

**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  
2003 GLOBAL CONFERENCE  
ON OCEANS, COASTS, AND ISLANDS,  
UNESCO, PARIS, NOVEMBER 12-14, 2003  
AND SUBSEQUENT DEVELOPMENTS**

**May 2004**



National Oceans Office  
Australia



Strategic Commission  
on the Oceans  
Portugal



## The Global Forum on Oceans, Coasts, and Islands

The Global Forum on Oceans, Coasts, and Islands represents an alliance of leading ocean experts from the governmental, non-governmental and international and intergovernmental sectors formed 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.

This alliance began to form in 2001 as part of the preparations for the World Summit on Sustainable Development (WSSD) and first came together at the *Global Conference on Oceans, Coasts, and Islands at Rio+10: Toward the 2002 World Summit on Sustainable Development—Assessing Progress, Addressing Continuing and New Challenges*, held on December 3 to 7, 2001, at UNESCO in Paris. Oceans, coasts, and islands were not initially on the WSSD agenda, which emphasized issues concerning water and sanitation, energy, health, agriculture, and biodiversity. However, following the mobilization of interested governments, non-governmental organizations, and UN agencies into a global oceans alliance early in the WSSD preparatory process, advances in oceans, coasts, and islands represent one of the most important outcomes of the World Summit.

As noted in the UN Secretary General's report on Oceans and the Law of the Sea (March 3, 2003, A/58/65): *The persistent efforts of all interested groups, beginning with the Global Conference on Oceans and Coasts at Rio+10, persuaded the preparatory meetings for the Johannesburg Conference that not only was UNCLOS not the end of the road, but also that many of the commitments of the UNCED at Rio remained unfulfilled.* (p. 7).

The global alliance, begun in the WSSD preparatory process, was formalized into the Global Forum on Oceans, Coasts, and Islands at the Johannesburg summit to serve as a forum for cross-sectoral discussion, analyses, and mobilization of knowledge and resources to advance the global oceans agenda.

### Global Forum Goals

- Work together with governments, international and intergovernmental organizations, nongovernmental organizations (en-

vironmental, 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 Johannesburg Plan of Implementation, and commitments from Agenda 21 and other related agreements;

- Work as a catalyst to mobilize knowledge, resources, and organizational action to advance the global oceans agenda;
- 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;
- Mobilize public awareness on oceans, coasts, and islands, and promote information sharing and dissemination.

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*Ministerial Perspectives on Oceans and Coasts at Rio+10* (2001)

*Reports of the Conference Working Groups from the Global Conference on Oceans and Coasts at Rio+10* (2001)

*A Guide to Oceans, Coasts, and Islands at the World Summit on Sustainable Development* (2002)

*Toward Mauritius 2004: Voluntary Partnership Initiatives from the 2002 World Summit on Sustainable Development and Small Island Developing States* (2003)

*Pre-Conference Proceedings Volume, Global Conference on Oceans, Coasts, and Islands: Mobilizing for Implementation of the Commitments Made at the 2002 World Summit on Sustainable Development* (2003)

Internet services: [www.globaloceans.org](http://www.globaloceans.org) provides a variety of information services on global, regional, and national developments related to oceans, coasts, and islands

*Global Forum Newsletter*, an electronic newsletter, is published every two months (available on [www.globaloceans.org](http://www.globaloceans.org))

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# **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  
2003 Global Conference on Oceans, Coasts, and Islands  
UNESCO, Paris, November 12-14, 2003  
and Subsequent Developments**

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**Global Forum on Oceans, Coasts, and Islands  
May 2004**

**(Editors' Note: Any errors or omissions in this report are the responsibility  
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## Foreword

Government delegates meeting at the World Summit on Sustainable Development (WSSD), which took place in Johannesburg, South Africa from August 26 to September 4, 2002, negotiated and agreed on an action plan for oceans, coasts, and small island developing States (SIDS), with quite specific targets and timetables for action. Major examples include applying the ecosystem approach to marine areas by 2010 and establishing networks of marine protected areas by 2012. Important targets were also established on issues related to SIDS (e.g., assess progress achieved on sustainable development in island nations); on fisheries issues (e.g., managing fishery capacity by 2005 and controlling illegal fishing by 2004), and in other ocean-related areas as well. The targets and timetables found in the Johannesburg Plan of Implementation represent an important advance because they have enshrined, as global imperatives by the world's political leaders, many of the goals previously posited by expert groups and specialized agencies. There is now a global consensus reached at the highest political levels that there is an urgent need to take specific action to reverse declining trends in oceans, coasts, and SIDS.

The WSSD targets and timetables, however, are not “self-implementing.” Instead, governments around the world will need much assistance and support from all parts of the oceans, coasts, and SIDS community—to operationalize what needs to be done, to mobilize the requisite knowledge and financial resources, and to maintain the high-level political support essential to achieve the sorely needed “on-the-ground” improvements in the health and condition of marine ecosystems and in the well-being of coastal communities.

This volume presents the results of the *Global Conference on Oceans, Coasts, and Islands: Mobilizing for Implementation of the Commitments Made at the 2002 World Summit on Sustainable Development on Oceans, Coasts, and Small Island Developing States*, held at UNESCO in Paris on November 12-14, 2003. Organized by the Global Forum on Oceans, Coasts, and Islands, the conference sought to examine progress achieved, obstacles faced in, and mobilization around the implementation of the WSSD targets and timetables related to oceans, coasts, and SIDS.

This was the first effort, out of all of the thematic areas addressed by the WSSD, to systematically assess WSSD implementation progress and prospects. Since the oceans and coasts area is not scheduled to be addressed and reviewed by the UN Commission on Sustainable Development until 2014, it is especially important for the oceans, coasts, and SIDS community to organize its own periodic assessments of progress being achieved, obstacles faced, and strategies for effective implementation of the Johannesburg Plan of Implementation and of other related international oceans agreements.

This volume also reports on major developments in WSSD implementation related to oceans, coasts, and SIDS which have taken place following the Global Conference, from November 2003 to May 2004, the publication date for this report. The reader should note that given limited information, only major new developments are covered.

It is heartening to see that even though only about one and a half years have elapsed since the World Summit that progress can be reported in a number of areas. It is heartening to us, too, to see that the global alliance forged to put oceans on the WSSD agenda, continues working now to help ensure that the commitments made become a reality “on the ground.” The Global Forum on Oceans, Coasts, and Islands brings together ocean experts from governments, nongovernmental organizations, international and intergovernmental organizations, private sector, and public outreach organizations to promote the advancement and implementation of the global oceans agenda. We invite all interested individuals and organizations to join in this common effort to achieve the sustainable development of oceans, coastal areas, and small island developing States.

Our grateful thanks and appreciation go to the sponsors of the Global Conference and the Global Forum (listed on page ii), to the members of the Global Forum Steering Committee (listed on the back inside cover of the report), and to a number of individuals (listed on page ii) who played, with great dedication, a key role in the organization of the Global Conference and in the preparation of this report.

**Co-Chairs, Global Forum on Oceans, Coasts, and Islands**

**Dr. Bilitiana Cicin-Sain**

**Dr. Patricio A. Bernal**

**Dr. Veerle Vandeweerd**

## List of Acronyms

CBD	Convention on Biological Diversity	LME	Large marine ecosystem
CMP	Gerard J. Mangone Center for Marine Policy	MPA	Marine protected area
EEZ	Exclusive Economic Zone	NOAA	U.S. National Oceanic and Atmospheric Administration
GEF	Global Environment Facility	NPA	National Programme of Action
GOOS	Global Ocean Observing System	ODA	Official Development Assistance
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities	OECD	Organisation for Economic Co-operation and Development
GWP	Global Water Partnership	SIDA	Swedish International Development Assistance
IMO	International Maritime Organization	UN	United Nations
IPoA	International Plan of Action	UNCLOS	United Nations Convention on the Law of the Sea
IOC	Intergovernmental Oceanographic Commission	UNEP	United Nations Environment Programme
IUU	Illegal, Unregulated and Unreported [fishing]	WSSD	World Summit on Sustainable Development
JPoI	Johannesburg Plan of Implementation		

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## **PART I. INTRODUCTION AND OVERVIEW**



# INTRODUCTION AND OVERVIEW

## Purpose of this Report

This volume reports on progress achieved and obstacles faced in the implementation of the commitments made at the World Summit on Sustainable Development (WSSD) (held in Johannesburg, South Africa, on August 26 to September 4, 2002) related to oceans, coasts, and small island developing States (SIDS). The report presents highlights from the Global Conference on Oceans, Coasts, and Islands held at UNESCO in Paris on November 12-14, 2003. Organized by the Global Forum on Oceans, Coasts, and Islands, the Conference sought to examine progress achieved, obstacles faced in, and mobilization around the implementation of the targets and timetable of the WSSD related to oceans, coasts, and small island developing States. The Conference involved 223 participants from 48 countries, representing perspectives from governments, nongovernmental organizations, intergovernmental and international organizations, private sector, and public outreach organizations, and benefited from the participation of 15 ministers and other high level participants.

This was the first effort, out of all of the thematic areas addressed by the WSSD, to systematically assess WSSD implementation progress and prospects. Since the oceans and coasts area is not scheduled to be addressed and reviewed by the UN Commission on Sustainable Development until 2014, it is especially important for the oceans, coasts, and small island developing States community to organize its own assessment of progress being achieved, obstacles faced, and strategies for effective implementation of WSSD targets and timetables.

This volume also reports on major developments in WSSD implementation related to oceans, coasts, and SIDS which have taken place following the Global Conference, from November 2003 to May 2004, the publication date for this report. The reader should note that only major new developments are covered.

In this Introduction, we first review major developments leading up to the World Summit on Sustainable Development, provide an overview of the commitments made at the WSSD, review highlights from the 2003 Global Conference, and present the organization of this volume.

## The WSSD and Oceans, Coasts, and SIDS

The World Summit on Sustainable Development brought together 21,340 participants from 191 governments, intergovernmental organizations, nongovernmental organizations, industry, and academia, including many heads of state and other high level officials to assess the progress that had been

made (or lack thereof) at global, regional, and national levels in the decade since the 1992 Earth Summit (United Nations Conference on Environment and Development, UNCED), and to chart a blueprint for action for the next decade.

Oceans, coasts, and islands were not initially on the WSSD agenda, which emphasized issues concerning water and sanitation, energy, health, agriculture, and biodiversity. However, thanks to the mobilization of interested governments, non-governmental organizations, UN agencies, and others early in the WSSD preparatory process, advances in oceans, coasts, and islands represent one of the most important outcomes of the World Summit. This alliance began to form in 2001 as part of the preparations for the WSSD and initially came together at the *Global Conference on Oceans, Coasts, and Islands at Rio+10: Toward the 2002 World Summit on Sustainable Development—Assessing Progress, Addressing Continuing and New Challenges*, held on December 3 to 7, 2001, at UNESCO in Paris.

## 2001 Global Conference on Oceans, Coasts, and Islands

The 2001 Global Conference, involving 424 participants from 61 countries (ocean experts from governments, nongovernmental organizations, intergovernmental and international organizations, public sector, and public outreach organizations) assessed global progress on oceans and coasts in the decade since new agreements on oceans and coasts had been adopted at the 1992 Earth Summit in Rio de Janeiro, including Chapter 17 of Agenda 21, and the oceans-related aspects of the Convention of Biological Diversity and the Framework Convention on Climate Change. The decade from 1992-2002 was marked by a number of important developments related to oceans, including the coming into force of the United Nations Convention on the Law of the Sea; modifications in the regimes related to deepseabed mining and to straddling fish stocks; major investments and experimentation in ocean and coastal management in many countries; and extensive work by international entities in providing guidance for and capacity building in sustainable development of marine and coastal areas.

The 2001 Global Conference documented the economic, social and environmental importance of oceans, coasts, and SIDS (see Box 1), and assessed the progress achieved, or lack thereof, since the Earth Summit, e.g.: what problems/constraints had been encountered; what lessons had been learned; what new trends were present in 2001 that were not present 10 years earlier; what efforts needed to be refocused or redirected; and what recommendations should be put forward

for the global agenda on oceans, coasts, and SIDS for the next decade?

The analysis revealed a number of positive changes since the 1992 Earth Summit (Bernal, Cicin-Sain, Belfiore, and Barbiere, 2002): 1) significant institutional progress has been made—

**Box 1. Examples of the Importance of Oceans, Coasts, and SIDS**

- Oceans comprise 72% of the Earth's surface
- Coasts contain more than 50% of human population
- 70% of megacities (greater than 8 million inhabitants) are coastal
- 44 of the world's nations are small island developing States, which are especially dependent on oceans
- Coasts yield 90% of the global fisheries on which 400 million fishers rely
- 90% of world trade moves by ship
- Travel and tourism is the largest industry in the world, much of it related to coastal and marine areas
- Over 25% of the world's energy supplies are produced in ocean areas offshore
- Marine aquaculture, a rapidly growing industry, accounts for 30% of the world's fish consumption
- Coral reef resources contribute \$375 billion to the world's economy annually

both at the international level through the adoption and partial implementation of a number of major ocean-related agreements)\* and at the national level (for example, 98 countries in 2000 were engaged in some form of coastal management compared to 59 countries in 1993); 2) significant new funding has been invested in oceans and coasts (for example, through the Global Environment Facility and many bilateral donors); 3) significant progress has been made in scientific

understanding of oceans and coasts (for example, through the development of the Integrated Global Ocean Observing System).

At the same time, the analysis found that important problems remain (Bernal, Cicin-Sain, Belfiore, and Barbiere, 2002). The “on-the-ground” condition of ocean resources and coastal communities remains poor. Poverty continues largely unabated and unhealthful conditions predominate in coastal communities of the developing world (e.g., 90% of sewage in developing countries is untreated and there are 250 million cases of gastroenteritis annually). The multitude of activities supported in oceans, coasts, and islands is placing increasing pressure on the integrity of coastal and marine ecosystems and many oceanic, coastal, and island resources are threatened through overexploitation. Seventy-five percent of global fisheries are either fully utilized or overutilized. Seventy percent of 126 marine mammal species are threatened. Fifty percent of the world's mangroves have been lost and important seagrass habitats are rapidly being destroyed.

Twelve billion tons of ballast water containing at any one time around 10,000 marine species are shipped around the globe each year, spreading alien and invasive species. Over the past decade, the frequency of recorded harmful algal blooms resulting in mass mortality and morbidity of marine organisms has increased significantly. Continued use of fossil fuels is projected to exacerbate global climate changes with severe consequences for ocean, coastal, and island ecosystems. Food security for a growing human population has driven the intensification of agricultural production and has resulted in the increased application of fertilizers, pesticides, and herbicides, incurring the degradation of coastal ecosystems.

The 2001 Conference thus issued an Urgent Call of Action to the WSSD, as noted below:

*The Conference wishes to transmit a sense of urgency to the WSSD for addressing the issues surrounding the sustainable development of oceans and coasts. Participants at the Conference generally agreed that we are in a critical situation of declining trends that requires immediate actions by nations and governing bodies worldwide. This sense of urgency and priority was corroborated in ministerial statements, as well as by non-governmental, governmental and international experts, scientists, commercial fishing, and industrial representatives attending the meeting. It is essential that we link economic development, social welfare, and resource conservation in order to achieve sustainability of oceans and coasts. The Conference issues an urgent call to action to decision makers in the*

---

\*e.g., UN Convention on the Law of the Sea, UN Fish Stocks Agreement, FAO Compliance Agreement and Code of Conduct for Responsible Fisheries, UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, Convention on Biological Diversity (Biosafety Protocol, Jakarta Mandate), International Coral Reef Initiative, Barbados Programme of Action for the Sustainable Development of Small Island Developing States, Underwater Cultural Heritage Convention, Rio Principles, IMO Agreements, regional conventions, etc.)



*WSSD process to develop a detailed action plan for the sustainable development of the world's oceans and coasts.*

More specifically, the Global Conference called for attention of WSSD decision makers to the following major points:

- **Poverty reduction during the coming decade will require more access to sustainable economic livelihoods and wealth derived from the ocean, and development of safer, healthy coastal communities.** (Examples of possible actions include: coastal management to focus on sustainable development and alternative livelihoods; Global Programme of Action to address problems of sewage disposal; retargeting of donor aid towards poverty reduction.)
- **Full implementation and effective compliance with international agreements is needed.** The significant number of international agreements that have come into effect since 1992 now need to be properly implemented and enforced, and their implications for national-level action more fully addressed. (Examples of possible actions include: encourage regional-level assistance in national implementation; encourage joint implementation of clusters of ocean agreements, and streamlining of national reporting on international agreements, especially for SIDS; encourage the formation of national ocean councils to oversee implementation of related ocean agreements in an integrated manner).
- **Capacity building for good governance of coastal and ocean use is essential.** Scientific advances and technology development will continue to open untapped potential for use of coastal, offshore, and Exclusive Economic Zones, and deep ocean areas. Yet our understanding of the role and vulnerability of these new resources and habitats is still limited. All countries, rich and poor, lack the needed capacity to manage even the existing level of development in a well-integrated way. Thus, the capacity of local and national governments to apply effective institutional and legal frameworks for integrated coastal and ocean management must be strengthened. (Possible actions include: scaling up of pilot projects in integrated coastal and ocean management to cover larger parts of, and ultimately, the entire coastal and marine areas under national jurisdiction; promote systematic planning for the use of Exclusive Economic Zones; develop systematic training and education programs in integrated coastal and ocean management, especially in developing countries.)
- **The health of the oceans and coasts is directly linked to the proper management of river basins, including freshwater flows to the marine environment.** Eighty percent of marine pollution comes from land-based sources. Ecosystem approaches that link management of river basins to marine ecosystems, such as those promoted by the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) must be effectively implemented. This is especially important in the context of coastal megacities such as Lagos, Nigeria, where 65% of the estimated 13.4 million population live in poverty. (Examples of possible actions include: Promoting the faster implementation of the GPA; developing institutional linkages between river basin management and coastal management; developing closer linkages between the ocean, coasts, and SIDS community, and the freshwater community (e.g., the World Water Forum, the World Water Council, the Global Water Partnership).
- **Protecting coastal and marine areas and biodiversity takes an ecosystem approach.** The very significant shift from a sectoral to an ecosystem-based approach that recognizes precaution and linkages among activities is an important achievement of the past decade. The Convention on Biological Diversity and work carried out through the Large Marine Ecosystem (LME) Program supported by the Global Environment Facility, in particular, provide international frameworks to guide ecosystem-based management at regional and national levels. (Examples of possible actions: develop a global representative system of marine protected areas as an essential component for ecosystem understanding, management, and biodiversity protection; learn from existing experiments with ecosystem management, such as the LME program, and apply lessons to other areas).
- **The special problems and issues of small island developing States must be addressed.** Small island developing States have special problems and opportunities related to the oceans which need to be recognized and addressed. Small in land area, these nations typically have control and stewardship responsibilities over huge expanses of oceans—their Exclusive Economic Zones (EEZs). (Examples of possible actions include: Assistance to SIDS nations in delimiting and developing management approaches to their EEZs; assistance to SIDS nations in capacity building in ocean and coastal management.

## Results of the WSSD on Oceans, Coasts, and SIDS

In response to alarming “on the ground” trends in ocean and coastal resources and areas and in SIDS, government delegates at the 2002 World Summit on Sustainable Development negotiated and agreed on an action plan for oceans, coasts, and SIDS, with quite specific targets and timetables for action, as part of the Johannesburg Plan of Implementation. The provisions concerning oceans, seas, islands, and

coastal areas (paragraphs 30-36) are addressed in section IV of the Plan, *Protecting and Managing the Natural Resource Base of Economic and Social Development*, while SIDS occupy section VII, *Sustainable Development of Small Island Developing States* (paragraphs 58-61)—see summary in Table 1. Major examples include applying the ecosystem approach to marine areas by 2010 and establishing networks of marine protected areas by 2012. Important targets were also established on issues related to SIDS (e.g., developing community-based initiatives in sustainable tourism by 2004); on fisheries issues (e.g., managing fishery capacity by 2005 and controlling illegal fishing by 2004), and in other ocean-related areas as well. The targets and timetables found in the WSSD Plan of Implementation represent an important advance because they have enshrined, as global imperatives by the world's political leaders, many of the goals previously posited by expert groups and specialized agencies. There is now a global consensus reached at the highest political levels that there is an urgent need to take specific action to achieve sustainability of oceans, coasts, and of small island developing States.

The WSSD targets and timetables, however, are not “self-implementing.” Instead, governments around the world will need much assistance and support from all parts of the oceans, coasts, and islands community—to operationalize what needs to be done, to mobilize the requisite knowledge and financial resources, and to maintain the high-level political support essential to achieve the sorely needed “on-the-ground” improvements in the health and condition of marine ecosystems and in the well-being of coastal communities.

### **The 2003 Global Conference on Oceans, Coasts, and Islands**

The major purposes of the Global Conference on Oceans, Coasts, and Islands held at UNESCO, Paris, on November 12-14, 2003, were to review what has been done to date in implementing the WSSD commitments, and to catalyze action on WSSD implementation through collaboration among governments, international organizations, non-governmental organizations, and the private sector. The conference focused, as well, on approaches to mobilizing public and private sector support for the global oceans agenda, and on the identification of emerging ocean issues.

More specifically, the Conference aimed to:

- Focus on useful strategies for and experiences in implementing the commitments made at the World Summit on Sustainable Development at global, regional, and national levels, through discussions among experts from governments, international organizations, non-governmental organizations, and the private sector. For each of the major areas of oceans, coasts, and islands where WSSD targets have been set, the conference sought to:

—Invite reports by governments, nongovernmental organizations and intergovernmental organizations on progress and challenges in implementation of the Johannesburg Plan of Implementation;

—Discuss the contribution of sustainable development partnership initiatives (voluntary action-oriented partnerships intended to contribute to translating the Johannesburg Plan of Implementation into action) including the identification of gaps in knowledge/resources/political will needed for implementation of the WSSD targets;

—Analyze, in particular, the needs of SIDS, especially in relation to the forthcoming global review of progress achieved in SIDS countries since the 1994 Barbados Programme of Action, scheduled to be held in Mauritius in August 2004.

- To discuss emerging issues on oceans, coasts, and islands for which international consensus is still to be reached.
- To develop strategies for mobilizing private sector involvement and increased public awareness on oceans, coasts, and islands, to insure continued support for the global oceans agenda.

The 2003 Global Conference was organized by the Global Forum on Oceans, Coasts, and Islands, comprised of individuals from governments, intergovernmental and international organizations (IOs), and nongovernmental organizations (NGOs), with the common goals of advancing the interest 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 SIDS which are especially dependent on the oceans. Initially organized informally in 2001 in the WSSD preparatory process, the Global Forum was created at the World Summit on Sustainable Development in Johannesburg in September 2002 by the WSSD Informal Coordinating Group on Oceans, Coasts and Islands.

The 2003 Global Conference was held over a three-day period (November 12 through Friday, November 14, 2003) with opportunities for informal group meetings, workshops, and side events on November 10 and 11, 2003.

Lead papers and panel participants were asked to address the following:

—How to operationalize each WSSD commitment/target? What will the commitment/target require in terms of knowledge resources, financial resources, and political will? If accomplished, what would the result (s) be “on the ground”? (e.g., what would, for example, “representative networks of marine protected areas” look like?)

—What will it take to implement the commitment/target? i.e., what is the path to implementation? e.g., National-

**Table 1. Major Targets and Timetables Adopted at the World Summit on Sustainable Development on Oceans, Coasts, and SIDS****Integrated ocean and coastal management**

- Encourage the application of the ecosystem approach by 2010 for the sustainable development of the oceans, particularly in the management of fisheries and the conservation of biodiversity
- Establish an effective, transparent and regular inter-agency coordination mechanism on ocean and coastal issues within the United Nations system
- Promote integrated coastal and ocean management at the national level and encourage and assist countries in developing ocean policies and mechanisms on integrated coastal management
- Assist developing countries in coordinating policies and programs at the regional and sub-regional levels aimed at conservation and sustainable management of fishery resources and implement integrated coastal area management plans, including through the development of infrastructure

**Fisheries**

- Implement the FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing 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

**Conservation of biodiversity**

- Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012

**Protection from marine pollution**

- Advance implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities in the period 2002-2006 with a view to achieve substantial progress by 2006

**Science and observation**

- Establish a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socioeconomic aspects, by 2004

**Small island developing States**

- Develop community-based initiatives on sustainable tourism in small island developing States by 2004
- Reduce, prevent, and control waste and pollution and their health-related impacts in Small island developing States by 2004 through the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
- Support the availability of adequate, affordable and environmentally sound energy services for the sustainable development of small island developing States, including through strengthening efforts on energy supply and services by 2004.
- Undertake a comprehensive review of the implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States in 2004.

level action? International action? Subnational action?  
Action by private sector? A combination of these?

- What is the role of international agencies /NGOs /Governments in assisting and catalyzing implementation?
- To what extent is the specific target already on the agenda of various groups, and how might these efforts be synergized?
- Is it best to approach the issue/target regionally? In what regions? Through pilot or demonstration projects? What about issues of scaling up?
- Which group/countries/agencies have the knowledge resources needed for achieving each specific target? Which have the financial resources?
- Which groups/countries/agencies might be/are taking leading roles? How to further encourage/catalyze this?
- Are the financial resources already pledged for the WSSD commitments/targets and for the sustainable develop-

ment partnership initiatives adequate to mobilize implementation of the target?

The Global Conference was organized by two Conference Secretariats: The Intergovernmental Oceanographic Commission (IOC) hosted the meeting and oversaw all arrangements related to the conduct of the conference at UNESCO headquarters in Paris, including facilitating the travel and housing of conference participants.

The Gerard J. Mangone Center for Marine Policy (CMP) at the University of Delaware, USA, served as the organizer of the conference program and handled the organization of pre-conference meetings, conference sessions, conference proceedings, and publications. Serving as Conference Co-Chairs were the Co-Chairs of the Global Forum on Oceans, Coasts, and Islands: Dr. Biliana Cicin-Sain, Director, Gerard J. Mangone Center for Marine Policy, University of Delaware; Dr. Patricio Bernal, Secretary, Intergovernmental Oceanographic Commission, UNESCO; and Dr. Veerle Vandeweerdt, Director, UNEP/GPA, The Hague.

The conference received funding and in-kind and travel support from a wide variety of governmental, nongovernmental, and intergovernmental organizations from around the world (noted on page *ii*) whose essential contributions are acknowledged with sincere thanks and appreciation.

The Conference greatly benefited from the participation of a number of Ministers and other Eminent Persons:

**Mr. Sun Zhihui**, Deputy Administrator, State Oceanic Administration, China

**Dr. Harsh K. Gupta**, Secretary to Government of India, Department of Ocean Development, India

**H.E. Ambassador Jagdish Koonjul**, Permanent Representative of Mauritius to the United Nations, and Chair of the Alliance of Small Island States (AOSIS)

**Mr. Daniel McDougall**, Director-General of Oceans, Department of Fisheries and Oceans, Canada

**H.E. Ms. Roselyne Bachelot-Narquin**, Minister for Ecology and Sustainable Development, France

**H.E. Mr. José Luís Arnaut**, Minister Assistant to the Prime Minister of Portugal and Chairman, Strategic Commission on Oceans, Portugal

**Dr. William J. Brennan**, Deputy Assistant Secretary for International Affairs, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

**H.E. Ambassador Gunnar Pálsson**, Ministry for Foreign Affairs, Iceland, and Chair, Senior Arctic Officials

**Dr. Klaus Toepfer**, Executive Director, United Nations Environment Programme (UNEP)

**Lord (Prof.) Julian Hunt**, Professor and Fellow of Royal Society, United Kingdom. Chairman, Advisory Committee on Protection of the Sea (ACOPS)

**Dr. Sylvia Earle**, Director, Global Marine Programs, Conservation International

**Dr. Tullio Treves**, Judge of the International Tribunal for the Law of the Sea and Professor at the University of Milan, Italy

**Prof. Jon M. Van Dyke**, Professor, University of Hawaii at Manoa, Richardson School of Law, USA

**Mr. Emilio Gabbrielli**, Executive Secretary, Global Water Partnership, Sweden

**Mr. Alan Simcock**, Executive Secretary, OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic

The presentations from the Ministers and other Eminent Persons are found in Part II of this volume.

The Conference heard presentation of papers and panel discussions on the following topics:

1. Problems and Opportunities in the Implementation of WSSD Commitments: Ministerial Perspectives
2. Implementation of WSSD Commitments at the Regional Level
3. Small Island Developing States: The Issues in Mauritius 2004
4. NGO and Foundation Perspectives on WSSD Implementation
5. Roundtable Discussion on Challenges and Opportunities in Meeting the WSSD Substantive Objectives on Oceans, Coasts, and Small Island Developing States

- Cross-sectoral aspects

- 1) Integrated Coastal and Ocean Management and Governance
- 2) Ecosystem Approaches

- Fisheries

- Small Island Developing States

- Biodiversity Protection and Marine Protected Areas

- Protection from Marine Pollution

- Achieving Enhanced Coherence in the United Nations vis-à-vis Oceans, Coasts, and Islands:

- 1) Toward an Effective, Transparent, and Regular Inter-Agency Coordination Mechanism on Ocean and Coastal Issues within the United Nations System
- 2) Toward a Global Marine Assessment by 2004

- Marine Science and Observation Contribution to the WSSD Agenda

6. Targeting Development Assistance to Meet WSSD Goals
7. Private Sector Perspectives on WSSD Implementation and on the Global Oceans Agenda
8. Options for a Global Oceans Fund
9. Generating and Maintaining Public Support for Oceans, Coasts, and Islands
10. Evolving Issues

The Conference considered the information presented in these panels and the discussions held by five Discussion Groups, which addressed the following topics:

1. Cross-sectoral aspects
2. Fisheries



3. Small Island Developing States
4. Biodiversity and Marine Protected Areas
5. Enhanced United Nations Coherence

Discussions from the Conference have been summarized by The Earth Negotiations Bulletin and may be found at <http://www.iisd.ca/sd/sdune/12november.htm>.

In addition to the current volume, other conference papers are available as part of the *Pre-Conference Proceedings Volume, Global Conference on Oceans, Coasts, and Islands: Mobilizing for Implementation of the Commitments Made at the 2002 World Summit on Sustainable Development* (2003) (see Box 2 for a list of authors and papers). In addition, presentations and other materials presented at the Conference are available on the Global Forum's website: [globaloceans.org](http://globaloceans.org)

## Highlights of the 2003 Global Conference

At the outset of the Conference, Conference Co-Chairs Biliiana Cicin-Sain and Patricio Bernal emphasized the unprecedented political opportunity to make a difference on oceans, coasts, and SIDS, presented by the very specific targets and timetables established by the governments at the World Summit on Sustainable Development. However, they also reiterated that the targets will not “self-implement,” and instead, that governments will need much assistance from all other sectors of the oceans, coasts, and SIDS community, to make the targets real and operational “on the ground.”

**Pre-conference meetings.** A variety of pre-conference meetings were held, especially on WSSD sustainable development partnerships, integrated coastal management, national ocean policies, coral reef management, SIDS, Large Marine Ecosystems (LME), public involvement, and capacity building. The results of these discussions and of related working groups are reported in Part II of this volume. In all of these discussions, special efforts were made to draw and promote connections among major entities and programs, such as the LME programs, the UNEP Regional Seas Programme, national initiatives in integrated coastal and ocean management, and coral reef management in various national contexts, especially in island countries.

**Ministerial addresses.** The Conference benefited greatly from the participation of a number of ministerial representatives showing political commitment at a high level for moving on WSSD commitments both at the national level and at the international level assisting other nations in WSSD implementation. The Conference heard from high-level representatives of the two largest developing countries in the world: China and India, from the Alliance of Small Island States, and from major developed nations with a keen interest in the oceans: Canada, France, Portugal, and the United

States. The head of the UN Environment Programme underlined the commitment of the UN agencies to mobilize their knowledge and financial resources to achieve the goals of the WSSD. The high-level presentations are found in Part III of this volume.

**Regional presentations.** A number of regional-level presentations underscored that much is happening at the regional level to implement the WSSD mandates, e.g.:

- In the **East Asia region**, through the leadership of the PEMSEA program, the world's first regional agreement to implement the WSSD targets and timetables has been negotiated among the 12 nations in the region (*see Box 3 and paper by Dr. Chua Thia-Eng in the Pre-Conference Proceedings Volume*).
- In the **Pacific Islands region**, the 16 nations in the region have developed the world's first regional ocean policy endorsed at the highest political level, and are currently in the process of fostering national level action on the regional policy.
- In the **European Union**, a concerted effort is underway to develop a European Marine Strategy, covering the Arctic Ocean, the Baltic Sea, the Black Sea, the Mediterranean Sea, and the North-East Atlantic.
- In the **Caribbean region**, specific efforts are underway to manage from “hilltops to oceans” linking watershed management to coastal management and to marine ecosystem management, especially through the “White Water to Blue Water Initiative” (a WSSD Sustainable Development Partnership) (*see discussion in Part II of this volume*).
- In the **Mediterranean region**, a new regional protocol on integrated coastal management is under negotiation that will advance efforts at comprehensive management of oceans and coasts at both regional and national levels (*see paper by Professor Harry Coccossis in the Pre-Conference Proceedings Volume*).
- In the **Arctic region**, extensive efforts are underway to protect the vulnerable resources of the Arctic (*see paper by Ambassador Pálsson in Part III of this volume*).
- In the **North-East Atlantic region (OSPAR) and in the Baltic Sea region (HELCOM)**, regional entities are working together on applying an ecosystem management approach to the entire region, and have already developed and applied indicators on marine ecological quality and sustainability (*see paper by Alan Simcock in Part III of this volume*).
- In the **Caspian Sea region**, which vividly demonstrates the special problems faced in many enclosed seas situa-



**Box 2. List of Authors and Papers Found in 2003 Pre-Conference Proceedings Volume (available at [www.globaloceans.org/globalconference/outcomes.html](http://www.globaloceans.org/globalconference/outcomes.html))**

WSSD Implementation in East Asia  
**Chua Thia-Eng**, PEMSEA

Challenges and Potential Solutions for Achieving Synergies at the Regional Level on Ocean and Coastal Governance  
**Gunnar Kullenberg**, International Ocean Institute

Towards a Regional Legal Framework for Integrated Coastal Area Management in the Mediterranean  
**Harry Coccosis**, University of Thessaly

Volga/Caspian Basin. Regional Cooperation – Benefits and Problems  
**Iouri Oliouline**, International Ocean Institute

Managing the Managers: Improving the Structure and Operation of Fisheries Departments in SIDS  
**Robin Mahon and Patrick McConney**, University of the West Indies

Environment Outlook of Small Island Developing States  
**Sherry Heileman and Marion Cheatle**, United Nations Environment Programme

A Suggested Call to Action by the Oceans Forum on Carrying Out the WSSD Plan of Implementation  
**Xavier Pastor, I. L. Pep. Fuller, Jorge Varela**, Oceana

Ship & Ocean Foundation's Perspectives on WSSD Implementation  
**Hiroshi Terashima**, Ship & Ocean Foundation

Sustainability and Viability: Reinforcing the Concepts of the Johannesburg Declaration on Sustainable Development  
**Eduardo Marone**, International Ocean Institute, and **Paulo da Cunha Lana**, Federal University of Parana

Capacity Building in Support of WSSD Implementation  
**Francois Baillet**, International Ocean Institute

Obstacles to Ecosystem-based Management  
**Lawrence Juda**, University of Rhode Island

When Can Marine Protected Areas Improve Fisheries Management?  
**Serge Garcia et al.**, United Nations Food and Agriculture Organization

The Regional Management of Fisheries  
**Hance D. Smith**, Cardiff University

Developing a Capable, Relevant Network to Address Marine and Coastal Environmental Concerns and Food Security in Africa and Neighboring Small Island Developing States (SIDS)  
**Grant Trebble**, AMCROPS

Targeting Development Assistance to Meet WSSD Goals Related to Marine Ecosystems  
**Alfred Duda**, Global Environment Facility

A Fisherman's Perspective on Sustainable Development and the Global Oceans Agenda  
**Pietro Parravano**, World Forum of Fish Harvesters & Fishworkers

Perspectives on Global Funding Mechanisms for Oceans, Coasts, and Islands  
**Scott Smith**, The Nature Conservancy

The World Ocean Observatory: A Forum for Ocean Affairs  
**Peter Neill**, South Street Seaport Museum

Building a Conservation Vision for the Grand Banks of Newfoundland, Canada  
**Charlotte Breide and Robert Rangely**, World Wildlife Fund International

Progress Towards a Ten-year High Seas Marine Protected Area Strategy  
**Kristina M. Gjerde**, International Union for Conservation of Nature

tions, extensive efforts are underway to achieve agreement on a regional sea management strategy (*see paper by Iouri Oliouline in the Pre-Conference Proceedings Volume*).

**Discussion of WSSD targets and timetables.** Consideration of the WSSD targets and timetables on oceans, coasts, and SIDS represented the heart of the Conference, and detailed discussions on all the major targets took place both in plenary sessions and in discussion groups. In Part II of this volume, we discuss progress in implementation of major

WSSD targets, i.e.: cross-sectoral aspects; enhancing UN coherence; Global Marine Assessment; advancement of the GPA; SIDS; fisheries; marine protected areas, biodiversity, and coral reefs; and mobilizing resources towards the achievement of WSSD targets on oceans, coasts, and SIDS.

**Special addresses at the conference and emerging issues.** A number of special addresses, found in Part III of this volume, highlighted current and forthcoming issues. Dr. Sylvia Earle reminded the participants that we live at such a

decisive point in time—if we don't act now, we will have irreversible damage in oceans, coasts, and SIDS, and we will face the wrath of our children—"why didn't you do something while there was still a chance?"

Law of the Sea Tribunal Judge Tullio Treves reviewed the evolution of the Law of the Sea—which provides the constitution for the world's oceans—over the past twenty years, and called attention to emerging issues of mechanisms for the settlement of disputes, multilateral unilateralism, and the combination and cross-fertilization of approaches in international law.

Professor Jon Van Dyke discussed growing threats to the international ocean regime related to various forms of shipping and conflicts among countries in the way they are handling or reacting to these threats.

Greater political and institutional linkage of oceans issues to freshwater issues has long been discussed as a major need. Moreover, the oceans community stands to learn much from studying the evolution of the freshwater community and its effective organization at the global level. A step in this direction was taken at the Paris conference with the presentation of Emilio Gabbrielli, Global Water Partnership, reflecting

### Box 3. East Asian Efforts on Coastal and Ocean Governance: Implementation of the WSSD at the Regional Level

Twelve East Asian nations around the seas of East Asia, namely Brunei Darussalam, Cambodia, DPR Korea, Indonesia, Japan, Malaysia, PR China, Philippines, RO Korea, Singapore, Thailand and Vietnam, endorsed the *Sustainable Development Strategy for the Seas of East Asia* (SDS-SEA) through the Putrajaya Declaration at the Ministerial Forum held in Putrajaya, Malaysia on 12 December 2003. The Ministerial Forum was an integral part of the East Asian Seas (EAS) Congress, which was held on 8-11 December 2003. Initiated by the GEF/UNDP/IMO Regional Programme on Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) in collaboration with 16 international, regional and national partners, the SDS-SEA provides a regional framework and platform for effective partnership on coastal and ocean governance.

