have been provided by FAO, Japan, Norway, Germany, UK, Italy, Canada, Belgium, Spain, Sweden and EU. Developing countries such as China, Palau, Algeria, and Zambia have also contributed. FAO has developed a strategic framework and a 5-year plan of action for the reconstruction and rehabilitation of the fisheries sector. Lessons learned from the past year include: the need to adopt a community-based approach and involve beneficiaries and stakeholders from the earliest stages of the process; the need to improve coordination of stakeholders (UN agencies, NGOs, governments, direct beneficiaries); and the need for proper technical advice. Good governance and accountability should go hand in hand with procurement and operations. For example, well over 125 NGOs are now operating in Banda Aceh, and it has been estimated that funds for fisheries have created a 25% overcapacity with respect to the pre-tsunami conditions, which were already beyond sustainability. This creates the risk that traditional critical factors in fisheries will be exacerbated and developed to overcapacity. Challenges are also posed by the introduction of inappropriate types of gear and boats that do not meet fisheries safety standards.

Establishment of Warning Systems

Progress and challenges posed by the establishment of early warning systems for tsunamis in the Mediterranean region were reviewed. The Intergovernmental Coordination Group for the Tsunami Early Warning and Monitoring System in the North Eastern Atlantic, the Mediterranean, and Connected Seas (ICG/

NEAMTWS) was established at the end of 2005 to integrate the existing seismographic detection networks with real-time sea-level networks to be upgraded from existing ones. Several national and local warning systems under development will be fully integrated into this initiative. Nations committed themselves to working toward upgrading legislation and existing detection systems and develop integrated national emergency preparedness and awareness plans. The Intergovernmental Coordination Group will work toward the formulation of a complete plan of action by December 2006, including the implementation of trials for key components of the early warning system, with the aim of having an initial operational system in place by December 2007. Such a system is needed in regions—the Mediterranean and the Northeast Atlantic—where there are numerous tsunami sources and historical records. Such sources, including earthquakes, landslides, and volcanic eruptions may cause catastrophic events in major coastal cities such as Lisbon, Naples, Messina, Istanbul, Heraklion, and Cairo. Most of the sources are very close to the coast and tsunamis may hit in a few minutes, exceeding the current ability for warning based on the national and regional real-time seismic, monitoring networks installed in the area.

Activities on the conduct and implementation of the renamed ICG/PTWS, which was set up in 2005, were presented. A task team has been established to convene a tsunami exercise in May 2006, and working groups have been set up on seismic measurements, including: data collection and exchange; sea-level measurements, including data collection and exchange; tsunami hazard identification and characterization, including modeling, prediction and scenario development; resilience building and emergency management; and interoperability of regional, sub-regional and national

tsunami warning systems in the Pacific. Through the activities of the International Tsunami Information Centre (ITIC), the ICG/PTWS is also assisting in the implementation of comprehensive mitigation programmes. Tsunami risks are being reduced by facilitating technology transfer through expert missions and conducting training programmes and guidance on tsunamis and tsunami warning. The ICG is also engaged in the development and creation of educational and awareness materials in local contexts and acting as a clearinghouse for the distribution of these materials globally in multiple languages, as well as gathering and documenting information on tsunami events. Through these programmes, ITIC cooperates with other ICGs and interested stakeholders to increase awareness and facilitate coordination to implement regional tsunami warning centers and raise the level of community engagement and empowerment that is essential for an effective response to tsunami warnings and immediate response to local tsunamis. The key point in the establishment and implementation of tsunami warning systems is putting together tsunami scientists, governments, NGOs, and emergency managers to work toward a common planning and strategy that would benefit from a variety of fields and expertise.

The degree of susceptibility and vulnerability to coastal hazards in the Caribbean region where there are records of numerous tsunamis and related fatalities were presented. Through the work of IOCARIBE and UNEP, a more integrated approach to coastal zone management is being adopted in the region, incorporating coastal inundation considerations. At the beginning of 2006, the *Intergovernmental Co-ordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean Sea and Adjacent Regions* (ICG/CARTWS) was established. The Caribbean early warning system aims to pro-

vide timely and accurate forecasts and warnings of coastal flooding and associated hazards due to tsunamis, storm surges, and hurricanes, and it is expected to be operational by the end of 2006 as a system of coastal sensors, many of which are already in place. In the region, the most reliable warning system has a delay of 20 minutes, but marine and coastal hazards may have a shorter travel time. Safety of coastal communities cannot depend only on sensors but also requires improvement of public awareness, enhanced governance and coordination among institutions, and innovative partnerships among governments, the scientific community, and civil society.

Hazard mitigation strategies, including long-term coastal planning, were presented. The review centered on the concerns posed by hazards, including both extreme catastrophic events and long-term, incremental hazards. The focus of hazard assessment should be on the incidence of hazard events at local to regional scales, the susceptibility of coasts to inundation, and the vulnerability of the coastal population. Options to respond to hazards include partially reducing susceptibility to inundation and primarily reducing vulnerability of coastal communities. The first can be achieved by hard and soft engineering solutions and regulating human activities that exacerbate susceptibility. The second can be achieved by preparedness, better communication links at the global and local levels, and mobilizing contingency resources. More importantly, vulnerability can be reduced through strategic measures: introducing strategic planning, adapting to a changing physical environment, recognizing vulnerability of expanding urban areas, and weighing livelihood opportunities against vulnerability. People can contribute to vulnerability through employment opportunities, poverty, indifference (lack of awareness to risk), fading memories of catastrophes, and resistance to evacuation. Hazard mitiga-

tion strategies concern the credibility and effectiveness of risk assessment and the appropriateness, feasibility, affordability, and sustainability of the response. A number of global lessons can be learned from the coastal catastrophic events of the last years: coastal populations are vulnerable to storm surges and extreme waves; surge and extreme wave events have recurrent costs on country economies; developed countries do not necessarily have effective emergency responses; strategic planning and development are key responses in reducing vulnerability, especially in coastal cities and mega cities; standards of protection need continual monitoring and maintenance; warning systems must be in place at global to local scales; and emergency plans must be tested, resourced, and implemented.

Establishment and Maintenance of Early Warning Systems: Regional Perspectives

Pacific: The System has been reorganized with more island states added. There are still some gaps as well as a need to have instrumentation optimized with the addition of more sea-level stations. The System is providing assistance to the Caribbean and Indian Ocean TWS.

Caribbean: This is a Multi-Hazard system coping with storm surges as well as tsunamis. Puerto Rico is set to take over from Hawaii as the Regional Warning Centre.

Indian Ocean: The IOTWS is scheduled to be in place by September 2007, handling tsunamis only. An initial system should be in place by the end of 2006. Hopefully, the system will also eventually be used for storm surges. There are several Regional Warning Centres but no single Centre has been agreed.

NE Atlantic, Mediterranean, and Connected Seas: An initial system is projected to be in place by the end of 2007, with the planning stage

complete by the end of 2006. Because of the near-field nature of tsunami impacts in the Mediterranean, there may be a need for more than one Warning Centre.

During the discussion, the issue of the participation and role of NGOs in the development and operation of early warning systems for marine multihazards was raised jointly with the issue of communication and distribution of powers among concerned institutions.