The EAS Congress was a gathering of more than 400 international, regional and national stakeholders of the seas of East Asia. The Congress discussed issues relating to maritime transport, biodiversity, land-based pollution, fisheries and aquaculture as well as on cross-cutting issues relating to national coastal/ocean policies, regional cooperation, local governance and alliance and capacity building. In attendance were government officials, environment and natural resource managers, NGO representatives, media practitioners, the academe, and other members of civil society and the private sector from 26 countries across the world, including representatives from 25 international and regional organizations.

The Seas of East Asia are noted as a global center of marine biodiversity, with more than 7 million square kilometers of sea area supporting 30% of the world's coral reefs and mangroves, and producing close to the world's 40% of marine fish production and 80% of aquaculture products. However, these values are being seriously eroded due to habitat losses and damages, resource degradation and depletion, pollution, and harmful

algae bloom, as well as resource misuses and mismanagement. Recognizing the interconnectivities of the problems facing the countries, the regional strategy emphasizes inter-country and cross-sectoral partnerships as the effective way of problem solving. The East Asian Seas nations recognized that a key challenge is to embed "resource sustainability" in the decision-making process of socioeconomic development, and pledged to develop and implement sustainable coastal and marine development policies and action plans. A number of countries are already in various stages of national coastal and ocean policy development including Indonesia, Japan, Philippines, PR China, RO Korea, Thailand and Vietnam.

The SDS-SEA is a product of more than three years of consultations and consensus building among all the concerned countries and stakeholders in the Seas of East Asia region. It is an instrument for the countries of the region to collectively implement the provisions of Agenda 21, the Millennium Development Goals (MDGs), the Johannesburg Plan of Implementation, relevant international and regional conventions, agreements and protocols, as well as regional programmes of actions related to coasts and oceans. It adopts a holistic and integrative approach in addressing both sectoral and cross-sectoral issues through the implementation of the six strategies and 228 action programmes. It offers a programmatic approach to addressing the linkages among poverty alleviation, sustainable livelihood, reduction of vulnerability to natural hazards, long-term security, economic growth and the health of human beings, ecosystems and the natural resource base.

Through PEMSEA, regional efforts are being made to develop self-sustained financing mechanisms and promote investment opportunities to meet the widespread needs of local townships and communities in water pollution reduction and improvement of sanitary conditions.

For more information on East Asian efforts on coastal and ocean governance, please contact Dr. Chua Thia-Eng, Programme Director, PEMSEA ([chuate@pemsea.org](mailto:chuate@pemsea.org)).

on the global evolution of the water issue and on strategies for better linking oceans to freshwater (*found in Part III of this volume*).

Other issues on the horizon were raised especially by a panel on emerging issues headed by Professor David VanderZwaag, Dalhousie Law School who noted that many challenges loom on the horizon including the need to sort out regulatory approaches to possible extraction of polymetallic sulphides from hydrothermal vents and cobalt crusts associated with seamounts. Governance frameworks for potential high seas aquaculture and energy projects and future bioprospecting of the deep seabed remain to be developed.

Another emerging issue discussed concerned the flags of convenience phenomenon in marine transportation and the failure of open-registry flag States to adequately control their ships in relation to labor standards, environmental protection measures and fisheries conservation obligations.

**Mobilization of people and resources to support the WSSD mandates.** Considerable time was spent at the Conference discussing that mobilization of human and financial resources on a timely basis, growth in management capacity, greater involvement by the private sector, greater involvement of NGOs and the public, are all essential for the attainment of the WSSD goals related to oceans, coasts, and SIDS. Conference participants discussed different strategies for achieving these goals, as reported in Part II of the volume.

**The value and perils of targets and timetables.** Generally participants expressed their appreciation to the governments which had set forth detailed WSSD targets and timetables at Johannesburg—these can serve a catalytic role in mobilizing people and resources to implement and to achieve success on the target on a timely basis. When timelines are very short, however, this can have the opposite effect of provoking despair about the impossibility of achieving a particular goal in a short time frame. Participants emphasized that for targets with very short time horizons (e.g., 2004), it was important to develop and agree to a strategy laying out a series of doable steps, over perhaps a longer time frame but with an immediate start, to attain the intended target.

A similar type of argument was made with regard to targets which call for putting into place a complex and long-term process such as the Global Marine Assessment (GMA). NGOs note that the GMA is potentially a great tool—it can become a “report card” on the status of oceans and of coastal communities which can be used to communicate with and to galvanize the public around oceans issues. And yet it will need to be done very carefully, with the participation of

all relevant agencies and stakeholders and will no doubt require substantial resources. Notwithstanding the complexities, getting started is what is most important. As Alan Simcock noted in his presentation on the challenges of ecosystem assessment and monitoring in the North-East Atlantic (OSPAR Convention) and of implementing the WSSD mandates at the regional level, “.....the experience of OSPAR in this field confirms the paradoxical statement of the English author, G. K. Chesterton—“If a job is worth doing, it is worth doing badly”—in other words, if a task is really important, then the product will be worthwhile even if it is not perfect. Provided allowances are made for possible errors when conclusions are drawn, a review and assessment of what is known can be helpful, even if it only shows what the main gaps in knowledge are that need to be filled.”

**Evolution of the Global Forum.** Conference participants also discussed the added value which the Global Forum on Oceans, Coasts, and Islands can bring to the many efforts that are already underway to support the implementation of the global oceans agenda. Two factors were frequently mentioned: the emphasis of the Forum on informal and candid dialogue about interrelated issues which cross-cut more than one marine sector, and the useful bringing together of diverse perspectives from governments, nongovernmental organizations, intergovernmental and international organizations, and the private sector. Already participating in the Forum are the major intergovernmental and international ocean entities, major NGOs, and ocean leaders from the government sector. The Global Forum enjoys growing participation by the private sector and the strong participation of museums and aquaria from around the world.

Participants discussed the desirability of expanding the informal Forum alliance to also include individuals from the government sector from other leading ocean countries, other NGOs, and to expand the participation from ocean industries, the development assistance community, and organized scientific networks. The creation of Roundtables which would bring together specialized groups was cited as a possible avenue for reaching out to additional stakeholders.

Participants discussed future possible priorities for the Global Forum, including the importance of establishing closer linkages between the ocean community and the freshwater community in recognition of the inextricable linkage between freshwater and oceans. Participants discussed the desirability of continuing the organization of global conferences, generally on a biennial basis, and including high-level ministerial meetings, and coordinated with the World Water Forum, to provide linkages with the global water agenda.

## **Organization of this Volume**

Part II of this volume reviews activities undertaken in support of the major WSSD targets related to oceans, coasts, and islands: Addressing Cross-Sectoral Aspects; Enhancing United Nations Coherence; Establishing a Global Marine Assessment; Advancing Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities; Addressing the Issues of Small Island Developing States; Improving Fisheries Management; Improving Management of Marine Protected Areas, Biodiversity, and Coral Reefs; and Mobilizing Resources towards the Achievement of WSSD Targets on Oceans, Coasts, and Islands.

For each issue/target, we review: the relevant wording from the Johannesburg Plan of Implementation; the history of the issue/target; discussion at the 2003 global conference; suggested next steps in general and for the Global Forum specifically (if applicable); major developments since the global conference (in the period November 2003 to May 2004, whenever data were readily available); and provide a summary of major conclusions and outstanding issues.

In Part III are found papers and statements by the Ministerial and high-level participants. Part IV provides a summary and conclusion.





## **PART II. ASSESSING PROGRESS ON MAJOR WSSD TARGETS**



## ADDRESSING CROSS-SECTORAL ASPECTS

**Johannesburg Plan of Implementation** (several sections are relevant to cross-sectoral issues) (*emphasis added by the authors*):

*Invite States to ratify or accede to and implement the United Nations Convention on the Law of the Sea, which provides the overall legal framework for ocean activities; (30a)*

*Promote the **implementation of chapter 17 of Agenda 21** which provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas through its programme areas of integrated management and sustainable development of coastal areas, including exclusive economic zones; marine environmental protection; sustainable use and conservation of marine living resources; addressing critical uncertainties for the management of the marine environment and climate change; strengthening international, including regional, cooperation and coordination; and sustainable development of small islands; (30b)*

*Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and decision 5/6 of the Conference of Parties to the Convention on Biological Diversity; (30d)*

*Promote integrated, multidisciplinary and multisectoral coastal and ocean management at the national level, and encourage and assist coastal States in developing ocean policies and mechanisms on integrated coastal management; (30e)*

*Assist small island developing States, including through the elaboration of specific initiatives, in delimiting and managing in a sustainable manner their coastal areas and exclusive economic zones and the continental shelf (including, where appropriate, the continental shelf areas and beyond 200 miles from coastal baselines), as well as relevant **regional management initiatives** within the context of the United Nations Convention on the Law of the Sea and the UNEP regional seas programmes; (58c)*

*Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, **the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures** for the protection of nursery grounds and periods, proper coastal land use; and **watershed planning and the integration of marine and coastal areas management into key sectors**; (32c)*

*Strengthen regional cooperation and coordination between the relevant regional organizations and programmes, the UNEP regional seas programmes, regional fisheries management organizations and other regional science, health and development organizations; (30f)*

*Assist developing countries in **coordinating policies and programmes at the regional and subregional levels aimed at the conservation and sustainable management of fishery resources, and implement integrated coastal area management plans**, including through the promotion of sustainable coastal and small-scale fishing activities and, where appropriate, the development of related infrastructure; (30g)*

(See also relevant provisions calling for advancement of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, making 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, discussed in Part II, section 4).

## **The Issue**

The first part of the Johannesburg Plan of Implementation related to oceans and coasts emphasizes that “oceans, seas, islands and coastal areas form an integrated and essential component of the Earth’s ecosystem and are critical for global food security and for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries.”

The JPoI provisions on cross-sectoral aspects, noted above, first reinforce the central role of the UN Law of the Sea Convention as the overall legal framework for ocean activities and of Chapter 17 of Agenda 21 as the programme of action for achieving sustainable development of oceans, coasts, and seas, and emphasize the need for their implementation.

The JPoI calls for a specific timetable for applying the ecosystem approach by 2010, one of the few specific timetables related to cross-sectoral aspects.

Throughout the discussion of cross-sectoral issues, several major inter-related themes are emphasized:

- the need for implementing integrated coastal and ocean management at the national level and institutionalizing ICM as “the business of government”

- the need for management of Exclusive Economic Zones (EEZs), including continental shelves

- the special needs of SIDS in delimiting and managing their coastal areas and EEZs

- watershed planning and the integration of marine and coastal areas management into key sectors (as also reinforced by the GPA target)

- the establishment of networks of marine protected areas by 2012

- the need for coordination and cooperation among regional programs.

## **Discussions at the 2003 Global Conference**

Conference participants addressed the interrelated issues of cross-sectoral aspects by discussing the current situation, needs, and emerging trends in four interrelated issue areas:

1) integrated coastal management; 2) development of national ocean policies for Exclusive Economic Zones; 3) controlling land-based sources of marine pollution through linkages with watershed and river basin planning (*please note*

*that these issues are discussed in the section on GPA, Part II, section 4), regional-level experiences with ecosystem management, especially the Large Marine Ecosystem planning and management, and through the UNEP Regional Seas Programme.*

Participants emphasized the need to think about the interrelationships among these as comprising *nested governance*—with linkages among regimes addressing watersheds and river basins, to coastal area management regimes (comprising coastal lands and nearshore waters), ocean areas further offshore including Exclusive Economic Zones, and regional-level marine ecosystem planning and management.

### **1) Integrated Coastal Management**

One of the central goals of Agenda 21, Chapter 17—the practice of integrated planning and management of coastal areas (ICM) (including both land and generally nearshore ocean areas)—has expanded significantly since the Earth Summit. About 100 countries now have experience with some form of ICM, compared to 59 countries in 1992. More extensive work in ICM has been carried out in Europe, North America, and East Asia, while fewer programs are present in Oceania, Caribbean, Africa, Near East, and Latin America. In many cases, the ICM programs have involved many pilot, small scale projects, many of them initiated by external donors (Cicin-Sain 2003).

Conference participants emphasized the need to scale up pilot projects to include larger parts of the coastal zone, and pointed out the usefulness of setting up specific targets in achieving total coastal zone coverage (for example, 20% of coastlines under ICM by 2012, 60% by 2022, 100% by 2032). As one speaker, Dr. Magnus Ngoile from Tanzania put it, “if it is worth doing it, just do it! Don’t pilot it.”

Dr. Ngoile and others also emphasized the importance of ICM becoming institutionalized as the “business of government,” with government taking ownership of ICM programs. While successes in ICM typically involve both national and local level actors, participants pointed to the need to engage and catalyze political will at the national level to insure long-term sustainability of programs.

Conference participants also emphasized the need to move from planning to implementation, and pointed out that typically development assistance funds are difficult to obtain for implementation, so that many ICM plans “stay on the shelf.”

Participants also discussed the need for greater focus on economic issues/poverty reduction/public health, and generally improvement in the quality of life in coastal

communities, especially in the developing world. While also emphasizing conservation and preservation of ecological integrity and biodiversity, ICM programs are, by their very nature, multiple use programs which are also aimed at enhancing economic and social opportunities and benefits from oceans and coasts.

Also emphasized were linkages to freshwater management, watersheds and river basins, and the need to implement the GPA program in the context of ICM programs.

Participants also pointed out that insufficient work has been carried out on the performance of ICM programs through systematic and independent evaluations. Indicators on performance and outcomes need to be applied, and good practice in ICM needs to be codified.

Similarly, capacity in integrated coastal and ocean management is still quite limited in many countries, especially in the developing world. As noted later in the capacity building section, more systematic capacity building efforts need to be undertaken together with the development of educational programs in this field in the developing world and with appropriate long-term financial support.

The special needs of SIDS in developing coastal management, particularly in view of their vulnerability to sea level rise and their dependence on coastal and marine resources, need to be addressed more fully. As is reported in the section on SIDS, a recent analysis of national actions taken since the 1994 Barbados Programme of Action 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.

The important role of regional entities in promoting national level action on ICM at the regional level (such as Regional Seas programs, LME programs) was also emphasized, (see, for example, new regional protocol in ICM in the Mediterranean).

Box 4 provides a summary of the discussion at the pre-conference meeting on Integrated Coastal Management, led by Stephen Olsen (University of Rhode Island), Chua Thia-Eng (PEMSEA) and Indumathie Hewawasam (World Bank, Africa Region).

## **2) Establishing National Ocean Policies**

While most coastal nations of the world already have a variety of sectoral policies in place to manage different uses of the ocean (such as shipping, fishing, and oil and gas development), it has only been in the last decade that coastal nations

have undertaken concerted efforts to articulate and implement an integrated vision for the governance of the entire ocean areas under their jurisdiction—their Territorial Seas and Exclusive Economic Zones (EEZs). This is a very encouraging development, responding, as it does to the reality of serious conflicts of use in most national ocean zones and to the prescriptions articulated in both the Law of the Sea (“the problems of ocean space are interrelated and must be treated as a whole”), and in the 1992 Earth Summit (given the interrelationship among uses and processes in the coast and ocean, ocean and coastal governance must be “integrated in content and precautionary in ambit”).

The move to create comprehensive national ocean policies to harmonize existing uses and laws, to foster sustainable development of ocean areas, to protect biodiversity and vulnerable resources and ecosystems, and to coordinate the actions of the many government agencies that are typically involved in oceans affairs, is a growing practice, with more and more nations embarking on the development of national ocean policy. Initial research indicates that there are about 20 countries and 3 regions of the world which appear to be taking concrete steps toward cross-cutting and integrated national ocean policies (not only separate sectoral policies). Examples include nations already in the phase of implementing national ocean policies (Australia, Canada, China, United Kingdom); nations in the process of formulating national ocean policies (India, South Korea, New Zealand, Norway, Portugal, Russian Federation, and United States); nations in the preparatory phase in planning for national ocean policies (Brazil, Colombia, France, Indonesia, Japan, Malaysia, Philippines, Thailand, and Vietnam). At the regional level, two regions have undertaken systematic efforts to articulate regional ocean policies: the Pacific Islands region and the European Union. A third region, Africa, is beginning such a process in the context of the New Partnership for Africa's Development (NEPAD).

Other countries are also facing important challenges from new uses of offshore waters, such as offshore aquaculture and wind farming, which may well necessitate the development of more elaborate and cross-cutting frameworks for national ocean policies.

In all the cases noted, nations are facing the challenge of developing new concepts, procedures and structures, and, as such, stand much to gain from working with one another to share and draw lessons and best practices.

As they embark on national ocean policy formulation, many nations, in particular SIDS, will need assistance in mapping and delimitation of their EEZs, and development of new institutions and procedures.



**Box 4**

**Report of Pre-conference Meeting on Integrated Coastal Management**

The discussion at the meeting reiterated the need for specific global targets for ICM formulated in preparation for the WSSD. These were framed as the following set of eight recommendations:

1. National and local governments, with the assistance of regional and international organizations, should develop and implement coastal management programs that meet international standards before conditions in coastal populations and coastal ecosystem deteriorate further. The following targets are recommended:
  - 20% of national coastlines under management by 2012
  - 60% of national coastlines under management by 2022
  - 100% of national coastlines under management by 2032.
2. National and local governments should commit to the participatory methods and high standards of accountability that are the backbone of ICM good practices. They should assemble the domestic and international financial resources required to sustain effective ICM programs that unite efforts at the community level with national policies and procedures and thereby enable steady progress towards sustainable forms of coastal development and conservation.
3. Recognizing the destructive impacts of growing flows of pollutants to coastal waters, national and local governments should support the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities and, in particular, the Strategic Action Plan on Municipal Wastewater.
4. A high priority should be given to addressing the challenges faced by small developing island States that are particularly vulnerable to the consequences of global change and urgently require assistance in meeting multiple challenges that may be most effectively addressed through the integrated practices of ICM.
5. The institutions investing in ICM and those most experienced in its practice should come together to codify good practices for those implementing programs and formulate a code of conduct for responsible investments in coastal development. A primary objective of such codification must be to put in place the mechanisms by which effective ICM programs can be sustained through the decades of effort that will be required to achieve more sustainable forms of coastal development over large geographic areas.
6. Since coastal management issues and their solution have many similarities despite important differences in local contexts, and since ecosystems and governance process frequently transcend national boundaries, regional ICM networks should be formed to exchange experience and forge alliances to meet common goals. Such regional networks should also be a focal point for further investments in training and institutional capacity building in ICM practices.
7. National governments should extend the inclusive practice of ICM seaward and establish mechanisms to formulate and implement collaborative policies for the management of exclusive economic zones (EEZs) that recognize the ecosystem process at work and the urgent need to apply new approaches to managing common property resources in a socially equitable manner that sustains a flow of societal benefits for generations to come.
8. National and local governments should utilize ICM frameworks that address priority social as well as environmental needs to expand coastal protected areas to conserve biodiversity, in accordance with the Jakarta Mandate on Marine and Coastal Biodiversity.

Regional organizations have a very useful role to play in assisting States in developing national ocean policies for their ocean zones. Significant work along these lines is already taking place in the Pacific Islands region, the East Asia region (through PEMSEA), the Asia Pacific region (through APEC), and through the European Union.

As nations and regions work on national and regional ocean policy formulation and implementation, it will be important to consider the role of networks of marine protected areas in the national and regional ocean policies. It is important to keep these two developments coordinated and harmonized to insure maximum impact.

At the Global Conference, a pre-conference panel held on national ocean policies, chaired by Daniel McDougall and Biliana Cicin-Sain, discussed the points noted in Box 5, making reference to the evolving policies of the following countries and regions: Australia, Canada, Colombia, East Asia, India, Japan, New Zealand, Norway, Portugal, South Pacific, United Kingdom, and United States.

### ***3) Regional Efforts at Ecosystem Management: The Regional Seas Programme and the Large Marine Ecosystem Program***

Participants discussed in the panel on regional perspectives the contributions of the Regional Seas Programme to achievement of the cross-sectoral goals of the WSSD. The Regional Seas Programme, encompassing 13 regions is undergoing a significant transformation to ensure that the Regional Seas programs can be used as a platform for implementation of major international agreements on oceans, coasts, and SIDS at the regional level, also reaching out to stakeholders in novel and innovative ways (strategy developed at Regional Seas meeting, November 25-27, 2003, Nairobi).

Several pre-conference sessions focused on lessons learned through the Large Marine Ecosystem (the LME) program funded by the Global Environment Facility, among others. LMEs are areas of the ocean characterized by distinct bathymetry, hydrography, productivity, and trophic interactions. LMEs are regions that encompass coastal areas from river basins and estuaries to the seaward boundaries of continental shelves, enclosed and semi-enclosed seas, and the outer margins of the major current systems. There are 64 designated LMEs in the world, which produce 95% of the global marine fishery catch. In 1995, the GEF Council included the concept of LMEs in its GEF Operational Strategy as a vehicle for promoting ecosystem-based management of coastal and marine resources in the International Waters focal area. There are 10 approved LME projects and seven in the preparation stage (Sherman 2003).

Participants concluded that the LME approach provides a vantage platform for focused temporal and spatial assessments and monitoring efforts in support of management aimed at the long-term productivity of marine habitats and sustainable utilization of marine resources and amenities.

As such, it would be particularly useful to build and learn lessons from the LME experience with the analysis and management of marine ecosystems in the pursuit of the following WSSD targets and timetables:

- Ecosystem approach by 2010
- Fisheries-recovery to MSY levels by 2015
- Develop and facilitate the use of diverse approaches and tools (No timetable)

Current and emerging LME projects are addressing and moving towards WSSD targets for:

- a. introducing ecosystem-based management by 2010
- b. moving toward significant reductions of land-based sources of pollution by 2006
- c. the designation of marine protected areas by 2012
- d. recovery and maintenance of fish stocks to MSY levels by 2015

Box 6 summarizes the findings of the pre-conference meetings on the LME experience, led by Pablo Huidobro, UNIDO, Carl Lundin, IUCN, and Kenneth Sherman, U.S. National Marine Fisheries Service.

## **Developments Since the 2003 Global Conference**

Given that there are over 100 nations working on coastal management and over 20 nations working on national ocean policies, it is difficult to capture changes that are taking place. Thus, only some international developments are noted.

### ***1) Development of indicators for performance of coastal and ocean management programs.***

Under the leadership of the IOC, Canada's Department of Fisheries and Oceans, and the U.S. National Oceanic and Atmospheric Administration, a project is developing detailed indicators to measure the performance of ICM programs examining environmental, socio-economic, and governance indicators, with the intent of developing international guidance on measuring ICM progress.

### ***2) Comparative analyses of national ocean policies.***

A cross-national study, with funding from the Nippon Foundation, Japan, is examining the development and implementation of national ocean policies in 20 countries and 3 regions, with the intent of developing international guidance on principles and processes in national ocean policy formation.

### Box 5

## Report of Pre-Conference Meeting on National Ocean Policies

- National oceans policy and legislation is a “growth industry;” many countries have developed or are in the process of developing national oceans policies; and, several countries are moving beyond oceans policy development and are working on implementation of national policies.
- The development of a regional oceans policy is also starting to emerge.
- There are many commonalities and many lessons that can be learned from the various approaches that have been employed for oceans policy development and policy implementation.
- There are many common thematic areas where the broad outlines of the public policy direction have been established, but many difficult issues remain for additional discussion and analysis; several that were mentioned include:
  - giving operational effect to ecosystem-based oceans management, including dealing with the primacy of “ecosystem health” considerations, and the incorporation of natural and social scientific research, knowledge and advice;
  - local capacity building, particularly for implementation of integrated coastal zone management, and in both developing countries and developed countries;
  - creating a “whole of government” agenda for national oceans policy (so-called “horizontal management”), and national/sub-national engagement;
  - economic valuation of the oceans, and the application of economics and market-based approaches to oceans policy;
  - public engagement on oceans issues and oceans policy development, including the need to focus on marketing and communications tools;
  - considering the issues of indigenous peoples and corresponding legal issues;
  - engaging sectoral interests, and incorporating sectoral management into broader oceans policy for both resource management (consumptive) and non-consumptive industries; and
  - dealing with immediate oceans management issues (most often sectoral) in the context of on-going policy development and implementation and the long-term orientation of oceans policy.
- Suggestions for consideration:
  - promoting the incorporation of integrated management planning within national policies and legislation
  - depositing national oceans policy documents and national legislation with DOALOS; using existing networks for information dissemination (e.g., Global Forum; the UNDP; Ecolex (IUCN, UNEP and FAO), the Commission on Environmental Law; etc.)
  - developing “model policy” and legislative guidelines, modules and other aides for strengthening national legal regimes;
  - developing a “global oceans policy;”
  - creating and expanding networks of oceans policy “practitioners”—within and between national governments and beyond

**3) The Pacific Islands Regional Ocean Policy**, developed at the highest political level, is providing national guidance on ocean and coastal policy formulation, for all the nations of the Pacific Islands region.

## Box 6

### Report of Pre-Conference Meeting on Large Marine Ecosystems

Major lessons that can be learned from the LME effort:

1. Adaptive process
2. Implement Real Time Assessment (RTA) and management in the most important fish production areas
3. At national level it is highly dependent on local acceptance and political will
4. On a regional basis, LME is based on collaboration background within the region
5. In developing countries, institutional fragility and high level political acceptance are key factors that must be taken into account
6. Must be outcome oriented (solving regional problems) rather than process oriented
7. It is based on an incremental cost with incremental steps, and therefore incremental results
8. There is no "one-size-fits-all", adjustments are essential
9. Good development and implementation of driving instruments for identification, problem solving, knowledge base, capacity building, partnerships, and awareness
10. The role played by executing agencies is crucial to achieve effectiveness and efficiency
11. It is important to have a trained Regional Coordinator to facilitate communication and work plan effectiveness
12. Promote stewardship based on project compliance
13. Enhance communication among natural and social scientists, and policy makers
14. There is confusion on the role each UN agency is supposed to play on ocean matters and countries - certainly - adapt to this situation, but at a high cost
15. These has been developed within the process of project planning through Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP), formulations of a clear vision on how to couple LME, MPAs and ICZM projects and policies, and watershed management
16. Indicators of project success are included as an integral component of each LME project based on knowledge, shared and common visions, problem solving orientation, participation, awareness, alliances, wills, benefits, synergies and adjustment), and quantitative indices of sustainable use of LME resources
17. Synergies with other regional initiatives can be achieved by:
  - Establishing clear definitions and competencies on the role to play by international programs and agencies
  - Forcing a coordination baseline and clear complementary funding allocation among the different international and regional initiatives (Regional Seas Programme, GIWA, White Water to Blue Water, Hilltops 2 Oceans, etc.)
  - Inviting new actors to the scene (Freshwater: GWP; GIWA, etc.)
  - Knowledge and experience gained through the LME efforts can be most usefully applied to enhance sustainable development of coastal and ocean zones when LME approach is used as a tool for intervention, replication and adaptation

## **Summary and Outstanding Issues**

- Programs in integrated coastal management need to:
  - be scaled up to encompass larger parts of coastal areas, and ultimately the entire coastal area and EEZ. The setting of specific timelines for accomplishing this would be useful.
  - receive specific funding to support the implementation of coastal management programs so that programs can go from planning into the operation phase.
  - expand their activities in poverty reduction and public health
  - link to watershed and river basin management
- Management of ocean areas further offshore, including entire EEZs will require:
  - new concepts, approaches and structures
  - lesson sharing among countries
  - assistance to developing and SIDS countries to delimit EEZs and continental shelves and to establish appropriate governance mechanisms
- Regional-level marine ecosystem efforts, such as LMEs and regional seas:
  - LME experience can be relied upon as a major source of experience for applying the ecosystem approach by 2010
  - LMEs, Regional Seas, and other regional entities, working together, need to develop specific goals and procedures at the regional level to implement the global WSSD targets



## ENHANCING UNITED NATIONS COHERENCE<sup>1</sup>

### Johannesburg Plan of Implementation:

***Establish an effective, transparent and regular inter-agency coordination mechanism on ocean and coastal issues within the United Nations system; (30c)***

#### *Related provisions:*

Strengthen regional cooperation and coordination between the relevant regional organizations and programmes, the UNEP regional seas programmes, regional fisheries management organizations and other regional science, health and development organizations; (30f)

Strengthen donor coordination and partnerships between international financial institutions, bilateral agencies and other relevant stakeholders to enable developing countries, in particular the least developed countries and small island developing States and countries with economies in transition, to develop their national, regional and subregional capacities for infrastructure and integrated management and the sustainable use of fisheries; (31g)

### The Issue

The issue of international coordination and cooperation on oceans and coasts has been repeatedly raised in various intergovernmental meetings and conferences. It is widely recognized that there is a need for addressing oceans and coasts in a cross-sectoral and comprehensive manner, examining the interrelationships among issues affecting these areas. The need to examine the interconnection among ocean issues is emphasized in the Law of the Sea ("the problems of ocean space are closely interrelated and need to be considered as a whole") and in the 1992 Earth Summit which underscored that given the interrelationships among uses and processes in the coast and ocean, ocean and coastal governance must be "integrated in content and precautionary and anticipatory in ambit."

Existing UN agencies related to oceans have largely sectoral mandates, that is, they are charged with addressing different aspects of sustainable development of the oceans, such as fisheries issues, marine science issues, marine navigation and safety issues, marine pollution control issues, among others. Hence, there is an important need to coordinate the actions of the various UN agencies dealing with oceans, coasts, and islands, to harmonize their activities, to avoid duplication, and to catalyze joint agency action, whenever useful and appropriate.

### Background

Recognizing this need, the 1992 UN Conference on Environment and Development (UNCED) called for the UN Secretary General and executive heads of United Nations agencies and organizations to:

- (a) Strengthen coordination and develop improved arrangements among the relevant United Nations organizations with major marine and coastal responsibilities, including their subregional and regional components;
- (b) Strengthen coordination between those organizations and other United Nations organizations, institutions and specialized agencies dealing with development, trade and other related economic issues, as appropriate;
- (c) Improve representation of United Nations agencies dealing with the marine environment in United Nations system-wide coordination efforts;
- (d) Promote, where necessary, greater collaboration between the United Nations agencies and subregional and regional coastal and marine programmes;
- (e) Develop a centralized system to provide for information on legislation and advice on implementation of legal agreements on marine environmental and development issues.

<sup>1</sup>This section relies, in large part, on the presentation by Mr. Eckhard Hein, Secretary of the U.N. Chief Executives Board for Coordination (CEB) High-Level Committee on Programmes on behalf of Mr. Qazi Shaukat Fareed, Director of the U.N. CEB Secretariat.

As noted by Mr. Eckhart Hein on behalf of the Secretariat of the Chief Executive Board (CEB, the system-wide body presided by the Secretary General of the UN and composed of all the Heads of Agencies and Programmes, and the World Bank), following the UNCED mandate, from 1993 to 2001, the UN Administrative Committee on Coordination (ACC) Sub-Committee on Oceans and Coastal Areas (SOCA) functioned as the principal inter-agency mechanism addressing issues of environmental protection and sustainable development on oceans and coasts

In 1999-2000, the UN Secretary General launched a process of review of the Administrative Committee on Coordination and of its subcommittees. The Secretary General set up a Senior Review Team to draw up proposals for a more focused and substance-driven approach to coordination. Based on the report of the Review Team and benefiting also from a Joint Inspection Unit report on the subject, CEB changed the name of ACC to CEB, changed also the manner it functioned and delegated much of the standard or routine coordination work to two new High-Level Committees—one on programmes and the other on management. All responsibilities of ACC standing bodies were subsumed by the two high-level committees and all the permanent standing sub-committees disbanded. In taking this decision, CEB made it clear that the intention was not to discourage inter-agency collaborative work in specific areas. Rather, the idea was to enable CEB and its new High-Level Committees to concentrate on key policy issues and matters of strategic concern. In addition, the Board concluded that more dynamic methods were needed to ensure concrete progress in the different areas of inter-agency concern beyond the UN system involving new stakeholders and other key external partners. More flexible and function-based approaches were needed to replace the existing mechanisms which had become formalistic and bureaucratic.

## **WSSD Outcomes**

As noted by Mr. Hein, the Johannesburg Plan of Implementation called for UN inter-agency collaborative arrangements in four major areas: (i) Freshwater and water and sanitation; (ii) Energy; (iii) Oceans and coastal areas and (iv) Changing unsustainable patterns of consumption and production. The CEB entrusted this endeavour to its High Level Committee on Programmes (HLCP).

In discussing the mechanisms for follow-up to WSSD, CEB highlighted the need for:

- coherence and consistency at operational, regional and global levels and strong linkages among these levels;
- country ownership of the follow-up process, coordination support for capacity-building and full use of existing country-level mechanisms;
- a focus on sustainability and productivity and on natural resources as the engine for sustainable growth;
- greater attention to the regional dimensions of the follow-up to WSSD, given the growing need for cooperation on issues that cut across national borders;
- implementation to be linked to the broader processes of integrated follow up to United Nations conferences and summits, particularly the Millennium Summit; and
- The High Level Committee on Programmes to assist in identifying ways of streamlining parallel processes and duplicative reporting.

Based on these general directives, HLCP endorsed a function-based approach with emphasis on implementation, greater integration in follow-up programmes and actions, while underlining the need for reduction in transaction costs for coordination and for drawing upon the experience of past coordination mechanisms.

## **Oceans and Coastal Areas**

As noted by Mr. Hein, WSSD emphasized that oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and for sustaining economic prosperity. This recognition led to the adoption of a number of concrete goals and specific targets in such areas of the ecosystem as fish stocks, biodiversity, protection of the marine environment, particularly from land based activities, maritime safety, and improving the scientific understanding and assessment of marine and coastal ecosystems.

In adopting these specific goals, the Summit recognized that ensuring sustainable development of the oceans, covering a wide range of issues, would require effective coordination and cooperation, including at the global and regional levels as well as among the relevant bodies. In this context, the JPOI called for steps to “establish an effective, transparent and regular inter-agency coordination mechanism on oceans and coastal issues within the United Nations system.”<sup>2</sup> The Summit's recommendation was sub-

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<sup>2</sup>The discussion of this issue at the WSSD echoed discussion at the 2002 Open-Ended Informal Consultative Process on Oceans (ICP) (April 8-15, 2002) (UN A/57/80, July 2, 2002). ICP noted that it was “essential to establish a new coordination mechanism for issues relating to oceans and seas, consistent with the new arrangements being developed in the UN system,” and underscored that this new mechanism should be “transparent, effective, and responsive.”

sequently endorsed by the 57th session of the UN General Assembly (A/RES/57/141).

It should be emphasized that, from the start of the process in HLCP/CEB, there was a widely shared view that enhanced coordination of activities relating to oceans and coastal areas would require both review and harmonization of on-going activities as well as addressing the emerging challenges and launching of new joint initiatives.

To cover all aspects, including political, legal, security, economic, social, and environmental, this mechanism should include not only former SOCA members but also international financial institutions and other relevant institutions such as the International Seabed Authority and secretariats of multilateral environment treaties such as CBD, UNFCCC, etc.

All of these elements are present in the approach eventually agreed upon by HLCP and endorsed by the CEB, which is as follows:

- An Oceans and Coastal Areas Network (OCAN) has been created. This Network is to build on SOCA covering a wide range of issues. It will be composed of the relevant programmes, entities and specialized agencies of the UN system and the secretariats of the relevant international conventions, including the International Seabed Authority.
- This network is to operate as a flexible mechanism to review joint and overlapping ongoing activities and to support related deliberations of UNICPOLOS.
- A steering group of the Network, composed of senior representatives of the most directly involved organizations/programmes should meet as required to coordinate programmes, harmonize reporting, and review ongoing activities. The timing of such meetings could be coordinated with UNICPOLOS sessions.
- At the same time, the Network can pursue time-bound initiatives, with well-defined terms of reference, through task-oriented groups, open to the participation of NGOs and other international stakeholders.
- Emerging challenges or new initiatives are to be identified by the Network, based on relevant work inside and outside the UN system. An example of such task-oriented groups could be the establishment of a task force comprising leading agencies dedicated to the coordination, planning and implementation of the Global Marine Assessment (GMA) or on regional ocean governance.

The modalities of work recommended for the Network included the intensive use of electronic communication; hold-

ing meetings normally in conjunction with other related meetings; the establishment of written agreements among Heads of Agencies or Responsible Managers; and open dialogue with non-UN system actors and transparent communication with all partners, including through the use of a dedicated website.

The new coordinating mechanism is to build on the experience, and make full use of, existing inter-agency cooperative mechanisms or projects, including the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), Global International Water Assessment (GIWA), UN Atlas of the Oceans (UNAO), Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), Global Oceans Observing System (GOOS) as well as others.

In adopting this approach, a process is being set in motion to draw up the Network's terms of reference and work programme, which is to be reviewed by HLCP. It was stressed that OCAN should be involved, with UNDOALOS in the lead, in the preparation of the Global Marine Assessment (GMA) report. The Committee has also requested UNDOALOS to keep it informed of progress achieved in the establishment by 2004 of a regular process for global reporting and assessment of the state of the marine environment, as called for by the JPOI and the GA resolution 57/141.

## **Discussion at the 2003 Global Conference**

The Discussion Group on Enhanced UN Coherence stressed the importance of an effective coordination mechanism in the work of the UN system and secretariats of the relevant international conventions as well as with multilateral and bilateral financial organizations and other international organizations and NGOs, as a pre-condition for a successful implementation of the WSSD goals contained in the Johannesburg Plan of Implementation..

It was recognized that an obstacle to the implementation of cooperative activities in the past has been the difficulty to secure resources for coordination across the several programs and agencies, and of the lack "seed money" that would enable the different partners to contribute to and participate in the development phase of new jointly funded activities.

From a management point of view, it was pointed out that on a longer-term basis, stronger coordination would require major adjustments in the planning and budgeting cycles of agencies and programmes in an effort to align mandates with resources across several budgets.

In consideration of such a structure, the Discussion Group had the following recommendations/observations to make:

- The terms of reference for the OCAN network and Steering Group should be clearly defined and widely communicated.
- An effort should be made to define the membership in an inclusive way, considering that there are existing fora and bodies already established and working on various issues.
- Opinions were divided about the level at which it is best to involve partners external to the UN. One idea is that the core group could remain UN agencies and financing institutions, with NGOs and other international stakeholders invited to be full members of the specific Task Forces.
- In the development and implementation of the inter-agency mechanism, there was a strong plea by members of the group to come up with flexible and transparent ways of participation that could help to increase ownership and accountability of the process.