Recommendations

The discussion group acknowledged a lack of clarity in the expected goals of the EWSs – whether the systems should in all cases be expected eventually to cope with storm surges as well as tsunami hazards. In many parts of the world, storm surges by far constituted the greater risk. Was a multihazard system one that coped with tsunamis and storm surges, or simply one that coped with tsunamis from different types of tsunamigenic sources – seismic, volcanic, landslide? This is an area to be resolved. While a truly multihazard system is ideal, it is acknowledged that setting these up may take some time. There was an immediate need to put in place systems that coped with the tsunami hazard.

The assessment of risk is an area where the science community can make (and is making) a major contribution. Deepwater and fine-scale coastal modeling can make a major contribution and it is felt that there is scope for much improved integration and coordination of modeling efforts and initiatives. Susceptibility mapping including integrated high resolution bathymetric and topo-



Panel Co-Chair William Brennan, Deputy Assistant Secretary for International Affairs, US National Oceanic and Atmospheric Administration, commended the IOC, the International Strategy for Disaster Reduction (ISDR) and regional organizations for coordinating and developing regional tsunami early warning systems and called for increased focus on multi-hazard warning systems.



Panel Co-Chair François Schindelé, on behalf of Patricio Bernal, Executive Secretary, IOC, elaborated on the five regional early warning systems, either currently in place or under development.

graphic survey is certainly achievable and needs to be addressed as a matter of urgency with respect to storm surge as well as tsunami hazards. This will require financial resources. The need to focus efforts on coasts with a high socio-economic importance was accepted. There is also a need to be aware of the rapid changes in population, and thus potential vulnerability, in the coastal areas, particularly with respect to the growth of coastal mega cities.

A priority regarding communication is to get high resolution, real time data to warning centers. There is also a need for a dedicated channel for disaster management.

Efforts should also be made to conserve, and wherever possible, rehabilitate mangroves, sand dunes, and coral reefs that afford a natural barrier to tsunamis and storm surges.

Regarding long-term education and planning, there are many basic measures that can be undertaken without great cost. The inclusion of hazard awareness and emergency procedures should become standard in the education of coastal communities where a high risk is acknowledged. Community involvement is essential. A priority should be placed on strategic land-use planning and

implementation in the context of integrated coastal management. The realities of essential livelihoods and poverty should be considered in this respect and all reasonable steps taken by local authorities to make people aware of the risks involved in living in areas susceptible to inundation. The assessment of risk by the scientific community should, above all, be realistic – national governments and local authorities will need to be convinced of risk and this may be difficult to achieve where events are few and far between.



Maitree Duangsawasdi, Director-General, Department of Marine and Coastal Resources, Thailand, outlined reconstruction efforts following the December 2004 tsunami, including the creation of a national disaster relief center to coordinate monitoring and awareness programmes.



Stefano Tinti, Chair, Intergovernmental Coordination Group for the Tsunami Early Warning and Monitoring System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), explained that his Group was established in June 2005 by the IOC to create a plan of action by December 2006.



Franklin McDonald, Adviser, UNEP, former Director, Jamaican National Environment and Planning Agency, and former Project Manager, Pan-Caribbean Disaster Preparedness and Prevention Project, stressed that the region faces other forms of coastal inundation, and outlined the region's long history of tsunamis.



Russell Arthurton, Consultant, Coastal Geoscience, and formerly British Geological Survey, said risk assessment should take into account: the incidence of hazard events at local to regional levels; the susceptibility of specific coasts to inundation; and the vulnerability of coastal populations.



Lahsen Ababouch, Chairman, FAO Fisheries Tsunami Task Force, outlined FAO's activities in restoring fisheries and livelihoods in the countries affected by the Indian Ocean tsunami, and challenges faced.

ISSUES RELATED TO MARINE AREAS BEYOND NATIONAL JURISDICTION: CO-CHAIRS' REPORT

Summary prepared by Salvatore Arico, UNESCO,
and Alfonso Ascencio Herrera, Permanent Mission of Mexico to the UN



During the Third Global Conference, several new and emerging issues were addressed, including issues related to governance of marine areas beyond national jurisdiction. The following is intended to provide a reflection of the discussions that took place at the session dealing with issues in marine areas beyond national jurisdiction at the Conference.

The Session was structured in the form of one panel and two dialogue sessions. It was the outcome of the collective efforts by members of the Working Group that was set up prior to the Conference to help structure the Session and the Conference participants that attended it. Their contribution is recognized and much appreciated.

The panel was co-chaired by Mr. Alfonso Ascencio Herrera of the Permanent Mission of Mexico to the United Nations and by Dr. Salvatore Arico of UNESCO. Presenters included the co-chairs as well as Professor Tullio Scovazzi, Università degli Studi di Milano, Bicocca, Italy; Mr. Alex Rogers, British Antarctic Survey; Ms. Lee Kimball, IUCN-The World Conservation Union; Dr. Vladimir Golitsyn, UN Division for Ocean Affairs and the Law of the Sea; Ms. Marjo Vierros, Convention on Biological Diversity; Mrs. Norma Taylor Roberts, Permanent Mission of Jamaica to the United Nations and Dr. Frida Armas-Pfirter, Austral University, Argentina. The related dialogue sessions were chaired by Dr. David VanderZwaag, Dalhousie University and Mr. Michael Lodge,

High Seas Task Force, and included presentations from contributors Ms. Fernanda Millicay, Hamilton Shirley Amerasinghe Fellowship on the Law of the Sea, Dr. David Leary, Centre for Environmental Law, Macquarie University, and Ms. Kristina Gjerde, IUCN.

Principles guiding the work related to session were:

- it was not intended and should not be a negotiating session;
- it was intended to be an educational process for all participants;
- it was intended to contribute towards a better understanding of the various issues involved;
- it would not lead to a policy statement;
- participants would operate on the basis that they did not need to reach consensus, which meant that all ideas expressed during the panel and dialogue sessions would stand on equal footing;
- the Session aimed at stating what we know and where we are with regard to the issues involved; and
- it was also intended to be an exercise to collect views.

Although the Panel was termed “Improving High Seas Governance,” in reality it covered broader issues relating to marine areas beyond national jurisdiction. This was based on the fact that the 1982 Convention on the Law of the Sea (UNCLOS) provides a specific re-

gime for the high seas in Part VII of the Convention, while the international seabed area, or the “Area” – term used in the Convention – is governed by Part XI of the Convention, as elaborated by the 1994 Agreement relating to the Implementation of Part XI of UNCLOS.

The Panel featured presentations on:

- general trends in marine scientific research and in bioprospecting in the deep seabed, noting a shift from geophysical expeditions to ecological, biological and bioprospecting ones;
- trends in scientific discoveries in the deep oceans, noting the high degree of diversity found on seamounts and other deep ocean ecosystems;
- current scientific knowledge on the vulnerability of certain marine ecosystems;
- gaps in knowledge and the need for further studies on scientific, legal and socio-economic aspects – among others;
- uncertainties regarding the definition of and regime for bioprospecting and its relationship to marine scientific research in the international seabed area, and the legal status of the biodiversity of the deep seabed in areas beyond national jurisdiction and ways to address these uncertainties;
- the potential of UNCLOS in dealing with issues related to

- marine areas beyond national jurisdiction, including the possibility to strengthen UNCLOS;
- the role of existing organizations and bodies, including the role of the United Nations General Assembly;
 - the need to rely on recognized common principles to move the discussions forward; and
 - the need to further discuss ways and means for the possible establishment of marine protected areas in areas beyond national jurisdiction.

Although both dialogue sessions, 1) *Deep Seabed Genetic Resources*, and 2) *High Seas Fisheries Governance*, dealt with issues related to marine areas beyond national jurisdiction, those issues were dealt with in their own merit, so as not to pre-judge possible connections between those issues.

In relation to high seas fisheries, the following points were discussed:

- Opportunities for improving high seas fisheries governance:
 - the role of the High Seas Task Force in dealing with Illegal, Unreported and Unregulated fisheries, whose report will be launched in early March, and future steps;
 - the UN Fish Stock Agreement Review Conference and related outcomes;
 - emphasis was put on the situation of discrete high seas fish stocks, including ways to manage them;
 - the review of measures taken by Regional Fisheries Management Organizations and States regarding destructive fishing practices in vulnerable marine ecosystems, with particular emphasis on the inputs to,

and mechanisms for discussion at, that process;

- That strong sectoral governance nested within a broader framework is key to addressing the WSSD fisheries targets;
- That governance objectives for high seas fisheries should include:
 - eliminating Illegal Unreported and Unregulated fishing (as called for in the WSSD goals);
 - improving regional governance arrangements i.e. Regional Fisheries Management Organizations;
 - bringing unregulated high seas fisheries under international governance;
 - applying the precautionary approach;
 - applying ecosystem-based management principles in order to combine high seas fisheries with broader biodiversity considerations;
 - the need for cooperation and coordination approaches between Regional Fisheries Management Organizations and international processes;
 - the need for coastal States, market States, port States and beneficial owners to work together.

In order to deal with issues relating to the conservation and sustainable use of deep seabed genetic resources in areas beyond national jurisdiction, the following points were discussed:

- Differences of opinions about what principles should be guiding bioprospecting in areas beyond national jurisdiction e.g. freedom of use as opposed to common heritage of humankind;
- There also are differences of opinions on:
 - what bioprospecting really

covers, recognizing that there is no internationally agreed definition of it (in this regard, it was also mentioned that in practice distinctions between marine scientific research and bioprospecting were blurred since it was difficult to ascertain the “intent” from the beginning);

- whether a new international regulatory framework is required;
- it remains uncertain at this point what are the institutional and legal ways for dealing with bioprospecting beyond national jurisdiction; (Some mentioned that UNCLOS is the starting point for discussions on these issues)
- Next steps could include:
 - facilitating further constructive dialogue sessions to promote understanding of differing perspectives and exploring options for moving forward;
 - launching key studies in support of cooperation e.g.:
 - examination of ways to address environmental consequences of bioprospecting;
 - Studies on the nature and operation of public/academic-private marine biotechnology partnerships,
 - study of patents already granted to genetic resources in areas beyond national jurisdiction and other intellectual property rights;
 - the role of international legal principles in addressing bioprospecting in areas beyond national jurisdiction (some participants referred to equitable use, sustainable use, environ-

mental impact assessments, cooperation at all levels);

- a review of international legal and institutional options for managing activities connected to marine biodiversity of the international seabed area, including binding and non-binding approaches (Some referred specifically, as non-binding approaches, the conclusion of codes of conduct, while others favoured mandatory approaches based on existing legal principles/frameworks);
- survey of adequacy of existing national legal and institutional frameworks for controlling national and state flag vessels engaged in marine scientific research/bioprospecting in areas beyond national jurisdiction;
- the scale of bioprospecting;
- strengthening capacity-building, e.g. targeted training/ learning sessions on key topics such as understanding of intellectual property rights and patent issues, understanding the socioeconomics of the industry and environmental effects, understanding legal dimensions and scientific aspects;
- promoting scientific cooperation;
- considering different ways of moving forward ensuring that bioprospecting is linked to broader discussions e.g. the possible establishment of marine protected areas in areas beyond national jurisdiction;
- exploring opportunities for existing organizations to assist in these steps.

A concrete outcome of the Session as a whole was that this process was very useful in terms of creating a cooperative environment for dialogue and joint work. In that regard, there was a strong sentiment to continue sharing information informally; continue floating ideas regarding all the aspects of the topics, including areas on which further studies are needed; and continue the analytical work and research in order to fill gaps in knowledge. It should be stressed that this will be an open-ended and flexible approach, and that everyone is welcome to join in.

The Co-Chairs thank all participants and contributors for their help, which was essential in making the Session a success and the Organizers of the Conference – indeed a very important and successful one – for their guidance, assistance and encouragement.

Working Group Members and Participants in Discussions Related to Issues of Marine Areas Beyond National Jurisdiction at the Third Global Conference on Oceans, Coasts and Islands

Co-Chairs: *Salvatore Arico, UNESCO

*Alfonso Ascencio Herrera, Permanent Mission of Mexico to the UN Working Group Members and Conference Session Participants

Tim Adams, Secretariat of the Pacific Community

Ellik Adler, UNEP-Regional Seas Programme

Porfirio Alvarez, SEMARNAT - Mexico

Joe Arbour, Department of Fisheries and Oceans, Canada

*Frida Armas-Pfirter, Austral University, Argentina

*Robert Baldi, Department for Environment, Food, and Rural Affairs, UK

*Miriam Balgos, Global Forum on

Oceans, Coasts, and Islands

Richard Ballhorn, Legal Bureau, Foreign Affairs Canada, Ottawa

Dominique Benzaken, Secretariat of the Pacific Regional Environmental Programme

Sergio R. Carranza Forster, Ministry of Foreign Affairs and Cooperation, Spain

Lucien Chabason, Institute de Development Durable, Paris

*Leif Christoffersen, Diversa Corporation

*Biliana Cicin-Sain, Global Forum on Oceans, Coasts, and Islands

Alexandre De Lichtervelde, Federal Ministry of Environment, Belgium

Michel Dion, ORTHONGEL

*Fanny Douvere, UNESCO

*Sylvia Earle, Conservation International

Elizabethann English, National Oceanic and Atmospheric Administration (NOAA), US

*Martin Exel, Austral Fisheries

*Anne Frenette, Department of Fisheries and Oceans, Canada

Patricia Gallagher, Simon Fraser University

*Serge Garcia, Food and Agriculture Organization (FAO)

*Matthew Gianni, Deep Sea Conservation Coalition

*Kristina Gjerde, The World Conservation Union (IUCN)

*Vladimir Golitsyn, UN Division for Ocean Affairs and the Law of the Sea

Sarah Gotheil, The World Conservation Union (IUCN)

Michel Goujon, CNPMM

Alistair Graham, WWF-International



Stressing the importance of UNCLOS, Co-Chair Ascencio Herrera stated that the Convention does not define marine scientific research, and there is also no internationally agreed definition of bioprospecting of the international seabed area. He called for further studies and underlined the need to address, coherently and harmoniously, all issues relating to marine biodiversity beyond national jurisdiction within the UNCLOS framework. He argued that the UN General Assembly is the appropriate forum for debating these issues as it plays a key role in promoting cooperation and coordination and in ensuring integrated approaches.



Tullio Scovazzi, University of Milan, Bicocca, Italy, pointed out that marine scientific research is not defined but regulated by UNCLOS, whilst bioprospecting is not specifically mentioned in the Convention. He said this lacuna must be tackled by a new agreement on MPAs.