## **Developments since the 2003 Global Conference**

In the period since the Global Conference (November 2003 to May 2004), the following activities have taken place to put into place a new UN interagency mechanism on oceans:

The CEB Secretariat invited the Executive Secretary of the IOC, Dr. Patricio Bernal, former Chair of SOCA, to lead the process of consultation for the definition of the Terms of Reference of the Network.

On December 5, 2003, a first draft was made available to all partners and a final version, after amendments, was distributed at the end of January 2004.

Responding to the proposal made by UN-DESA, to adopt the name “UN-Ocean” for the network, to parallel “UN-Water”, the interagency mechanism on water, the group enthusiastically endorsed the new name.

The TOR and the change of name proposal were presented to the HLCP by Shaukat Fareed, Director of the Secretariat of the CEB in February, receiving a favourable review.

The proposed terms of Reference are:

- a) strengthening coordination and cooperation of the UN activities related to ocean and coastal areas;
- b) reviewing the relevant programmes and activities of the UN system, undertaken as part of their contribution to the implementation of UNCLOS, Agenda 21,

and the JPOI;

c) identification of emerging issues, the definition of joint actions, and the establishment of specific task teams to deal with these, as appropriate;

d) promoting the integrated management of ocean at the international level;

e) facilitating as appropriate, the inputs to the annual report of the Secretary General on oceans and the law of the sea;

f) promoting the coherence of the UN system activities on oceans and coastal areas with the mandates of the General Assembly, and the priorities contained in the Millennium Development Goals, the JPOI and of governing bodies of all UN-Oceans members.

## **Initial List of Potential Members of UN-Oceans**

As for the membership in the former Inter-agency Committee on Sustainable Development (IACSD), all the members of the UN System can become a member of the Network, through a simple expression of will. In the list that follows, all the organizations that participated in the previous work of SOCA, or in the informal coordination for the ICP meetings have been included, as well as those organizations that have expressed their interest to participate.

## **Departments of the UN Secretariat<sup>3</sup>**

Office of Legal Affairs (OLA): Division for Ocean Affairs and the Law of the Sea (DOALOS)

Department of Economic and Social Affairs (DESA): Division for Sustainable Development

## **UN Specialized Agencies**

International Labour Organization (ILO)

Food and Agriculture Organization of the United Nations (FAO)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

World Health Organization (WHO)

World Bank Group: The World Bank (IBRD)

International Maritime Organization (IMO)

The World Meteorological Organization (WMO)

United Nations Industrial Development Organization (UNIDO)

World Tourism Organization (WTO)

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<sup>3</sup>Names and groupings from “Organization Chart of the UN system”, and <http://www.un.org/depts>



### **UN Programmes and Funds**

United Nations Development Programme (UNDP)

United Nations Environment Programme (UNEP)

### **Related Organizations**

International Atomic Energy Agency (IAEA)

United Nations Human Settlements Programme (UNHSP  
"UN-HABITAT")

### **Related Conventions (UN and non-UN) Secretariats**

UN Framework Convention on Climate Change

Convention on Biological Diversity

The Ramsar Convention on Wetlands

United Nations Conference on Trade and Development  
(UNCTAD)

International Seabed Authority

### **Other UN entities**

United Nations University

### **Others**

Organisation for Economic Cooperation and Develop-  
ment (OECD)

International Hydrographic Organization (IHO)

## **Summary and Outstanding Issues**

- A new interagency mechanism on oceans has been created by the highest levels of the UN system: the Oceans and Coastal Areas Network, subsequently renamed UN Oceans, paralleling UN Water, the UN inter-agency mechanism for coordination of water issues.
- New modalities for coordination among UN Agencies and programs, applicable to the new networks under the High Level Committee on Programmes (HLCP) have been defined as part of the follow-up of WSSD.
- The TOR for UN-Ocean have been defined as well as a list of interested agencies identified. Specifics of how the mechanism will operate are to be defined by the network.
- NGO involvement is expected to materialize at the level of specific Task Forces addressing different issues.





## ESTABLISHING A GLOBAL MARINE ASSESSMENT

### Johannesburg Plan of Implementation:

The Plan of Implementation of WSSD (paragraph 36) called on States to *improve the scientific understanding and assessment of marine and coastal ecosystems as a fundamental basis for sound decision-making, through actions at all levels to:*

- (a) *Increase scientific and technical collaboration, including integrated assessment at the global and regional levels, including the appropriate transfer of marine science and marine technologies and techniques for the conservation and management of living and non-living marine resources and expanding ocean-observing capabilities for the timely prediction and assessment of the state of the marine environment;*
- (b) **Establish by 2004 a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments;**
- (c) *Build capacity in marine science, information and management, through, inter alia, promoting the use of environmental impact assessments and environmental evaluation and reporting techniques, for projects or activities that are potentially harmful to the coastal and marine environments and their living and non-living resources;*

### The Issue

The question of a regular process for assessment of the marine environment, including socio-economic aspects, has been discussed in international meetings for several years, culminating finally in the recommendation of the WSSD Plan of Implementation Paragraph 36B. The history of this issue is laid out in A/AC.271/WP.1 Fifty-eighth session, UN General Assembly, Agenda item, Oceans and the Law of the Sea, A Regular Process for the Global Reporting and Assessment of the State of the Marine Environment, Including Socio-Economic Aspects, and is quoted verbatim here:

“The process of investigating the potential establishment of a regular marine environment assessment to provide accurate information to decision makers on the state of the marine environment was initiated in 1999 by national governments at the seventh session of the Commission on Sustainable Development. Further Global Marine Assessment (GMA) initiatives included the technical workshops in Reykjavik (2001) and Bremen (2002).<sup>1</sup> At the World Summit on Sustainable Development (WSSD), States decided to seek the establishment by 2004 of a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic

aspects, both current and foreseeable, building on existing regional assessments. That decision was subsequently endorsed by the General Assembly in resolutions 57/141 (paragraph 45) and 58/240 (paragraphs 64-65)” (A/AC.271/WP.1, p. 1).

In Resolution 57/141, the General Assembly requested the Secretary-General to prepare proposals on modalities for a regular process for the global reporting and assessment of the state of the marine environment, and to submit these proposals to the General Assembly at its fifty-eighth session for its consideration and decision, including on the convening of a possible intergovernmental meeting. At its fifty-eighth session, the General Assembly adopted resolution 58/240, paragraph 64 (a) of which requested the Secretary-General “to convene a group of experts of no more than twenty-four participants, comprising representatives of States, including all regional groups, and representatives from intergovernmental organizations and non-governmental organizations, including both scientists and policy makers, to produce, including through the possibility of hiring a consultant, a draft document with details on the scope, general framework and outline of the regular process, peer review, secretariat, capacity building and funding.” (A/AC.271/WP.1)

<sup>1</sup> For details on Reykjavik (12-14 September 2001) and Bremen (18-20 March 2002) meetings, see the United Nations Environment Programme web site on the GMA: [www.unep.org/DEWA/water/MarineAssessment](http://www.unep.org/DEWA/water/MarineAssessment).

## Discussions at the 2003 Global Conference

At the 2003 Global Conference, participants benefited from the presentation on plans for implementing the GMA targets of the WSSD by Dr. Louise de LaFayette, UN Division of Ocean Affairs and Law of the Sea. No specific working group was established on this question, but extensive informal discussion ensued. Participants emphasized the importance of a global marine assessment, including socio-economic aspects, to understand (and ultimately manage) major drivers of environmental change in the oceans and also to monitor the health and quality of life of coastal communities and to better understand the socio-economic contributions and environmental impacts of ocean industries. Scientists present at the meeting underscored the need to coordinate a global assessment effort with important global ocean scientific assessment efforts already underway. UN agencies emphasized the need to involve all the UN agencies in the effort and to build on existing UN environmental assessment efforts such as those of UNEP. NGOs emphasized the potential of the GMA as a periodic report card on the state of the oceans and of coastal communities which could be used to both assess the effectiveness of international and national efforts in ocean and coastal management (are conditions better or worse?) and also to communicate with and involve the public in important ocean issues. Many put forward the important point that, while the establishment of the process of the GMA will be quite complex and will require careful planning and a staged approach, that it was essential to get started on this important effort at the earliest possible moment.

## Developments Since the 2003 Global Conference

As noted in A/AC.271/WP.1, the Group of Experts on the Global Marine Assessment was convened in New York, from 23 to 26 March 2004, pursuant to paragraph 64(a) of General Assembly resolution 58/240, and was composed of representatives of States, intergovernmental organizations and non-governmental organizations, including both scientists and policy makers. The Group of Experts was chaired by Dr. David Pugh of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization.

The outcome of the discussions of the Group of Experts is a 17-page document (advance, unedited text) contained in A/AC.271/WP.1 which details an approach to the establishment and regular operation of the GMA. The draft document is being presented to the GMA International Workshop, held in conjunction with the 5th UN Open-ended Informal Consultative Process (ICP) on Oceans and the Law of the Sea, from June 7-11, 2004.

## Highlights of the Group of Experts Report on the GMA

This section presents the highlights of the report *A Regular Process for the Global Reporting and Assessment of the State of the Marine Environment, Including Socio-Economic Aspects* (A/AC.271.WP.1) being discussed at the 5th ICP.

**Goals.** "...the GMA should produce regularly occurring integrated global syntheses of the status and trends of marine ecosystems, including socio-economic aspects. The GMA should be built, as much as possible, on integrated regional assessments conducted by regional affiliates. The process of conducting the GMA should facilitate continuous access to information on the status and trends of marine ecosystems on diverse geographic scales. The global marine assessments should inform policy makers, ocean users, the public, and the scientific community with reliable and objective information, with the ultimate goal of policies, individual choices, and research that benefit humanity in a sustainable manner."

**Scope.** The report notes that the GMA "should address all dimensions of marine ecosystems including the physical and chemical environment, biota, and socioeconomic aspects. The assessments should address the state of marine ecosystems, causes of change, benefits derived from marine ecosystems, and threats and risks. The geographic scope of the assessments should span coastal and estuarine waters through ocean basins, taking account of terrestrial and atmospheric influences."

**Startup phase.** The report recommends that there should be a startup phase of up to two years prior to commencement of the regular GMA process which would include an assessment of past and current assessments in the field; identification of regions, consideration of capacity building needs; identification of issues for, and possibly the commencement of, topical assessments; and scenario analysis.

**Conceptual Framework.** The report notes that the GMA requires a common conceptual framework to foster comparability among the regional assessments. To foster policy relevance, the conceptual framework for assessing the present state of the marine environment should be framed on the basis of four general and overlapping themes related to the health of the marine environment and the societal benefits derived from it: 1) food security and fisheries; 2) public health and safety; 3) ecosystem function; and 4) economic and social benefits and uses.

**General Operation.** The report recommends that after the startup phase, that the regular GMA process follow a five-year cycle, adjustable based on experience gained during the first cycle. The GMA would operate at both global and

regional levels. At the global level, a global scientific assessment panel would produce a general design for the global and regional assessments based, in part, on consultations with stakeholders. At the regional level, regional scientific assessments would be the responsibility of regional affiliates to the GMA.

The Group of Experts Report also calls for extensive coordination among UN agencies and others in the design and operation of the GMA and sets out modalities for quality assurance including peer review.

A draft budget suggests that the start up phase would cost one to two million dollars for two years. The ongoing work of the GMA afterwards is likely to cost 6 to 8 million US\$ per year.

### **Next Steps**

The Report from the Group of Experts will be under discussion during the UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea in New York, June 7-11, 2004.

### **Summary and Outstanding Issues**

- A detailed proposal for the design and operation of the Global Marine Assessment has been prepared by the Group of Experts
- States and others are in the process of discussing the draft and of considering the mobilization of financial and human resources to put the GMA into effect





## ADVANCING IMPLEMENTATION OF THE GLOBAL PROGRAMME OF ACTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT FROM LAND-BASED ACTIVITIES

### Johannesburg Plan of Implementation:

*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 alteration and destruction of habitats, and nutrients, by actions at all levels to:*

- (a) 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;*
- (b) 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;*
- (c) 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 accelerated environmental changes and development pressures;*
- (d) 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. (33)*

### The Issue

Pollution of the marine environment, as defined by the United Nations Convention on the Law of the Sea (UNCLOS), is “the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the seas, impairment of quality for use of sea water and reduction of amenities” (UN 1983). About 80% of the pollution load in the oceans come from land-based activities, including municipal, industrial and agricultural wastes and run-off, and atmospheric deposition. These pollutants ecologically and physically affect the most productive areas of the marine environment, on which coastal populations depend for their livelihood and well-being.

Almost 2.4 billion people live within 100 kilometers of a coastal region (WRI as cited in Monsarrat 2002), which is commonly threatened by development-related activities. The intense pressures put on the coastal systems and their concomitant adverse impacts require serious attention and protective action at all levels: local, national, regional and global (UNEP-GPA 2003).

In response to these major problems, 108 governments and the European Commission declared their commitment to protect and preserve the marine environment from the harmful environmental impacts of land-based activities. The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and the Washington Declaration were adopted in 1995 and UNEP was assigned to lead the coordination effort and to establish a GPA Coordination Office. The comprehensive, multi-sectoral approach of the GPA also reflects the intention of

Governments to strengthen the collaboration and coordination of all agencies involved in the protection of the marine environment from land-based activities, through their participation in a global programme (UNEP-GPA 2003).

The GPA is a source of conceptual and practical guidance for national and/or regional authorities in devising and implementing sustained action to prevent, reduce, control and/or eliminate marine degradation from land-based activities. The GPA aims to: 1) Identify the sources and impacts of land-based sources of pollution; 2) Identify priority problems for action; 3) Set management objectives for these problem areas; 4) Develop strategies to achieve these objectives; and 5) Evaluate the impacts of these strategies. Implementing the GPA is mainly the task of governments, with support from regional and international organizations. Additionally, civil society has been recognized as a potential contributor towards the achievement of GPA goals (Osborn 2003).

## **WSSD and Related Outcomes**

Table 2 summarizes the global and regional conventions and events leading to the establishment of the GPA and subsequent developments including the WSSD targets relating to the protection of the marine environment from land-based activities.

The WSSD became an opportunity for governments and non-governmental groups to commit to full implementation of the GPA, motivated by prevailing substantial threats to the marine environment. The Johannesburg Plan of Implementation (JPOI, paragraph 33) provides for advancing the implementation of the GPA and the Montreal Declaration, with particular emphasis during the period 2002 – 2006 on municipal wastewater, the physical alteration and destruction of habitat, and nutrients. This target requires actions at all levels to:

- Facilitate partnerships, research and diffusion of technical knowledge
- Mobilize resources
- Promote human and institutional capacity building
- Strengthen development of national and regional programmes

Each country must select an approach that best suits its geographic characteristics, political, institutional and regulatory frameworks, best available science and technology, current assessments, inventories and data. The target number of national programmes of action by 2006 is 40 (Osborn 2003).

## **Discussion at the 2003 Global Conference**

Expert groups in large-marine ecosystem projects (LME), coral reefs, and integrated coastal management convened at the Conference identified GPA implementation as an important component of their activities. Among the groups' recommendations related to GPA implementation are the following:

- LME: Assist in the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities within the period 2002-2006 by undertaking baseline assessment of land based marine pollution, including:
  1. Assessment and evaluation of legal frameworks
  2. Development of water quality guidelines
  3. Development of transboundary pollution monitoring program
  4. Regional oil spill contingency planning
- Coral Reefs: Promote and strengthen partnerships, information exchange and participatory stakeholder approaches e.g., via the International Coral Reef Action Network, and involvement in integrated partnerships such as the GPA and White Water to Blue Water, and promote these recommendations at various global fora.
- ICM: Recognizing the destructive impacts of growing flows of pollutants to coastal waters, national and local governments should support the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities and, in particular, the Strategic Action Plan on Municipal Wastewater.

At the plenary session, it was noted that UNEP-GPA is working to help countries develop national programmes of action (NPA) by 2006. GPA is a useful tool for improving ocean governance and complements the freshwater management and sanitation goals set out in the Millennium Declaration. Noting the example of Iceland and other countries that have adopted NPAs, it was emphasized that countries should integrate NPAs with sustainable development strategies (Johannesson 2003).

Several IMO activities focused on marine pollution protection, including two WSSD partnerships -- Ballast Water Management and the Marine Electronic Highway (see Box 9 on p.63). It was also noted that the GloBallast project assists developing countries in reducing the transfer of invasive aquatic species.

Table 2. Major Milestones Related to the Protection of the Marine Environment from Land-based Activities (adapted from UNEP-GPA 2003).

1972	<ul style="list-style-type: none"> <li>• United Nations Conference on the Human Environment</li> <li>• Recognized the inadequacies of the existing regimes and underlined the need for a more comprehensive approach to the protection of the marine environment from all forms of pollution</li> </ul>
1974	<ul style="list-style-type: none"> <li>• The regional seas Conventions and related Protocols (e.g. North Sea, 1974; Mediterranean, 1976; Kuwait region, 1978; South-East Pacific, 1981; Wider Caribbean, 1983)</li> </ul>
1982	<ul style="list-style-type: none"> <li>• United Nations Convention on the Law of the Sea (UNCLOS)</li> <li>• Created a comprehensive, binding and directly enforceable regime for the protection and preservation of the marine environment, providing for general legal obligations coupled with a call for the development and implementation of detailed rules dealing with specific concerns.</li> <li>• UNEP started addressing issues related to impacts on the marine environment from land-based activities</li> </ul>
1985	<ul style="list-style-type: none"> <li>• Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-based Sources</li> </ul>
1992	<ul style="list-style-type: none"> <li>• United Nations Conference on Environment and Development (UNCED) and Agenda 21</li> <li>• Chapter 17 of Agenda 21 deals with "the protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources".</li> <li>• Convention on Biological Diversity (CBD)</li> </ul>
1995	<ul style="list-style-type: none"> <li>• UNEP Governing Council decisions 18/31 and 18/32 pertaining to the Washington Conference and persistent organic pollutants (POPs)</li> <li>• Adoption of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and adoption of the Washington Declaration</li> <li>• Jakarta Mandate on the Programme of Action for Marine and Coastal Biodiversity within the CBD</li> </ul>
1996	<ul style="list-style-type: none"> <li>• GPA Implementation Plan presented to the Commission on Sustainable Development (CSD-4)</li> <li>• United Nations General Assembly resolution 51/189 on the institutional arrangements for the implementation of the GPA</li> </ul>
1997-1998	<ul style="list-style-type: none"> <li>• UNEP Governing Council decision 19/14 on global and regional GPA implementation</li> <li>• Establishment and operationalization of the UNEP/GPA Coordination Office in The Hague, The Netherlands</li> </ul>
2001	<ul style="list-style-type: none"> <li>• GPA Intergovernmental Review Meeting</li> <li>• Brought together high-level government officials from 98 countries, international financial institutions, international organizations, UN agencies and NGOs in Montreal, Canada, where participants adopted the Montreal Declaration, which provided input to the WSSD</li> </ul>
2002	<ul style="list-style-type: none"> <li>• World Summit on Sustainable Development (WSSD)</li> <li>• The Johannesburg Plan of Implementation sets the target for the advanced implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities in the period 2002-2006 with a view to achieve substantial progress by 2006</li> </ul>

## Global Forum Next Steps

The Global Forum on Oceans, Coasts, and Islands will assist in raising awareness and creating linkages to initiate and facilitate a continuing dialogue among sectors involved in the protection of the marine environment, through:

- Assisting in the monitoring/reviewing of progress in the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities by creating a Task Force composed of NGOs, governments, development assistance agencies, and private sector representatives. This Task Force will begin by considering the results of the Hilltop to Oceans Conference, held in Cairns, Australia on May 11-14, 2004, and the specific suggestions emanating from this conference to achieve significant progress in the effective implementation of the GPA by 2006.
- Fostering ongoing relationships and collaboration between the Global Forum on Oceans, Coasts, and Islands and the World Water Forum to encourage tangible and ongoing linkages between freshwater and ocean issues. The leadership of the Global Forum will thus approach the leadership of the World Water Forum, Global Water Partnership, and World Water Council to discuss joint initiatives and to establish a joint Task Force on freshwater/oceans linkages. A mechanism will also be established to regularly report the outcomes of the Global Forum on Oceans, Coasts, and Islands into the program of work of the World Water Forum and viceversa.

## Developments since the 2003 Global Conference

### Global H<sub>2</sub>O: Hilltops-2-Oceans Partnership Conference<sup>1</sup>

**Cairns, Australia, May 11-14, 2004**

Co-sponsored by the Australian Government's Department of the Environment and Heritage and the United Nations Environment Programme, the conference is an integral part of the H<sub>2</sub>O Partnership Initiative launched during the World Summit. The aim of the H<sub>2</sub>O Partnership Conference was to promote realistic actions and partnerships that address river, coastal and marine pollution. Emphasizing the linkages between freshwater and marine environments, the conference provided an open forum for stakeholders to address freshwater and saltwater issues in an integrated fashion. The H<sub>2</sub>O Partnership Conference followed shortly after the Global Ministerial Environment Forum (29 – 31 March 2004)

and the 12th Session of the Commission on Sustainable Development (19 – 30 April 2004), where discussion focused on WSSD targets relating to water, sanitation and human settlements. In this regard, the H<sub>2</sub>O Partnership Conference provided a timely opportunity to further focus international attention/dialogue on the concrete actions needed to realize the WSSD targets related to freshwater, coasts and oceans, and specifically the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.

### *Specific Objectives of the H<sub>2</sub>O Partnership Conference*

The H<sub>2</sub>O Partnership Conference, representing a major milestone in the implementation of the H<sub>2</sub>O Initiative, was aimed at Ministers, Senior Government Officials, CEOs and Managing Directors of Private Sector firms or industry groups, Senior NGO representatives, academia and International Agencies.

In addition to advancing the overall objectives of the H<sub>2</sub>O Initiative, the specific objectives of the H<sub>2</sub>O Partnership Conference included:

- To renew the commitment of governments and other stakeholders of the need for sustained and adequately resourced action to protect the marine environment from the harmful effects of activities from the hilltops to the oceans;
- To identify detailed methods and tools for initiating sustained, effective and efficient national action;
- To further strengthen the links between water supply and sanitation, and to emphasize the environmental dimensions of realizing the WSSD target on sanitation;
- To explore Innovative Financial Arrangements for financing capital intensive initiatives;
- To review, debate and recommend the appropriate use of Wastewater Emission Targets (WET) as a tool for protecting the marine environment from the harmful effects of activities from the hilltops to the oceans;
- To assist countries and stakeholders to commit to concrete action to protect the marine environment from land-based activities.

### *Major Outcomes of the H<sub>2</sub>O Partnership Conference*

The Global H<sub>2</sub>O: Hilltops-2-Oceans Partnership Conference reaffirmed the crucial links between watersheds, river systems, coastal estuaries and the marine environment. It also highlighted the interdependence of the respective stakeholders in these environments and the critical need to strengthen cooperation between freshwater, coastal and oceans institu-

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<sup>1</sup> Prepared by Mr. David Osborn, UNEP-GPA.



tions. The conference concluded that action is needed at global, regional, national and local levels to foster collaborative partnerships between government, water resource managers, local and indigenous communities, industry, the private sector and research bodies. Such partnerships should address the integration of coastal and marine management with watershed management policies, programs and legislation. Similarly, such partnerships should seek to raise awareness, build multi-stakeholder capacity at the local level and emphasize mutual benefits.

The conference observed that in many instances voluntary multi-stakeholder partnerships provide flexible and effective complements to the implementation of legally binding instruments. Further, innovative voluntary partnerships may go beyond binding commitments. Good examples of partnership building initiatives, such as the White Water to Blue Water Initiative, can be used as a model in other regions.

The conference focused on National Programmes of Action (NPA) and on the possible use of Wastewater Emission Targets (WET) as they refer to sanitation. With regard to using National Programmes of Action as frameworks for multi-stakeholder partnerships, the key outcomes and major points of discussion included:

- Agreement that NPAs provide an effective tool and policy framework for integrated 'whole-of-government' actions to protect water resources from the Hilltops to the Oceans.
- NPAs should be long-term iterative processes that contribute to poverty reduction strategies and/or national sustainable development strategies, and should be appropriately reflected in domestic priorities and budgets.
- Mobilization of domestic resources is clearly required to implement NPAs. International financing can only provide a stimulus to embed the implementation of the NPA into national structures – in this regard, the GPA Coordination Office has an important role to play as a broker of partnerships between developing countries and donors/international financial institutes.
- NPAs can provide a platform to coordinate partnerships emerging from multilateral negotiations, e.g. partnerships relating to the WSSD targets on freshwater, coastal and marine environments.
- NPAs can also provide a platform for Public Private Partnerships aimed at protecting and preserving water resources.

- The enhancement of the GPA Clearing House Mechanism, the use of its Marine Pollution Solutions database and the formation of a network of NPA practitioners will facilitate the continued sharing of experiences, promoting best practices and providing technical assistance to advance implementation.

- There are indications that the 2006 H<sub>2</sub>O target of 40 countries actively involved in developing or implementing NPAs will be exceeded.

With regard to Wastewater Emission Targets (WET) as they relate to Sanitation, the key outcomes and major points of discussion included:

- Launch of a partnership between UNEP and the Water Supply and Sanitation Collaborative Council (WSSCC), linking the WET-initiative with the Water, Sanitation and Hygiene for all campaign, WET – WASH, to ensure that the WSSD targets on Water and Sanitation include all aspects, in particular hygiene awareness and the safe discharge and re-use of wastewater.
- In the implementation of the WSSD sanitation target, all of the water cycle management and hygiene practices should be considered, from hand washing to sustainable treatment of wastewater, including its reuse.
- Considerable progress in the integration of policies for wastewater management has been achieved in several regions, including in the Pacific Islands and South Asian regions. The use of Wastewater Emission Targets (WET) was highlighted as a potential vehicle to further the implementation of the GPA component on municipal wastewater.
- Setting targets is not an end in itself but a tool to achieve specific policy objectives. Targets will differ at global, regional, national and local levels depending on specific circumstances. Flexibility is key to an adequate use of targets, setting different types of targets addressing various situations and needs. Once targets are set, progress towards them should be monitored and evaluated periodically.
- The community should be involved in the process of setting targets.



### **Summary and Outstanding Issues**

- UNEP-GPA is working to help countries develop national programmes of action (NPA) by 2006. Building on the experience of countries that have developed NPAs, it is recommended that countries integrate NPAs with sustainable development strategies and/or poverty reduction strategy papers.
- There is an indication that the 2006 H<sub>2</sub>O target of 40 countries actively involved in developing or implementing NPAs will be exceeded.
- Links between the oceans community and the freshwater community urgently need to be strengthened and used to build integrated responses to the problems of watershed /coastal/marine degradation.
- The incorporation of GPA objectives into LME, coral reefs, ICM, as well as in biodiversity and marine protected area programs and strategies is recognized as a key factor towards the successful implementation of these programs.

## ADDRESSING THE ISSUES OF SMALL ISLAND DEVELOPING STATES

Johannesburg Plan of Implementation (emphasis added by the authors):

**58. Small island developing States are a special case both for environment and development. Although they continue to take the lead in the path towards sustainable development in their countries, they are increasingly constrained by the interplay of adverse factors clearly underlined in Agenda 21, the Programme of Action for the Sustainable Development of Small Island Developing States and the decisions adopted at the twenty-second special session of the General Assembly. This would include actions at all levels to:**

*(a) Accelerate national and regional implementation of the Programme of Action, with adequate financial resources, including through GEF focal areas, transfer of environmentally sound technologies and assistance for capacity-building from the international community;*

*(b) Further implement sustainable fisheries management and improve financial returns from fisheries by supporting and strengthening relevant regional fisheries management organizations, as appropriate, such as the recently established Caribbean Regional Fisheries Mechanism and such agreements as the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean;*

*(c) Assist small island developing States, including through the elaboration of specific initiatives, in delimiting and managing in a sustainable manner their coastal areas and exclusive economic zones and the continental shelf (including, where appropriate, the continental shelf areas beyond 200 miles from coastal baselines), as well as relevant regional management initiatives within the context of the United Nations Convention on the Law of the Sea and the UNEP regional seas programmes;*

*(d) Provide support, including for capacity-building, for the development and further implementation of:*

*(i) Small island developing States-specific components within programmes of work on marine and coastal biological diversity;*

*(ii) Freshwater programmes for small island developing States, including through the GEF focal areas;*

*(e) Effectively reduce, prevent and control waste and pollution and their health-related impacts by undertaking by 2004 initiatives aimed at implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities in small island developing States;*

*(f) Work to ensure that, in the ongoing negotiations and elaboration of the WTO work programme on trade in small economies, due account is taken of small island developing States, which have severe structural handicaps in integrating into the global economy, within the context of the Doha development agenda;*

*(g) Develop community-based initiatives on sustainable tourism by 2004, and build the capacities necessary to diversify tourism products, while protecting culture and traditions, and effectively conserving and managing natural resources;*

### **Johannesburg Plan of Implementation: (Continued)**

*(g) Develop community-based initiatives on sustainable tourism by 2004, and build the capacities necessary to diversify tourism products, while protecting culture and traditions, and effectively conserving and managing natural resources;*

*(h) Extend assistance to small island developing States in support of local communities and appropriate national and regional organizations of small island developing States for comprehensive hazard and risk management, disaster prevention, mitigation and preparedness, and help relieve the consequences of disasters, extreme weather events and other emergencies;*

*(i) Support the finalization and subsequent early operationalization, on agreed terms, of economic, social and environmental vulnerability indices and related indicators as tools for the achievement of the sustainable development of the small island developing States;*

*(j) Assist small island developing States in mobilizing adequate resources and partnerships for their adaptation needs relating to the adverse effects of climate change, sea level rise and climate variability, consistent with commitments under the United Nations Framework Convention on Climate Changes, where applicable;*

*(k) Support efforts by small island developing States to build capacities and institutional arrangements to implement intellectual property regimes;*

*59. Support the availability of adequate, affordable and environmentally sound energy services for the sustainable development of small island developing States by, inter alia:*

*(a) Strengthening ongoing and supporting new efforts on energy supply and services, by 2004, including through the United Nations system and partnership initiatives;*

*(b) Developing and promoting efficient use of sources of energy, including indigenous sources and renewable energy, and building the capacities of small island developing States for training, technical know-how and strengthening national institutions in the area of energy management;*

#### **60. Provide support to SIDS to develop capacity and strengthen:**

*(a) Health-care services for promoting equitable access to health care;*

*(b) Health systems for making available necessary drugs and technology in a sustainable and affordable manner to fight and control communicable and non-communicable diseases, in particular HIV/AIDS, tuberculosis, diabetes, malaria and dengue fever;*

*(c) Efforts to reduce and manage waste and pollution and building capacity for maintaining and managing systems to deliver water and sanitation services, in both rural and urban areas;*

*(d) Efforts to implement initiatives aimed at poverty eradication, which have been outlined in section II of the present document.*

**61. Undertake a full and comprehensive review of the implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States in 2004, in accordance with the provisions set forth in General Assembly resolution S-22/2, and in this context requests the General Assembly at its fifty-seventh session to consider convening an international meeting for the sustainable development of small island developing States.**

*"For small island states, the health of the oceans is of paramount importance; so vital is the exerted influence of the oceans over islands that they impact directly on a spectrum of island issues, including its people, culture, economy, and the environment. Indeed, islands and oceans are an integral part of a single environment. For small island developing States, the protection and management of their marine environment are intrinsically linked to their sustainable development aspirations."*

-His Excellency Ambassador Jagdish Koonjul, AOSIS Chair  
Global Conference on Oceans Coasts and Islands, November 12, 2003

Small island developing States (SIDS) have limited land-based resources. However, with the establishment of the 200 miles Exclusive Economic Zones (EEZs), small islands are the custodians of vast ocean spaces. As such, SIDS have heavy responsibilities for the management, conservation and sustainable development of these resources. SIDS are entrusted with the management of rich and diverse natural resources such as biodiversity, fisheries and minerals. SIDS typically have beautiful landscapes and a rich cultural heritage, providing numerous opportunities for tourism developments. Therefore, oceans and coastal environment are of vital and strategic importance for SIDS and constitute perhaps their major sustainable development resource.

Small island developing States (SIDS) and islands supporting small communities are a special case for both environment and development as set forth in Agenda 21, since they are ecologically fragile and vulnerable. SIDS have all the environmental problems and challenges of the coastal zone concentrated in very limited land areas:

- SIDS are considered extremely vulnerable to global warming, sea level rise and to extreme meteorological events, but because small island development options are limited, they face special challenges to implement sustainable development.
- The ocean and coastal environment is of strategic importance as it constitutes the major natural asset for development, but often lack appropriate management;
- The small size, limited resources, geographic dispersion and isolation from markets of SIDS, prevent economies of scale and place them at economic disadvantage;

- SIDS have rich and diverse cultures with special adaptations to island environments and knowledge of the sound management of island resources

### The Barbados Programme of Action and the WSSD

In April 1994, the Global Conference on Sustainable Development of Small Island Developing States was convened in Barbados. This was the first conference that translated Agenda 21 into a programme of action for a group of countries: the Barbados Programme of Action (BPoA). The BPoA sets forth specific actions and measures to be taken at the national, regional and international levels in support of the sustainable development of SIDS<sup>1</sup>. The developments and major outcomes related to genesis and evolution of the implementation of the BPoA are shown in Box7<sup>2</sup>:

### Discussion at the 2003 Global Conference<sup>3</sup>

The discussions on the SIDS at the Conference focused mainly on the preparation of SIDS for the Mauritius International Meeting (BPoA+10). The discussion group outlined the following goals:

- JPoI objectives, targets and implementation need to be incorporated into the outcomes of the Mauritius International Meeting
- Development of national and regional plans of action and of implementation
- Proper address of the problems of the vulnerability of small island States
- Promotion of some of the vulnerability features as strengths to attract investment and partnerships forms of sustainable tourism, based on the cultural and traditional heritage
- Mobilization of the international community to participate in the sustainable development of SIDS
- Enhancement of information access as a key issue to ensure sustainable development
- Sharing information on best practices
- Collaboration between communities to overcome small scale and dispersion
- Increasing public participation on sustainable development by means of education, including integrating civil society on early stages of the processes; and
- Creation of structures to involve youth on communities' activities, and on the implementation of the BPoA.

<sup>1</sup> UNDESA. 2004. The 10-year Review of the Barbados Programme of Action (BPoA). Available: [www.un.org/esa/sustdev/sids/sids.htm](http://www.un.org/esa/sustdev/sids/sids.htm)

<sup>2</sup> Based on UNDESA. 2004. Small Island Developing States (SIDS). Available: [www.un.org/esa/sustdev/sids/sids.htm](http://www.un.org/esa/sustdev/sids/sids.htm); and IISD. 2004. SIDS Preparatory Meeting for the 10-Year Review of the Barbados Programme of Action (BPOA), United Nations Headquarters, New York, April 14-16, 2004. Available: [www.iisd.ca/sids/bpoa10/sidsprep/](http://www.iisd.ca/sids/bpoa10/sidsprep/)

<sup>3</sup> This section highlights the outcomes of the pre-conference meeting and discussion group on SIDS led by Dr. Diane Quareless, Chief of the SIDS unit (UN DESA) and the salient points of the address to the Global Conference by Ambassador Jagdish Koonjul, Chair of the Alliance of Small Island States (AOSIS)

## Box 7. Major Milestones in UN Actions Related to Sustainable Development of SIDS

**1989.** The 44th session of UN General Assembly (UNGA) recognised the vulnerability of islands and coastal areas to the possible adverse effects of sea-level rise on islands and coastal areas (resolution 44/206).

**1992. The UN Conference on Environment and Development (UNCED)** adopted Agenda 21, a programme of action for sustainable development (June 1992, in Rio de Janeiro, Brazil). Chapter 17 of Agenda 21 on the protection of oceans, all kinds of seas, and coastal areas brings the special case of small island developing States to international attention by including a programme area on the sustainable development of small islands and also by calling for a global conference on the sustainable development of SIDS.

**1994. The UN Global Conference on the Sustainable Development of SIDS** convened at Barbados (Bridgetown, Barbados, from 25 April to 6 May). The Conference adopted the *Barbados Programme of Action on the Sustainable Development of SIDS* (BPoA), which identifies priority areas and indicates specific actions necessary for addressing the special challenges faced by SIDS, as well as the Barbados Declaration, a statement of political will underpinning the agreements contained in the BPoA. The BPoA is a 14-point programme, whose priority areas include: climate change and sea-level rise, natural and environmental disasters, management of wastes, coastal and marine resources, freshwater resources, land resources, energy resources, tourism resources, biodiversity resources, national institutions and administrative capacity, regional institutions and technical cooperation, transport and communication, science and technology, and human resource development. The BPoA also identifies several cross-sectoral areas: capacity building; institutional development at the national, regional and international levels; cooperation in the transfer of environmentally sound technologies; trade and economic diversification, and finance.

**1997.** During the 19th Special Session of the UNGA (UNGASS-19), during consideration of the implementation of Agenda 21, it was decided that a Special Session of the General Assembly would be held in 1999 to conduct a full review of the implementation of the BPoA, for which CSD would serve as the preparatory committee.

**1999.** The 22nd Special Session of the UN General Assembly (UNGASS-22) undertook a comprehensive review and appraisal of the implementation of the BPoA. The UNGASS-22 adopted the “**State of Progress and Initiatives for the Future Implementation of the Programme of Action for the Sustainable Development of SIDS**” (BPoA+5), which identified six problem areas in need of urgent attention: climate change, natural and environmental disasters and climate variability, freshwater resources, coastal and marine resources, energy, and tourism. Additionally, the BPoA+5 stressed the need to focus on means of implementation through national and international initiatives: the development and implementation of national sustainable development strategies, initiatives for information management, such as strengthening the SIDS Network, and international cooperation and partnership.

**2000.** The Millennium Summit adopted the UN **Millennium Declaration** (Resolution 55/2), which also addresses the special needs of SIDS, by implementing the BPoA and the outcome of the BPoA+5 rapidly and in full.

**2002.** The World Summit on Sustainable Development (WSSD, 26 August to 4 September, Johannesburg, South Africa) adopted the **Johannesburg Declaration on Sustainable Development** and the **Johannesburg Plan of Implementation** (JPoI). The WSSD reaffirmed the special case of SIDS; dedicated chapter VII of the JPoI to the sustainable development of SIDS, which identified a set of priority actions; called for a full and comprehensive review of the BPoA in 2004; and requested the General Assembly to consider convening an international meeting on the sustainable development of SIDS. Non-negotiated partnerships/initiatives for sustainable development, also known as ‘Type II partnerships/initiatives’, are an important outcome of the WSSD. Since the WSSD, over 290 such partnerships have been launched<sup>4</sup>, of which at least 27 address challenges facing small islands<sup>5</sup>.

**2002.** The 57th session of the UN General Assembly (UNGA-57) decided to convene an international meeting in 2004 to undertake a full and comprehensive review of the implementation of the BPoA (resolution 57/262). The review should focus on practical and pragmatic actions for the further implementation of the BPoA, and a renewed political commitment by all countries, including through the mobilization of resources and assistance for SIDS. The resolution further decided to convene regional preparatory meetings and an inter-regional preparatory meeting in order to undertake the review of the BPoA at the national, subregional and regional levels. The Government of Mauritius offered to host the meeting. (continued on p. 43)



## Box 7. Major Milestones of Action and the WSSD (*Continued*)

**2003.** The CSD-11 (28 April to 9 May 2003) deliberated to undertake a three-day preparatory meeting during CSD-12 for an in-depth assessment and appraisal of the implementation of the BPoA, and to finalize the preparations for the International Meeting in Mauritius. The development communities, international donors, and international organizations were invited to provide information on their activities in support of the BPoA's implementation.

**2003.** In preparation for the inter-regional meeting, three **regional preparatory meetings** and four **expert meetings** convened during the second half of 2003. The outcomes of these meetings comprised the background documents for the inter-regional meeting, held in The Bahamas (26 to 30 January 2004):

The AIMS<sup>6</sup>, Caribbean and Pacific SIDS regional preparatory meetings<sup>7</sup> finalized the regional positions of the SIDS regions which were to be presented as Regional Synthesis Reports during the inter-regional preparatory meeting. The four expert meetings addressed: capacity building for renewable energy and energy efficiency; vulnerability of SIDS and enhancing resilience; waste management; and capacity building for sustainable development.

**2003.** The UN Under-Secretary-General Anwarul Chowdhury, who is also the UN High Representative for the Least Developed Countries (LDCs), Landlocked Developing Countries and SIDS, was appointed as the Secretary-General of the International Meeting in December 2003 (UNGA-58, resolution 58/213). The UNGA-58 decided to convene the International Meeting from 30 August to 3 September of 2004. Per request from the Government of Mauritius, the International Meeting has been rescheduled to January 10-14, 2005.

<sup>4</sup> UNDESA. 2004. Partnerships for Sustainable Development - CSD Database. Available: <http://webapps01.un.org/dsd/partnerships/search/browse.do>

<sup>5</sup> Belfiore, S. 2004. Voluntary Partnership Initiatives from the 2002 World Summit on Sustainable Development and Small Island Developing States. Global Forum on Oceans, Coasts and Islands, Toward Mauritius Paper Series No. 2003-01.

<sup>6</sup> AIMS: Atlantic, Indian Ocean, Mediterranean and South China Sea.

<sup>7</sup> Regional meetings: Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) SIDS (1-5 September 2003, Praia, Cape Verde); the Caribbean SIDS (6-10 October 2003, Port of Spain, Trinidad and Tobago) and Pacific SIDS (4-8 August 2003, Apia, Samoa).

During the workshop the following constraints were identified:

- Funding to fully implement JPoI and Volunteer Partnerships within SIDS
- Capacity problems: inadequacy of trained skilled personnel in the countries particularly in highly skilled areas (marine science and technology, negotiation skills, research for development)
- Vulnerability and small scale
- Impacts of military experiments and installations on communities
- Lack of capacity to ensure security within the EEZs of SIDS

The working group identified the following actions that have been undertaken to meet the goals of both the BPoA and the JPoI:

- Enhancement of regional cooperation between countries especially at the Pacific and Caribbean regions: Pacific stra-

tegic action program for the international waters of the Pacific SIDS and the Pacific Islands Forum

- Strengthening of regional fisheries organizations: establishment of the Caribbean regional fisheries mechanism and conservation arrangements of fishery resources in the Pacific
- Development of national assessments for the implementation of the BPoA
- Integrated management of natural areas, taking into account social and economic aspects, such as health, education, heritage and quality of life
- Enhancement of public participation

The working group on SIDS made the following recommendations:

- At the Mauritius International Meeting (IM) there will be no renegotiation of the BPoA; the BPoA will be the basis for the discussions, where new issues can be added. The aim is to analyze what went right, what went wrong and what needs to be done to ensure that recommendations are implemented.

- The International Meeting should focus on a very targeted agenda and outcomes that are both practical and pragmatic, including deadlines for implementation. The IM should come up with a political declaration and a plan of further implementation of the BPoA, focusing on:

- Ensuring environmental sustainability;
- Capacity building;
- New emerging issues, such as security and terrorism on islands and its ocean waters;
- Trade and vulnerability; and
- Translating WSSD outputs into concrete measures on how to address the problems of vulnerability and the problems of small island states

- SIDS and the international community should commit to:

- Meet the targets that were set by the JPoI regarding waste and pollution initiatives, tourism, and renewable energy
- Develop or enhance regional mechanisms for cooperation between SIDS to overcome small scale dispersion, and to enhance regional management of resources
- Enhance cooperation within SIDS, between communities as well as at the national level
- Build capacity to enhance SIDS human resources
- Ensure environmental sustainability
- Focus on science and technology development
- Value cultural and traditional assets to provide new competitive products, in order to enhance economic diversity and decrease external dependence
- Emphasize the positive aspects of vulnerability
- Strengthen the participation of civil society on the process of sustainable development
- Ensure funding for full participation of the civil society at Mauritius, including youth

## **Developments since the 2003 Global Conference**

Since the Global Conference four major developments related to preparation of the International Meeting have taken place in 2004: 1) the Inter-Regional Preparatory Meeting for the Review of the BPoA was held, 2) the informal consultative process during the preparatory meetings at the twelfth session of the UN Commission on Sustainable Development (CSD-12) was held, 3) the development of a regional ocean policy for the Pacific was advanced further, 4) a SIDS Expert Workshop on Ocean and Coastal Issues outlined major ocean and coastal issues for consideration for the next phase.

### **1) Inter-Regional Preparatory Meeting** for the Ten-year Review of the Programme of Action for the Sustainable

Development of SIDS (from 26-30 January 2004, in Nassau, the Bahamas). The SIDS adopted the Nassau Declaration and the Alliance of Small Island States (AOSIS) Strategy Paper for the Further Implementation of the BPoA. The AOSIS Strategy Paper aims to approach the SIDS problems in a holistic manner, highlighting the special challenges faced by SIDS in sustainable development, urging greater understanding and cooperation from members of the international community regarding their commitments since the Earth Summit. The Paper identifies the priority areas of the BPoA, as well as new and emerging issues, including graduation of SIDS least developed countries (LDCs), trade, health, and culture. The AOSIS Strategy Paper was endorsed by the G-77/China, which proposed to use it as a basis for negotiation for the 10-year review of the BPoA. SIDS renewed calls for political will, increased financial resources, and greater support from the international community to facilitate SIDS' implementation of the BPoA.

**2) Negotiations at CSD-12.** The final preparations for the Mauritius International Meeting were undertaken during the 3-day Preparatory Meeting, at the 12th Session of the UN Commission on Sustainable Development (14 to 16 April 2004, New York). The meeting considered the Secretary-General's synthesis report based on recommendations from SIDS, the reports from the expert thematic workshop, and the regional and inter-regional preparatory meetings. During the three days of the preparatory meeting for the International Meeting, informal consultations were conducted for a first reading of the Strategy Document on the further implementation of the BPoA. The more important remarks were:

- The UN Secretary-General's report on Review of Progress in the Implementation of the Programme of Action for the Sustainable Development of SIDS (E/CN.17/2004/8) reviews the overall implementation of the BPoA, identifying the continuing challenges facing SIDS, and the areas where additional support of the international community is required;
- CSD-11 decided to include the vulnerability of SIDS as a cross-cutting issue in the CSD's multi-year programme of work;
- The Mauritius International Meeting objectives were once more stressed; in particular the BPoA will not be renegotiated. Instead, the International Meeting should focus on how the Meeting can make a difference in promoting the well being of the SIDS peoples, how SIDS can gain the support, commitment and political will from partners, on the examination of the shortcomings of the implementation of the BPoA, as well as on the creation of a monitoring mechanism, which allows the identification of shortcomings on implementation on a periodic basis;

- Review of and negotiations related to the AOSIS Strategy Paper are still being undertaken, as several proposals have been made to change the text, and as concerns regarding the document's structure have been raised;
- The Government of Mauritius has requested the postponement of the International Meeting. The International Meeting has been rescheduled to January 10-14, 2005.

The AOSIS Strategy Paper takes into account the structure of the BPoA, by analyzing the different themes of the BPoA as well as new emerging issues, and stresses the need to reinforce some of implementation aspects such as increasing international community involvement on SIDS problem resolution, namely through the increase of funding as well as the need of enhancing SIDS representation at international bodies. During the informal consultations and negotiations on the document, some concerns and disagreement arose regarding prioritization of actions to be undertaken by both SIDS and the international community and placing action-oriented measures within the confines of existing international agreements on sustainable development. These aspects, amongst others, are therefore still under negotiation between SIDS and a number of developed countries. Additional informal consultation meetings in order to continue negotiations on the Strategy Paper are likely in September 2004.<sup>8</sup>

The most relevant points under negotiation are:

- **Structure and prioritization of issues.** Some Delegates considered that the Strategy Paper is too long and detailed and lacking prioritization of issues. Thus, the selection of a more restricted set of issues to target as opposed to the whole list of BPoA items and new emerging issues was proposed.
- **Situating the Strategy Paper in the context of the international agreements since the Millennium Summit,** the expected outcomes, their relevance to SIDS, and the selective use of text on good governance, official development assistance (ODA), and trade and finance. SIDS countries recalled the commitment of developed countries to contribute 0.7% of their GNP to ODA, and that a substantial increase in ODA and other resources are required for SIDS to achieve the internationally agreed development goals and objectives, including those contained in the Millennium Declaration. Donors considered that they are not able to move beyond what was previously agreed on the Monterrey Consensus and the World Trade Organization's Doha Development Agreement. There-

fore, donors and SIDS are negotiating commitments to provide finance, in particular ODA, and the establishment of new financial mechanisms to support SIDS' implementation efforts.

- **Resolving issues of capacity and representation in international decisionmaking bodies** as well as access to the benefits of the global trade regime, were seen by SIDS as crucial components of the International Meeting. SIDS need to be recognized as a group with special circumstances by international institutions, in order for these institutions to take appropriate action. Some developed nations did not agree with the text calling for special status for SIDS as a group in international institutions and agreements, and for differentiated treatment by multilateral institutions. One of the alternatives proposed is that SIDS' special status can be negotiated within each of those institutions and agreements;
- Some developed nations stressed that the International Meeting should reinforce the importance of country-driven and country-owned strategies for poverty reduction and sustainable development, and that it should focus on the role of the international community in supporting these national initiatives.
- Regarding coastal and marine resources, the establishment of a new financial mechanism to assist SIDS in the implementation of the UN Convention on the Law of the Sea (UNCLOS) was opposed by some developed nations who stressed the need to make better use of existing mechanisms. The G-77/China emphasized the need to enhance SIDS' access to such mechanisms. On fisheries management, a number of developed nations proposed strengthening language to assist SIDS in addressing illegal, unreported and unregulated (IUU) fishing and problems relating to flags of convenience.

**3) Further Development of Regional Ocean Policy for the Pacific Islands.** As noted in the section on Cross-Sectoral Aspects, further development of the regional ocean policy for the Pacific Islands took place at the Regional Pacific Ocean Forum, held in Suva, Fiji, on February 4-8, 2004. The Forum delineated steps that need to be taken to further develop the ocean policy at the regional level, identifying gaps in the existing regional ocean regime. The Forum also put forward frameworks and implementation challenges for national-level implementation of the regional ocean policy.

<sup>8</sup> Based on In ENB, 2004. Preparatory Meeting for the International Meeting on the Ten-Year Review of the Programme of Action on Sustainable Development of SIDS: 10-16 April 2004. Earth Negotiations Bulletin (ENB), 8(41).

**4) SIDS Experts Workshop on Ocean and Coastal Issues.** As part of the series of SIDS experts meetings held in preparation for the Mauritius International Meeting, the UNDP sponsored a SIDS Experts Workshop on Ocean and Coastal Issues (May 24 to 27, 2004, Suva, Fiji). Participants discussed the need to conserve ocean resources while generating opportunities for alternative revenues, including user fees for MPAs and power generation (e.g., ocean thermal energy conversion). The meeting recommended developing stronger negotiating mechanisms for SIDS, particularly with respect to foreign fisheries valuation, further adoption and implementation of the ecosystem-based approach, and development of stronger institutions for ocean and coastal governance.

### Global Forum Next Steps

The working group on SIDS suggested the following actions for the Global Forum on Oceans, Coasts, and Islands:

- Support SIDS on the development of information useful for the Barbados +10 assessment process
- Capacity building for coastal and ocean management
- Development of background papers: In support of SIDS preparation for the International Meeting at Mauritius, the Global Forum, supported by UNEP, has developed the Paper Series *Toward Mauritius 2004*. This series consists of a set of analysis to contribute to the deliberations leading up to the International Meeting to review implementation of the BPoA. Three papers have been prepared to date and a fourth one is forthcoming in July 2004.

*1. Voluntary Partnership Initiatives from the 2002 World Summit on Sustainable Development and Small Island Developing States. 2003.* This paper examines the potential contribution of the voluntary partnerships emanating from the WSSD and specifically examines the extent to which and how the partnership initiatives support the targets and timetables agreed upon in the JPoI. At the present, there are 27 SIDS voluntary partnerships of which 18 are related to oceans and coasts.

*2. International Environmental Agreements and Small Island Developing States. 2004.*

This paper investigates SIDS participation in multilateral environmental agreements, including ratification status and constraints to implementation. On the whole, SIDS have shown high ratification of many environmental agreements, in particular the Convention on Biological Diversity and the UN Framework Convention on Climate Change. However, SIDS face serious constraints in fulfilling their convention commitments. The funding and assistance provisions within the conventions themselves have not proven adequate to assist

SIDS to fully implement the initiatives. As called for in Agenda 21, additional funding, technical support, and capacity building are needed from the international community to assist SIDS in implementing MEAs. Assistance is particularly needed in nations with low participation in MEAs.

*3. Small Islands, Large Ocean States: An Analysis of Changes in Coastal and Ocean Management in Small Island Developing States since the Barbados Programme of Action for the Sustainable Development of Small Island Developing States. 2004.*

This paper assesses the implementation of the BPoA related to oceans and coastal management, focusing on integrated and ocean management, global climate change, development of sustainable tourism, and waste management. Regional institutions have played a key role in interpreting and implementing the requirements of the BPoA in all three SIDS regions—Pacific, Caribbean, and AIMS, since 1994. At the national level, however, development and implementation of oceans and coastal policies is lagging regional action. Experimentation with ocean and coastal management has taken place, although much of the management remains largely sectoral: 7 nations have developed specific institutions or interagency mechanisms for the coordination of integrated coastal and ocean management, while 18 nations have entrusted the coordination of marine and coastal issues to environmental institutions. The most important priorities for the next decade for oceans and coastal management seem to be:

- a. EEZ delimitation and continental shelf delimitation. These have to be done in a way that does not jeopardize cooperation among the SIDS themselves, which is so essential to their well-being and relations with other nations.
- b. Assessment of needs and opportunities in EEZs conducted at the highest levels of government. This can help focus political attention on oceans and help to mobilize resources and political will as well as provide an opportunity to apply ecosystem and multiple use approaches, identify current and new uses, and anticipate potential benefits and conflicts. Regional organizations can play a key role by providing the needed expertise to carry out these assessments. A major purpose is to identify new and existing economic opportunities while preserving the health of the oceans. A part of these assessments should be the identification of networks of marine protected areas that would be useful in preserving the quality and integrity of marine ecosystems.
- c. Development of institutional structures for ocean and coastal management, including:
  - appointment of oceans and coasts focal points in each national government



- creation of interagency coordination mechanism on oceans and coasts
- sharing of power and authority with local communities regarding ocean and coastal areas and resources

1. Specific aspects of coastal and ocean management
2. Negotiation skills
3. Skills in EEZ management
4. South/South cooperation

d. Development of an ongoing authoritative decision-making process on oceans and coasts

*4. Energy Issues and Climate Change in Small Island Developing States. 2004.*

e. Capacity building, e.g.:

- Educational programs in the field to train a new cadre of leaders in the field
- Workshops for public officials
- Training on specific skills:

This paper assesses the implementation of the BPoA related to energy issues and its relation to climate change and sea-level rise (forthcoming in July 2004).

### Summary and Outstanding Issues

- A draft of the strategy document for the Mauritius International Meeting has been prepared and agreed to by the SIDS countries and the G77/China, and is now under further negotiation.
- The Mauritius International Meeting has been rescheduled to January 10-14, 2005.
- Assessments conducted for the Barbados+10 preparatory process underscore the central role of oceans and coasts for the environmental, social, and economic well-being of SIDS.
- An important need of SIDS countries, articulated both in the JPoI and in the preparatory process of the Mauritius International meeting, is the delimitation and management of coastal areas, Exclusive Economic Zones, and continental shelves.
- To accomplish the above purposes, the further development of institutional frameworks for ocean and coastal management and capacity building in the field should take place.
- Important steps in the development of a Regional Ocean Policy, providing guidance for both regional and national-level ocean policies, have been taken in the Pacific Islands region.





## IMPROVING FISHERIES MANAGEMENT

### Johannesburg Plan of Implementation:

*Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and decision 5/6 of the Conference of Parties to the Convention on Biological Diversity; (30d)*

*Maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015. (31a)*

*Urgently develop and implement national and, where appropriate, regional plans of action, to put into effect the FAO international plans of action, in particular the international plan of action for the management of fishing capacity by 2005. (31d)*

*Deter and eliminate illegal, unreported and unregulated fishing by 2004. Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by flag States, to further the international plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing. (31d)*

*Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use; and watershed planning and the integration of marine and coastal areas management into key sectors. (32c)*

### The Issue

Fisheries and aquaculture produce about 100 million tons of food and 30 million tons of feeds, at a cost of an excessive impact on the resource base and the ecosystem. The sector now faces the challenge of producing 140-180 million tons of fish by 2030 (depending on whether the per capita consumption stagnates at the present level (16 kg/person) or improves (to 20 kg/person) possibly with much less impact on the aquatic environment (FAO 2002). To this end, the sector must undergo a significant reduction of its fishing capacity in order to rebuild stocks while increasing low-impact aquaculture production to meet the future world demand. In doing so, it faces huge transitional costs and the risk of unacceptable environmental impacts. The task needs to be undertaken in a rapidly changing context of economic globalization, declining governmental capacity, growing domination of concentrating economic interests, trade liberalization, widening gaps between the poor and the rich, scientific uncertainties, environmental degradation and climate change (Garcia and Doulman 2003).

The situation can be illustrated by two interrelated phenomena that emphasize the deteriorating status of fish stocks worldwide:

- In response to overfishing, there have been important changes in the species composition of world fisheries catches as fisheries expanded across the whole array of available species resulting in the proportion of low value species increasing substantially since the 1970s while the proportion of traditional target species and average sizes has decreased. This situation may be aggravated by the demand for fishmeal for terrestrial animal production and aquaculture feed.
- IUU (illegal, unreported and unregulated) fishing occurs in both small-scale and industrial fisheries, in marine and inland water fisheries, as well as in zones of national jurisdiction and on the high seas. In some important fisheries, IUU fishing accounts for up to 30 percent of total catches; in one instance FAO has indicated that IUU catches could be as high as three times the permitted catch level (Doulman 2001). IUU fishing is influenced by

the existence of excess fleet capacity, the provision of government subsidies, strong market demand for particular fish species and products, weak national fishery administration, poor regional fisheries management and ineffective monitoring, control and surveillance, including a lack of vessel monitoring system. In some areas, flag of convenience vessels are becoming common in IUU fishing practices by choosing their flag States through reflagging (sometimes flag hopping), with the apparent aim of circumventing the conservation and management measures of the regional fisheries management organizations.

## **WSSD and Related Outcomes**

The working group on fisheries convened at the Global Conference on Oceans and Coasts at Rio+10, UNESCO, Paris in December 2001 assessed what has been done so far to address global issues in fisheries, as reported in Pullen et al. 2001 (p. 33-36) and reiterated as follows.

Progress has been made in the area of responsible fisheries development and management as a result of the coming into force of the United Nations Convention on the Law of the Sea (in 1994) and the adoption of a number of complementary international instruments and voluntary agreements, including:

- The UN Fish Stock Agreement, coming into force in December 2001, has strengthened management in the high seas;
- The FAO Code of Conduct for Responsible Fisheries, adopted in 1995, has influenced the modification of national fisheries laws;
- Through FAO, three International Plans of Action (IPOAs) were adopted in 1999 and are being implemented to improve shark management, reduce by-catch of seabirds in long-line fisheries, and control and reduce fishing capacity. Another IPOA was adopted in early 2001 to prevent, deter and eliminate IUU fishing. A Strategy for Improving Information on Status and Trends of Capture Fisheries was also adopted in 2003 and is being implemented; and
- The 1993 Compliance Agreement has potential to further improve fisheries management but still require further accession by States to become effective.

A number of regional fishery management organizations (RFMOs) have undertaken a systematic review of their mandate and functioning with the view to improving their performance in management. In addition, new institutional arrangements have been established *inter alia* for: (a) conservation of southern blue fin tuna; (b) conservation and management of pollock resources in the central Bering Sea;

(c) Iceland-Norway-Russian Federation Agreement on co-operation in fisheries; (d) conservation of fisheries resources in the high seas of the Southeastern Pacific; (e) conservation and management of highly migratory fish stocks in the Western and central Pacific Ocean; (f) conservation and management of high seas fishery resources in the Southeast Atlantic Ocean; and the CARICOM Caribbean Regional Fisheries Mechanism. Cooperation among governments, NGOs, and industry has led to the elaboration of a series of Guidelines in support of the Code of Conduct.

Overall, these international agreements and instruments reflect a move towards a global fisheries paradigm that increasingly recognizes the reality of overfishing and environmental degradation and the need for restricted rights of access. These international agreements embody the precautionary approach, notably the FAO Code of Conduct with its concepts of precautionary reference points that were implemented in a number of regional fishery bodies and countries. There is increasing adoption of participatory approaches to fisheries management involving local communities. The ecosystem approach, developed for fisheries in a special issue of the FAO Technical Guidelines for Responsible Fisheries is also being systematically considered and tested. Marine protected areas are increasingly being implemented within broader ocean and coastal management programs that are integrated and participatory. However, the testing and implementation of these initiatives at a larger scale and for specific use in fisheries management would require more scientific, financial and political support.

The scientific sector, through various initiatives, has provided the basis for the transition from, *inter alia*: (1) using Maximum Sustainable Yield (MSY) as a target, to using it as a limit to be avoided; (2) output-oriented fisheries management based on Total Allowable Catches (TAC) to rights-based fisheries; (3) single species management to multi-species and ecosystem approaches to management; (4) risk-prone to risk-averse, precautionary management; (5) top-down, control-and-command to bottom-up participatory management with adequate economic incentives; (6) static quota strategies to dynamic forward-looking (rebuilding) strategies, based on operational management procedures (OMPs) as well as harvest rules and control laws. The precautionary approach is being used not only as an exceptional measure to be applied in case of “risk of irreversible damage” but is increasingly being applied in the elaboration of scientific advice and is becoming an accepted part of “best practices”.

In addition, a process of collaboration between FAO and CITES has been established to improve the process of scientifically evaluating the risk of extinction of fishery species subject to trade-related risk. Attempts have been made to develop eco-labeling systems for fisheries and aquaculture.

Biodiversity-related considerations have increased in fisheries and aquaculture management, e.g. in relation to genetic impacts of capture fisheries, by-catch and discards, habitat protection, introduction of alien species, etc. One of the solutions to these problems may be the increased use of polyculture and integrated aquaculture.

A number of promising new and revised management approaches have emerged in recent years and are available for use by managers of small-scale fisheries, and by the fishers themselves. These include broader emphasis on fishery and ecosystem management objectives and participatory decision processes; new governance regimes such as community-based management and co-management; interdisciplinary and social science methodologies that use fishers' local ecological knowledge, and participatory rural appraisal. A reconsidered approach to small-scale fisheries management will involve change on the part of all the stakeholders in the process of management to become responsible and precautionary – the fishers, their families, resource managers, elected officials, NGOs.

A set of recommendations put forward by the working group on fisheries (see Pullen et al., p. 35-36) was promoted at the WSSD by an informal coordinating group on oceans, coasts and islands. Most of the recommendations made it into the Johannesburg Plan of Implementation along with other oceans, coasts, and islands agenda.

The Johannesburg Plan of Implementation (JPOI) provided in paragraphs 30 and 31, a plan for addressing the most urgent issues in fisheries, including specific goals and targets. However, there are goals and targets in the JPOI (Table 3) whose accomplishment will have a direct bearing on the achievement of the WSSD fisheries targets, e.g., targets that cover the sustainable management and conservation of the marine and freshwater environment. Moreover, a closer examination of the whole JPOI will reveal that fish issues are widely and intricately linked to almost every aspect of sustainable development (WorldFish Center 2002; Garcia and Doulman 2003). It is also evident that there are issues pertaining to fish and other living aquatic resources that are not covered by the JPOI, as will be mentioned in the section on discussion at the 2003 Global Conference.

**Table 3. JPOI Goals and Targets that Have a Direct Bearing on the Achievement of WSSD Fisheries Targets.**

Year	Goals	Reference
2004	Establish by 2004 a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments	36 (b)
	Effectively reduce, prevent and control waste and pollution and their health-related impacts by undertaking by 2004 initiatives aimed at implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities in small island developing States	58(e)
2005	Develop integrated water resources management and water efficiency plans by 2005, with support to developing countries	26
2006	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	33(d)
2010	A more efficient and coherent implementation of the three objectives of the Convention on Biological Diversity and the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity will require the provision of new and additional financial and technical resources to developing countries.	44
2015	Achieve the Millennium Declaration target to halve by the year 2015 the proportion of the world's people who suffer from hunger and realize the right to a standard of living adequate for the health and well-being of themselves and their families, including food, including by promoting food security and fighting hunger in combination with measures which address poverty, consistent with the outcome of the World Food Summit and , for States Parties, with their obligations under article 11 of the International Covenant on Economic, Social and Cultural Rights	40(a)

The JPoI targets, along with the 1982 UN Convention on the Law of the Sea and all the international instruments adopted since UNCED, represent an overwhelming set of commitments that fisheries authorities have to implement. The 1995 FAO Code of Conduct for Responsible Fisheries is the agreed voluntary framework for implementation, integrating all the requirements of relevance to fisheries.

### **Discussion at the 2003 Global Conference<sup>1</sup>**

The Working Group on Fisheries at the 2003 Global Conference on Oceans, Coasts, and Islands considered that the target dates given in WSSD, not based on any analysis of processes and capacity required to achieve those targets, were optimistic, particularly in regard to IUU and reduction in fishing capacity. In these areas, national plans (NPOAs) might already be developed but not yet fully implemented, particularly if the technical and ODA (overseas development assistance) support needed is not mobilized.

The ecosystem approach to fisheries is likely to be well implemented in 2012 both in capture fisheries and aquaculture. The degree of compliance will be linked to the success of capacity-reduction programmes and the degree of uptake and success of ICAM (integrated coastal area management) as a central paradigm for coastal area management.

Many presently overfished fisheries might recover to MSY by 2015, depending presumably on progress made in controlling and reducing capacity. There is a need to emphasize that while this was not apparent in the Johannesburg Plan of Implementation text, the WSSD targets are connected to each other in terms of drivers, processes, measures and impacts. The target dates do not explicitly reflect these connections.

### **Global Forum Next Steps**

The discussion group on fisheries outlined the following actions that would be useful to accelerate the implementation of the WSSD targets in fisheries, which the Global Forum could help promote:

1. Elements of demand-oriented management should be developed to complement the conventional supply-oriented management. This implies the development of equitable ecolabeling systems (an issue “forgotten” by WSSD);

2. Agreement of definitions and measurements of Fishing Capacity and Excess Capacity need to be obtained as a priority, leading to the development of a system of indicators;
3. Harmful subsidies should be identified and gradually eliminated;
4. Develop and implement education programs aimed at developing an early sense of sustainable fisheries among children;
5. Strengthen formal reporting of actions taken and achievements in implementing the FAO IPOAs;
6. Enhance public awareness about the true meaning of fisheries and fishermen’s life with the assistance of aquariums and museum associations;
7. Increase international/bilateral cooperation on highly migratory species and shared stocks;
8. Foster the direct involvement of the fishing industry (even in small-scale fisheries) in the implementation of responsible fisheries strategies as contained in the Code of Conduct;
9. Involve retailers and all stakeholders in fisheries management;
10. Ensure that the WSSD targets (and the FAO IPOAs) are explicitly considered in the agendas of the RFMOs;
11. Encourage all fisheries organizations to incorporate WSSD targets within their priorities;
12. Incorporate fisheries into pertinent international initiatives;
13. The FAO Committee on Fisheries (COFI) should continue to play its role as a global fisheries forum;
14. Since only 10% of the total fisheries captures take place in the high seas, it would be very important to more forcefully develop national ocean policies with integrated fisheries policies for the EEZs<sup>2</sup>;
15. In order to have healthy capture fisheries, aquaculture capacity must be developed, exploring alternative (less impacting) production strategies;
16. While a global ecosystem is required, the development and implementation of the ecosystem approach to fisheries (EAF) need to be pursued actively;

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<sup>1</sup> Material for this section is based on the report of the Conference discussion group on Fisheries led by Dr. Serge Garcia, UN Food and Agriculture Organization.

<sup>2</sup> In November 2002, a new international initiative called *Fish for All* ([www.fishforall.org](http://www.fishforall.org)) was launched, which is a global science and policy dialogue designed to elevate fisheries issues through the active participation of senior policy makers, opinion leaders and researchers at various levels of the community. One of its major targets is the formulation of national fisheries policies for sustainable development taking in to account the needs of the fisheries and aquaculture sectors as well as opportunities for domestic and international trade.



17. The LME approach should be adopted to provide a vantage platform for focused temporal and spatial assessments and monitoring efforts in support of management aimed at the long-term productivity of marine habitats and sustainable utilization of marine resources such as fisheries. Better connections should be developed, however, with existing decision-making systems.

## **Developments since the 2003 Global Conference**

### **Deep-Sea Fisheries Workshop<sup>3</sup>**

In November 2003 in New Zealand, FAO co-sponsored with the Department of Environment, Food and Rural Affairs, United Kingdom, a Workshop on the conservation and management of deepwater chondrichthyan fishes. The Workshop provided an opportunity for international specialists to review the ecology, taxonomy, stock status and threats to deep-sea chondrichthyans and to discuss conservation and management recommendations for these highly vulnerable fish.

The Workshop noted that management of these fishes, especially those that inhabit the relatively unproductive deep-sea areas, is difficult, as their stock sizes and potential yields are lower than for other more traditionally fished species. Thus, it is essential that the precautionary approach to their management be taken to ensure the sustainability of these fishes and fisheries.

The Workshop found that basic identification guides necessary for accurate data collection needed for their management are lacking, many species are undescribed and a large number of sympatric species complexes are unresolved. Further, the understanding of age, growth, reproduction, trophic ecology and physiology is poorly known, if at all, for many species. Age estimates for deepwater chondrichthyans are not yet validated and the reproductive cycle of many species is non-seasonal and annual fecundity estimates are not available. Diet information, also not available, will help define community structure and provide data for ecosystem models.

The Workshop further found that much additional information is required to identify unit stocks and define geographic and depth distributions and that the movement patterns of deepwater elasmobranchs is often unknown. These data and stock structure information are essential for determining the proportions of stocks exploited by fisheries and thus in developing appropriate management plans.

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<sup>3</sup> Based on the report of the UN Food and Agriculture Organization Concerning the UN General Assembly Resolution A/58/L.19 on Oceans and the Law of the Sea, January 2004.

## **Summary and Outstanding Issues**

1. The JPoI targets, along with the 1982 UN Convention on the Law of the Sea and all the international instruments adopted since UNCED, represent an overwhelming set of commitments that fisheries authorities have to implement.
2. In regard to deterring and eliminating IUU (Illegal, Unregulated and Unreported) fishing (by 2004) and reduction in fishing capacity (by 2005), the development and implementation of national plans of action (NPOAs) is constrained by the lack of mobilization of technical and ODA (Overseas Development Assistance) support required.
3. The WSSD targets are connected to each other in terms of drivers, processes, measures and impacts, which are not explicitly reflected in the target dates. The degree of adoption of the ecosystem approach in fisheries and aquaculture by 2012 and the extent of recovery of many presently overfished fisheries to MSY by 2015 are linked to the success of capacity-reduction programmes, the elimination of harmful subsidies, and the degree of uptake and success of ICAM (Integrated Coastal Area Management) as a central paradigm for coastal area management. In order to have healthy capture fisheries, aquaculture capacity must be developed with less impacting production strategies.
4. Though overlooked by WSSD, elements of demand-oriented management should be developed to complement the conventional supply-oriented management, e.g., the development of equitable ecolabeling systems.
5. Agreement in definitions and measurements of Fishing Capacity and Excess Capacity needs to be obtained as a priority, leading to the development of a system of indicators. Formal reporting of actions taken and achievements in implementing the FAO IPOAs (International Plans of Action) should also be strengthened.
6. The importance of effective and targeted public awareness and educational programs, the direct involvement of key players such as the fishing industry, retailers, and other stakeholders in fisheries management, and increased international/bilateral cooperation on highly migratory species and shared stocks in the implementation of responsible fisheries strategies, cannot be over-emphasized
7. Since only 10% of the total fisheries captures take place in the high seas, it would be very important to more forcefully develop national ocean policies with integrated fisheries policies for the EEZs. Furthermore, the LME approach should be adopted to provide a vantage platform for focused temporal and spatial assessments and monitoring efforts in support of management aimed at the long-term productivity of marine habitats and sustainable utilization of marine resources such as fisheries. Better connections should be developed, however, with existing decision-making systems.



## EXPANDING AND IMPROVING MANAGEMENT OF MARINE PROTECTED AREAS, BIODIVERSITY, AND CORAL REEFS

### Johannesburg Plan of Implementation:

*32. In accordance with chapter 17 of Agenda 21, promote the conservation and management of the oceans through actions at all levels, giving due regard to the relevant international instruments to:*

*(a) Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction;*

*(b) Implement the work programme arising from the Jakarta Mandate on the Conservation and Sustainable Use of Marine and Coastal Biological Diversity of the Convention on Biological Diversity, including through the urgent mobilization of financial resources and technological assistance and the development of human and institutional capacity, particularly in developing countries;*

*(c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use; and watershed planning and the integration of marine and coastal areas management into key sectors;*

*(d) Develop national, regional and international programmes for halting the loss of marine biodiversity, including in coral reefs and wetlands;*

*(e) Implement the RAMSAR Convention, including its joint work programme with the Convention on Biological Diversity, and the programme of action called for by the International Coral Reef Initiative to strengthen joint management plans and international networking for wetland ecosystems in coastal zones, including coral reefs, mangroves, seaweed beds and tidal mud flats.*

### Related provisions:

*30d. Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and decision 5/6 of the Conference of Parties to the Convention on Biological Diversity;*

*31a. Maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015;*

### The Issue

- The conservation of coastal and marine biodiversity represents a major area of concern in ocean and coastal management, due to continuing alarming trends:
- 58 percent of the world's reefs are at risk from coastal development, marine pollution, overexploitation and land-based pollution, with about 27 percent of reefs at high or very high risk (Bryant et al. 1998).
- Of 126 species of marine mammals, 88 are listed on the IUCN Red List of Threatened Species (Marsh et al. 2001).
- It is estimated that overall 50 percent of the world's mangrove forests have been lost (WRI 2001).
- Important seagrass habitats, occupying over 600,000 km<sup>2</sup> are rapidly being destroyed; in South East Asian countries, 20 to 60 percent of seagrass beds have been lost (Fortes 2001).

- Trawling on the seafloor represents a major threat to the biodiversity of coastal ecosystems: it is estimated that the world's trawling grounds could total approximately 20 million km<sup>2</sup>, or nearly two and one-half times the size of Brazil (WRI 2002 after UNDP, UNEP, WB, and WRI). Although the full global extent of deep sea coral ecosystems has not been described as scientists have only explored less than 1% of the seafloor, recent scientific studies as well as fisheries observer data have documented reductions in the quantity and quality of deep sea corals in several regions. For example, it has been estimated that 30-50% of the deep sea coral *Lophelia* reefs in Norway have been damaged by bottom trawling and that fishermen claim that catches are significantly lowered in areas where the reefs are damaged.
- 12 billion tons of ballast water containing, at any one time, 3,000 marine species are shipped around the globe each year, spreading alien and invasive species (GESAMP 2001).

As a tool to address conservation of coastal and marine biodiversity, as well as to contribute to sustainable fisheries, marine and coastal protected areas (MPAs) are being established:

- It is estimated that 1,500 MPAs have been established around the world, covering about 2 million km<sup>2</sup> or 10 percent of the world's territorial sea (GEO-3); however, the number of implemented MPAs is estimated to be much less than the existing one.

## **WSSD and Related Outcomes**

Following the commitments agreed upon through legal and programmatic agreements such as the Convention on Biological Diversity 1992 and its Jakarta Mandate on Coastal and Marine Biodiversity of 1995 and the International Coral Reef Initiative (ICRI) of 1995, objectives and targets concerning the conservation of coastal and marine biodiversity have been recently restated.

In 2002, the World Summit on Sustainable Development (WSSD) called on the international community to implement various targets related to oceans, coasts and islands with specific deadlines, including:

- 2010: the application of the ecosystem approach to sustainable fisheries and the conservation of biodiversity;
- 2012: the establishment of representative MPA networks based on scientific information and consistent with international law; and

- 2015: the maintenance or restoration of depleted fish stocks to levels that can produce the maximum sustainable yield.

In 2003, the 5<sup>th</sup> World Parks Congress (Durban, September 8-17) reinforced these interconnected commitments through Recommendation 5.22 on Building a Global System of Marine and Coastal Protected Area Networks, which partly reiterates other IUCN recommendations adopted in 1988 and 1992. The achievement of the 2012 target for MPA networks will require the continuation or undertaking of a series of actions related to, in particular: the designing, planning, and designation of MPA networks based on scientific information; the devising of appropriate policy and legal frameworks and institutional mechanisms; the building of capacity and the mobilization of adequate financial resources; the coordination of activities at the regional and international level; and the routine monitoring of the implementation and effectiveness of MPA networks in achieving their goals.