Alex Rogers, Biological Sciences Division, British Antarctic Survey, elaborated on deep sea biodiversity and fishing activities. Stressing that the deep seabed houses a startling biodiversity, much of which is still unknown, he described its unique ecosystems, including seamounts, coral reefs and hydrothermal vents.

Arthur Gray, Organization of Eastern Caribbean States

*Fred Grassle, Institute of Marine and Coastal Sciences, Rutgers University

Barbara Hanchard, Forum Fisheries Agency

Margaret Hayes, Department of State, US

Olive Heffernan, ImarEST

*Arlo Hemphill, Conservation International

Andrew Hurd, The World Conservation Union (IUCN)

Andrew Hurst, Environment Canada

*Elie Jarmache, Prime Minister's Office, France

*Sam Johnston, Institute of Advanced Studies, United Nations University (UNU-IAS)

*Kim Juniper, University of Montreal at Quebec

Konstantinos Kalamantis, European Bureau for Conservation and Development

*Lee Kimball, The World Conservation Union (IUCN)

Armand Kokolo, Ministere des Transports Maritimes et de la Marine Marchande (Congo)

Peter Koltermann, BSH Hamburg, Germany

Tom Laughlin, National Oceanic and Atmospheric Administration (NOAA), US

*David Leary, Centre for Environmental Law, Macquarie University

*Michael Lodge, High Seas Task Force

Christy Loper, National Oceanic and Atmospheric Administration (NOAA), US

*Eric Mathur, Diversa Corporation

Fernanda Millicay, Amerasinghe Fellowship

Sebastian Moncorps, IUCN French Committee

*Jennifer Mooney, Department of Fisheries and Oceans, Canada

Patricia Muñoz, Instituto Politecnico Nacional –Mexico

*Daniel Owen, Fenners Chambers, United Kingdom

Carol Phua, WWF European Policy Office

Roland Pittar, Australia Embassy, Paris

Ann Powers, Pace University Law School

Margi Prideaux, Whale and Dolphin Conservation Society

Peter Prows, Permanent Mission of Palau to the UN

*Jean-Francois Pulvenis, Food and Agriculture Organization (FAO)

*Gaile Ramoutar, Trinidad and Tobago

*Rosemary Rayfuse, University of New South Wales

Saskia Richartz, Greenpeace European Unit

Peter Ricketts, UBC Okanagan

*Lori Ridgeway, Department of Fisheries and Oceans, Canada

Silva Ritossa, IUCN French Committee

*Alex Rogers, British Antarctic Survey

Mario Ruivo, National Council on Environment and Sustainable Development (Portugal)

*Karen Sack, Greenpeace International

Francesca Santoro, University of Italy

*Renée Sauv e, Department of Fisheries and Oceans, Canada

Carl-Christian Schmidt, OECD

Tullio Scovazzi, University of Milano-Bicocca

Despina Symons, European Bureau for Conservation and Development

*Norma Taylor Roberts, Permanent Mission of Jamaica to the UN

*Chris Tompkins, Department for Environment, Food, and Rural Affairs, UK

*David VanderZwaag, Dalhousie University

*Monica Verbeek, Seas at Risk

*Marjo Vierros, Convention on Biological Diversity (CBD)

*LaVerne Walker, St. Lucia

*Lindsey Williams, Global Forum on Oceans, Coasts, and Islands

Jennifer Winston, National Oceanic and Atmospheric Administration (NOAA), US

* Working Group Member

Co-Chair Salvatore Arico, Programme Specialist, Biodiversity, Division of Ecological Sciences, UNESCO, presented a paper by Abdul Zakri, UN University-Institute for Advanced Studies, on trends in deep seabed research, which he said is going on at an increasing pace. He noted a shift in the focus of deep seabed expeditions from geophysical and geological purposes to ecological, biological and bioprospecting ones.



Vladimir Golitsyn, Director, UNDOALOS, called for further targeted marine biodiversity research, which he identified as highly sophisticated, costly and labor intensive. He recognized the need for better cooperation between governments, institutions, scientists and industry engaged in marine biodiversity research in order to share costs and information, increase geographical cover and ensure the participation of developing countries.

Norma Taylor-Roberts, Deputy Permanent Representative to the United Nations, Jamaica, expressed concern over the lack of a legal regime to regulate bioprospecting. Calling for a wider acceptance and implementation of UNCLOS, she advocated concluding a new agreement under UNCLOS to address bioprospecting, rather than developing a new convention.



CLIMATE AND OCEANS

Summary prepared by Magdalena A.K. Muir, Research Associate,
Arctic Institute of North America



The Global Conference considered the issue of climate and oceans, exploring the effects climate change may have on the world's oceans, coasts, and islands, with an emphasis on ocean acidification, carbon sequestration, Arctic change, and sea level change. The expected outcomes for the panel included consideration of policy implications of wide-ranging effects of climate change on marine and coastal environments and on coastal populations and economies; and whether an "observatory" function, linking emerging scientific findings to analyses of attendant policy issues related to climate and oceans/coasts/islands might be needed.

The panel was chaired by Robert Corell, Chair, Arctic Climate Impact Assessment. Panel participants included: Ambassador Gunnar Pálsson, Director, Department of Natural Resources and Environmental Affairs, Ministry of Foreign Affairs, Iceland; Halldór Thorgeirsson, Deputy Executive Secretary, UN Framework Convention on Climate Change (UNFCCC); Ambassador Enele Sopoaga, Tuvalu, Vice-Chair, AOSIS, and Permanent Representative of the Mission of Tuvalu to the UN; John Shepherd, Tyndall Centre Regional Associate Director, Southampton Oceanography Centre; Ellina Levina, Climate Change Analyst, Environment Directorate, Organization for Economic Cooperation and Development (OECD); and Magdalena Muir, Research As-

sociate, Arctic Institute of North America.

Climate Change Science

The Intergovernmental Panel on Climate Change will present the Fourth Assessment Report to the 13th Conference of the Parties to the United Nations Framework Convention on Climate Change in December 2007. Supporting prior reports, this report documents the impact of man-made climate change. The most vulnerable populations and economic sectors are faced with immediate and long-term adaptations for climate change, and some of the key vulnerabilities center on oceans, coasts, and islands. Sea level rise is a significant threat for small islands, coasts, and low-lying lands. Ocean acidification is a new and looming threat that could undermine the marine food web and preclude coral development. Sea level rise and acidification will remain for the next few thousand years. Another emerging threat is the impact of high sea surface temperatures on the intensity of tropical cyclones and hurricanes. Understanding the role of the oceans as a regulator of the earth's climate system is also increasing. The oceans control the timing and magnitude of changes in the global climate system, primarily through the absorption of carbon dioxide and heat. Other climate impacts include arctic sea ice reduction, cyclonic storms, changes in ocean circulation, and changes in biodiversity and fisheries.

In 2005, the Intergovernmental Panel on Climate Change presented a special report on carbon dioxide sequestration. It found that storing captured carbon dioxide in geological formations is a mature technology. Ocean storage, or the direct release into the ocean water column or onto the deep seafloor, has been researched less. This storage option is less permanent than geological storage and significant uncertainty remains on ecosystem impacts. Oceans have slowed the build up of carbon dioxide in the atmosphere by acting as a sink for carbon dioxide. Recent evidence suggests that this carbon absorption has its limits and is resulting in acidification of the oceans.