## **Discussion at the Paris Global Conference<sup>1</sup>**

The working group on coastal and marine biodiversity and MPAs recognized that:

- MPAs provide a good model for conserving marine biodiversity and developing sustainable fisheries that can be implemented from the poles to the tropics.
- Marine biodiversity goals are different from, but not necessarily incompatible with sustainable fisheries management goals. The success of fisheries management is measured in terms of sustainable catches. Successful biodiversity conservation is measured by long-term maintenance of the diversity and viability of all species and habitats.
- The establishment of MPA networks is a basic tool but not the only one required to conserve marine biodiversity, to improve fisheries and aquaculture management, promote public/stakeholder participation, etc.
- The WSSD targets are reasonable and institutional arrangements exist and are available to move the targets, including ICRI, CBD, SIDS, and others.

Nations have adequate legal frameworks and are proceeding to develop networks of MPAs within their jurisdictions. The UN Convention on the Law of the Sea provides a basis for implementing high seas MPAs. However, there is a need to better utilize and build on existing legal regimes to enable effective implementation and enforcement of the global network of MPAs that includes the high seas.

<sup>1</sup> Material for this section is based on the report of the Conference discussion group on Biodiversity, Marine Protected Areas, and Coral Reefs led by Charles Ehler, U.S. National Oceanic and Atmospheric Administration.

The Working Group on Coastal and Marine Biodiversity and MPAs noted that the following actions are underway to meet the targets and timetable of WSSD concerning coastal and marine biodiversity and MPAs:

- IUCN's development of a global strategy for a global network of MPAs, including MPAs on the high seas.
- The use by nations and regional institutions of tools for addressing biodiversity conservation and MPA network goals, e.g. Regional Seas Program, World Heritage Convention, the GBRMPA's network, and the Mediterranean High Seas MPA in the Ligurian Sea, marine biosphere reserves, China's sea-use zoning system that includes MPAs, Samoa's community based MPA program.
- Advancements in the development of performance indicators such as IOC's ICM indicators, COOP's indicators, IUCN's indicators for MPAs, and Regional Seas' indicators, such as OSPAR's Ecological Quality Objectives.

The working group on coastal and marine biodiversity and MPAs made the following recommendations for:

- *Implementing the WSSD targets and timetables*
  - Countries and organizations should adopt integrated approaches to halt and reverse the decline of coral reef biodiversity through further implementation of ICRI Calls for Action, development of MPAs network, long-term sustainable funding mechanisms.
  - Identify existing transboundary tools and programs for addressing biodiversity conservation and MPAs network goals (e.g. Regional Seas Program, World Heritage Convention, Convention on Migratory Species, and CBD).
  - Promote discussion and use upcoming and appropriate fora and meetings to explore new mechanism and actions to promote biodiversity conservation that complement the emerging role of MPA networks in the context of fisheries management, LMES, sea use planning and zoning, and application of the ecosystem approach in marine environments (e.g., Regional Fisheries Management Organizations).
  - Work with stakeholders, including user groups, industry associations and organizations, to promote the development of environmentally friendly technologies.

Reach consensus on appropriate approaches and particular sets of tools for biodiversity conservation and establishing MPA networks.

- Convene discussions during fora such as: UN Informal Consultative Process on Oceans and Law of the Sea, CBD, and SIDS.

- Promote dialogue between sustainable fisheries and biodiversity communities (e.g., World Fisheries Conference, Deep Seas Fisheries Conference).
- Continue development and implementation of performance indicators in order to quantify global impacts of biodiversity loss.

Regarding the conservation of coral reefs, an expert group meeting at the Global Conference recommended that that countries and organizations adopt integrated approaches to halt and reverse the decline of coral reef ecosystems through: further implementing the ICRI Calls for Action; developing networks of MPAs; and providing adequate financial resources and called for the following actions:

- *Partnerships and Coordination*—Countries and coral reef partners should:
  - Strengthen participation of developing countries, especially SIDS, organisations, NGOs and the civil society in achieving the objectives of ICRI and operational networks;
  - Improve co-operation and co-ordination with relevant MEAs and the NGO community
  - Develop or strengthen national and regional Coral Reef Task Forces to involve all stakeholders to co-ordinate sectoral activities; and
  - Promote and strengthen partnerships, information exchange and participatory stakeholder approaches e.g. via ICRAN, and involvement in integrated partnerships such as the GPA and White Water to Blue Water.
- *Management Tools*—Countries and coral reef partners should:
  - Develop networks of larger MPAs based on scientific assessment to ensure sustainability;
  - Ensure that national legislation facilitates community-based resource management and effective enforcement mechanisms;
  - Encourage governments to participate in co-management of MPAs and coastal areas with local communities, NGOs and the private sector;
  - Provide tools on best management practices and develop appropriate technologies; and
  - Provide MPA case studies and demonstration sites for peer-to-peer exchanges illustrating economic benefits from sustainable fisheries and tourism.
- *Monitoring and Research*—There is a need for improved monitoring and research for better decision making, thus communities and countries are advised to:

- Develop and strengthen capacity in marine science targeting coral reefs and related ecosystems;
- Expand monitoring, information gathering and data management via greater involvement in GCRMN, Reef Check and ReefBase;
- Implement research to prioritise MPA sites that have maximum resilience against global change impacts.

## **Global Forum Next Steps**

The working group on coastal and marine biodiversity and MPAs suggested the following actions for the Global Forum on Oceans, Coasts, and Islands:

- Collate and publish achievements in biodiversity conservation and promote activities on a national and regional level to achieving WSSD targets. Invite to future Global Forums resource economist specialists (including ecological economists) to address economic value of biological diversity as a component of ecosystem function; and to underline the full range of monetary and non-monetary goods and services provided by marine ecosystems.
- Support the coordination of efforts and resources of international organizations, NGOs and governments, specifically related to capacity building, public participation and local community based management in achieving WSSD targets. Global Forum conference secretariat and co-chairs should identify relevant conferences and meetings to promote and move the agenda from this forum, such as:
  - 5<sup>th</sup> UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea
  - 10<sup>th</sup> International Coral Reef Symposium
  - SIDS Experts Meeting and Mauritius conference
  - IUCN World Conservation Congress
  - International MPA Congress, November 2005

## **Developments since the Global Conference**

### **Advances on Biodiversity and Marine Protected Areas at the Convention on Biological Diversity COP 7<sup>2</sup>**

The seventh meeting of the Conference of the Parties (COP) to the Convention on Biological Diversity was held in Kuala Lumpur, Malaysia, from 9 to 20 February 2004. Representatives from 162 countries, as well as representatives from international organizations, indigenous and local com-

munity organizations and non-governmental organizations, attended the meeting. Thirty-six decisions were adopted during this meeting, all of which are available at the following website: <http://www.biodiv.org/decisions/>.

Amongst the important results of COP 7 is decision VII/5 on marine and coastal biological diversity. This decision adopted the elaborated programme of work on marine and coastal biological diversity, which includes new material on marine and coastal protected areas, mariculture, high seas biodiversity, and coral bleaching. In addition, relevant activities from the Plan of Implementation of the World Summit on Sustainable Development have been incorporated into the programme of work.

The topic of marine and coastal protected areas (MCPAs) created substantive discussion and resulted in several pages of decision text, including recommendations on national systems of MCPAs and guidance on how a country might go about developing such a system. Noting the low level of development of MCPAs, the COP agreed that the goal for work related to MCPAs under the Convention should be the establishment and maintenance of MCPAs that are effectively managed, ecologically based and contribute to a global network of MCPAs, building on national and regional systems, and including a range of levels of protection. The COP, in both decision VII/5 on marine and coastal biological diversity and decision VII/28 on protected areas, adopted the target of developing such MCPA systems by the year 2012, echoing the commitment made in the WSSD Plan of Implementation. The COP agreed on the establishment of a national framework of MCPAs consisting, in the context of integrated marine and coastal area management, of areas allowing sustainable uses and areas where extractive uses are excluded.

The COP also underlined that there is an urgent need for international cooperation and action to improve conservation and sustainable use of biodiversity in marine areas beyond the limits of national jurisdiction, including through the establishment of MCPAs consistent with international law and based on scientific information. In this regard, seamounts, hydrothermal vents, cold water corals and other vulnerable ecosystems were identified in paragraph 59 of decision VII/5 as threatened areas in need of rapid action to address those threats in the context of the precautionary approach and the ecosystem approach. As one of the next steps in the process, the Convention's Ad Hoc Open-Ended Working Group on Protected Areas will be considering this issue in 2005.

The CBD work plan on coral bleaching was also updated by COP-7, and is contained in Appendix 1 of the elabo-

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<sup>2</sup> Prepared by Ms. Marjo Vierros, Secretariat of the Convention on Biological Diversity



## Box 8. NGO Support for MCPA Partnerships in SIDS

Functional marine and coastal protected areas (MCPAs) in small island developing States (SIDS) are critically important for the conservation and sustainable use of marine biodiversity and for the provision of essential goods and services to support local livelihoods. As part of the 10-year review of the Barbados Programme of Action (BPoA) for the Sustainable Development of Small Island Developing States, a number of consultations have been undertaken with SIDS to explore collaboration on the new global agenda for marine conservation. These discussions determined the value and substance of partnerships that would bring together the priorities set by SIDS in terms of MCPA establishment and strengthening and the commitment made by the consortium of NGOs. The consultations revealed strong support for a broad *SIDS MCPA Partnership* composed of national and local governments, international and local NGOs, and donor agencies that would:

1. Contribute to the global target adopted by CBD and endorsed by WSSD of a significant reduction in the rate of biodiversity loss by 2010;
2. Support SIDS to build comprehensive, effectively managed and ecologically representative MCPA networks by 2012 that ensure sustainable livelihoods;
3. Be a significant outcome of the International Meeting on SIDS (Mauritius, Jan 2005), and contribute directly to the further implementation of the BPoA;
4. Increase financial and technical assistance at the national and local levels; and,
5. Leverage the NGO commitment<sup>1</sup> made at CBD COP7.

Based on the lessons learned over the last 10 years, SIDS representatives have identified the following priorities for such a partnership:

- Focus on establishing and improving community-based MCPAs and sustainable livelihoods
- Enhance baseline data and information
- Improve linkages with existing commitments and Multilateral Environment Agreements
- Build information and awareness of MCPA benefits at national and community levels and within the private sector
- Strengthen capacity and participatory processes
- Bring science and traditional knowledge together to improve management effectiveness
- Implement sustainable financing mechanisms at the national and community levels

### Operationalising the SIDS MCPA partnerships

To achieve these goals, MCPA partnerships in SIDS would aim to provide the broadest possible base for collaboration. This would include, for example, continuing and boosting on-going work in various countries with governments, local organisations and existing networks, and to **mobilize broad stakeholder agreement around national MCPA strategies**. Such a strategy could focus on natural resource management frameworks to ensure the integrity of the full range of ecosystems, with MCPA networks a key tool for achieving this.

In a sustainable development context, **coastal and inland fisheries represent a critical management challenge** for SIDS, whereby provision of co-management regimes or recognition and reinstatement of traditional management measures should be incorporated within management systems that include networks of MCPAs. The partnership could be mobilized to strengthen the related policies emerging from the CBD, such as the forthcoming **Programme of Work on Island Biodiversity**, and identify sustainable means for implementation on the ground.

An MCPA partnership could also be useful as a platform from which to develop regional strategies, such as for **trans-boundary ecosystems and for shared stocks and migratory species**. In the large areas of ocean dominated by SIDS and high seas, regional strategies and actions would ensure the persistence of such stocks and species, including provision for regional management frameworks as part of regional networks of MCPAs. Only through effective management of stocks, will countries ensure equitable benefits to their populations and sustainable yields into the future.

Climate change impacts is yet another focal area for SIDS which can be addressed by an MCPA partnership that ensures incorporation of **management measures to build resilience in the face of climate change** into MCPA networks and anticipation of sea level rise as part of sustainable development strategies, and presses for further international action and engagement.

Prepared by Mr. Gerald Miles, The Nature Conservancy



## **Summary and Outstanding Issues**

- Tangible steps in operationalizing networks of MPAs have been taken, in the 7<sup>th</sup> meeting of the Conference of Parties of the Convention on Biological Diversity, which has specified guidance for national frameworks of MPAs in the context of integrated coastal and marine management
- The CBD, among others, has emphasized the urgency of also developing MPAs in marine areas beyond national jurisdiction
- Mobilization of people and resources to achieve the WSSD goal of networks of MPAs by 2012 is beginning in some places, e.g., in the Pacific Islands through an NGO coalition
- Some unmet needs in this area:
  - operationalizing the notion of “networks of MPAs” in the context of specific marine regions
  - setting up of sub-targets or intermediate goals to be reached prior to 2012

# MOBILIZING RESOURCES TOWARDS THE ACHIEVEMENT OF WSSD TARGETS ON OCEANS, COASTS, AND SIDS

## Introduction

Mobilization of resources covers increasing the flow of targeted financing to implement WSSD goals, better utilization of human resources, increasing technical capacity, establishing and maintaining new partnerships, and creating an overall enabling environment for development. In this report, discussions from the Global Conference and subsequent developments from November 2003 to May 2004 are reported on WSSD informal partnership initiatives, capacity building, NGO and foundation perspectives, targeting development assistance and options for a global oceans fund, private sector perspectives, and generating and maintaining public support for oceans, coasts, and islands.

## WSSD Informal Partnership Initiatives<sup>1</sup>

### The Issue

Twenty-six (26) partnerships on oceans and coasts and 17 partnerships on SIDS were launched at the WSSD. Only a little over one year has elapsed since the WSSD and advancement of most partnerships is therefore limited to preparatory activities. However, some main obstacles involved in the development and implementation of partnerships on oceans, coasts, and islands are emerging associated with their composition, sustainability, and focus:

- Government involvement and commitment is limited
- Few partnerships include the private sector
- Funding allocations for ocean, coast and island issues are often not properly targeted or are duplicative or insufficient
- Certain issue areas are barely addressed by partnerships (e.g., fisheries)
- Certain regions are less represented in partnerships, possibly due to limited information about the opportunities offered by this instrument
- Limited regional and thematic coordination might lead to duplication or dispersion of efforts, which could be addressed through coordination platforms at the regional and national level
- Linkages with different sectors (e.g., water, transportation, energy) are rarely addressed and potential lessons from other experiences remain unutilized

## Commentary on WSSD Targets and Timetable

While no general targets and timetables have been and can be set for partnerships, which are conceived as multi-stakeholder voluntary initiatives, it is important that they generate and disseminate results in their specific contributions to the advancement of Agenda 21 and the Johannesburg Plan of Implementation (JPOI). In this perspective, the two-year UN reporting requirement could be supplemented by accountability frameworks at the regional level, tied to the major WSSD targets and timetables.

## Discussion at the 2003 Global Conference

### Lessons learned

Although partnerships are still in their early stage of implementation, valuable lessons can be learned. In the Pacific, umbrella partnerships such as the Pacific Island Oceans Initiative and multi-agency cooperation provided platforms for regional coordination and involvement of a wide range of stakeholders as well as inputs to the development of specific regional policies, forums, and implementation action plans.

In Southeast Asia, wide participation of stakeholders in the Sustainable Development in the Seas of East Asia initiative has strengthened partnership development and mobilization of resources from both the public and private sector. High-level endorsement through the direct participation of municipal and national authorities has also strengthened regional collaboration, with the signature of an agreement among 12 countries and 60 international organizations for the development of activities related to land-based pollution, biodiversity, and maritime transportation.

In the Caribbean, the White Water to Blue Water initiative is stimulating regional cooperation through dialogue among countries at a high political level using the political and legal framework of the Caribbean Environment Programme (CEP) and the Cartagena Convention, one of the UNEP Regional Seas Programmes. The identification of regional priorities is the direct responsibility of country teams and is leading to the development of cross-sectoral partnerships and management strategies for nautical and coastal tourism, enhancement of regional fisheries, and monitoring and conservation of reefs and other habitats also in implementation of the recommendations of the 5<sup>th</sup> World Parks Congress.

<sup>1</sup> This section highlights the report of the pre-Conference meeting on Sustainable Partnership Initiatives led by Thomas Laughlin, U.S. National Oceanic and Atmospheric Administration.

Networking of partnerships and practitioners is proving vital to the sharing of experience and lessons learned, particularly on a regional basis. Networks of ICM experts, for example, could provide further support to existing regional partnerships. Positive linkages could be established also with global and regional and subregional observation and monitoring and assessment programs such as the coastal module of GOOS.

IMO has joined forces with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) to assist developing countries to reduce the transfer of invasive aquatic species by establishing the Global Ballast Water Management Programme (GloBallast). GloBallast has achieved an exemplary level of awareness raising nationally, regionally and globally and enjoys a strong commitment from the Pilot Countries and impressive participation and support from the various stakeholders involved (Box 9) (Sekimizu 2003).

Participation in partnership fairs and forums can provide inputs on how to establish and build partnerships and to facilitate matchmaking, as well as lessons on how to secure resources for these initiatives in the future. This is also valuable for bringing together different actors—governments, NGOs, IGOs, and the private sector—as well as for enhancing cross-sectoral communication and collaboration.

As for the most relevant lessons of broad application: (a) the involvement of high-level political actors is fundamental to the identification of priorities and the mobilization of funding support for the partnerships; (b) multi-agency participation is helping improve institutional coordination at both the national and regional levels; and (c) partnerships can provide an important opportunity to introduce the application of the ecosystem approach to meet the 2010 target recommended by WSSD.

#### ***Principal entities involved in advancing the agenda***

As multi-stakeholder initiatives, partnerships involve a variety of actors and their voluntary character should be maintained. However, some of the major players, such as finance ministers and the private sector, are not sufficiently involved in existing initiatives. Their involvement would help identify key funding activities and allocate related resources for strengthening existing partnerships and for developing new initiatives.

Existing funding could also be optimized through better targeting of WSSD commitments. Based on successful experiences in partnership implementation, additional resources

could be mobilized, also through better linkages with the operations of international donors (e.g., World Bank, GEF, or IMF). The Coral Reef initiative, for example, started with limited allocated resources but was able to mobilize resources also by involving the tourism sector.

#### ***Principal elements of a strategy for advancing partnership initiatives***

A strategy for the enhancement and development of partnerships on oceans, coasts and islands could be based on the development of a “mechanism for partnership facilitation” led by the Global Forum. The mechanism could have four elements:

- A list of ongoing and potential partnerships, identifying lead organizations, other partners, goals, contact information, and a written partnership description in sufficient detail to determine the relevance of the partnership to the reader's interest.
- A description of “lessons learned” (as supplied by Global Forum participants on the basis of their experience in partnership implementation).
- A description of potential sources of resources to support partnerships.
- A description of partnerships activities organized on a regional and subregional basis aimed at practitioners.

The Global Forum should draw the attention on this new effort of appropriate UN agencies associated with implementation of the JPoI. It should be noted that this new function is not cost-free and that resources would need to be identified for this effort.

#### ***Global Forum Next Steps***

As a first next step, the Global Forum could identify lessons learned from and potentials for synergies among partnerships, including communicating to a wider audience the opportunities offered by engaging in partnership initiatives, sharing of experiences among regions (e.g., from Pacific to the Indian Ocean) or countries facing similar issues (e.g., SIDS), and promoting the development of regional partnerships on fisheries.

In terms of priorities, partnerships linking freshwater and coastal and marine waters (e.g., H2O and WW2BW) and based on the ecosystem approach should be promoted and their approach experimented in other regions (e.g., exchange of experience between the Pacific and Indian Ocean).

#### ***Developments Since the 2003 Global Conference***

Several developments have taken place since the 2003 Global Conference with regard to the Sustainable Development Partnership initiatives: 1) an International Forum on Partner-

## Box 9. Sustainable Development Partnerships to Prevent Marine Pollution

The International Maritime Organization (IMO) is leading two Sustainable Development initiatives to prevent marine pollution:

### **1. GloBallast Project**

IMO has joined forces with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) to assist developing countries to reduce the transfer of invasive aquatic species by establishing the Global Ballast Water Management Programme (GloBallast). This co-operative initiative is implemented in six initial demonstration sites around the world and includes: education and awareness; ballast water risk assessment; training and capacity building; legal assistance on conceptual reforms; and regional cooperation.

GloBallast has achieved an exemplary level of awareness raising nationally, regionally and globally and enjoys a strong commitment from the Pilot Countries and impressive participation and support from the various stakeholders involved. The programme has created a solid foundation of support for the anticipated Ballast Water Convention and has initiated many activities, which will stand the participating countries in good stead when the Convention is adopted. GloBallast represents a unique and model example of GEF assistance being used during the developing stages of an international instrument directly related to GEF aims and objectives.

Due to the transboundary character of the ballast water issue, IMO firmly believes that the successful implementation of the new Convention significantly depends on countries adopting proactive strategies co-ordinated at regional level. This would prevent unfair competition among ports of a region and adverse collateral effects derived from unilateral actions. Aiming to protect the investment to-date by GEF and to ensure that this investment is further leveraged, IMO is currently exploring possibilities to continue the unprecedented momentum of concerted international action precipitated during GloBallast pilot phase. A proposal for partnership towards sustainable continuation of the programme was submitted by IMO on the occasion of the WSSD in Johannesburg last year and included among the so-called Type II outcomes of the Summit. Currently IMO together with UNDP are developing a concept for a new phase named GloBallast Partnerships. This phase will be a logical continuation of the pilot programme, building on its excellent achievements and focusing on replication of best practices and lessons learned at regional level. The ultimate goal of the new phase will be to induce conceptual reforms embedded in national policies to minimize the risk posed by invasive species in ships' ballast water. GloBallast Partnerships will seek to adopt a holistic and integrated approach to aquatic invasive species by liaising, coordinating and collaborating with other international groups working on this issue. IMO is particularly pleased to acknowledge the interest expressed by IUCN, UNEP and a number of regional programmes in becoming partners for the implementation of the new phase.

### **2. Marine Electronic Highway Project**

The Marine Electronic Highway in the Straits of Malacca and Singapore represents another new initiative of IMO during the WSSD and is a partnership among the International Association of Independent Tanker Owners (INTERTANKO), International Hydrographic Organization (IHO) and IMO aiming to use innovative maritime and environment management technological tools to create, network and maintain a marine information infrastructure for enhanced maritime services, navigational safety standards, integrated marine environment protection and sustainable development of coastal and marine resources.

In addition to the establishment of infrastructure, networking and institutional arrangements, this initiative aims to demonstrate the economic, financial and social benefits of the MEH system by promoting public private partnerships with the industry and relevant stakeholders. In the case of the shipping sector and the maritime community in general, their participation in this initiative is crucial in demonstrating the effectiveness, viability and value-added contribution of the MEH system to maritime safety and marine environment protection. The various stakeholders envisaged for this project include: national and local governments in the region, shipping industry and maritime communities, technology providers and users.

The establishment of an effective and financially viable pilot MEH system, which is one of the major outputs of this demonstration project, will pave the way towards a full-scale MEH system covering the whole Straits of Malacca and Singapore. The MEH will integrate high technology navigational aids with chemical and oil spill modelling facilities and transboundary marine pollution prevention, response and management leading to improved monitoring and better preparedness in case of accidents.

The overall enhancement of the safety of navigation throughout the region will encourage regional cooperation and provide the necessary impetus for the ratification of relevant international conventions, protocols and agreements on marine environment protection, maritime safety and sustainable development of the coastal and marine resources. The preparation of the project is well advanced and it will be considered for approval by the World Bank Board at the beginning of 2004 with a view towards commencement of implementation in May 2004.

For further information on these two initiatives, please contact Mr. Koji Sekimizu, Marine Environment Division, IMO (ksekimizu@imo.org).

**Box 10**  
**International Forum on Partnerships for Sustainable Development**  
**March 4-6, 2004**  
**Rome, Italy**

The International Forum on Partnerships for Sustainable Development was convened in Rome, Italy on March 4-6, 2004. The Italian Ministry for the Environment and Territory organized the International Forum, in cooperation with the United Nations Department of Economic and Social Affairs. Presided over by Italy's Minister for the Environment and Territory, H.E. Mr. Altero Matteoli, as Forum Chair, along with Mr. Corrado Clini, Director General of the Ministry for the Environment and Territory, the International Forum drew 700 representatives from governments, intergovernmental organizations, civil society, and private sector who are involved or interested in partnership initiatives.

The meeting aimed to generate dialogue on ways to enhance the contribution of partnerships towards the implementation of sustainable development goals and objectives, particularly those related to the Johannesburg Plan of Implementation, adopted at the World Summit on Sustainable Development (WSSD), and other international agreements related to sustainable development. More than 200 partnerships were launched at the WSSD, and more continue to be initiated. These partnerships range from consortia to networks, from local to international, from formal arrangements to informal structures. Some initiatives carry out advocacy and mobilization of public opinion through knowledge generation and providing access to information. Others develop tools and technological solutions to specific natural resource problems. Most importantly, partnerships represent a way for governments, civil society and the private sector to pool their energy and other resources in addressing difficult economic, social and environmental problems.

The International Forum conducted discussions of partnerships for sustainable development along the following themes:

a) Partnerships for sustainable development as model of technology transfer and use of innovative financial mechanisms; b) The added value of partnerships in the global strategy of sustainable development: equal opportunities, equal responsibilities; c) Improving the credibility of partnerships: transparency and accountability; d) Water and sanitation, and human settlements; e) Agriculture, rural development, and desertification; f) Air quality, climate change, and transport; g) Energy efficiency and renewable energy; h) Forests, biodiversity, and mountains; and i) Oceans and seas, marine resources, small island developing states, and disaster management.

The Forum discussions centered around three major questions: 1) Are partnerships recognized as an essential tool towards achieving sustainable development? 2) What are the elements that make a partnership successful? 3) How can we foster the development of new successful partnerships in the future?

Partnership initiatives can add value to sustainable development efforts by increasing the involvement of stakeholders at all levels, by increasing participation of sectoral experts and by their capacity to address goals such as poverty reduction, environmental protection and social development using a synergistic approach. Although partnership initiatives do not substitute for multilateral processes, they nevertheless are an important component of the international dialogue on sustainable development.

Partnerships should have the following characteristics to be potentially successful:

1) Equal participation among partners with clearly defined roles and expectation of benefits; 2) Realistic goals and a good system for monitoring and reporting; 3) Increased role and involvement of the private sector; 4) Appropriate local institutional framework  
Self-financing; 5) Effectiveness, accountability and local ownership; 6) In compliance with Multilateral Environmental Agreements; and 7) With long term feasible and strategic plans.

In order to foster the development of new successful partnerships, the International Forum put forward the following among its recommendations: 1) Discussion at the Commission on Sustainable Development (CSD) for a recommendation to promote successful partnership initiatives, evaluate how to proceed in the future, and how to use them to contribute to the implementation of the Johannesburg Plan of Implementation and the achievement of the Millennium Development Goals. The CSD Partnerships Database can be used as a reference tool in this respect, to share good practices and information on partnerships at a global level; 2) A system of "Certification for Sustainable Development", as a means of recognizing accountability, and encouraging successful replicability in other geographical areas; 3) Local authority involvement in the partnerships; and 4) Good communication and timely sharing of information

The Chairman's Summary of the International Forum outcomes was reported during the 12th Session of the Commission on Sustainable Development in New York, 14-30 April 2004, UN Headquarters, and may be accessed from the International Forum website at [http://www.minambiente.it/Sito/settori\\_azione/pia/docs/forum\\_chairman\\_summary.pdf](http://www.minambiente.it/Sito/settori_azione/pia/docs/forum_chairman_summary.pdf)



## Box 11

### White Water to Blue Water Partnership

The “White Water to Blue Water” Partnership (WW2BW) is an international alliance of governments, international organizations, financial institutions, non-governmental organizations (NGOs), universities, and corporations. WW2BW aims to stimulate partnerships that will promote integrated watershed and marine ecosystem-based management. The objectives of White Water to Blue Water include:

- *Strengthening national and regional institutional capacity* to implement cross-sectoral watershed and marine ecosystem management.
- *Facilitating closer cooperation and good governance* within and among nations, regional agencies, and civil society in coastal and marine resource management, water management, health, environmental protection, agriculture, and urban planning.
- *Engaging business partners* in the major global growth sectors, such as tourism and shipping, to promote best business and environment practices, and to support regional activities in watershed and marine coastal management.

The WW2BW Partnership Conference was held in Miami, Florida on March 22-26, 2004, attended by over 700 people from 36 countries. The Conference was divided into overlapping thematic areas including, Integrated Watershed Management, Marine Ecosystem-based Management, Environmentally Sound Marine Transportation, and Sustainable Tourism, with several cross-cutting themes, such as Education and Youth, Marine Science, and Adaptation to Climate Change.

The Conference was designed to create as many partnership opportunities as possible. Plenary sessions were short; most of the Conference was organized into small breakout sessions; and evening opportunities were set aside for country teams to meet and compare notes. The first plenary session of each day was set aside for announcements of new partnerships, and two evenings were set aside for informal matchmaking socials and for those who wished to gather to discuss specific topics. The Conference was a large success with over 70 partnerships created or further expanded.

The WW2BW Steering Committee was tasked to follow-up on the Conference outcomes by encouraging partners to implement identified partnerships and incipient partnerships to develop into full-fledged initiatives, by exploring further partnership opportunities for development, and by encouraging organizations to adapt the partnership meeting organization and approach used in the Miami Conference at the national level.

For further information on the WW2BW partnership, please contact Thomas Laughlin, U.S. National Oceanic and Atmospheric Administration (Tom.Laughlin@noaa.gov) or Richard Wilbur, U.S. Department of State (WilburRM2@state.gov), or visit [www.ww2bw.org](http://www.ww2bw.org).

ships for Sustainable Development was held in Rome in March 2004 to bring together all the WSSD partnerships and to exchange lessons and experiences (see Box 9); 2) the White Water to Blue Water Partnership conference was also held in March 2004 (see Box 11) and was successful in spurring the creation of a number of other partnerships; 3) the Hilltops to Oceans (H2O) Conference was held in May 2004, bringing together information and commitments for advancement of the implementation of the GPA (reported on in the GPA section).

## Capacity Building<sup>2</sup>

### The Issue

Limitations in capacity among many countries, particularly in developing countries and small island developing States, con-

strain the implementation of UNCLOS, related conventions, chapter 17 of Agenda 21 and related programmes. The UNCLOS does not contain any provision for any fund or assistance for its implementation. Agenda 21, chapter 17 includes suggestions about capacity-building as a means of implementing the programme of action on oceans and seas, for each of the seven identified programme areas (UN 2002). Both financial assistance and in-kind assistance can be useful for implementing capacity-building measures. Essentially such measures broaden and deepen the human resource base, strengthen the institutional structure and the institutions themselves, and expand the physical resource base. A wide range of measures can be relevant which involve, inter alia, executing technical cooperation projects, including those related to transfer of technology and know-how; undertaking educational, training, research and public awareness programmes and strengthening institutions capable of carrying out such

<sup>2</sup> This section highlights the report of the Conference discussion group on Capacity Building, co-chaired by Dr. Indumathie Hewawasam (World Bank) and Dr. François Baitel (International Ocean Institute).

programmes; exchange of data, information and experiences; creating and strengthening physical as well as institutional infrastructure; and provision and mobilization of raw materials, equipment, facilities and vessels (UN 2002).

Measures of national agencies and institutions as well as those of regional and international organizations contribute significantly to capacity-building, focusing on oceans, coastal and small island issues. While there are significant successes, there are key obstacles that prevented scaling up, coordination, and targeting of these initiatives. Main obstacles noted include:

- Short term nature
- Fragmented and uncoordinated
- Not in keeping with local, national or regional priorities
- Not context specific
- Not addressing all of the needs at all levels
- Not supported through long-term targeted financing

A strategy needed to be developed to identify key constraints and options in a systematic manner.

### **WSSD and Related Outcomes**

The Working Group on Capacity Building at the Global Conference on Oceans and Coasts at Rio+10 (Paris, 2001) had recommended the following key elements of capacity building:

- a) Human resource development through education and training. This should target increased knowledge as well as skills development;
- b) Institutional and infrastructure development that meets the human resource development needs;
- c) Development of a favorable enabling policy environment. Human resource development support should be related to national goals to ensure continuity of support once external support ceases; and
- d) Capacity building programs based on actual needs. The needs should be determined through careful needs assessments to ensure that the mode and methods of human resource development are appropriate to the level of education and training that exist. The programs should involve local institutions and be sustained over time.

These elements are included in the Johannesburg Plan of Implementation, which provides for human and institutional capacity-building in the areas of fisheries, biodiversity, protection of the marine environment from land-based activities, and Global Marine Assessment, at the national, regional,

subregional, and at the international level, with particular emphasis on developing countries and small island developing States.

### **Discussion at the 2003 Global Conference**

Capacity building for ocean and coastal initiatives was recognized as a cross-cutting issue, and as such addressed under different related programs. It was agreed that there was a need to identify gaps and set priorities.

The key goals noted were:

- Need for a critical mass of integrated coastal and ocean managers and professionals,
- More ICM capacity building at the national level
- Need to move from capacity building to capacity utilization and enhancement.

In follow-up to the general discussion, small working groups at the conference assessed the above goals in detail and identified possible future actions. Subsequently, a capacity-building strategy to promote sustainable ocean and coastal governance was outlined as follows.

### **Towards a strategy for enhancing capacity building**

It was agreed that capacity building should consist of several basic components depending on actual needs including:

- Human resource development through education and training. This should target increased knowledge as well as skills development.
- Institutional and infrastructure development that meets human resource development needs
- Development of a favorable policy environment. Support should be related to and integrated into national goals to ensure continuity of support once external assistance ceases.
- Strengthening of governance skills including development of legislation, implementation, enforcement, compliance, monitoring and evaluation; and
- Building civil society skills in participation, negotiation and networking.

#### **1) Principal elements of the strategy**

A. Undertake an assessment of existing capacity building programs to identify whether the programs are:

- Achieving their stated goals and if not, assess the key reasons and gaps
- Addressing the current and evolving issues in oceans, coasts, and islands
- Resulting in improved governance for ocean, coasts, and islands at regional, national and local levels
- Also aimed at capacity utilization
- Contextually relevant

- Coordinated, and if not, to identify a mechanism for addressing the problem
- B. Formulate an action plan to assess the demand and also mobilize demand
- Determine and demonstrate economic value and social and political relevance of ocean and coastal management
  - Identify partnerships for building a broader constituency for ocean and coastal management within the donor community, governments and civil society
- C. Define modalities to make current capacity building programs more relevant to end-users and sustainable
- Identify mechanisms for capacity utilization and enhancement
  - Define activities to enhance existing efforts and help with implementing good practice
  - Develop a program to advance the knowledge and experience to civil society
  - Identify current financial and technical resources and gaps
  - Contextualize academic programs to build a critical mass of in-country ICM professionals and practitioners
  - Build broad-based partnerships to urgently mobilize technical and financial resources to achieve the outcomes above
  - Tie training efforts to current, real needs in the locality/nation/region
  - Scale efforts and resources to where needs are greatest
  - Identify and promote indigenous knowledge
  - Transfer knowledge and experience - development of networks and knowledge sharing
  - Promote more hands-on training, based on mentoring and real life experience
  - Emphasize continuity, long-term needs and financing for capacity building programs

## 2) Regional connections or applications

Possible role of the intergovernmental organizations should be considered in terms of providing resources and technical assistance for capacity development and utilization. One idea might be to develop regional clearing houses and relevant generic training modules/curricula for local adaptation. Information could be made available on a web-based forum to train trainers.

## 3) Analyses that need to be done

Needs assessments based on existing knowledge and training context and political reality. Attempt some kind of assessment of the costs of achieving the WSSD targets.

## 4) Possible role of the Global Forum on Oceans, Coasts, and Islands

The Global Forum could champion the development of the strategy, coordinate partnerships and mobilize financial resources for implementation on a regional/national basis. The Global Forum could also facilitate the development of regional clearing houses and/or training modules.

## 5) Funding required and sources

The scope and financial commitment needed to develop such strategies on a global or even regional scale is expected to be determined as part of the proposed strategy.

## 6) Next steps, including where to take the issue next

- Agree on who should lead, coordinate and finance the development of the strategy
- Prepare a proposal for carrying out this task, including a cost estimate and timeline

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## NGOs, Foundations, and Private Sector Perspectives<sup>3</sup>

Over the last two decades, especially following UNCED and Agenda 21, we have seen major changes in the roles that NGOs and foundations play in development initiatives, roles that have been increasingly essential to project/program success. At the WSSD, NGOs, foundations, and the private sector were important players in informal partnerships, now called sustainable partnership initiatives. This section covers the discussion on NGO, foundation, and private sector perspectives on WSSD implementation at the Global Conference.

### NGO and Foundation Perspectives

In the past two decades, NGOs and foundations have been playing a major role in advocating and implementing policy changes in marine conservation at local, national, and global levels. Their contributions take the form of information gathering and dissemination; capacity building, promotion and facilitation of civil society participation; development and implementation of new policies and programs; and mobilization of existing and additional sources of funding (Bailet 2003).

Today, while continuing to function in the same way, NGOs and foundations are working increasingly in partnerships

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<sup>3</sup> This section highlights the discussion at the Conference session on NGO and Foundation Perspectives on WSSD Implementation led by Dr. Lynne Hale, the Nature Conservancy, and at the Conference session on Private Sector Perspectives on WSSD Implementation and on the Global Oceans Agenda led by Mr. Paul Holthus, Marine Aquarium Council, USA.

among each other and with government organizations, civil society/local organizations, the private sector, and intergovernmental organizations, in addressing oceans, coastal and islands issues. At the Global Conference, NGO presentations emphasized the following common themes in their collaborative initiatives (Bailet 2003; Bryant 2003; Hatchwell 2003; Lundin 2003; Terashima 2003):

1. WSSD targets:

- Promoting integrated, multidisciplinary and multisectoral coastal and ocean management at the national level
- Application of ecosystem approach to management by 2010
- Restoration of fisheries where possible to maximum sustainable yields by 2015
- Establishment of a representative network of MPAs by 2012

2. How to deliver the targets:

- Building political will
- Working with partners
- Demonstrating good practice
- Implementing on the ground projects
- Contributing to scientific debate

3. Specific strategies focused on two WSSD targets

*Establishment of a representative network of MPAs by 2012:*

- Establishing networks of marine protected areas
- Building networks
- High seas MPAs
- Improving MPA management effectiveness
- Working with industry, governments, and communities to address threats
- Preventing illegal activities in MPAs

*Restoring fisheries to maximum sustainable yields by 2015:*

- Providing market incentives
- Eliminating subsidies
- Forging equitable access agreements
- Operationalizing ecosystem-based management
- Eliminating IUU (Illegal, Unregulated & Unreported) fishing

4. Outstanding issues:

- Providing sustainable financing for MPAs
- Developing a legal framework and implementation of high seas MPAs
- Developing a global baseline of current MPA coverage
- Building political will to implement MPAs and sustainable fisheries
- Implementing an effective monitoring and evaluation system for MPAs
- Developing new approaches to mitigate IUU fishing

## **Private Sector Perspectives**

“(But) Governments cannot do it alone. (...) Without the private sector, sustainable development will remain only a distant dream. We are not asking corporations to do something different from their normal business: we are asking them to do their normal business differently.” U.N. Secretary General Kofi Annan, World Summit on Sustainable Development, Johannesburg, 2002

This statement is fully applicable to marine and coastal related industries, such as coastal tourism, aquarium fish trade, fisheries, and dive tourism industries which are factoring in environmental considerations in the way they do business, as described in the following summary of private sector interventions in the Global Conference.

### ***Aquarium Fish Trade***

The initiative of the U.S. Marine Aquarium Council “International Certification for Quality and Sustainability of Marine Ornamentals” from the reefs to the retail stores involves the transformation of the marine aquarium trade. This initiative entails making sure that aquarium fish are captured in a gentle manner to protect the coral reefs on which the industry depends, along with a number of other stakeholders, such as sustenance fishers dependent on the coral reefs for their livelihoods (Holthus 2003).

### ***Fisheries***

Unilever’s “Fish Sustainability Initiative” is a partnership initiative between Unilever and WWF. This initiative is motivated by Unilever’s desire to 1) secure the fisheries resource base in the long term; 2) meet their consumers’ expectations on the quality of the fish they sell; and 3) earn the licence to operate the business. In 1996, Unilever pledged to obtain all their fish from sustainable sources as defined by the FAO Code of Conduct for Responsible Fisheries, by 2005. By the end of 2002, more than a third of the fish they sell came from sustainable fisheries (Peters 2003).

### ***Coastal Tourism***

Three ways of steering private sector towards a more sustainable approach to tourism investments and operations have been put forward by the World Tourism Organization. First is the establishment of fiscal or financial incentives that help direct investments towards the type of tourism projects that are compatible with the agreed coastal management plan and that are within the carrying capacity. Second is the reinforcement of environmental legislation and regulations applicable to large private tourism development projects, and/or the reinforcement of supervision of voluntary, self-regulatory schemes, e.g., the Blue Flag program. Third is the designation of marine protected areas (Yunis 2003).



Recreational diving provides a wealth of opportunities to promote sustainable practices in coastal tourism. One prime example is PADI's (Professional Association of Diving Instructors) initiative called "Project AWARE", which aims to contribute to the conservation of the underwater environment through education, advocacy, and action (Pleydell 2003).

## Targeting Development Assistance<sup>4</sup>

### The Issue

The increasing poverty in 54 countries and the decrease in Official Development Assistance from 1990-2001, indicate the need for increased targetting of ODA to meet internationally accepted goals. Within Aid Agencies there appears to be a more serious appreciation of the value of these goals and targets, like the ones coming out of the WSSD for oceans, coasts and small island developing States. These are not nominal goals and targets. They are now at the heart of many Aid Agencies and their staff.

Global funds related to oceans, coasts, and islands are typically tied to specific global conventions (such as biodiversity and climate change), and do not centrally address sustainable development of these areas. Other global funds related to oceans, coasts, and islands, tend to be of a sectoral nature (e.g., related to fisheries, pollution, etc.) and are not aimed at addressing, in a comprehensive way, the sustainable development of oceans, coasts, and SIDS.

There is no global (or regional fund) for advancing the implementation of integrated ocean and coastal management processes. There are no global funds readily available for implementation of important "soft law" international agreements related to oceans, coasts, and islands, such as those emanating from the 2002 World Summit on Sustainable Development. The implementation of many of the WSSD commitments and targets, will require the devising of innovative financial instruments complementary to those already available. While SIDS countries have responsibilities over vast areas of the world's oceans, they do not receive adequate funding for sustainable development of their oceans and coasts.

Conference participants considered the possible need of establishing a global oceans fund (including both public and private funds) for the following purposes:

—generally, achievement of the sustainable development of oceans, coasts, and islands (e.g., addressing simultaneously environment and development aspects in these areas), including the top priority of eradicating poverty in coastal areas and in SIDS.

—have the capacity for responding to important "soft law" international agreements (such as WSSD).

—foster cross-sectoral analyses and dialogue among all parts of the oceans, coasts, and islands communities on important global issues affecting oceans, coasts, and SIDS

—act as an observatory analyzing, interpreting, and fostering action on important trends and issues affecting oceans, coasts, and islands.

—to respond to global, regional or national ecological catastrophes when there is no alternative or adequate source of financing

—fund activities at the global level (and where appropriate at regional and national levels) to foster the purposes noted above.

### Discussion at the 2003 Global Conference

#### *Targeting Development Assistance to Meet WSSD Goals*

International finance institutions, bilateral donor agencies, international organizations, and governments of the North and South all must realign their policies and programs if progress in WSSD is to be made. Since 1992, the Global Environment Facility (GEF) has supported countries to address Chapter 17 of Agenda 21. Many thematic actions GEF has supported on a pilot basis have been incorporated into the Johannesburg Plan of Implementation (JPOI), and in early 2003, GEF adjusted its strategic priorities to align with WSSD goals. GEF has been providing support for countries in the biodiversity and international waters focal areas related to oceans, coasts and SIDS since 1992. GEF projects implement interventions at different scales as part of its ecosystem-based approach involving Large Marine Ecosystems (LMEs) that address WSSD mandates. The LME approach intends to facilitate integration across sectors and develop adaptive management frameworks with site-specific targets. Since 1991, GEF has approved 46 projects in its international waters focal area for \$440 million GEF and \$1.38 billion in total cost, as well as 58 projects in the biodiversity area for \$330 million from GEF and \$1.22 billion in total cost, for some 118 countries supporting

<sup>4</sup> This section highlights the discussion at the Conference session on Targeting Development Assistance to Meet WSSD goals led by Mr. Phil Reynolds, and at the Conference session on Options for a Global Oceans fund led by Dr. Biliana Cicin-Sain.



marine ecosystem interventions described in paragraphs 30-34 and paragraph 58 of the JPoI. There are other additional GEF support in the pipeline along with reforms needed in both northern as well as developing countries in order to reverse marine ecosystem decline (Duda 2003).

The World Bank (WB) has an on-going and proposed fisheries program based on its mandate of poverty reduction, economic growth, and sustainability. The WB fisheries program was also designed in response to the imminent collapse of global fisheries systems, increasing awareness in the international community and at the World Bank about this situation, and the WSSD call for the global community to act speedily to reverse declines. The World Bank has ongoing lending activities in this area; a Trust Fund for sustainable Fisheries Development is operational; and a partnership among the GEF, WWF, FAO, and the World Bank is being developed (LeGall 2003).

Bilateral donors match the standard, if not the scale, in which international aid agencies follow in the implementation of development assistance projects. Although bilateral and multilateral donors follow a different approach to extending development assistance, they are similar in the belief that using inter-agency mechanisms in addressing ocean, coastal and island issues is the preferred strategy (Blom 2003).

The Aid Activity database of the Development Assistance Committee (DAC) of the OECD contains information on financial flows of official development assistance. It provides a set of basic data that can be used to analyse where aid goes, what purposes it serves and what policies it supports on a comparable basis for all DAC members. The data is compiled according to internationally agreed definitions and classifications. The Aid Activity database aims to cover the totality of all Aid flows in all DAC members which limits the information covered to basic financial information and only limited project descriptions (Benn 2003).

Conference participants noted the need to carry out analyses of flows of development assistance related to oceans, coasts, and SIDS. At present, it is difficult to put together an overall picture on development assistance on oceans, coasts, and SIDS from bilateral and multilateral sources.

Conference participants also discussed the desirability of mechanisms for bringing together multilateral and bilateral development assistance agencies to better coordinate their programs to achieve maximum impact.

### ***Towards a Global Oceans Fund***

A paper prepared specifically commissioned to study the option of a global oceans fund (overseen by Global Steer-

ing Committee member Indumathie Hewawasam) addresses the question of whether or not a Global Fund for Oceans, Coasts and Islands is warranted; and if so, how might such a fund be structured and operationalized. A review of existing funds demonstrates that a global fund explicitly targeting oceans, coasts, and islands is needed. The existing programs and funds are essentially inadequate because their mandates do not target all of the needs of oceans, coasts, and SIDS. Coastal areas that are not of interest in terms of their biological diversity are low priority funding targets. Another problem with available funding mechanisms stems from the complexity of accessing funds for the long-term requirements of institutional capacity building in coastal areas. Additionally, the overall level of funds available is arguably insufficient (Cartier 2003).

Drawing on the structures and lessons learned from existing environmental funds, a Global Oceans Fund is proposed initially to be tested as a Pilot fund. A key lesson of environmental funds is that the success of a fund is more likely if it starts with a narrow focus, building a track record of expertise that it can apply as it expands its portfolio. It is proposed that the Pilot be located in a coastal area with a wide range of development issues, thereby facilitating the acquisition of a comprehensive base of experience (Cartier 2003).

Another perspective was provided by Smith (2003), who put forward key considerations for national and global funding mechanisms, as well as key questions that need to be considered before embarking on the development of a global oceans fund, including: "Is there a need for a new mechanism to catalyze partnerships or innovative financing and management approaches? If so, what is the most effective role a Global Oceans Fund might play in this regard?" "Is there a need for additional funding mechanisms that have important characteristics different from existing ones?" "How might a fund be structured to catalyze or reinforce high standards of efficiency, transparency, and accountability for resources devoted to meeting the WSSD oceans, coasts, and islands commitments?" "Would the creation of a 'virtual' Global fund – a coordinated network to help existing financing mechanisms at the local, national, regional, and international levels realize their strengths and enhance their effectiveness – provide an efficient, non-competitive, and high value-added alternative to developing a new, independent mechanism?"

### **Global Forum Next Steps**

It was agreed at the Conference that further study of a global oceans fund should be pursued, collecting more data and information on existing global funds in various areas (examples, water, HIV/AIDS, etc.) to ascertain how they are structured, how they work, and how effective they are, e.g:

- the fund's goals and purposes
- the fund's sources of funds
- the fund's structure
- the fund's administration
- the fund's range of activities
- the results achieved by the fund

On the basis of the above analysis and keeping in mind the purposes noted earlier, the study will:

- Identify various options for establishment and management of a Global Oceans Fund
- Offer specific suggestions on the design of such a fund
- Offer specific suggestions for the funding base of such a fund
- Offer specific suggestions for next steps that could be taken to explore the possible development of such a fund.

## Public Information, Education and Awareness<sup>5</sup>

### The Issue

The main issue in public information, education and awareness is how to make communication efforts more far-reaching and effective in changing people's behavior. It is important to consider what part can education systems play in reversing the degradation of the marine environment. As part of that system, aquariums, museums and science centers need to realize what they can do to more aggressively effect changes in behavior toward the environment.

### WSSD Outcomes and Public Education

#### ***Changing Environmental Behavior through Public Education***

The World Ocean Network (WON) is a worldwide network of aquariums, zoos, non-profit organizations, maritime museums, education centers, and other institutions dealing with public education. The main objective of the network is to make people change behavior and act on environmental issues. Currently, there are 120 network participants from 600 organizations in 30 countries, with sponsorship from UNESCO-IOC, NGOs, and government organizations.

The network targets to make contact with over 200 million people annually, through a coordinated program of work as follows:

- Joint information modules

- Passport and Ambassadors (issued to any member certifying participation in the action) (See Box 12)
- Field actions (identify and inform members; campaign to convince members to commit to at least one local and one global action)
- World Ocean Day (proposed by the Earth Summit in 1992)

### WSSD Outcomes

The Johannesburg Plan of Implementation contains several provisions (paragraphs 13-18 and 109-117) reiterating education as an essential means of implementing sustainable development. Among the more important targets are:

*-Changing unsustainable patterns of consumption and production by promoting sustainable consumption and production and supporting regional and national initiatives in this area. (14-19)*

*-Means of implementation should include education at all levels, providing community with educational opportunities and adopting a decade of education for sustainable development, starting in January 2005. (124d)*

The U.N. declared the ten-year period beginning on January 1, 2005 the United Nations Decade of Education for Sustainable Development to emphasize that education is an indispensable element for achieving sustainable development.

### Discussion at the 2003 Global Conference

The discussions focused on the following targets to support JPoI commitments on oceans, coasts and islands as follows:

a. *Raising and maintaining mass media interest.* Ocean issues must reach millions of people and this can be done through the media by providing them information on conservation action involving the public at large, e.g., bringing environment issues into popular programs on radio and TV and by embedding environment messages into stories/plots.

b. *Mobilizing educational organizations in reaching very large audiences.* There is a need to define the level of details that need to be communicated depending on the targeted audiences, i.e., children, work force, tourists, divers, aquarists.

c. *Mobilizing educational organizations at all levels* in order to integrate ocean issues into programs implementing the U.N. Decade of Education for Sustainable Development beginning in 2005. Raising public awareness is an essential element in implementing all the WSSD targets. In order to accomplish that, there is a need for educational organizations to engage people into action that is beneficial to the environment by focusing on communicating priority messages to the public, e.g., success stories based on community initia-

<sup>5</sup> Based on outcomes of the Pre-Conference meeting and discussion group on Public Information, Education and Awareness led by Philippe Vallette, NAUSICAA, France, and World Ocean Network.

tives, and messages that use scientific information in order to provide motivation to act.

d. *Mobilizing all stakeholders to get involved in Ocean Day and other events.* People must feel the impact of ocean issues in their everyday life in order to get involved in ocean issues. They can get this exposure by participating in major ocean activities such as ocean/coast days.

e. *Determining the best tools for specific target groups.* There is a need for exchanges of best practices and educational tools that are easily adapted, attractive and credible, at the international level, through affiliation with professional educators. There are existing tools on all WSSD issues that can be exchanged. However, other tools can be developed for better communication results.

f. *Identifying and providing funding for educational activities and campaigns.* There is a need to develop educational materials that can be used for special events, like the World Ocean Day, to be used globally but especially for use in developing countries, with support from government organiza-

tions, NGOs, public and private sector, regional and inter-governmental organizations.

### **Global Forum Next Steps**

The discussion group suggested the following actions for the Global Forum:

- Provide the media with stories of human interest such as people-centered and community programs
- Set-up dialogues among scientists, decision-makers, and media in order to determine what specific target clients need in order to act positively towards the oceans and its resources.
- Assist in communicating priority messages to the public
- Incorporate more public awareness components into conservation projects in order to provide more opportunities for the public to get involved in conservation efforts
- Provide information on available tools and methods that can be adapted for public education and awareness programs
- Provide information on funding sources for public education initiatives

### **Box 12**

#### **The Passport of the Citizen of the Ocean**

As a Citizen of the Ocean, everyone on earth can contribute to the promotion of a new international policy to foster sustainable use of the ocean and our planet. The Passport of the Citizen of the Ocean will be officially launched on June 8, 2004 during World Ocean Day.

A passport represents the culture and country in which the passport holder lives. Beyond national borders however, people live on one planet, a blue Planet. It is this planet that Citizen of the Ocean Passport holders belongs to. The passport will show not only the identity of the holder, but also one's commitment to contribute, on a daily basis, to preserve the balance and resources of the world's oceans.

The passport represents certain rights and responsibilities:

- The right to receive a special welcome in the venues and organisations taking part in the WORLD OCEAN NETWORK activities.
- The right to have the passport holder's voice heard as a defender of humanity's world heritage.
- The honorific right for passport holders to be recognised as Ocean Ambassadors.
- The responsibility to obtain information from WORLD OCEAN NETWORK institutions and be a spokesperson for these institutions.
- The responsibility to promote sustainable management of marine ecosystems and resources.
- The responsibility to make this same voice be heard whenever the ocean is endangered.

As a Citizen of the Ocean, the passport holder pledges to carry out a certain number of actions that contribute to the preservation and protection of oceans, or simply to spread the message of his/her commitment and its importance to our planet. These combined actions may secure the future of our oceans. The Citizen of the Ocean Passport holder is not a mere spectator. He/she becomes a true actor who takes charge of the future of his/her blue planet. Tomorrow, children should be able to admire an ocean that will continue to feed them, provide them with energy, entertain them, and continue to contribute to the climactic balance of the planet.

*The Passport of the Citizen of the Ocean may be obtained from WORLD OCEAN NETWORK members on request (please visit [www.worldoceannetwork.org](http://www.worldoceannetwork.org) for a list of institutions delivering the Passport).*

## Summary and Outstanding Issues

Mobilization of human and financial resources on a timely basis, growth in management capacity, greater involvement by the private sector, greater involvement of NGOs and the public, are all essential for the attainment of the WSSD goals related to oceans, coasts, and SIDS.

### *Financing*

—There is a need to carry out analyses of flows of development assistance related to oceans, coasts, and SIDS. At present, it is difficult to put together an overall picture on development assistance on oceans, coasts, and SIDS from bilateral and multilateral sources.

—There are perceived gaps in development assistance on oceans, coasts, and SIDS—especially for the implementation of ICM programs and of multilateral “soft law” agreements.

—To enhance coordination among development assistance efforts from bilateral and multilateral donors, periodic Roundtables of Donors should be convened, at both the global level and in various regions.

—Further study of the need for and possible modalities of a global oceans fund should be pursued, learning from the experience of existing global funds in other areas.

### *Sustainable Development Partnerships*

—Regarding the WSSD Sustainable Development Partnerships, preliminary analysis of the status of partnerships in the oceans, coasts, and SIDS area suggests a mixed picture, with some partnerships being well financed, effective, and generating additional partnerships, while other partnerships are getting off the ground very slowly. Some obstacles mentioned included: limited government involvement and commitment, few partnerships include the private sector, funding allocations for ocean, coasts, and SIDS issues are often not properly targeted or insufficient, certain issue areas are barely addressed by partnerships, certain regions are less represented in partnerships, limited regional and thematic coordination might lead to duplication or dispersion of efforts, linkages with different sectors (e.g., water, transportation, energy) are rarely addressed and potential lessons from other experiences remain unutilized.

—The most relevant lessons of broad application are: (a) the involvement of high-level political actors is fundamental to the identification of priorities and the mobilization of funding support for the partnerships; (b) multi-agency participation is helping improve institutional coordination at both the national and regional levels; (c) networking of partnerships and practitioners is proving vital to the sharing of experience and lessons learned, particularly on a regional basis. (d) Participation in partnership fairs and forums can provide inputs on establishing and building partnerships to facilitate matchmaking, securing resources for these initiatives in the future, bringing together different actors, and enhancing cross-sectoral communication and collaboration; and (f) partnerships can provide an important opportunity to introduce the application of the ecosystem approach to meet the 2010 target recommended by WSSD.

—A strategy for the enhancement and development of partnerships on oceans, coasts and islands could be based on the development of a “mechanism for partnership facilitation” led by the Global Forum. The mechanism could have four elements:

1. A list of ongoing and potential partnerships, identifying lead organizations, other partners, goals, contact information, and a written partnership description in sufficient detail to determine the relevance of the partnership to the reader's interest. (*Continued on p. 74*)



2. A description of “lessons learned” (as supplied by Global Forum participants on the basis of their experience in partnership implementation).
3. A description of potential sources of resources to support partnerships.
4. A description of partnerships activities organized on a regional and subregional basis aimed at practitioners.

### ***Capacity building***

—While there are many capacity building efforts related to ocean and coastal management, there are key obstacles that prevent scaling up, coordination, and targeting of these initiatives. These include short-term nature of the efforts; fragmentation and lack of coordination; not context specific and responsive to local, national, or regional priorities; not supported through long-term targeted financing.

—In order to develop a critical mass of integrated coastal and ocean managers and professionals, there is a need to develop a global strategy for capacity building in the field which assesses existing programs and identifies gaps, formulates an action plan for sustained capacity building and utilization, and defines modalities to make capacity building programs more relevant to end users.

### ***NGOs and Private Sector***

—NGOs and foundations are approaching WSSD targets by: developing policies, building political will, working with partners, demonstrating good practice, implementing on the ground projects, and contributing to scientific debate. NGOs may vary in specific implementation techniques but they carry out common strategies, especially in addressing WSSD targets in MPAs and fisheries. Outstanding issues that they would like to address include: providing sustainable financing for MPAs, developing a legal framework and implementation of high seas MPAs, developing a global baseline of current MPA coverage, building political will to implement MPAs and sustainable fisheries, implementing an effective monitoring and evaluation system for MPAs, and developing new approaches to mitigate IUU fishing.

—A growing number of industries are beginning to factor in environmental considerations in the way they do business, e.g., the aquarium fish trade, fisheries, and coastal tourism. Sustainable practices, based on international prescriptions, such as the FAO Code of Conduct for Responsible Fisheries and the principles of integrated coastal management are finding their way into private sector initiatives. In coastal tourism, strategies to influence the private sector into adopting a more sustainable approach to tourism investments include: establishment of fiscal or financial incentives that help direct investments towards sustainable tourism; reinforcement of environmental legislation and regulations applicable to large private tourism development projects and/or the reinforcement of supervision of voluntary, self-regulatory schemes; and designation of marine protected areas.

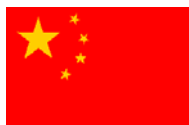
### ***Public Involvement***

—Public involvement in the resolution of oceans, coasts, and islands issues requires a change in environmental behavior that may be facilitated by public education initiatives. Concerned public education and media organizations actively involved in oceans issues agree that the following are all essential in facilitating the achievement of WSSD targets in oceans, coasts, and SIDS: raising and maintaining mass media interest; providing adequate information on oceans issues; mobilizing educational organizations in reaching very large audiences; mobilizing educational organizations at all levels in order to integrate ocean issues into programs implementing the U.N. Decade of Education for Sustainable Development; engaging people into action that is beneficial to the environment by focusing on communicating priority messages to the public; mobilizing all stakeholders to get involved in Ocean Day and other events; determining the best tools for reaching specific target groups; and identifying and providing funding for educational activities and campaigns.



## **PART III. MINISTERIAL STATEMENTS AND SPECIAL ADDRESSES**





*China*

## CHINA'S ACTION FOR MARINE SUSTAINABLE DEVELOPMENT

**Mr. Sun Zhihui**

Deputy administrator  
State Oceanic Administration, China

Agenda 21 provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas through its programme areas of integrated management and sustainable development of coastal areas, including exclusive economic zones; marine environmental protection; sustainable use and conservation of marine living resources; addressing critical uncertainties for the management of the marine environment and climate change; strengthening international, including regional, cooperation and coordination; and sustainable development of small islands.

The World Summit on Sustainable Development (WSSD), in 2002, recognizes that oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries. The WSSD also appeals that ensuring the sustainable development of the oceans requires effective coordination and cooperation, including at the global and regional levels, between relevant bodies, and actions at all levels

Zhu Rongji, the Former premier, made a firm promise, when addressing the World Summit on Sustainable Development, that China will continue to work hard, unflinchingly shoulder our responsibilities, honor our commitments with deeds, and steadfastly take the road of sustainable development. The Chinese Government also pays great attention to the sustainable development of oceans and coasts. The major leaders give emphasis, on many occasions, to perfect the framework of marine planning and programming, legislation and management, to reinforce marine law enforcement and strengthen marine environmental protection.

I would like to take this opportunity to brief you on the problems we have encountered, measures we have been taking and future work we intend to do.

### What are the Problems?

There are more than 400 million people living in the coastal areas in China. The GDP in these areas makes up 60 percent of national total. Over the past years, marine economy has grown at very high rate, with the GDP derived from marine industries reaching 100 billion USD in 2002. Marine industry has become a new booming industry in national economy.

However, these marine development activities have not only provided great profits, but also given rise to the problems of resources and environment. The main problems being faced include:

- Lack of integrated planning and coordination mechanism among ocean-related sectors, which lead to prominent conflicts among different sectors, and irrational utilization of marine resources;
- Increase of gross pollutants into the sea, which exacerbates the continuing degradation of marine environment, especially in coastal waters.
- Deterioration of marine ecosystem, and reduction of biodiversity and rare species and introduction of exotic species.

It is estimated that the loss of coastal wetlands has amounted to about 2.19 million hectares, 50 percent of the total. The Mangrove has less than 15 thousand hectares, a reduction of 73 percent. The coverage of coral reef has reduced 80 percent. Rare species such as Chinese White Dolphin has become endangered species owing to the sharp decrease in number. Exotic species such as spartina had a severe impact on some local ecosystems.

- Overexploitation of coastal fisheries due to illegal catch.
- Frequency and types of marine disasters such as storm surge, red tide, tsunami and oil spilling has increased, which contribute to great loss of property and human lives. In 2002, the direct property loss amounted to 6.6 billion RMB Yuan, and 124 persons lost their lives. Nearly 10 million people suffered from various types of marine disasters.

### The Measures Taken Toward Achieving Marine Sustainable Development.

Since the United Nations Conference on Environment and Development (UNCED) in 1992, the Chinese government, has been actively responding to the call of UNCED. We formulated the China Agenda 21, which regards the sustainable development and protection of marine resources as one of priority areas. On such basis, the Chinese government also set down the China Ocean Agenda 21, providing the guidelines for marine sustainable development and utilization. In recent years, particularly since WSSD in 2002, to implement

the Johannesburg Declaration on Sustainable Development and the Plan of Implementation, China promulgated the National Marine Functional Zonation Scheme in 2002, and issued/approved the National Programming Compendium on Marine Economic Development in May of this year. Besides, China recently revised the Fishery Law and Law on Marine Environment Protection, and put into force the law on Management of Sea Area Use and other marine-related laws and regulations. In this regard, I would like elaborate on some of the specific and important actions China has taken to realize the marine sustainable development.

### **Planning and Programming**

#### *China Ocean Agenda 21*

China formulated the China Ocean agenda 21, which set forth the strategy, objectives, countermeasures and major action areas. The overall objective is to restore healthy marine ecosystem, develop rational marine development system, and promote the marine sustainable development.

The countermeasures include: guiding the establishment and expansion of marine industry on the principle of sustainable development; placing equal stress on development and social and economic sustainable development; gradually solving the constraint problems such as freshwater and energy shortage in coastal areas by means of well-planned marine development activities; sustainably utilizing the resources of islands and protecting its ecologic balance and its biodiversity; setting up marine protected areas such as coral reef, mangrove and sea grass bed, spawning grounds, protecting special species and ecosystem; promoting the sustainable development by reliance of science and technology; establishing ICM system; intensifying ocean observations, forecasting, disaster warning and mitigation; strengthening international cooperation; enhancing public awareness.

#### *National Programming Compendium on Marine Economy*

To provide macro guidance, coordination and programming, the State Council approved and publicized the National Programming Compendium on Marine Economy this year. The main marine industries referred to include marine fisheries, marine transportation, oil and gas, tourism, ship, sea salt and chemical engineering, seawater desalination and comprehensive utilization, marine biological medicines. The programming period lasts 10 years from 2001 to 2010.

The principles of the Compendium is adhering to the principle of placing equal stress on economical development and protection of resources and environment; intensifying the protection and construction of marine ecological environment; accommodating the development scale and growth to the carrying capacity of environment, etc.

The overall objective of marine economy, put forward in

the Compendium, is to increase the contribution of marine economy in the National Economy, optimize the marine economy structure and industry layout, rapidly develop backbone industries and new-booming industries, apparently improved the quality of marine ecological environment. The GDP derived from the marine economy will amount to 4% of national total by 2005, and over 5% by 2010.

The Compendium also puts forward the following objectives of the protection of biological environment and resources: the amount of main pollutants into the sea in 2005 will be reduced by 10% compared to 2000. Further improve the capability to monitor red tide, make efforts to mitigate the loss by red tide, gradually realize the conservation and sustainable utilization at key river mouth, wetlands and tidal flats.

#### *The National Marine Functional Zonation Scheme*

To plan all relevant ocean-related use as a whole, protect and ameliorate the ecological environment, promote the sustainable use of sea area; secure the safety at sea, the State Council approved the National Marine Functional Zonation Scheme in 2002, which provides a scientific basis for sea area use management and environmental protection, to ensure a sound development of national economy.

In this scheme, in light of the requirement of location, natural resources and utilization, all jurisdictional sea areas are divided into ten types of functional areas for port and transportation, utilization and conservation of fisheries, tourism, and marine reserve, and so on.

### **Legislation**

Based on the United Nations Convention on the Law of the Sea, the Law on Territorial Sea and Contiguous Zone of the People's Republic of China and the Law on Exclusive Economic Zone and Continental Shelf of the People's Republic of China, in recent years China has stipulated or amended following laws:

#### *The Law on Management of Sea Area Use*

In order to protect the ownership of the national sea area and the legitimate rights and interest of the users of the sea area, prevent exhaustive development and utilization of the marine resources, protect the marine ecological environment, ensure scientific and rational use of the marine resources, and promote sustainable development of the marine economy, the National People's Congress promulgated the Law on Management of Sea Area Use and put it into effect as of 1 January 2002.

This law has established the following three basic systems: the sea area entitlement system, the marine functional zoning system and the sea area paid-use system. The sea area entitlement system clearly defined that the sea area is owned by the

State, and any organization or individual who intends to use the sea area, must apply in advance according to relevant regulations. They are entitled to use the sea area only after approval from the government. The marine functional zoning system is the foundation for marine development and management, under which the sea area is divided into different types of functional zones according to the standard of the functions of the sea area and the optimum order of functions of the sea area use so as to control and guide the direction of the sea area use and provide scientific basis for rational use of the sea area. The sea area paid-use system embodied that the sea area is the state-owned asset, and any organization or individual who intends to use the sea area to carry out production and business activities must pay for sea area use. According to the provisions, the fee of sea area use may be reduced or exempted based on the purpose of use.

#### *The Marine Environment Protection Law of the People's Republic of China*

In order to protect and improve the marine environment more effectively, protect marine resources, prevent pollution damage, ensure human health, and promote sustainable development of the economy and society, the National People's Congress amended the original Marine Environment Protection Law of the People's Republic of China, and put it into effect as of April 2000.

The amended Marine Environment Protection Law provides that "the State shall establish and implement the control system for gross pollutants discharged into the sea in the key areas, define the index of gross control of the major pollutants discharged into the sea, and distribute the controlled discharge volume for the major pollution sources".

Some new contents have been added in this amended Law, mainly including: protection of marine ecology, prevention of the pollution damage to the marine environment by land-sources pollutants, prevention of the pollution damage to the marine environment by coastal construction projects, prevention the pollution damage to the marine environment by marine construction projects, prevention of the pollution damage to the marine environment by dumping at sea, and prevention of the pollution damage to the marine environment by ships and other related operation activities.

#### *The Fishery Law of the People's Republic of China*

In order to strengthen protection, propagation, development and utilization of the fishery resources, the National People's Congress amended the Fishery Law of the People's Republic of China recently.

The amended Fishery Law provides that "the State shall determine the total catch ability based on the principle that the catch is lower than the increase of the fishery resources and practice fishing quota system. The state shall practice fishing license system for the fish catching industry". Besides, the law

also provided the propagation and protection of the fishery.

#### *Regulations on Management of Protection and Utilization of the Uninhabited Islands*

Recently China has just promulgated the Regulations on Management of Protection and Utilization of the Uninhabited Islands for the purpose of strengthening the management of the uninhabited islands and protecting the island ecological environment of the uninhabited islands. Although it is only a regulatory document at present, it will play a positive role to a large extent in the protection of the islands and their resources since there is no formal legislation for the islands in China now.

The regulations have clearly defined that "the State shall implement the system of functional zoning and protection and utilization planning for the uninhabited islands, encourage rational development and utilization of the uninhabited islands, strictly restrict such activities that cause damage to the uninhabited islands and the marine environment and natural landscape around them as explosion, excavation of the sand and gravels, construction of dams to link the islands. The uninhabited islands that are of special value for protection and the sea area around them will be built into marine nature reserves or special marine protected areas, etc., according to law through application by the competent oceanic administrative agencies above the county level.

In addition, according to the Law on Territorial Sea and Contiguous Zone of the People's Republic of China and the Law on Exclusive Economic Zone and Continental Shelf of the People's Republic of China, etc., other laws and regulations concerning ocean administrative management have been stipulated and promulgated by the State Council such as the Regulations on Dumping of Wastes at Sea, Regulations of the People's Republic of China Concerning Environmental Protection in Offshore Oil Exploration and Exploitation, Regulations on Management of the Fishing Permit, etc.

## **Management**

#### *Management of the Sea Area Use*

The public awareness is increasing continuously, and the supporting bylaw system has been gradually completed. The four-level marine functional zoning system involving the central government, provincial government, municipal government and the county government has primarily taken shape. Above two thirds of the cities and counties of the 11 coastal provinces and municipalities have completed the drafting of their functional zonation scheme and most of them have been approved and implemented. The sea-area-use rights confirmation and certificates issuance have been carried out steadily. The phenomena of irrational use of the sea area have been comprehensively straightened out. The management of col-



lection of the fee for sea area use has been strengthened which has ensured maintenance and increase of the value of the national resources assets of the sea area. Boundary delimitation of the administrative divisions has been carried out in an all-round way. The construction of demonstration sites for management of sea area use at national level has gained prominent results and 30 national-level demonstration sites for management of sea area use have been established.

#### *Management of the Marine Environment*

The supporting regulations and bylaw system have been perfected. The Environmental Protection Program has been formulating. The national marine environmental monitoring and assessment have been enhanced. The three-level marine monitoring operational systems involving the central government, provincial government and municipal government have preliminarily come into being. The red-tide monitoring has been intensified, and the oceanic administrative agencies of the coastal local governments have put in place a monitoring system and an emergency response system in the red-tide monitoring and control area. Protection of marine ecology has also been consolidated, and 76 marine nature reserves, among which 21 are at the national level and 55 at the local level, have been set up. Some representative marine ecosystems of rare and endangered marine animals, mangroves and coral reefs have been brought under protection. In 2002, the national marine ecological investigation was carried out, which lasted for 8 months. And strict supervision and management of dumping at sea and prevention of the pollution caused by marine construction projects has been strengthened.

#### *Management of the Marine Fishery Resources*

In response to the significant impact of the new international marine legal regime brought forth by the UNCLOS, China is working out and implementing relevant policies and measures to guide the fishermen to reduce the number of fishing boats and turn to other jobs. Some provincial governments allot financial subsidies for the fishermen and direct them to shift to non-catching industries.

China is carrying out the general investigation of fishing boats, exploring actively the system of quota management of the fishery resources and the compulsory end-of-life system for fishing boats, reducing gradually the number of fishing boats, and controlling fishing intensity. China is also continuously carrying out fishery administration and effectively practicing the system of fishing closed season in summer, for 2~3 months a year, involving over a million of the fishermen. Positive progress has been achieved in the protection and management of the ecological environment in fishing areas. Pilot projects on artificial fish reefs have been carried out in provinces of Guangdong, Zhejiang and Fujian, etc. and they are actively exploring the measures to recover the

ecological environment in the near-shore areas.

#### *Marine Public Service*

Through decades of development, comparatively complete system for marine environmental monitoring and forecast service has been established to carry out real-time operational forecast for storm surges, sea waves, sea ice and seawater temperature. At the same time, research on the phased forecast and pre-warning of various kinds of marine hazards such as the phenomena of El Nino and La Nina, coastal erosion, the seawater flowing intrusion, as well as sea level rise has been conducted. This work has played an important role in prevention and mitigation of the marine disaster as well as in the service to the sea-related trades. Since last year, in particular, we have initiated the environmental forecasting for the major bathing beach in the country. The forecasts are made public timely through China Central Television (CCTV) and other major news media. We have started the report on environmental quality for aquaculture in the monitoring and control areas of the red-tides, which provides good guidance in the local fishery and aquaculture production.

### **Future Efforts to Take**

In response to the calls of the Summit Conference on Sustainable Development and carry out well the plans of implementation of Agenda 21, China will put greater emphasis to push forward the work in the following fields:

- a. Perfect the planning and programming system and work out the National Environmental Protection Program and integrated management programs for key sea areas like the Bohai Sea.
- b. Perfect the marine legal system and realize more effective marine/coastal integrated management;
- c. Perfect the marine environmental monitoring system and assessment system, set up ecological monitoring and control areas, and continue to strengthen the construction and management of marine protected areas;
- d. Improve the capability to prevent and mitigate marine disasters, and complete marine service system;
- e. Consolidate development, utilization and protection of the uninhabited islands;
- f. Promote international cooperation in the region, and further push primarily such international programs as the Marine Sustainable Development Strategy for the Seas of East Asia, as well as such projects on the Protection of the Marine Biodiversity in the south China seas and Protection and on the Management of the Large Marine Ecosystem in the Yellow Sea (YSLME) in cooperation with GEF and other related countries.



*India*

## PROBLEMS AND OPPORTUNITIES IN THE IMPLEMENTATION OF WSSD COMMITMENTS: THE INDIAN PERSPECTIVE

**Dr. Harsh K. Gupta**

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### Introduction

The vital role of oceans in sustaining life on planet Earth has been recognised in India from its ancient past. As an integral part of the global sustainable development process, oceans, coasts and islands support a diverse array of activities yielding enormous economic and social benefits. The Earth Summit of 1992 and the World Summit on Sustainable Development (WSSD) of 2002 brought the global community together to address holistically and collectively, among other issues, the ecological, economic, and social importance of oceans, coasts, and islands for the global well-being and to prepare a time-bound action plan that needs to be implemented with the synergy of several actors. It is heartening to note that oceans, coasts and islands received the due importance in the WSSD, as indicated in its major outcomes viz. (a) the Plan of Implementation of the World Summit on Sustainable Development, (b) the Johannesburg Declaration on Sustainable Development and (c) Partnership initiatives to strengthen the implementation of Agenda 21.

The WSSD has given us a time-bound action plan over a wide spectrum of areas covering fisheries, biodiversity and ecosystem functions, marine pollution, maritime transportation, marine science, small islands, developing States and several related cross-sectoral aspects. The Global Forum on Oceans, Coasts and Islands is indeed an important platform for ensuring this implementation process. India would be pleased to join this global effort, particularly by contributing to the Indian Ocean region, and focussing her national efforts in ocean development.

### The Indian Ocean - A Complex Oceanic Realm

The Indian Ocean, the third largest ocean in the world, has a unique geographic setting with more than 1.5 billion people living around its edge, who are predominantly agrarian and monsoon-dependant. The frequent cyclones of the Bay of Bengal, the unique biogeochemical processes of Arabian Sea as well as the bi-annual reversal of monsoon winds and currents make the Indian Ocean a complex oceanic realm. The Indian Ocean has been a subject of serious concern for the countries around this region as well as the international community. It is also recognised that, as compared to the Atlantic and Pacific, the Indian Ocean still lacks systematic observations that are essential for understanding the oceanic processes and their impact on the sustainable development glo-

bally and within the region in particular.