The Arctic Climate Impact Assessment Scientific Report documents climatic changes in the circumpolar Arctic. One of the key findings suggests that the Arctic has been warming rapidly with much larger changes projected for the future. Increasing temperatures, melting glaciers, reductions in the extent and thickness of sea ice, thawing permafrost, and rising sea level illustrate this warming trend. In the Arctic, changes in sea ice are a key indicator and agent of climate change, affecting surface reflectivity, cloudiness, humidity, exchanges of heat and moisture at the ocean surface, and ocean currents. Changes in sea ice have enormous economic, environmental, and social implications. There are negative impacts on

ice-dependent wildlife and northern peoples, like the Inuit, with a traditional subsistence lifestyle based on hunting mammals on or adjacent to sea ice. Changes may also have positive economic effects, as they may facilitate increased marine transportation, economic development, and immigration into the region.

Small islands are vulnerable to the impacts of climate change, sea level rise, and extreme events because of size and exposure to natural hazards, and more limited adaptive capacity. According to the Third Assessment Report of the Intergovernmental Panel on Climate Change, islands represent early indicators of climate change for the rest of the world. Islands often depend on rainwater and are vulnerable to changes and distribution in rainfall. Like many parts of the equatorial and tropical world, human health is impacted by climate change. For example, diarrhea will increase with rising temperatures and deterioration of water in the Pacific. Vector-borne diseases like dengue fever and malaria will increase, with the Caribbean islands being at greater risk. Shortages of water and drought, as well as contamination of water quality during floods and storms, will increase disease risk, including cholera, diarrhea, and dengue fever. Subsistence and commercial agriculture on small islands will be impacted by sea level rise due to flooding, salt water intrusion in fresh water, salination of the soils, and decline in water quality and quantity. Infrastructure and development are affected by sea level rise and extreme events, which affect tourism, agriculture, and the delivery of health, fresh water, food, and other essential services. Coral reefs, marine fisheries, and marine resources will also be affected by climate change and climate variability. Small islands with a large Exclusive Economic Zone already have limited capacity to manage those zones, and these management issues will only be compounded by climate change.

Africa is also very vulnerable to climate change, with negative impacts expected for watersheds, coasts, and seas of Africa, worsening desertification in northern and southern Africa, and reductions in the development of the continent overall. The Third Assessment Report predicted that the effects of climate change would be greatest in developing countries in terms of loss of life and relative effects on the investment and economy. Africa was described as the world's poorest region and the continent most vulnerable to the impacts of projected change, because widespread poverty limits adaptation capabilities. There has been limited scientific research on climate change in Africa, but local scientific networks for climate change are developing.

Science-Policy Interface for Oceans and Climate Change

The 11th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) in Montreal in December 2005 initiated a two-track process to develop the future climate strategy, where the Kyoto Protocol is the first track. The second track is an informal Convention Dialogue aimed at exchanging experiences and analyzing strategic approaches for long-term cooperative action. This dialogue is based on the UNFCCC Convention and is not confined to the present Parties to the Kyoto Protocol. It will address technology, adaptation, market-based opportunities, the development context, and voluntary action by developing countries. First meetings of the Convention Dialogue will be held in parallel with the Subsidiary Body meetings of the Kyoto Protocol in Bonn in May 2006.

Climate change mitigation is a major challenge, which goes to energy, economic, technological, and development policy. The UNFCCC process addresses adaptation through understanding of climate

impacts, vulnerability, and possible adaptation measures on the one hand and financial and technical assistance to the most vulnerable Parties on the other. Proceeds from the Clean Development Mechanism project activities will fund a new Adaptation Fund under the Kyoto Protocol. The bulk of two other dedicated funds under the Convention are targeted for adaptation to the impacts of climate change by developing countries.

Maintaining the ecosystem services of the oceans is instrumental in achieving the United Nations Millennium Development Goals, as at least four of the eight goals are closely linked to the conservation and use of natural resources, including living marine resources. The Millennium Ecosystem Assessment, relying on the Food and Agriculture Organization of the United Nations, identifies fishing as the most important driver of change in the marine ecosystem for the past fifty years. It is now apparent that, aside from pollution and over fishing, climate variability and change, including acidification, may threaten the productivity of oceans. The challenge for governments is to understand the complex processes for oceans and climate change, and to have adequate policies.

On a global and regional level, climate change science and policy need to be added to the oceans agenda, and oceans science and policy need to be inserted in the climate agenda. The Third Global Conference disseminated information on ocean and climate science and policy measures to oceans decision-makers. Information on climate change and related policy issues for oceans needs to be included in the annual United Nations Open-ended Informal Consultative Process on Oceans and Law of the Sea, as well as to the global marine assessment agreed to at the World Summit on Sustainable Development in 2002, which is now in the start-up phase of an assessment of assessments.

Additionally, information on oceans and climate sciences and related policy measures should be included in meetings of the Kyoto Protocol Parties and the Convention Dialogue, beginning in May 2006.

Adaptation is not enough; mitigation is also required through the reduction of greenhouse gases and the shift to renewable energy and energy efficiencies. It is necessary to think globally, plan regionally, and act locally. Due to their complexity, climate issues require input from many disciplines and the integration of ecosystem-based and other integrated approaches. There is a need for a constant dialogue between scientists and decision-makers. Scientific data and analysis, from accurate and timely predictions of hurricanes, to improved global and regional forecasts of future sea level rise, and the impacts of ocean acidification, lay the foundation for adaptation policy discussions and the development of climate strategies. In order to be effective, this data and analysis need to be communicated to decision-makers on a timely basis and in an appropriate language.

The timing of policy development and science must be synchronized, so that the long and short-term windows for science and decision-making can be synchronized accordingly. Short-term windows for decision-making may be advantageous as they allow the inclusion of new and more detailed information and predictions. In the future, data may make it possible for scientists to accurately predict climate variability and change. The challenge will then be how to convert these predictions into adaptation policies for fisheries management, harbour development, or civil emergency planning. Global climate change scenarios need to be checked against more specific studies at regional and sub-regional levels. As policies adapt to climate change and variability, it is important to consider opportunities as well as risks. With accelerating climate change and variability, reliable sci-

entific information becomes crucial for formulating policy on a wide variety of issues, including fisheries, marine infrastructure, and transportation. Therefore, more resources need to be devoted to ocean climate research, paying attention to the short and medium term, to the regional impacts as well as the global impacts, to monitoring and management approaches across vulnerable coastal and marine ecosystems, and to the benefits as well as the risks of climate change.

The integration and communication of climate science and policy to governments, decision makers, civil society, and the public is viewed as crucial for both the developed world and the developing world in order to build support for the necessary mitigation and adaptation measures. There will be common problems in adapting to climate change by Small Island Developing States (SIDS) and less developed regions and countries within Africa, Asia, the Caribbean, Central and South America, and the Pacific. Similar to Arctic coasts, SIDS are early indicators of climate impacts for the rest of the world, this linkage being recognized under the UNEP Grid-Arendal project, *Many Small Voices – Building Strategies for Climate Change Awareness and Adaptation among Vulnerable Regions: The Arctic and Small Island Developing States*.

For SIDS, there is a need to enhance economic, ecological, and social resilience in an integrated manner. Effective implementation of adaptation measures is critical to ensure sustainable development, and SIDS governments are already incorporating adaptation measures into national sustainable development strategies for infrastructure, economic development, disaster management, environment, conservation and biodiversity. SIDS urgently need financial resources and technical support, as recognized and committed under the UNFCCC process, including funding arrangements for the development and transfer of re-

newable energy and energy efficiency technologies as a way of reducing carbon dioxide emissions. The integration of the Mauritius Strategy for the sustainable development of SIDS in the work programme of the UNFCCC is crucial to address SIDS concerns on climate change. The appeal of the SIDS through the Alliance of Small Island States (AOSIS) for discussion of implementation of the Mauritius Strategy should be considered. The SIDS strongly oppose carbon dioxide sequestration and nuclear power as options to address climate change. Funding and technical assistance to support the continuation of the Small Islands Developing States Network (SIDSnet) website in New York is also requested.

As a region and a political entity, Europe is responding to climate change in its coasts and oceans. It is addressing mitigation and adaptation through global initiatives and regional and local actions, and is thus developing useful experiences and strategic approaches for the Convention Dialogue under the UNFCCC. The European Climate Change Program II has working groups for coasts and oceans issues: the Impacts and Adaptation Working Group; the Renewable Energy Working Group; and the Carbon Sequestration and Storage Working Group. The European Union is sponsoring research for climate changes for oceans and coasts, including: monitoring, governance, and security initiatives under the European Space Agency; the European Network for Coastal Coordination Action; the European Spatial Planning: Adapting to Climate Change; the Coupled European Ocean Atmo-



Panel Chair Robert Corell, Chair, Arctic Climate Impact Assessment, gave an overview of the recent scientific findings on climate effects on oceans, stressing that since the oceans contain 97% of the Earth's water, they are the thermodynamic engine of the planet. He listed current and projected effects of climate change on oceans, including sea level rise, biodiversity loss, the disappearance of Greenland's icecap, and thinning of the Arctic sea ice.



Noting accelerating climate variability, Ambassador Gunnar Pálsson, Ministry of Foreign Affairs, Iceland, said the availability of reliable scientific data is crucial, and called for increased resources for research on the risks and benefits of the impact of climate change on oceans, and improved integration of scientific data into the public domain.



spheric Processes & Climate Change; and the EUROSION and Floodscape projects. The European Union is currently implementing the Water Framework Directive for rivers and watersheds, including a coastal component that links fresh waters and oceans. The EU is also

undertaking consultation on a Marine Strategy and a Maritime Strategy. The Maritime Strategy includes the Marine Strategy and addresses sustainable economic uses in Europe's coastal and marine waters, considering climate change as a crosscutting theme. Europe also

shares the Mediterranean Sea with northern Africa and Asia. Europe and member states like Italy implement regional initiatives for that sea, which consider economic and environmental factors, including climate change.



Halldor Thorgeirsson, Deputy Executive Secretary, UN Framework Convention on Climate Change (UNFCCC), explained that the Kyoto Protocol allows for use of market tools to mitigate climate change and that the last UNFCCC COP has set the base for the development of a future strategy.

Ambassador Enele Sopoaga, Tuvalu, Vice Chair, Alliance of Small Island States, underscored the impact of climate change on SIDS, as illustrated by the recent increases in the frequency and intensity of hurricanes in the South Pacific. He argued that SIDS cannot begin to develop sustainably until climate change is comprehensively addressed, and urged developed nations to intensify their mitigation strategies and support SIDS's efforts to implement adaptation strategies.



Highlighting climate change-related sea level rise and acidification, John Shepherd, Tyndall Centre Regional Associate Director, Southampton Oceanography Centre, stated that any adaptation strategy must be: concentrated on reducing physical and social infrastructure in coastal areas; planned regionally whilst being focused locally; supported by government institutions; and long-term.

Ellina Levina, Climate Change Analyst, Environment Directorate, Organization for Economic Cooperation and Development, presented on integrating scientific knowledge into policymaking. She called for: appropriate strategies and institutional and legal frameworks to allow for the development of a science-based policy framework; mechanisms that identify key players and information; clear communication of scientific data to policy makers and local stakeholders; and additional research.



OCEAN INDUSTRIES: BEST PRACTICES IN SUSTAINABLE DEVELOPMENT ACROSS THE SECTORS

Summary prepared by Paul Holthus, Private Sector Coordinator, Global Forum on Ocean, Coasts and Islands; and Executive Director, Marine Aquarium Council



The Global Conference considered the issue of ocean industries, using the goal of identifying best practices now used by global leaders in marine industrial sectors to reduce risks to marine environment effectively while achieving business objectives efficiently. The expected outcomes for consideration by the panel on ocean industries included: Identify opportunities and next steps to develop best practices within the global marine business and industry community and how to share these within the private sector and with other stakeholders.

The panel was chaired by Paul Holthus, Private Sector Coordinator, Global Forum on Ocean, Coasts and Islands; Executive Director, Marine Aquarium Council. Panel participants included: Tim Wilkins, Environmental Manager, International Association of Independent Tank Owners (INTERTANKO); Dierk Peters, International Marketing Manager for Sustainability, UNILEVER; Arthur Bogason, Co-Chair, World Forum of Fish Harvesters and Fish Workers; John Connelly, President, National Fisheries Institute and International Coalition of Fishing Organizations; Mark Caney, President, Professional Association of Diving Instructors (PADI) Europe; Jose Matheickal, International Maritime Organization (IMO); and Bruno Corr ard, Manager for Sustainable Marine Resources, Carrefour.

The panel on Ocean Industries focused on the importance of industry responsibility for sustainable practices and the need and opportu-

nity for building cross-sectoral partnerships among business and industry and with other ocean stakeholders to ensure the sustainable use of ocean space and resources. The panel presentations highlighted the leadership that several industries are providing in defining and implementing sustainable practices which address the sustainable use of marine resources, responsible operations in the marine environment and conservation of ocean biodiversity. The panel highlighted the efforts of leaders from industries as diverse as shipping, fisheries, oil and gas, and recreational diving who are working for the protection and management of the oceans and the improvement of industry standards for activities in the marine realm. Partnerships with NGOs are often an important part of understanding and implementing best practices and achieving sustainability. Many ocean industry sectors are moving to establish higher quality standards for a variety of products and practices in relation to marine resources or operations in the ocean environment. This is being led by leadership companies and by industry associations. The panel supported the need for increased industry attention to sustainable development of ocean areas and resources that is consistent with conservation goals and includes interaction with multiple stakeholders.

Building on the first Business and Industry Leaders Roundtable held at TOPS 2005: The Ocean Policy Summit on October 12, 2005 in Lisbon, Portugal, the second roundtable

brought together an increased number and a greater cross-section of the industries and user groups that depend on or use ocean and coastal space and resources. The second meeting of the Business and Industry Leaders Roundtable was also chaired by Paul Holthus, Private Sector Coordinator, Global Forum on Ocean, Coasts and Islands; Executive Director, Marine Aquarium Council, and included the following participants: Lahsen Ababouch, Chief, Fish Utilization and Marketing Service, FAO Fisheries Tsunami Task Force; Daniel Bailey, Chairman, Batostar Fishing Ltd., South Africa; Arthur Bogason, Co-President, World Forum of Fish Harvesters and Fish Workers; Mark Caney, President, Professional Association of Diving Instructors (PADI) Europe; John Connelly, President, National Fisheries Institute, International Coalition of Fishing Associations; Bruno Corr ard, Manager for Sustainable Marine Resources, Carrefour Group; Jean Courjault, MIF Liaison, French Suppliers Council (GEP), Policy Advisor, European Oil and Gas Innovation Forum (EUROGIF); Rob Cox, Technical Manager, International Petroleum Industry Environment and Conservation Association (IPIECA); Richard Delaney, Executive Vice President, Horsely Witten Group; Philippe Ferlin, Ing nieur G n ral, French Conseil General du Genie Rural des Eaux et For ts (GREF); Michel Goujon, French National Fisheries Commission (CNPMEM); Shelby Hockenberry, Gerard J.