India has a coastline of about 7500 kilometres, and the seas around India influence the life of the coastal population of about 370 million and the livelihood of a 7 million strong fishing community. We have two island systems viz, Andaman & Nicobar and Lakshadweep with their special geographical connection with the seas around them. Further, we have a fragile but precious coastal ecosystem that needs to be preserved for posterity.

### The Vision and Perspective Plan 2015 for Ocean Development in India

Our recognition of the intricate and long-term role that the ocean plays in determining our environment and the equally critical role that we play in modifying its characteristics, coupled with our realisation of the incompleteness of the understanding that we have on this complex process, has been the driving force for setting out, in the year 2002, a Vision and Perspective Plan 2015 for Ocean Development in India. The mission is to improve our understanding of the ocean, especially the Indian Ocean, for sustainable development of ocean resources, improving livelihood, and for timely warnings of coastal hazards. The Vision 2015 hinges around improving our understanding of ocean processes through conceiving and implementing long-term observational programmes and incubating cutting edge marine technology so that we are able to (i) improve understanding of the Indian Ocean and its various inter-related processes; (ii) assess the living and non-living resources of our seas and their sustainable level of utilization; (iii) contribute to the forecasting of monsoons and extreme events; (iv) model sustainable uses of the coastal zone for decision-making; (v) forge partnerships with our Indian Ocean neighbours through the awareness and concept of one ocean; and (vi) secure recognition for the interests of India and the Indian Ocean in regional and international bodies. This vision is congruent with the WSSD outcome on oceans, coasts and islands.

The national agenda for ocean development in India during the coming decades, as set out in the perspective plan are:

- (i) Promoting ocean science, supporting technology development and strengthening observations, so as to continuously improve our understanding of local and remote processes;

- (ii) Modelling sustainable uses of the coastal zone and reliably predicting extreme events;
- (iii) Understanding the influence of the ocean on monsoons and contributing to the capability to forecast them;
- (iv) Strengthening programmes in the southern ocean and Antarctica that offer unlimited opportunities to study planet Earth in its pristine state;
- (v) Mapping ocean resources and evolving guidelines for proper stewardship so that they are sustainably utilized with minimal environmental impact;
- (vi) Developing reliable and safe deep sea technology that permits man to understand, quantify and harness ocean resources;
- (vii) Partnering Indian Ocean neighbours in mutually beneficial programmes;
- (viii) Creating awareness in stakeholders about the complex functions of the ocean and the inherent limits to the predictability of ocean processes; and
- (ix) Creating an Ocean Commission as a national framework so that national efforts on ocean issues are effectively coordinated.

### **GOOS Regional Alliance in Indian Ocean**

The Global Ocean Observing System (GOOS) of the Intergovernmental Oceanographic Commission, which evolved in 1992 and is co-sponsored by WMO, UNEP and ICSU, is an internationally organized system for effective management of the marine environment and sustainable utilisation of its natural resources. Along with the Global Climate Observing System and the Global terrestrial Observing System, GOOS will play a key role in the observation of oceans, atmosphere and land. GOOS envisages (i) an internationally accepted global design to address the broad realms of ocean & climate and the coastal ocean; (ii) a set of regional alliances of countries that will focus on issues of common concern and interests of the region; and (iii) national contributions for implementation of the observational systems.

India is playing an important role for ocean observations in the Indian Ocean by (i) leading the process of establishing of the GOOS Regional Alliance - IOGOOS - for the Indian Ocean region in November 2002; (ii) being called upon to host the IOGOOS Secretariat for the next 6 years as well as to lead IOGOOS in the coming years to formulate and guide projects on ocean observations and applications of common concern in the region; and (iii) taking decisive roles in IOC and other important international forums pertaining to GOOS. Already 19 Institutions from Australia, India, Iran, Kenya, Mauritius, Madagascar, Mozambique, Reunion, South Africa and Sri Lanka have become Members of IOGOOS and a few more are expected to join soon.

IOGOOS, along with a group of experts has initiated several time-bound actions in the area of ocean & climate, the coastal ocean, and data management and satellite applications, such as:

- (i) IOGOOS Workshop on “Capacity Building and Strategy for Data and Information Management” to be held in December 2003 at Colombo, as a prelude to the establishment of an ocean data and information network for the Indian Ocean;
- (ii) IOGOOS Workshop on “Marine Biodiversity” to be held in December 2003 at Goa to evolve a strategy and action plan for long-term sustained monitoring of coastal and ocean biodiversity in the region;
- (iii) Formulation of a “Strategy for Capacity Building in the Indian Ocean region on remote sensing applications for oceanographic and coastal studies”;
- (iv) Setting up of a “Joint CLIVAR/IOC-GOOS Indian Ocean Panel on Climate” that would coordinate and plan a unified approach to all the basin-scale observations in the Indian Ocean for both research and operational oceanography;
- (v) Pursuing a project proposal on Marine Impacts on Low lands Agriculture and Coastal (MILAC) resources jointly with JCOMM to contribute to natural disaster reduction in coastal lowland impacted by tropical cyclones;
- (vi) Formulation of a pilot project on the Monitoring and Management Systems for the Shallow Water Penaeid Prawns for the Indian Ocean region; and
- (vii) Participation in the GOOS Regional Alliances Networking Development (GRAND) Project that would facilitate knowledge networking among all regional GOOS alliances and also benefit from the advances made by EuroGOOS and MedGOOS over the last decade.

### **Indian Contribution to Ocean Observing in the Indian Ocean**

India's plan for the near future is to establish a well-planned network of in-situ ocean observing system in the north Indian Ocean with 150 Argo profiling floats, 40 moored data buoys, 150 drifting Buoys, 4 equatorial current meter moorings, expendable bathythermograph surveys along three major shipping routes, and tide gauges, all complemented by satellite observations through the Oceansat series of India. The progress of implementation has been quite good.

India had the opportunity to host the Argo Implementation Planning Meeting in July 2001 and this marked the beginning of Argo float deployment in the Indian Ocean by several countries. India was then called upon to be the Regional Coordinator for the international Argo project in the Indian Ocean and also to be the Regional Data Centre. It is satisfying to note that within a span of two years, the Argo array in



the Indian Ocean has reached 50 % of its target (of 450 floats by 2006).

India has already deployed 31 Argo floats and 20 more are scheduled to be deployed soon. The first results with Argo data are very encouraging. We have also mounted a national effort with the oceanographic and atmospheric community for assimilation of Argo data with the end goal of improving the predictability of the upper ocean and our climate. Capacity building in this area is crucial if we need to harness the full benefit from this valuable stream of data.

India has already established a network of 20 Moored Data Buoys in both deep and shallow waters to measure a host of met-ocean parameters. Surface Drifting Buoys (for measuring sea surface temperature and atmospheric pressure); Current Meter Arrays (for time series profiles of current speed and direction at fixed locations); Expendable Bathythermographs (for temperature profiles); and Tide Gauges (for sea level) in the Arabian Sea, Bay of Bengal and tropical Indian Ocean that have been providing very valuable data for operational oceanography, weather forecasting and research. There is an active programme for ship observations using the four Research Vessels of the Department of Ocean Development, in addition to ships of opportunity.

### **Storm Surge Forecast for North Indian Ocean**

The coastal regions bordering the Bay of Bengal are severely affected by the storm surges associated with tropical cyclones, particularly for the East Coast of India and Bangladesh. Since the coastal regions are densely populated, it is important to make realistic forecasts of inundations caused by such storms in order to prepare contingency plans to prevent the loss of life and property. A project entitled "Storm Surges Disaster Reduction in the Northern part of the Indian Ocean," aimed at developing the capability and infrastructure to provide storm surge and disaster warning to save lives, reduce damage and encourage sustainable development in coastal regions had received much consideration by IOC, WMO and the International Hydrological Programme of UNESCO in the recent past. However, this Project is yet to take off. JCOMM and IOGOOS are pursuing this.

Also, India has developed software to predict storm surges and estimate coastal inundation due to surges, along the East coast of India. Using this software and the available data sets, the path and height of storm surges have been successfully hindcasted. It is pertinent to note that a bilateral proposal has been prepared for implementation between India and Bangladesh for an operational oceanographic and hydrological storm surge prediction facility along with the improvement of meteorological, marine and hydrological observing systems and data processing systems. A key component of the proposal is capacity building and human resources development in the region.

### **Ocean Information and Advisory Services in India**

The concerted efforts of the Indian scientific community have culminated in a unique service to provide reliable and timely potential fishing zone advisories using satellite data to the fishing community along the entire coastline of the country. Frequent and intense interactions between the scientists and fishing community at the fishing harbours, and use of a wide range of media such as faxes, telephones, electronic display boards, radios and the internet have ensured that these advisories provided in local languages have become extremely important to the fishing community. The search time for fisherman lost at sea has been reduced by 30 to 70 % due to the usage of these advisories. This is an excellent example of passing of the benefits of science to society. Experimental Ocean State forecasts that are being provided on a daily basis are a typical example of multi-institutional endeavour to translate scientific knowledge into a service useful for safe operations in the sea. The setting up of an Ocean Information Bank supported by a national chain of Marine Data centres and Observation systems as well as Web-based on-line services are significant milestones towards the mission to provide the ocean information and advisory services in a timely manner.

### **Integrated Coastal and Marine Area Management (ICMAM)**

Agenda 21 adopted in UNCED (1992) emphasises the need to adopt the concept of Integrated Coastal and Marine Area Management (ICMAM) for the sustainable utilisation of coastal and marine resources and the prevention of degradation of marine environment. The ICMAM project has been implemented in India since 1997-98, with two major components viz. capacity building and the development of infrastructure for R&D and training. The capacity building activities cover development of GIS-based information system for 11 critical habitats; determination of waste assimilation capacity in estuaries and coastal waters; EIA studies; and development of ICMAM plans for major cities. A world class facility has been created for the development of human resources in this important area.

### **Coastal Monitoring and Prediction System**

A national programme on Coastal Ocean Monitoring and Prediction system (COMAPS) was launched in 1991 by India to constantly assess the health of our marine environment and to indicate areas that need immediate and long-term remedial action. To consider the levels and sources of pollutants, data on nearly 25 environmental parameters are collected at 82 locations in the 0-25 km sector of the entire

coastline using two dedicated vessels. Mathematical models are being developed to predict diffusion and dispersion characteristics of pollutants in specific areas. The data and information are regularly disseminated to the State Pollution Control Boards for legal/remedial action.

### **National Institutional Framework**

Modern oceanographic research in the country has a heritage of four decades. Over the years, India has set up the Department of Ocean Development and a chain of leading national institutions with a primary focus on Ocean Sciences and Research, Ocean Technology, Antarctic and Polar Sciences, Ocean Observation, Information and Services, Coastal Area Management, and Marine Living Resources. These institutions are supported by a large network of academia and industry. Close interaction at both the research and operational levels between the ocean, atmosphere, and space scientific communities has ensured that there is a seamless flow of data, information and knowledge that percolates down to the end users, thereby getting integrated with the development process in the country.

### **Conclusion**

India has been pursuing its efforts in ocean development with a missionary zeal, addressing not only the imperatives for sustainable development of its coasts, islands and seas but also contributing to the well-being of the entire Indian Ocean region. India would thus be an active contributor as well as a beneficiary of the implementation of the action plan on oceans, coasts, and islands that were set out at the WSSD.





*Mauritius*

## SMALL ISLAND DEVELOPING STATES, OCEANS AND COASTS, AND THE MAURITIUS INTERNATIONAL MEETING

**H.E. Ambassador Jagdish Koonjul**

Permanent Representative of Mauritius to the United Nations  
and Chair, Alliance of Small Island States (AOSIS)

I would like to thank the Global Forum on Oceans, Coasts and Islands for organizing this Conference and for its continued dedication and devotion to the improvement of global, regional, and national policies relating to oceans, coasts and islands. I have the honour today to address you as the Chairman of the Alliance of Small Island States AOSIS, an association, which has 44 member countries.

We often say that what happens in your neighbor's house affects your own house. Likewise what happens in the countries which are your immediate neighbors is also going to affect your own country. For us islanders the ocean is not only our immediate neighbor but also a source of livelihood and subsistence and what happens to the oceans is therefore bound to affect us. For small island states, the health of the oceans is of paramount importance. So vital is the exerted influence of the oceans over islands that they impact directly on a spectrum of island issues including its peoples, culture, economy and the environment. Indeed islands and oceans are integral parts of a single environment. For SIDS the protection and management of their marine environment are intrinsically linked to their sustainable development aspirations.

At the Global Conference on the sustainable development of Small Island Developing States in 1994, the international community recognized the special case for SIDS in regard to both the environment and development. The Barbados Program of Action highlighted the dependence of Small Island Developing States on coastal and marine resources. Because of our small land area many of our States are effectively coastal entities with the concentration of population and economic development - both subsistence and cash - in the coastal zone making our renowned biological diversity among the most threatened in the world.

The world's oceans play a crucial role in maintaining the health of the planet's ecosystems and serve as a valuable current and future source of food for mankind. For the coastal populations of SIDS the oceans represent the only means of subsistence.

SIDS are widely acknowledged to be ecologically fragile and vulnerable. They face specific and unique constraints arising from their smallness, isolation, geographical dispersion and vulnerability to natural disasters. Fragile ecosystems, difficulties with transportation and communications, remoteness from markets, vulnerability to exogenous economic and fi-

nancial shocks, lack of natural resources and heavy dependence on importations are known in addition to other constraints. Oceans and coastal environment are of vital and strategic importance for SIDS and constitute perhaps their only real sustainable development resource. With the establishment of the 200 miles economic zone, small islands are the custodians of vast ocean spaces and as such have heavy responsibilities for the management, conservation and sustainable development of these resources.

While progress in the implementation of the provisions of Agenda 21 and the BPOA in the area of sustainable development has been varied, regional-scale ocean governance has, in some cases, produced very positive results. Indeed regional approaches have been developed by some SIDS regions for example in the Pacific Region which represent a great potential for improving our understanding of the ocean; sustainably developing and managing the use of ocean resources, including the promotion and utilization of traditional practices; maintaining the health of the ocean; promoting the peaceful use of the ocean; and creating partnerships and promoting co-operation.

Oceans and coasts are critical to the natural and cultural heritage of the world, not just for SIDS. While many marine areas support a great diversity of plants, animals and natural habitats, oceans also play an essential role in the climatic cycles and other global processes. Coastal marine areas are dominated by a living fringing reef, which helps protect the coasts from the onslaught of the waves. Associated with the reefs is a complex and diverse system of animals and plants, which use the reef as a habitat, but at the same time, create the conditions, which are essential for the very survival of the reef.

The marine environment includes unique ecosystems and threatened species that are increasingly menaced by unsustainable use and water pollution. With rapid industrialization and absence of strict enforcement of regulations, the environment is exposed to increasing stress. In the SIDS, activities along the shorelines are increasing, as the economy is developing. Rapid tourism expansion in just about every SIDS region has also given rise to unplanned development along the coastline, increasing pressures on the limited resources in these areas.

SIDS have some of the most vibrant and vital fishing regions of the whole world. The tuna fish stock in the Pacific

alone is the largest in the world, and is as far as we can tell in fairly good health. The catch has been increasing, but reports suggest that it may just be within the sustainable ranges. For the most part the commercial exploitation of the tuna is carried out by distant water fishing fleets. Despite the very well negotiated agreements, the Pacific Island Countries today only receive a small proportion of the actual benefits. And while it is true that these distant water fishing fleets have beneficial financial impacts on the ports where they refuel and re-supply, we also know that in some cases there is widespread pollution and dumping from these fleets.

The challenge will therefore be to keep a steady level of development in the industry, and to gradually make the industry predominantly indigenous, so as to achieve the flow on effects to other sectors of the economy. It is also important to ensure that over capacity and over exploitation do not occur, as we have seen in many other regions.

Most of the SIDS have ratified the United Nations Convention of the Law of the Sea as well as the UNEP regional seas conventions. Some 20 SIDS have also ratified the United Nations Agreement on Straddling and Highly Migratory Fish Stocks Agreement. However, implementation continues to be impeded by financial constraints and a lack of capacity. Added to this are the continuing challenges inherent in existing international legislative frameworks and mechanisms. Illegal Unreported and Unregulated fishing as well as the monitoring and surveillance of the countries' respective EEZs, continue to pose a tremendous challenge to the small island developing states. They also encounter difficulties in relation to the monitoring and assessment of straddling and highly migratory fish stocks. There is a need therefore to create and where already available strengthen existing regional fisheries management mechanisms to conserve and manage this valuable resource. We also need to develop and implement surveillance and monitoring systems, and we need the necessary tools to analyze and assess the status of fish stocks in our seas. The database on marine resources developed by CARICOM is a successful venture of the region.

In many SIDS, effluents from industries and coastal urban areas have impacted heavily on the coastal systems, and along with other forms of pollution, are endangering the marine habitats. Intensive fishing practices have contributed to the degradation of the lagoon and reef ecosystem. Significant marine and coastal habitats are being adversely affected as a result of increasing pollution, over-exploitation, conflicting resource use, and habitat damage and destruction. Mangroves and wetlands are filled, small bays are being closed to create real estate, or are leased for aquaculture and mangrove-dependent flora and fauna are threatened.

This degradation is traceable directly to damage by over fishing, tourism and development activities, and inactive reef management. Protection of the coastal biodiversity on an

island or islet may appear to be local in nature; however, isolated populations of organisms evolve and form distinct components of the global genetic pool. At our recent Caribbean regional meeting, the participants emphasized the need to develop integrated coastal zone management policies and plans and the establishment of coastal zone units in all SIDS. Important aspects of Integrated Coastal Zone Management include addressing beach erosion, sand mining and coral reef conservation and protection, all of which are so vital to the survival of the islands. These concepts are difficult to apply in practice but they form part of a holistic approach to conservation and management and to the interaction between the island and the seas.

The Caribbean Sea, one of the most important semi-enclosed seas in the world, is the main resource linking Caribbean SIDS and its fragile ecosystem, which is routinely exposed to heavy traffic for cargo and cruise tourism, demands a comprehensive scheme for its protection in order to ensure its continued contribution to their sustainable development and in particular to the sustainable livelihoods of coastal communities. Caribbean SIDS therefore continue to advocate the designation of the Caribbean Sea as a special area in the context of sustainable development, and have taken this concern to the United Nations General Assembly, which has recognized the Caribbean Sea as having a unique biodiversity and highly fragile ecosystem. The General Assembly has called upon the United Nations system and the international community to assist, as appropriate, Caribbean countries and their regional organizations in their efforts to ensure the protection of the Caribbean Sea from degradation as a result of pollution from ships, in particular, through the illegal release of oil and other harmful substances, from illegal dumping or accidental release of hazardous waste, including radioactive materials, nuclear waste and dangerous chemicals, in violation of relevant international rules and standards, as well as pollution from land based activities.

In our preparations for the International Meeting to review the Barbados Programme of Action, the SIDS have examined these issues very closely and have undertaken to commit themselves to a series of actions in addition to the many that already exist aimed at protecting the marine environment and conserving the marine resources. I have already outlined some of these actions earlier.

Equally we have, *inter alia*, underscored the importance of completing the work on the mapping of Exclusive Economic Zones and depositing the charts with the United Nations Convention on the Law of the Sea Secretariat. We have also recommended the emulation of the success stories such as the Meso-American Barrier Reef Systems Project and the International Coral Reef Action Network in the Caribbean region, as examples of how the SIDS can seek to protect this valuable resource, which is protecting the very fabric of island life.

But for us to succeed it is essential that we get the critical support to build our capacity and fund our projects. The 'Type II Initiatives' emerging out of the Johannesburg Plan of Action represent a tremendous potential for action by organizations like the Global Forum on Oceans, Coasts and Islands in support of the Small Island Developing States. And we are very grateful for the important work that has already been undertaken by various partners in the different AOSIS regions. To name just a few let me first mention the initiative on 'Sustainable Development and Management of the Caribbean Sea' which is aimed at developing capacity to address the current threats to the environmental quality of the Caribbean Sea. The lead agency for this initiative is the Caribbean Community (CARICOM). Another interesting one is the U.S. Department of State led 'White Water to Blue Water' initiative which is a crosscutting approach to regional oceans and coastal ecosystem management. This initiative in particular aims at increasing coastal state and regional capacity for cross sectoral approaches to the management of watersheds and marine ecosystems.

In the Pacific region we have the 'Pacific Islands Oceans Initiative' with the overarching goal of healthy oceans that sustain the livelihoods and aspirations of Pacific Island communities. This initiative is intended to assist with the implementation of the Pacific Islands Regional Ocean Policy. The 'Capacity Building for Pacific Island Countries in Ocean Policy Implementation' is another initiative led by the National Oceans Office of Australia to increase the regional capacity in sustainable development, integrated oceans management, regional cooperation and partnerships.

We at AOSIS would like to see more of such initiatives and more of such partnerships. But what is also important is to ensure that there can be some coordination and consultation in order to avoid duplication and work at cross-purposes.

This Global Conference will be discussing a range of issues during this week all of which are likely to have an impact on the most effective way to approach the various concerns relating to the oceans, coasts, and the islands. It is our hope that the concerns, which we as small island developing states have expressed over the years, could in the course of the discussions get translated into concrete proposals for action. Let me mention such recommendations for action which are not new but which remain as valid to the sustainable development of small islands today as they did when they were first raised during the Rio conference.

At the local level, there is a need to ensure the dissemination of information. We need to prepare the versions of international instruments related to sustainable use of marine and coastal areas that are easily understood by local communities and the lay people showing the linkages between different agreements and the benefits, as well as the responsibilities, of small island developing states.

At the national level, in terms of island management, there is a need to establish and strengthen new institutional and administrative arrangements for the development and consolidation of integrated island management plans. We need to ensure capacity building for implementing integrated island management.

In terms of transfer of clean technology, we need to facilitate such transfers to reduce pollutants at their source and we need to have appropriate methods for treating sewage, industrial waste and solid waste.

At the level of community-based management, there's a need to support the development of guidelines and the implementation of pilot projects for community-based management of coastal resources as well as the development of alternative livelihoods like aquaculture and ecotourism.

With regard to marine resources, we believe that the need is there for exploiting living and non-living resources in the EEZ. We need to assess and monitor the fish catch, processing and marketing by foreign and domestic fishing companies need to be encouraged. We need also to develop legal frameworks for sustainable fisheries activities. We need to develop management plans and policies for assessing, monitoring and exploiting the resources in the EEZ.

At the regional level, we believe that there is a need to assist the regional institutions to strengthen their capacity to negotiate agreements related to the use of marine resources. There's a need also to strengthen the capacity to develop and implement national and regional action plans consistent with the goals of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. In the field of ocean energy, SIDS have a high dependence on fossil fuels, there's a need to shift from that source to new and renewable forms of energy like that of ocean energy such as thermal and mechanical energy. And we need also to develop specific initiatives for sustainable management of the oceans. And in that regard, there's a need to ensure that the implementation of UNCLOS and other international instruments can be done in an integrated manner which would support the development of related national ocean policies and legislations.

We need to have improved access to survey and monitoring technologies, which will help us with boundary delimitation, which in turn will help to ensure responsible and sustainable use of ocean resources and the completion of marine boundaries delimitations. With respect to ocean policies we think that we need to encourage the development and implementation of regional and national policies so as to enhance the sustainable management of oceans and their resources. The promotion of total ecosystem marine resource management through capacity building and pollution control measures needs to be encouraged and there is a need for further development of policy and program options to assist countries to

sustainably manage their own marine and ocean jurisdictions. We also need to carry out coastal vulnerability assessments in order to undertake qualitative improvements in such assessments. There needs also to be proactive coral reef monitoring. We also, and more importantly, need greater global co-operation to monitor the activities of illegal fishing, dumping pollution and shipment of toxic, hazardous and nuclear wastes. In that respect there were some suggestions earlier this morning about the need to get all vessels which are fishing in the territorial waters to be equipped with the GPS system so they can be located and then action can be taken if needed.

Madame Chair, Ladies and Gentlemen, the scale of human activities today affects not only the large-scale physical systems of the planet but also has consequences that reach far into the future. Most environmental problems that will require policy attention are the ones that are well known. And as time goes on, these problems will become more severe and pose more local as well as global challenges. The future impacts of today's decisions thus need to become more and more prominent in current policy-making. The need for broader integrated coastal and marine resource management approaches cannot be delayed any further. The consequences of non-action are too risky and are likely to be catastrophic for the small island developing states.

I thank you for your attention.





*Canada*

## ADDRESS\*

**Mr. Daniel McDougall**

Director-General of Oceans  
Department of Fisheries and Oceans, Canada

Thank you, Mr. Chair. Co-chairs, conference participants, it is with great pleasure that I join you today on behalf of the government of Canada, the Minister of Fisheries and Oceans, to share Canada's perspective on implementing the WSSD commitments. There are three aspects of the WSSD Plan of Implementation that I would like to touch on this morning. The first is dealing with implementation of those commitments and targets at the national level. The second is dealing with the linkages between the national, and the international and the intergovernmental aspects of the targets. The third aspect, the one that is indeed critical to the gathering here this morning, is the broadening of the WSSD agenda and the need to move the agenda beyond just a governmental and intergovernmental agenda, and to engage better civil society, the private sector and the others that are necessary for the effective implementation of the WSSD Plan of Implementation.

Regarding the first aspect, I'd like to highlight that we need to remember very clearly, as has been noted earlier this morning, that the WSSD Plan of Implementation is itself very much an integrated agenda. Accordingly, we need not only make progress in specific areas, but we also have to understand how these issues fit together and how we can draw from each aspect of the broad WSSD Plan of Implementation to deal with progress on sustainable development.

I would like to turn briefly to the Canadian experience. In Canada we think that we have created a strong congruence between our domestic oceans agenda and moving forward on WSSD implementation. We very much consider the Plan of Implementation to be a plan of action and we are starting to make, at least, very significant progress on that implementation. For example, one aspect I would like to highlight today is the WSSD's call for countries to ratify the United Nations Convention on the Law of the Sea. I'm very pleased to indicate that last week, the Government of Canada deposited our instrument on ratification for UNCLOS. Canada has long viewed UNCLOS and the United Nations Fishing Agreement as two complementary building blocks to the enhanced management of our global oceans. We believe our ratification of UNCLOS and our participation in UNCLOS institutions will provide a strong foundation for Canada to

continue our collaborative and innovative approaches to oceans issues with the international community.

We have also put in place the necessary legislation and policy framework to support a modern oceans management agenda domestically. We have created a national Oceans Act that provides the basic framework for oceans management, such as integrated management planning, the establishment of marine protected areas, and the development of marine environmental quality guidelines. The government of Canada last year also released a National Oceans Strategy, that articulates the overall policy direction and principles we will use to manage our oceans. The strategy again complements the WSSD agenda, in that it indicates we will be moving towards the implementation of an ecosystem-based approach to management, the broad application of the precautionary principle for the protection of the marine environment and the promotion of sustainable development overall. We have also established a national program of action for the protection of the marine environment from land-based activities. Recently, we have enacted legislation for the protection and recovery of endangered marine species and we've established our first marine protected area – the Endeavor hydrothermal vents. A suite of fifteen other marine protected areas have been proposed for the protection of areas of high biodiversity such as sea mounts, important marine habitats such as soft-bottom marshes and species, and for marine mammals and significant marine resources.

We are also implementing large-scale integrated marine management planning projects, in the Arctic, in the Pacific, and in the Atlantic EEZ areas. Within those projects, we are working with coastal communities, to create the local capacity for participation in new oceans management structures.

In short, work is underway for the implementation of the WSSD Plan of Implementation. We do know, however, that there are and will be many challenges. As only one example, experiences have shown that achieving the WSSD target of maintaining or restoring fish stocks to levels that can produce their maximum sustainable yield, will present a considerable challenge for governments and stakeholders globally. Fish stocks are subject to illogical shifts and pressures that are complex in their origins and effects. Different species rebuild at different rates. So we have to explore what this commitment on MSY really means and how it can be realistically achieved.

\* Transcribed address.



To do this, governments will have to agree on what constitutes success under this target, measure progress based on those indicators of success and report on their progress. We also know that unless we get a handle on issues such as illegal, unregulated and unreported (IUU) fishing and overcapacity, reaching maximum sustainable yield will continue to be extremely challenging.

Determining these types of linkages among the various commitments of the WSSD Plan of Implementation, must include an exploration of the underlying issues, the appropriate tools and the institutional mechanisms necessary for achieving success. Again, another example may be constructive. Canada expects to implement its National Plan of Action on IUU fishing this winter. In so doing, we are taking into account the framework of the FAO, the analysis of the OECD, and how best to apply the range of policy program and regulatory instruments we have available to us. We can make these connections at the national level. Making comparable linkages on issues such as this, and on the full range of WSSD commitments, is necessary not only at the national level, but also at the regional and global levels and this will indeed be extremely challenging. It is these types of issues that we are hoping that fora such as these will help address and help to create the linkages that will be necessary for progress.

WSSD recognizes that global actions are indeed necessary. Particularly we need to make stronger linkages amongst those institutions and agencies responsible for global actions. Not everything can, or should, be done at the national and subnational scale. For example, the Plan of Action calls for improvement in the scientific understanding and assessment of marine and coastal ecosystems as a fundamental basis for sound decision-making. This is an enormously costly and challenging undertaking, for the WSSD calls for interagency collaboration. In order to achieve this objective, I would suggest that this is one area where we might need to look at deepening the WSSD commitment, going down to the level of inter-program collaboration, not just interagency collaboration. We need to ensure that, at a minimum, there is no duplication of effort and beyond that, we are taking advantage of the synergies that are possible, particularly in scientific

domains where we strive, for example, to achieve ecosystem-based management. We need to develop new scientific and management tools and develop new approaches to applying these tools, in areas where we have capacity challenges and in areas where we have significant limits in our scientific knowledge. In our view, ecosystem-based approaches are the foundation for an integrated oceans agenda. Our collective understanding of ecosystems has improved over the years but we still have a long way to go.

This demands information on emerging issues, such as the conservation of high sea resource and habitat. Of course, we need to keep in mind that data collection and analysis is even more challenging for developing countries. We need strong, clear frameworks to guide and target our actions. So it will be imperative to determine in advance what type of data are needed to ensure the successful application of an ecosystem approach and, more importantly, how we can apply that data and knowledge in a management context. We also need to consider how to include the social and economic forms of knowledge such as local and traditional knowledge into the decision-making process for oceans management. Communities depend on the health of their oceans for social, economic and cultural well-being. We need information and management decision-making processes that can make these linkages between environmental conditions and social and economic outcomes.

In conclusion, the overall message I would like to convey today, is that while the WSSD Action Plan sets out a difficult and challenging agenda with ambitious targets and timelines, it is nonetheless an agenda that is easily transposable to the national level for implementation and meaningful progress is doable. However, the pace and effectiveness of national progress is very much dependent on action taken on issues at the regional and global level and is dependent on strengthening governmental and interagency collaboration and cooperation. All of these efforts, must also be supplemented by the broader engagement of citizens, oceans users, and civil society generally.

Thank you.



*France*

## ADDRESS

**Ms. Roselyne Bachelot-Narquin**

Minister for Ecology and Sustainable Development  
France

Ladies and Gentlemen,

It is with great pleasure that I come here “as a neighbour”, my ministry being just a step away, to take part in your symposium on the sustainable management of oceans and coastal environments. I should also like to say that I am happy that you have chosen France as the venue for this international event.

At the Johannesburg Summit, the President of the Republic, Mr. Jacques Chirac, made this historic remark “the house is on fire and we are gazing out of the window”.

The reference to fire is obviously somewhat distant when oceans are the topic of discussion.

But it is clear that the Johannesburg Summit provided the opportunity to place the spotlight on sustainable ocean management and the current emergency situation in which we find ourselves, as underlined in paragraph 30 of the Summit’s report, in a sentence that I endorse today:

“Oceans, seas, islands and coastal areas form an integrated and essential component of the Earth’s ecosystem and are critical for global food security and for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries”.

I want you to know that France has made a strong commitment in this field:

- a national sustainable development strategy, comprising a comprehensive maritime component, has been developed and was submitted to the interministerial maritime committee on 29 April 2003;
- the strategy highlights governance issues specific to marine environments and coasts, with particular reference to knowledge and observation, a theme that was addressed at greater length at last summer’s Washington Summit;
- lastly, it must not be overlooked that such governance concerns the international community first and foremost and therefore requires tools for concerted action by the various States.

I shall begin, by way of illustration, with the maritime component of the national sustainable development strategy, which is a practical expression of France’s policy commitment. It forms part of an ambitious approach, whose high note has

been the inclusion in our Constitution of an Environment Charter, whose preparatory work I had the honour of overseeing.

France has the second largest maritime zone in the world, which gives it access to many resources.

But our knowledge of marine ecosystems generally falls short of enabling us to understand how they function and to exploit environments in a responsible and environmentally friendly manner.

The first component of France’s strategy thus involves action to improve knowledge of the marine environment in order to exploit its resources in a sustainable manner and evaluation of the impact of various activities.

France’s action in this field consists, in particular, in improving knowledge of fish ecosystems, taking stock of the potential of the continental shelf, conducting studies on new energies harnessed from the marine environment and consolidating its position in operational oceanography, which will be one of the keys to sustainable marine exploitation.

It must also be said that the European Water Framework Directive too has set us the ambitious goal of achieving good chemical and ecological status in all water environments, including coasts and estuaries, by 2015. To do so, we must, in particular, significantly develop our marine environment monitoring networks so that we shall be able, among other things, to evaluate the status of and changes in the quality of coastal waters and subsequently develop medium- and long-term management plans to attain the established goals.

The second component covers the application of the Recommendation concerning the implementation of Integrated Coastal Zone Management in Europe. The first stage will be carried out in close cooperation with local actors and will involve one or more voluntary regions, possibly coordinated by a pilot region. In parallel, a major effort must be made to collect and correlate geographical coastal data and make them accessible.

Policy briefs outlining sectoral policies for the development of new marine activities (such as wind power, the extraction of marine aggregates or aquaculture) will be drawn up as part of our thinking on the future national integrated coastal zone management strategy.

Lastly, in regard to maritime transport, the Government has

decided to adopt the conclusions of the report submitted by Senator Henri de Richemont, particularly as regards the establishment of marine highways.

These, ladies and gentlemen, are the lines of emphasis that France has placed at the core of the maritime component of its national sustainable development policy.

I must add that France aims to draw up a national strategy on biodiversity in the next few months in order to attain the goal of halting biodiversity loss in our territories by 2010. From the large cetaceans, which we regularly defend in the International Whaling Commission, to highly complex questions concerning the oceans' microbial communities and the impact of human activity on them, the sea must be a key feature of the national strategy. As I told the Council of Ministers on 10 September 2003, we are going to move forward very rapidly:

- the main lines of the strategy will be submitted to the Conference of the Parties to the Convention on Biological Diversity, in Kuala Lumpur, in February 2004;
- detailed action plans will be drawn up by the summer of 2004;
- an international symposium will be held in September 2004 to conclude this undertaking, which will be set in a global perspective.

These specific decisions are illustrative of a basic fact: the sea is the focus of increasingly important economic activities, whose full significance may well have escaped our "terrestrial" national policy systems. One key point seems to me to stand out: quite apart from the need to protect natural marine environments and resources, we must manage the sea and activities in and on the sea.

That is a much more delicate task than protection: official regulations may be issued if they can subsequently be applied, but good management is possible only if the stakeholders concerned are closely involved. The principles of such management are:

- an ecosystem-based understanding of the environment;
- adoption of an integrated approach to all activities and all issues, which means that there must be appropriate consultation and coordination bodies;
- management decisions informed by indisputable scientific knowledge, i.e. based on systematic observation;
- adoption of a future-oriented approach: management must entail, above all, anticipation.

With this in mind, our Government has decided to launch very shortly the pilot integrated coastal zone management operations mentioned earlier. Similarly, my colleague Hervé Gaymard, the Minister of Fisheries, has just set up working groups involving fisheries professionals, IFREMER experts and his ministry's departments, to improve joint ownership

of data on the status of fish ecosystems.

In particular, observation is a topic of capital importance whether in the form of:

- detailed observation of environments, for which purpose my ministry's research programmes will soon lead to the introduction of permanent instruments to ensure, as stated earlier, the requisite follow-up to the European Water Framework Directive;
- global oceanographic observation, which I should like to set in the wider context of earth observation.

While the action taken by my ministry covers extremely varied fields and involves many experts in different disciplines, it is based on a plan that generally consists in knowing, understanding, foreseeing and deciding. I therefore rely on close observation of environmental phenomena throughout our territory and on the scientific community's expertise and research capabilities when taking decisions on the most appropriate preventive measures.

For example, it is as a result of the research carried out by scientists that we can now link extreme events, such as the terrible heat wave in August, to climate change and human activity. That is why I am particularly interested in developments in earth observation practices in Europe under the Global Monitoring for Environment and Security (GMES) initiative and, worldwide, as part of the follow-up to the Washington Earth Observation Summit, at which France was represented by the minister responsible for research and Europe spoke with one voice as a result of upstream cooperation under GMES. I shall be very attentive to proposals at the earth observation summit to be held at the end of 2004 in Europe to endorse the 10-year programme to integrate and coordinate observation systems. Such a system, if well designed, should capitalize on all local monitoring initiatives, for even if States discharge their responsibilities, as I am doing for example by building in France an observatory on the impact of oil slicks and on knowledge of coastal ecosystems, it is with reference to more global parameters that local decisions will have to be based in many cases.

France has built such observational capacity primarily in the field of oceanography. Our national research institute, IFREMER, is the inventor of operational oceanography and one of the driving forces behind its development in Europe. I am, to that extent, confident in the future of your discipline, but I am also keen that this achievement should serve as an example, the tools developed for ocean surveillance being so close to those that, transposed to other sectors, yield more specific knowledge about the earth and will thus provide a basis for relevant and effective preventive measures.

While observation is a good example of an area in which international cooperation should be developed, I believe that we must go a step further: ocean administration is by nature

an international matter. The ecosystem-wide approach entails looking at the Mediterranean Sea, the Gulf of Gascony or the Caribbean Sea as a whole.

Freedom of customs is however well established in marine history, along with a quasi-customary legal tradition with which the international community has only recently come to grips, with the signing of the United Nations Convention on the Law of the Sea at Montego Bay in 1982. Previously, there had not been any collective concern with ocean management.

The golden rule is still freedom to access and exploit resources in shared waters. However, the recent rise in problems has dented people's confidence in established international bodies, their existing decision-making mechanisms and their ability to ensure sustainable ocean management and a corresponding regulation of activities. The strong condemnation of "sea rogues" by the President of the Republic merely echoes a groundswell of public opinion. Similarly, the difficulties encountered in managing fishing activities worldwide are having an increasing impact on public opinion.