Mangone Center for Marine Policy, University of Delaware and Secretariat, Global Forum on Oceans, Coasts, and Islands; Hector-Lysis Kyriakidis, Managing Director, Teledyne R.D. Instruments-Europe; Jose Matheickal, Technical Adviser, GloBallast Water Management Programme, Marine Environment Division, International Maritime Organization (IMO); Jane Mauro, Biologist, PETROBAS; Cor Nobel, Secretary-General, Shipping Emissions Abatement and Trading Association (SEAA); Paul Nemitz, Head of Unit, Legal Affairs, Deputy Head of Maritime Policy Task Force, European Commission; Dierk Peters, International Marketing Manager, Sustainability Projects, UNILEVER; Kathrin Runge, Marketing, Friedrichs FeinFisch; Scott Truver, Group Vice President, CSSO Anteon Corporation; Takehiro Nakamura (for Dr. Veerle Vandeweerd, Director, UN Environment Programme (UNEP), Regional Seas Programme, and Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities); Tim Wilkins, Environment Manager, International Association of Independent Tanker Owners (INTERTANKO); and John Young, Marine Sound Management Team Coordinator, ExxonMobil Exploration Company.

The Business and Industry Leaders Roundtable provided an opportunity for the representatives of this range of private sector entities to explore both the differences and the commonalities in the sustainable development and use of the oceans. Key issues that emerged from the discussions were:

1. There is an important need and opportunity for building cross-sectoral partnerships among business and industry and with other ocean stakeholders in support of the sustainable use of ocean space and resources, and this should be pursued by continuing to develop a network on ocean business and industry and sustainable development.
2. The identification and sharing of best practices within industry sectors and among different components of business and industry is a practical and useful way for the private sector to interact on ocean sustainability.
3. In particular it would be valuable to exchange experiences, lessons learned and case studies in developing and implementing partnerships for addressing conservation and sustainable use issues in the marine environment.
4. Science and data provide a common language and basis for industries to interact with each other and with other stakeholders, and there are important opportunities for collaboration on undertaking research to support sustainable industry operations that would benefit a wide range of concerned parties.
5. Ocean business and industry are important globally, regionally, and nationally, and it would be valuable to pull together a report highlighting the contribution of ocean industries to the global economy.



Panel Chair Paul Holthus, Executive Director, Marine Aquarium Council and Coordinator of the Global Forum's Business and Ocean Industries Roundtable, said sustainability requires the proactive involvement of business and industry leaders, and stressed the importance of partnerships and economic considerations.

OCEAN DONORS ROUNDTABLE

Summary prepared by Christy Loper,
U.S. National Oceanic and Atmospheric Administration



On January 23, 2006, the second meeting of the Ocean Donors Roundtable, hosted by the Global Forum on Oceans, Coasts, and Islands, and chaired by David Freestone of the World Bank, was held in conjunction with the Third Global Conference on Oceans, Coasts and Islands at UNESCO headquarters in Paris, France. This second meeting of the Ocean Donors Roundtable built on the discussions held during the first Roundtable meeting which was held on October 10, 2005 in Lisbon, Portugal, as a parallel event of The Ocean Policy Summit (TOPS) 2005: The International Conference on Integrated Ocean Policy: National and Regional Experiences, Prospects, and Emerging Practices.

Participants in the second meeting included: Jens Ambsdorf, Light-house Foundation; Yves Auffret, Maritime Policy Task Force, European Commission; Ezio Bussoletti, Permanent Representative of Italy to UNESCO; Biliana Cicin-Sain, University of Delaware and Global Forum on Oceans, Coasts, and Islands; Federico Cinquepalmi, Ministry for Environment and Territory, Italy; Christophe Du Castel, Secretariat du FFEM-AFD (French GEF); Al Duda, GEF; Marea Hatziolos, World Bank; Arlo Hemphill, Conservation International; Indumathie Hewawasam, World Bank; Paul Holthus, Marine Aquarium Council; Andrew Hudson, UNDP; Tom Laughlin, U.S. NOAA; Carl Lundin, IUCN; Gerald Miles, Nature Con-

servancy; Ellen Pikitch, Pew Institute for Ocean Science; Yumiko Tanaka, Ocean Policy Research Foundation; Chua Thia-Eng, PEMSEA; Cees van de Guchte, UNEP/GPA; and Christy Loper, NOAA (session rapporteur).

Meeting Outcomes

1. All recognized the importance of awareness raising of ocean issues and felt there was room for collaboration and sharing of experience in this area and its contribution to resource mobilization.
2. The Group encouraged the Forum to complete a comprehensive directory of the organizations which finance ocean, coastal and small island developing states (SIDS) issues.
3. The Group recognized an important need for the sharing of information about funding activities in the Oceans, including priorities and programmes as well as lessons learned, both successes and failures. This could be through a list serve (which would need to include more bodies than those attending the current meeting) or even a facilitated website, perhaps constructed around or in conjunction with the Global Forum website.
4. There was recognition that the major priorities of the international Ocean Agenda had been

already set by legal and political instruments to which states were parties (Law of the Sea Convention; U.N. Fish Stocks Agreement, MDGs, WSSD JPOI, etc). For many present, particularly those from the public sector, there would be value in the monitoring and more systematic collection of information regarding national efforts to meet of these targets. Given that the next assessment of ocean WSSD targets would not be until the CSD in 2014 this was regarded by many as a useful activity, which might be modeled on the work of the World Water Forum, to be undertaken under the auspices of the Global Forum on Oceans, Coasts, and Islands.

Substance of the Discussion

The group noted that the purpose of Roundtable should be to expand the scale of funding for ocean issues. The group reviewed the report of the previous Ocean Donors Roundtable in Lisbon and discussed some of its main findings.

The group discussed a possible on-going role for such a group and its possible comparative advantage as the only meeting of donors, from both the public and private sector, directed at oceans, coasts and SIDS. It was recognized that although donor agencies may have innovative approaches to financing, they are not



agenda setters, but responsive to the global agenda which has been set and to which governments are committed (e.g., MDGs, WSSD JPOI), and donors should bear this agenda in mind.

Some thought that a meeting of donors might be a useful forum for discussing innovative financing ideas— although such a meeting might need to be organized slightly differently. A number of ideas, issues and approaches were raised.

It was noted that in the capacity building session, there are many needs that are not being met. For example, a serious hurdle in many countries comes about when there are multiple problems that need to be addressed. Governments will inevitably prioritize healthcare, roads,

HIV/AIDS, etc. above ocean and coastal issues. Awareness raising is needed to illustrate the importance of ocean issues in this competitive environment.

Some argued that funders might consider financing a more settled “secretariat”-type function to support the Global Forum to ensure continuity and to help sustainability. One of the activities of such a function might include monitoring the implementation of goals that are already on the table. Ideas were expressed on the way this might be done or whether it would be appropriate.

Sharing of information between funders was seen as an important and highly useful activity, whether through a list server or website. Not only information about financing but

also about country programmes. The view was expressed that the status of established goals and targets, and their implementation across the world was important for financiers to know where the bottlenecks are and how they might be addressed.

The group felt that future donors meetings might be more appropriately timed at the end of the Conferences after priorities had been discussed and set on major issues, so as to be able to reflect on the findings of the meeting.



ENGAGING DECISION MAKERS AND THE PUBLIC

Summary prepared by Miriam Balgos,
Global Forum on Oceans, Coasts, and Islands



During the Third Global Conference, several dialogue sessions and a panel addressed the issue of engaging the public and decision makers in oceans issues. The goals of the session on Engaging Decision Makers and the Public were to:

- Demonstrate the value of mobilizing decision makers and the public in the ocean governance planning and decision making process;
- Identify effective means to communicate the value of marine resources and the benefits of their use and conservation to decisionmakers and the public; and
- Discuss tangible options for cooperation in ocean information and education.

The expected outcomes of the session were as follows:

- Draw the attention of conference participants on the need for enhanced ocean information and education and engage them to support/take part in such activities and programs; and
- Develop a specific program of work on education and information related to advancement of the global oceans agenda for decisionmakers and the

public, and convey these recommendations to the World Ocean Network workshop following the Global Conference.

The panel was chaired by Mr. Philippe Valette, Managing Director, NAUSICAA-National Sea Centre, France, and Chair, the World Ocean Network. Overview presentations were given by Mr. Philippe Valette, and Ms. Marie-Laure de Lange, Communications Consultant, SeaWeb. Panelists included Dr. Dann Sklarew, Director, GEF IW: LEARN; Dr. Ram Boojh, Centre of Environment Education, India; Dr. Guillermo Garcia Montero, President, National Aquarium, Cuba, and National Intergovernmental Oceanographic Commission Committee; and Dr. Peter Neill, Director, The World Ocean Observatory, United States.

*A special presentation titled *The Public and the Oceans: A Long-Term Strategy for Mobilizing Public Support for the Global Oceans Agenda* was also given on January 24 by Mr. Philippe Valette. In addition, a related dialogue session on *Mobilizing Stakeholders and the Public Towards Fisheries Sustainability*, organized Dr. Leonard Sonnenschein, World Aquarium, USA was held on January 23 and a second dialogue session on *Engaging decisionmakers and the public* was held on January*

27 following the panel presentations.

Immediately following the Third Global Conference, the World Ocean Network (WON) hosted the Third International Meeting: *Acting together for the Future of the Blue Planet*, from January 29 - February 1, 2006 at NAUSICAA, Centre National de la Mer, Boulogne sur Mer, France. The event was organized under the aegis of the IOC/UNESCO and included the participation of Jean-Michel Cousteau, chair of the World Ocean Network Committee of Honour.

The World Ocean Network and its partners invited Global Conference participants to participate in the Third International Meeting. All organizations reaching out to the general public were encouraged to participate in the meeting to help further develop a global campaign to raise public awareness and an action plan for the sustainable use of the ocean.

Participants at the meeting and experts from the Global Forum on Oceans, Coasts and Islands had the opportunity to state their priorities regarding sustainable use of the ocean. The participants also shared results of the joint activities conducted since the 2nd International Meeting in 2002, and planned further cooperation for the next three years.

A full report of the World Ocean Network Third International meeting can be found on the World Ocean Network website at: <http://www.worldoceannetwork.org>.

ABOUT THE GLOBAL FORUM

The Global Forum on Oceans, Coasts, and Islands, created at the World Summit on Sustainable Development in Johannesburg in September 2002, aims to advance the interests of *oceans*—incorporating 72% of the Earth; *coasts*—the home of 50% of the world’s population; and *islands*—44 of the world’s nations are small island developing states which are especially dependent on the oceans. The Global Forum is composed of experts from governments, intergovernmental and international organizations, and nongovernmental organizations (environmental, scientific/technical, industry, and foundations) with the common goal of encouraging the sustainable development of oceans, coasts, and islands.

The Global Forum responds to major needs at the international scale:

- Promotion of cross-sectoral dialogue on ocean and coastal issues;
- Promotion of dialogue among governments, nongovernmental organizations, intergovernmental organizations, the private sector, and scientific institutions;
- A mechanism for oceans advocacy at the highest political levels; and
- A venue for linking oceans and freshwater concerns

The major goals of the Global Form are to:

1. Work together with governments, international and intergovernmental organizations, nongovernmental organizations (environmental,

scientific/technical, industry, foundations), and others to effectively implement, at national and regional levels, major international agreements on oceans, especially the commitments made in the Plan of Implementation of the World Summit on Sustainable Development, commitments from Agenda 21, and other related agreements;

2. Work as a catalyst to mobilize knowledge, resources, and organizational action to advance the global oceans agenda;
3. Raise the international profile of oceans, coasts, and islands in all relevant global, regional, and sub-regional fora and mobilize resources to address these issues;
4. Mobilize public awareness on oceans, coasts, and islands, and promote information sharing and dissemination.

Publications and Internet Services by the Global Forum on Oceans, Coasts, and Islands

1. *Small Islands, Large Ocean States: A Review of Ocean and Coastal Management in Small Island Developing States since the 1994 Barbados Programme of Action for the Sustainable Development of Small Island Developing States (SIDS)* (2005)
2. *Climate Change and Energy Issues in Small Island Developing States* (2005)
3. *Mobilizing for Implementation of the Commitments Made at the 2002 World Summit on Sustainable Development on Oceans, Coasts, and Small Island Developing States – Co-Chairs’ Report of the 2003 Global Conference on Oceans,*

Coasts, and Islands, UNESCO, Paris, November 12-14, 2003 and Subsequent Developments (May 2004)

4. *Global Multilateral Environmental Agreements and Small Island Developing States* (2004)
5. *Voluntary Partnership Initiatives from the 2002 World Summit on Sustainable Development and Small Island Developing States* (2003) (also in Spanish)
6. *A Guide to Oceans, Coasts and Islands at the World Summit on Sustainable Development: Integrated Management from Hilltops to Oceans* (2002)
7. *Ensuring the Sustainable Development of Oceans and Coasts: A Call to Action. Co-Chairs’ Report, the Global Conference on Oceans and Coasts at Rio+10, Paris, UNESCO, December 3-7, 2001* (2001)
8. *Ministerial Perspectives on Oceans and Coasts at Rio+10* (2001)
9. *Reports of the Conference Working Groups, The Global Conference on Oceans and Coasts at Rio+10, Paris, UNESCO, December 3-7, 2001* (2001)
10. Internet services: www.globaloceans.org provides a variety of information services on global, regional, and national developments related to oceans, coasts, and islands
11. *Global Forum Newsletter*, an electronic newsletter, is published every four months (available on www.globaloceans.org)

LIST OF PARTICIPANTS

THIRD GLOBAL CONFERENCE ON OCEANS, COASTS, AND ISLANDS

MOVING THE GLOBAL OCEANS AGENDA FORWARD

JANUARY 23-28, 2006, UNESCO, PARIS

Prof. Lahsen ABABOUC
Service Chief, Fish
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