It must be understood that "concern for future generations" – regarding biodiversity issues and the status of ecosystems, for example – is increasingly widely felt and is prompting the international community to assume greater responsibility in the area of sea management. This could rightly lead to a strengthening of controls on the high seas and therefore to restrictions on the initial principles of absolute freedom. After all, we have no problem in recognizing that the burning obligation to defend the public interest sometimes calls for a review of the principle of individual freedom that constitutes one of the bases of our law.

Having said that, limitations on the basic right to freedom on the seas are politically sustainable only if they are accepted, hence the importance of participatory governance procedures that involve the various players in decision-making and are based on a detailed understanding of the functioning of marine ecosystems.

In these circumstances, marine administration necessarily involves control, which implies public authorities vested with operational means, therefore States or groups of States, and not only bodies that lack the means of exercising such control.

To date, reflecting a rather land-based approach, States have intervened under the articles relating to sovereignty in the Convention on the Law of the Sea. In the MARPOL Convention, States are empowered to act only in waters under their jurisdiction, in France's case in the exclusive economic zone and the recently created Ecological Protection Zone (EPZ) in the Mediterranean. On the basis of these tools alone, it is to be hoped that bordering States will take responsibility for the future of the Mediterranean and that the establishment of neighbouring EPZs will be a step in the right direction.

Judging by the momentum building up around regional maritime cooperation bodies, as in the case of the Mediterranean today, we are doubtless ready to coordinate our means of action within such bodies, provided that the law of the sea allows it.

But, in the end, particularly in the marine field, the problem is not only a matter of sovereignty, a very obstructive notion that calls to mind conflicts over rights that States would like to arrogate to themselves and which must be relegated to the past. By a Council decision adopted in December 2002, the European Union has taken an interesting decision to strengthen fisheries management in the Mediterranean. Will existing legal tools suffice to implement the related action plan? Similarly, the initiative taken by several States to create a particularly vulnerable maritime zone off the European Atlantic coast deserves to succeed, but it is obvious that more must still be done to explain what the intention is and what must be done to achieve it and to study its effects.

Let me give you my opinion on this point: it is quite possible that out of concern for ocean-related sustainable development we shall one day revisit the Convention on the Law of the Sea, in particular, to introduce new tools that will give coastal States increased powers and even rights to intervene, in many cases through a regional coordination body, without necessarily being bound to a rationale of sovereignty inherited from the past.

To conclude, I should like to convey to you my deep conviction that we have a duty to future generations, in which the oceans have an important part to play, which has yet to be fully appreciated. The oil tanker *Prestige* sank off Spain barely one year ago, only three years after the *Erika* accident. While we can be said to be approaching the end of the critical phase in fighting the pollution that affected our coast, the moment has come to undertake a scientific, technical and political assessment of the situation. Much work still lies ahead to ensure that the guilty parties in such ecological disasters can no longer continue to behave as in the past. We have an duty to ensure that humanity understands that the sea in all probability represents the future of the earth.







*Iceland*

## PROGRESS AND CHALLENGES FACED BY THE ARCTIC COUNCIL IN ADDRESSING WSSD COMMITMENTS\*

**Ambassador Gunnar Pálsson**

Director of Natural Resources and Foreign Affairs, Ministry for Foreign Affairs  
Reykjavik, Iceland

Thank you, Chairman, Distinguished Guests, Ladies and Gentlemen:

From the Pacific we now move to the Arctic. I must say that it is an honor for me to introduce to you the work of the Arctic Council in implementing the ambitious goals of the Johannesburg Summit in the area of the marine environment. The Arctic Council, as many of you know, is a high-level, intergovernmental forum for addressing common concerns of the people of the Arctic region as they relate to sustainable development. Its eight members are the Nordic countries, the countries of North America, and the Russian Federation. In addition, six organizations representing indigenous peoples in the Arctic, commonly referred to as the permanent participants, participate in the work of the Arctic Council in full consultation with the member states.

Environmental issues have long been the main concern of the Arctic Council, the monitoring and assessment of pollution, climate change, biodiversity conservation, emergency preparedness and prevention as well as the protection of the marine environment. In addition, the Arctic Council addresses the economic and social dimension of people's lives in the Arctic. Ocean issues, one of the main topics of this conference, are high on the agenda of the Arctic Council, in part because of the large number of people who derive from the ocean their food and income and to some extent their cultural identity as well. Also, there is growing evidence that climatic processes and industrial pressures on the marine environment are beginning to have a substantial impact in the Arctic. Some of these effects were, indeed, referred to by Lord Hunt during an earlier session this morning.

The Arctic is predominantly a marine environment. The Arctic Ocean covers approximately 20,000 square kilometers, eight times the extent of the Mediterranean, for example. The marine environment of the Arctic is extremely rich in natural resources. It holds some of the world's most important commercial fishery grounds as well as oil and gas reserves. In addition, the Arctic is integral to the world's hydrological system. Overall, I don't think I exaggerate if I claim that the

Arctic Ocean is of considerable importance to the world as a whole.

As a regional organization, the Arctic Council can have an important role to play in the implementation of the commitments of the Johannesburg Summit. The Council provides, for example, regional coordination and cooperation to protect the Arctic marine environment from both land and sea-based activities through, among other things, the implementation of UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities at the regional level.

In the context of the Johannesburg commitments, I would like to draw particular attention to the Arctic Council's strategic plan with strategies based on an integrated approach to sustainable ocean management. We are confident that this plan will contribute significantly to the implementation of targets set by the World Summit on Sustainable Development. A three-day workshop hosted in Reykjavik last month under the auspices of the Arctic Council was an important milestone in this regard. The objective of the workshop was to provide a forum for exchanging information and ideas on the drivers of change and trends in ocean management. The main drivers of change identified at the workshop include climate change and increased economic activity. Both call for integrated holistic approaches. There was broad consensus that the ecosystem approach should be central to the Arctic Marine Strategy. At the same time it was recognized that more work was needed to define how an ecosystem approach is to be implemented given that this is a relatively new concept in natural resource management. In addition to the ecosystem approach, the precautionary approach and the polluter pays principle were referred to as important elements for consideration. One of the conclusions of the workshop was that the strategic plan should not deal only with the open seas but also with coastal zones, river catchments, and other areas that are connected to the ocean ecosystem. Now, the aim of the Arctic strategic plan is to set priorities. Through it we will not seek to reinvent principles, but develop and link existing ones. Such a strategy should offer numerous opportunities. It would help us confront existing conditions

\*Transcribed address.

including pollution and it would provide a means to address new and emerging challenges. One example is the possible opening of new Arctic Sea routes due to melting sea ice. The plan should enable the Arctic Council to take a leading role in the regional application of the ecosystem approach. An integrated approach would include partnerships among the different Arctic Council working groups as well as with external partners. It would also provide links to other international initiatives such as the UNEP Regional Seas Programme, the EU Marine Strategy, and the London Convention.

I would not want to conclude without mentioning the one Arctic Council project specifically referred to in the Johannesburg Plan of Implementation, mainly the Arctic Climate Impact Assessment (ACIA) due to be completed by autumn of next year. The goal of the ACIA is to examine present and possible future impacts of climate change on

the environment and its living resources, on human health and social and economic activities as well as possible adaptations and responses. Emerging evidence shows that the Arctic marine ecosystem is particularly vulnerable to global climate change. This is of growing concern and raises questions, among other things, about possible effects on the utilization of marine resources, global sea levels, and the so-called thermohaline ocean circulation—the global conveyor belt of the oceans that helps distribute the earth's heat.

For these reasons, the Arctic marine environment needs to be seen in a global context and addressed as such. And I am, therefore, particularly pleased to be able to draw attention to the Arctic marine environment in the context of this conference, and I look forward to having other opportunities to share with you the results of the Arctic Council's work on the ocean environment in the future. Thank you for your attention.



*Portugal*

## PORTUGUESE STRATEGIC COMMISSION ON OCEANS

**H.E. Mr. José Luís Arnaut**

Minister Assistant to the Prime Minister of Portugal  
and Chairman, Strategic Commission on Oceans  
Portugal

Thank you Mr. (s) Chairperson,

Ladies and Gentlemen

Let me begin by congratulating the Global Forum on Oceans, Coast and Islands and in particular Dr. Patricio Bernal, Executive Secretary of the Intergovernmental Oceanographic Commission (IOC), Dr. Veerle Vandeweerd, Coordinator of the UNEP/GPA and also Dr. Biliانا Cicin-Sain, Director of the Gerard J. Mangone Center for Marine Policy of the University of Delaware, for their continued efforts to move forward the global agenda on sustainable oceans governance.

This is an objective fully shared by Portugal.

I would like to go back in time, before Johannesburg, and recall Portugal's participation in the preparatory process of WSSD as a European Union Leading Country on ocean matters.

We were committed to ensuring - with several other like-minded national delegations, non-governmental organizations and stakeholders - that oceans, coasts and islands were to be on the Summit's agenda.

This goal was achieved and today we happily recognize that oceans, coasts and islands are amongst the World Summit's important outcomes.

At the Summit the Portuguese Prime Minister advocated that: (and I quote) *"Effective action to improve oceans and coastal management is urgently needed."*

He asked for (quote) *"political will to deliver concrete efforts and to be in line with the real aspirations of sustainable development"*

and finally assured that

*"Portugal will maintain her commitment to enhance public awareness and to help construct an international conscience in this important matter."*

This is why I am here today, in my capacity as Chairman of the Portuguese Oceans Strategic Commission, a high level policy group recently established to elaborate a national strategy for the ocean.

Ladies and Gentlemen,

We all recognise that the targets and timetables set out in the Johannesburg Plan of Implementation, inasmuch as they were accepted and adopted by the World's Heads of State and Government, constituted a step forward for the cause of the

oceans and seas.

And, in fact, issues pertaining to the oceans are becoming more and more a matter of discussion among nations as well as between these and other relevant actors.

Much of this attention is due, unfortunately, to the very concrete threats that the oceans face today, in particular, the rapid depletion of living resources, the degradation of their ecosystems and of the marine environment as a whole. All of which demand courageous decisions that will bring change to such current trends.

Simultaneously, the growing importance of oceans and seas and the growing attention paid to them by politicians and decision makers is also due to the pressure of public opinion, moved in particular by environmental disasters such as the Erika and Prestige.

Unfortunately, history tells us that many of the world's advances in environmental policy have resulted from such disasters, which in most cases could have been prevented.

Finally, attention to the oceans is also raised by new economic uses of the sea made possible by rapid developments in marine research and technology.

It is thus the right time to focus on implementing the principles, the directives and the targets that have been agreed by the international community.

And in this respect Johannesburg took the right approach. Top priority was given to the effective implementation of the vast range of international ocean law already available.

We support actions as broad as the ones that call for accession and implementation of the Law of the Sea, or Chapter 17 of Agenda 21, to other more specific calls for implementation relating to biodiversity (implementation of the Jakarta Mandate): marine pollution (implementation of the GPA), or fisheries (implementation of the FAO International Plans of Action).

Indeed, the focus in the coming years should be on implementation and related institutional adjustments more than in creating new legal instruments. Implementation requires political will. Such political will seems to be on the rising, if for nothing else, as a result of the pressure from public opinion as I have just mentioned.

In this picture, however, there is an essential piece of the

puzzle that is still missing, that is: coordination and cooperation, supported by scientific understanding and assessment.

We thus welcome the commitments set out in the Plan of Implementation relating the improvement of scientific knowledge and monitoring as a fundamental basis for sound decision-making.

In particular, we fully support the Plan of Implementation's actions to increase scientific and technical collaboration in marine science, and to establish by 2004 a process for global assessment and reporting of the state of the marine environment.

To this end, we urge relevant bodies of the United Nations system, with the Intergovernmental Oceanographic Commission (our host) acting as a focal point, to develop the appropriate interactions, as these are issues requiring scientific and technical competence and capability.

Ladies and Gentlemen,

The structure of international ocean law and institutions parallels that at the national level in most cases, and reflects its main weakness.

National ministries and agencies, responsible for instance for fisheries, ports, maritime safety and transportation, off-shore oil drilling, tourism or the environment, all have interests in ocean uses, which often are exercised in competition rather than in coordination.

In truth, protection of the marine environment has seldom been integrated into cross-sectoral policies.

This is why I would like to emphasise the goal of achieving integrated ocean and coastal management. In this context two of the WSSD action-targets deserve serious consideration:

- Establishing an effective, transparent and regular inter-agency coordination mechanism on ocean and coastal issues within the United Nations system. It is unfortunate that no deadline was given here. It is a task that can be made with the good will of all of us and that would set an important example to the entire international community, in particular to action at the domestic level. We need to work on this.
- Promoting integrated coastal and ocean management at the national level and encouraging and assisting countries in developing ocean policies and mechanisms on integrated coastal management.

However, the recognition and the call for "coordination", which is implicit in the concept of "integrated management", as you all know, was not born in the WSSD. It finds its origins in the preamble of the UNCLOS when it reads that "*All problems of the oceans are interrelated and need to be considered as a whole*".

In this context Portugal, with other nations, promoted in the UN the adoption of GA Resolution 54/33 where it was set out that the General Assembly "*Notes the importance of coordination and cooperation at the national level in order to promote an integrated approach on ocean affairs.*"

Our belief in the need of improving coordination and cooperation at all levels to achieve a sound ocean governance, made Portugal a firm supporter of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, which was established by the above mentioned GA Resolution.

The importance of coordination and cooperation has also been a recurring theme in the last Reports of the UN Secretary General on Oceans and the Law of the Sea.

In this regard the Secretary General goes as far as expressing the view that the lack of coordination and cooperation in addressing ocean issues, which call for cross-sectoral responses at all levels, starting at the national level, has prevented the emergence of efficient and results-oriented ocean governance.

Indeed, if we seek sound ocean governance we need to start by further improving institutions as well as coordinating and integrating at the national level. In Portugal we took very seriously the challenge of promoting integrated coastal and ocean management.

As a result, the Prime Minister has established on July 9, 2003 the Oceans Strategic Commission.

By establishing this high-level policy group the Government acknowledges that priority should be given to all matters concerning the ocean.

In this way it recognises and emphasises the strategic importance that the sea represents to Portugal. We are a country with close ties to the ocean, not only for historical reasons but mostly for the geographic reality in which we are in.

Indeed, the exposure of Portugal's long continental coastline and the positioning of the archipelagos of the Azores and Madeira grant us the largest maritime area of all member countries of the European Union. Our oceanic area is 18 times larger than our territorial grounds.

The Commission is made up of ministerial representatives and members of civil society and in accordance with its mandate shall present elements that will define a national strategy for the ocean, which shall be based upon a sustainable use and development of the ocean and its resources, and shall promote the management of the marine areas existing under Portuguese jurisdiction.

The main goal is to overcome sectoral approaches and thus provide a vision of the ocean that is global and integrated.

As such, we have brought together experts in oceanography, hydrography, marine biology and geology, experts in robotic

and systems, in naval engineering, in marine environment, in fisheries and aquaculture, in ports, maritime transports and ship building, in marine defence and vigilance, in Law of the Sea and diplomacy and even in marketing, and communication, in sociology, economy and management.

What we are seeking with the Commission can only be achieved with a strategic vision. A vision of long term investment on the ocean, supported by a set of main goals, as well as an appropriate national policy to pursue such goals.

Our vision is the importance of safe, secure and healthy oceans as a main component of Portugal, and our mission shall be to maintain and preserve such asset.

Our goals are:

- To further develop the link between Portugal and the ocean (at an educational, environmental and a cultural level);
- To know, to preserve and to protect the ocean (subordinating decision-making to ocean and coastal integrated management);
- To promote sustainable economic development of activities connected with the sea;

- To create specialization in the fields of science and technology; international relations; and in our safety, security and vigilance entities and mechanisms;
- To set in place needed institutional adjustments.

The Oceans Strategic Commission is the first initiative of this kind in Portugal, encompassing an integrated, multisectoral and interdisciplinary approach to the sea.

Our aim is to go farther and to develop a new approach to the ocean that may allow us to think of it as an integral part of the country and, within international parameters, as an extension of our territory.

This is a serious challenge, a challenge that we are set to meet and to live up to.

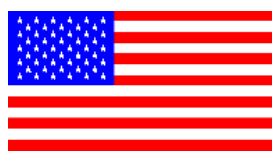
Ladies and Gentlemen,

By laying out briefly what we have done and are doing in Portugal with regard to oceans governance I hope I have met the purpose of this Global Conference: to focus on useful strategies and experiences in implementing the commitments made at the WSSD, giving the protection of oceans and seas a clear political profile.

Thank you for your attention.







*United States  
of America*

## U.S. IMPLEMENTATION OF WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT COMMITMENTS

**Dr. William J. Brennan**

Deputy Assistant Secretary for International Affairs,  
National Oceanic and Atmospheric Administration, U.S. Department of Commerce

### Introduction

Thank you, Mr. Chairman. I am pleased to be here today to share with you the United States' progress on implementation of the goals of the World Summit on Sustainable Development (WSSD) and to represent the efforts of not only my agency, the National Oceanic and Atmospheric Administration, but also of the other US agencies working on ocean-related activities. I also wish to thank the conference co-chairs, Drs. Cicin-Sain, Bernal and Vandeweerd, for organizing this event. I appreciate the opportunity to discuss our commitment to implementing the goals of WSSD and I look forward to hearing from my colleagues about their experiences.

I believe it is significant that we are gathering together again so soon after WSSD to discuss our progress. This conference and others that have taken place since Johannesburg are fine examples of the summit ushering in a decade of forward-looking actions. WSSD reached consensus on targets to be met by the participating community of nations and laid out in the Johannesburg Plan of Implementation an ambitious framework for implementing the goals of sustainable development. Many goals for ocean-related issues in the implementation plan are goals that have guided the work of US agencies and international and non-governmental organizations since the Rio Summit. So, though the goals are not new, the course for implementation has now been clearly charted and the necessary partners are now on board.

This morning, I would like to discuss some of the significant ways in which the US is working to achieve successful implementation of those goals. By way of example, I will focus on three goals that we are currently implementing. Two of these goals are explicitly related to oceans, coasts and islands. The third goal is much broader, and yet will play a key role in our collective effort to take the pulse of the planet.

### First Goal

The first goal, to introduce ecosystem-based assessment and management practices by 2010, is in fact an activity well underway through the Large Marine Ecosystem, or LME, projects, supported, in part, by the Global Environment Facility. The U.S. is pleased with the progress made on actions taken to move ahead on the introduction of ecosystem-based

assessment and management practices through the LMEs. The U.S. is also proud to serve as a partner with UNIDO, the GEF, IUCN, participating countries and others in these projects. In fact, to demonstrate our commitment, the U.S. announced during the Summit a \$500 million dollar pledge toward the replenishment of the GEF funds that support these and other LME projects around the globe.

As I reflect today on this pledge, it is clear that the post-Summit decade is to be one of significant progress toward the agreed-to targets; and we in the U.S. are pleased that the 126 countries participating in LMEs are committed, as are we, to the ecosystem-based approach for moving forward. The GEF is a proven success and the emerging new Network of GEF-supported LME projects is indicative of significant positive activity. In the absence of any single international organization empowered to monitor and manage marine ecosystems on a global scale, it appears that GEF-supported projects will help to fill this gap during the post-Summit decade.

The challenge to the countries participating in the LME Network is indeed one of national, regional and global significance. It is also within the boundaries of these LMEs that the Network can better address issues important to the Summit targets. The GEF funding support is now being applied to build the capacity needed to move the ecosystem approach forward to achieve fishery resource recovery and sustainability. Given the application of governance measures, it should be possible to achieve equitable allocation of the sustainable fishery resources to industrial, artisanal and other legitimate stakeholder interests.

We are also working to apply ecosystem-based assessment and management in the United States. Beginning with data from 2001, NOAA and the Environmental Protection Agency are in the process of integrating a coastal condition report. Indices of health from the nation's estuaries and ecosystems are coupled with fish species abundance, trends, and productivity data for the U.S. Northeast Shelf, Southeast Shelf and Gulf of Mexico LMEs.

Furthermore, NOAA and its partnering agencies are making some measurable progress toward the WSSD fish stock recovery targets. Among the stocks benefiting from the re-

building effort are Atlantic herring, Atlantic mackerel, Yellowtail flounder, and haddock.

## **Second Goal**

The second goal I would like to address is the promotion of integrated, multidisciplinary and multisectoral coastal and ocean management at the national level. One example of our work in this area is the White Water to Blue Water Initiative. The initiative is designed to stimulate partnerships that promote integrated watershed and marine ecosystem-based management in support of sustainable development. To build these partnerships requires integration, coordination and cooperation at the national and regional levels.

Domestically, the initiative has strengthened the integration of our own coastal, ocean and watershed management through the development of a robust interagency process with numerous agencies, and littoral states of the region, all working towards the same goals.

The White Water Initiative actually cuts across many of the ocean-related WSSD goals, because we are designing the partnerships to be developed among the different sectors of human activity, from agricultural practices in forests and landscapes to marine resource uses from drainage basins to the open sea. On the coastal side and throughout the Caribbean Sea, we will be encouraging the remediation of overfishing, habitat loss, and coastal pollution of the ecosystem. This links back directly to the previous discussion of promoting ecosystem-based assessment and management and will be done in part through the Caribbean LME project.

Before turning to my third goal, I will just mention that you can hear more about both the White Water to Blue Water Partnership Initiative and the LME Network from my colleagues in the next session.

## **Third Goal**

The United States is working vigorously to implement the third goal I would like to present today, that of promoting the systematic observation of the Earth's atmosphere, land and oceans. Let me focus on two aspects of our earth observation efforts.

In addition to the White Water Initiative, the United States is leading another significant WSSD initiative, the Geographic Information for Sustainable Development partnership, or GISD. Underscoring science as the basis for decision-making, this initiative draws on technological leaps to make wide use of satellite data. Over the past 30 years, the United States has spent billions of dollars on space technology, which enables us to collect environmental data and information on a global scale. Advances in information technology now allow us to make wide use of these data in support of activities such as sustainable agriculture, forestry, management of coastal and ocean resources, urban development, flood and

drought monitoring. Additional advances in information technology, including the Internet, allow data to be shared around the world. Through this partnership, the United States provides Earth observation data, state of the art GIS technologies and other knowledge to pilot projects in Africa. The pilot projects range from weather and climate to ones aimed at safeguarding food security.

GISD serves to connect remote sensing specialists with the people and sectors that can benefit from the use of the data. With this information, managers will be better able to address long-term challenges to natural resource management, land-use planning and disaster mitigation. The fact that this information is available to us today is a result of decades of international cooperation and partnerships among governments, academia, regional organizations and individuals, working together to develop the tools to understand the world in which we live. It is the full and open exchange of information and expertise that has made this partnership possible. The GISD truly represents a success of the public-private partnership. None of these individual entities could have done this alone.

Another way in which the United States is working to implement this goal is through the process that began with the U.S.-hosted Earth Observation Summit this in July 2003. At this summit, Ministers adopted a declaration that put forth the principles for developing a comprehensive, coordinated and sustained Earth observation system or systems to 'take the pulse of planet Earth.' This meeting represented a high-level governmental/political commitment to move toward a comprehensive Earth observation system and followed on from the G-8 Summit in Evian, France the month before, at which Heads of State affirmed a similar set of principles for strengthening international co-operation on global observation.

The Earth Observation Summit established the ad hoc inter-governmental Group on Earth Observations, referred to as GEO, and charged it with developing a 10-year implementation plan for a comprehensive, coordinated system or systems. The GEO has 4 co-chairs, representing the European Commission, Japan, South Africa and the United States, and a virtual international Secretariat, hosted by the U.S. but comprised of GEO members and international organizations.

The GEO process to create a truly integrated and coordinated system is gaining momentum and traction within the global community and all countries are encouraged to participate. The GEO group will be meeting in Baveno, Italy, in two weeks to discuss and give guidance on the first draft of the Framework for an implementation plan. The intention is to have the Framework adopted by ministers in Tokyo in the spring of 2004. Full implementation of the plan will be ready for approval by ministers at an Earth Observation Summit in Europe later that year.

As many of us know from our collective work on oceans observations, the national and international community has come to a heightened awareness of the need to observe the state of the global ocean much better than is done at present. The Global Ocean Observing System, which has been under development internationally for much of the last decade, provides a framework—a systematic, coordinated, and integrated approach. It will ensure that the nations of the world are able to document the changes in the physical, chemical and biological state of the ocean that are occurring. We can't stop with just the oceans and coastal areas, however. We must move forward to develop a global earth observation system or systems, which is why the GEO process is so important. And as we have learned from our experiences with ocean observations, systems of this nature will require cooperation. If we are to reap the full benefits of this endeavor, it must be integrated and coordinated.

## **Conclusion**

In conclusion, I would like to point out that the three goals I have chosen to discuss all have something in common with each other and with the other goals of WSSD – that progress toward achieving our goals cannot be done alone and that integration, coordination and cooperation are required in order to succeed. WSSD developed a plan of implementation and facilitated the development of partnerships to achieve it. Coming together as we have for this conference is an important part of the coordination and cooperation necessary in order to keep the momentum going for implementation. For in the end, if we all follow through on the commitments we have made, the world will have taken a giant step forward. Thank you.







## STATEMENT

**Dr. Klaus Toepfer**

Executive Director  
United Nations Environment Programme (UNEP)

Excellencies, Distinguished Delegates, Ladies and Gentlemen, I am honoured and pleased to address you today at the Global Oceans, Coasts, and Islands Conference, the first conference to assess implementation of the World Summit on Sustainable Development (WSSD) commitments, as they relate to the marine environment, since the Summit took place in Johannesburg last year. To this extent, the oceans, coasts and islands community is to be commended for its cooperation and determination to see that oceans, coasts and islands were adequately represented in the Johannesburg Plan of Implementation, the Water, Energy, Health, Agriculture and Biodiversity (WEHAB) Frameworks for Action, and the various type II initiatives. Without your dedication and perseverance, we would not be here today reviewing the work you have actively promoted since WSSD.

A major focus and outcome of WSSD is the implementation and formation of partnerships. The WSSD outlined the challenges facing capacity building and effective policy implementation, as well as the urgent need for effective partnerships to overcome these barriers. Through expanded stakeholder representation and involvement, increased sharing and exchange of knowledge and resources, and the formation of more effective working frameworks, the international community stands a better chance of implementing sustainable, long-term programmes of work. Your continued efforts and our mutual collaboration will ensure continued actions to invoke positive change.

UNEP's body of work addressing the health and sustainability of our oceans is ever-increasing, and we are grateful for the financial, substantive, and political support of governments and the oceans, coasts and islands community that allows us to continue to strengthen our efforts through the Regional Seas Programme and Global Programme of Action for the Protection of the Marine Environment (GPA).

The Regional Seas Programme was initiated by UNEP in 1974 to respond to transboundary issues such as marine pollution and the management of the marine and coastal environment. The Regional Seas programmes remain the central UNEP initiative providing the legal, administrative, substantive, and financial framework for the implementation of Agenda 21, in particular chapter 17 on oceans. However, as the nature and climate of international efforts changes,

it is important that the Regional Seas Programme adapts to adequately respond to current needs.

During the 22nd session on the UNEP Governing Council, held earlier in 2003, governments requested that UNEP encourage and support regional seas conventions and action plans to incorporate new strategic elements into their programmes of work. In response, we are revisiting the global direction of the Regional Seas. Our proposed new strategy for an enhanced Regional Seas Programme, which will be discussed at the upcoming 5th Global Meeting of the Regional Seas to be held in Nairobi from 25 to 27 November, is intended to build upon existing achievements and to incorporate the outcomes of the World Summit on Sustainable Development as well as reflect the Millennium Development Goals. It incorporates a strengthened role for regional seas in promoting the fundamental principles of sustainable development, including greater outreach to partners and stakeholders.

Specifically, six key directions are highlighted:

- i) Increase Regional Seas (RS) contribution to Sustainable Development through national and regional partnerships with relevant social, economic, and environmental actors;
- ii) Make the RS unit in Nairobi a service sector;
- iii) Enhance the sustainability of RS through increasing country ownership, translating RS conventions in national legislation and regulations, involving civil society and private sector, and ensuring financial sustainability;
- iv) Increase RS visibility and impact in global and regional policy setting, amongst others through the production of an annual statement on emerging/priority issues and through a new alliance of RS, sharing a common vision and jointly contributing to the international policy setting;
- v) Use RS as a platform for coordinated implementation of MEAs and global initiatives; and
- vi) Promote appropriate monitoring and assessment.

The UNEP-led Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, adopted in 1995, is the only global programme that directly addresses the link between freshwater, coastal and marine environments. It calls on governments to implement

national programmes to mitigate land-based pollution through a phased, prioritised process. Successful implementation demands broad stakeholder involvement and effective partnerships to establish integrated water resource and coastal area management.

Since the First Intergovernmental Review in 2001, the number and distribution of countries actively seeking to implement the GPA continues to grow. With 5 countries in the final stages of National Programme of Action (NPA) development, and approximately 30 more in the initiating stages, we are well on the way to achieving the goal declared at WSSD of having 40 formal NPAs by the Second Intergovernmental Review in 2006. Again, I must stress our appreciation to all of the governments who have generously committed backing to these efforts, and especially to the Government of the Netherlands, who has graciously hosted the GPA Coordination Office in The Hague since its inception.

The formation of the Hilltops-2-Oceans (H<sub>2</sub>O) Partnership Initiative was included in the successful partnership building efforts at WSSD. The Initiative aims to strengthen national governance frameworks that protect coastal and marine environments by (i) highlighting the link between freshwater and marine ecosystems; (ii) building multi-stakeholder capacity for integrated water resource and coastal area management; and (iii) exploring the use of time-bound Wastewater Emission Targets (WET) as a tool for managing water from the Hilltops to the Oceans. This initiative builds upon the achievements, which have already been met through GPA implementation.

The Global H<sub>2</sub>O Partnership Conference, to be held in May 2004 in Cairns, Australia, will serve as a major milestone in implementation, and I hope you will join us there.

The emphasis on water issues can also be seen elsewhere in UNEP's current activities, again reflecting the timely nature of this Conference. The focus of UNEP's Global Ministerial Environment Forum (GMEF) on water, sanitation and human settlements, in line with the focus of the UN Commission on Sustainable Development for the next two years, reflects the fact that there are many water issues, including the connectivity of freshwater, coastal and marine environments, that require considered attention by the international community. Focused dialogue is required to ensure the environmental aspects of these issues are not overlooked.

In light of this, may I urge the Global Forum on Oceans, Coasts and Islands, as a mechanism for multi-stakeholder dialogue, sharing information and generating flexible solutions, to identify mechanisms and partnerships that highlight the links between water, sanitation and human settlements with the health and integrity of oceans, coasts, and islands. A major challenge is to change the sectoral approaches to both freshwater and coastal area management, and to design and implement integrated mechanisms, particularly for projects that transcend sub-sectors. Short-term sectoral management of water catchments, groundwater, rivers, lakes and coastal areas is no longer an option in light of the objectives of sustainable development.

Another major topic of discussion at this Conference is small island developing States (SIDS). Their current development of national sustainable development policies is moving forward, and needs to be further supported. Due to their size, the environmental effect of water, sanitation and human settlements on coastal and marine environments of SIDS is particularly acute. The needs of SIDS are of great concern to UNEP and we hope that this conference will make a valuable contribution to the upcoming review of the Barbados Programme of Action to take place in 2004.

It is encouraging to note the progress the oceans, coasts and islands community already has made, and I acknowledge and appreciate your enthusiasm and drive to further efforts. This conference affords us an opportunity to identify strategies for further implementation and offers us a chance to identify and establish even stronger partnerships through which our oceans, coasts, and islands will be better protected and will realize improved health.

Excellencies, Distinguished Delegates, Ladies, and Gentlemen,

I thank you for your energy and congratulate you on your efforts to-date. Because of you, a strong foundation has been laid, but the real work must now be accomplished. The Johannesburg Plan of implementation will remain but "words on paper" if we do not translate the spirit of cooperation into concrete and sustained actions that improve the lives of individuals while protecting the integrity of the natural environment. I wish you success in the ongoing dialogues here at the conference and in your efforts once you leave.



## ADDRESS

### Lord (Prof.) Julian Hunt

Professor and Fellow of Royal Society, United Kingdom  
Chairman, Advisory Committee on Protection of the Sea (ACOPS)

It is an honour for ACOPS that I am invited, as it's Chairman, to address this Global Conference on Oceans, Coasts and Islands at the Intergovernmental Oceanographic Commission (IOC) of UNESCO as a follow up to the World Summit on Sustainable Development (WSSD) and, specifically to respond to its challenge to move forward on measures to protect the world's oceans through partnerships. ACOPS is an NGO set up by Lord Callaghan, the former British Prime Minister. This is my first visit to IOC whose work I greatly admired when I was the UK representative at the World Meteorological Organization. IOC has collaborated very effectively and shared its expertise with NGOs, such as ACOPS.

I should like to describe today two collaborative partnerships in which ACOPS is involved. These should contribute significantly to the Millennium goals and to the particular objectives of this Forum. Firstly, large scale scientific and sustainable development projects under the auspices of the Russian National Programme of Action (NPA) Arctic Programme are beginning to tackle the huge problems of improving the environment of the Russian Arctic, and ensuring the sustainable use of its riches. This exciting initiative, being led by the Russian Federation's Ministry of Economic Development and Trade, the Global Environment Facility, [its implementing agencies] UNEP, UNEP GPA, IOC, RAIPON, NDEP, EBRD, and bilateral donor countries (Canada, Iceland, Italy and the USA), should be seen in wider contexts; firstly of international activities in the Arctic and secondly of the challenge of the changing state of the Arctic and the global environment generally. These issues are taken seriously by the Russian Government and the State Duma. In addition, the Global Legislators Organization for a Balanced Environment (GLOBE) have been very active in supporting initiatives to ensure sustainable economic development and environmental protection of the Russian Arctic. I believe that it is a healthy development that parliamentarians investigate the environmental policies of other countries; as we know in the UK which is often the subject of growing concern about Sellafield. Equally I hope that Russia will welcome this growing interest in their country. The project coordinator from the Ministry of Economic Development and Trade of the Russian Federation, Mr. Morgunov, addressed the recent workshop in Reykjavik on the Arctic Marine Strategic Plan about the orga-

nization and objectives of the NPA Arctic issues and I shall therefore not go into these here.

The international significance of the Russian NPA Arctic Programme stems from the fact that the Arctic environment, like that of every ecosystem, is not only a vital component of the global ecosystem; it also has a huge influence on the global environment and global climate that is disproportionate to its size. The Russian part of the Arctic is obviously critical as it occupies about 40% of the circumpolar coastline and its land mass above the Arctic circle is a substantial fraction of the total.

The global circulation of the ocean is, we now know, driven to a great extent by the cooling and freezing process in the Arctic Ocean; this means that pollutants released in these regions can rapidly spread round the world. Equally significant, as the World Wildlife Fund and the Inuit Circumpolar Conference have emphasised, is that the Arctic Environment, including its fisheries, is strongly influenced by pollutants transported from lower latitudes by ocean currents and in the atmosphere, especially industrial chemicals and aerosols. Hopefully the remedial measure by governments, consumers and industry guided by the Montreal Protocol and the OSPAR Convention will progressively help reduce these dangers during this century. Global climate change is equally threatening; atmospheric and ocean measurements have shown some of the largest variations of climate phenomena in the Arctic and Antarctic coastal regions with temperature rises of the order of 1°C in the past 50 years; and the greater increases in the world of more than 8°C are predicted for here for the end of this century. But this depends in part on what industrial countries do now. We are likely to see an accelerating retreat of the permafrost beyond 10-15km per year as at present, and quite possibly, as the IPCC reports have mentioned, the release to the atmosphere of methane and hydrates from underground and undersea, which are currently trapped below the permafrost and the cold ocean. Since methane is a more potent form of greenhouse gas, these emissions may lead to even greater global warming than has been predicted so far. The scientific aspects of this potentially critical process are now the subject of intense study and discussion.

The growing collaboration on Arctic environmental issues involves new forms of international cooperation between



governmental and international agencies, private sector and non-governmental organisations, in the spirit of the debates that dominated the WSSD. I hope it will increasingly also involve the academic world, for example, through the University of the Arctic. I am pleased that academics are well represented at this conference. The aims will be firstly to observe and analyse, against a background of large scale environmental change, all the most serious aspects and locations or hotspots, of environmental degradation, and then how they affect the ecosystems of the Russian Arctic, many of which are the coastal areas. Secondly, and more important in the long term, we should consider and propose practical measures to deal with both specific and the broader, structural, causes of these environmental problems. These measures have to be local, national and international.

A vital part of the Russian NPA Arctic Programme is to integrate these measures into the total strategy of sustainable economic and environmental development. Since there are several significantly different strategic options for economic and environmental developments for these regions and, because any particular large-scale measures may also have adverse consequences, they all need careful study. For example, exploitation of the mineral and gas reserves or massive tree planting may well have benefits and disadvantages.

How does the Russian NPA Arctic Project fit into the wider framework of cooperation in the sustainable development of Arctic Regions? Since 1996 international cooperation in the Arctic proceeds under the aegis of the Arctic Council, which includes the eight circumpolar countries. This framework has made possible broader participation in Arctic environmental protection issues, including also through the NDEP (Northern Dimension Environmental Program) of the EU.

These are two examples of the impressive number of well constructed international initiatives and working groups which have already been set up, many of which are described on the internet (including for example, monitoring of pollution and assessment guidelines and implementation programmes). Increasing emphasis is being given to studies of climate change, impact on indigenous peoples, emergency response, marine environment and sustainable issues. These have involved not only the Arctic Council, the EU and North American Groups, but also international NGOs such as the Inuit Circumpolar Conference, WWF and IUCN. Increasingly these initiatives and programmes of action are devised within the framework of international conventions and targets for pollutants, biodiversity, marine protected areas, climate change etc. Their constructive and leadership roles were given further impetus by the recent World Summit on Sustainable Development. These international agreements also provide guidance and vision to stimulate and encourage people to work for their environment. However, in the context of Arctic development, there are, I believe, two new dimensions which are particularly important.

There should be a greater involvement of governmental, academic and non-governmental groups from Russia than in previous international Arctic projects. Everyone who has studied global environmental issues is familiar with both the extraordinary overview and penetrating insights of many Russian scientists, two of the most famous being the geophysicist Budyko and meteorological mathematician Marchuk. The extensive technical and project management ability of Russian experts will be fully applied in the scientific and preinvestment studies of the NPA Arctic Project. Many Russian colleagues were involved through the ACOPS led PDF-B (the precursor of the current full GEF Project) in analysing the key environmental hot spots that will be the focus of the initial work in the NPA Arctic Project. A US colleague has commented that we need to work hard to overcome some of the obstacles to scientific collaboration caused by differences in scientific tradition, language and communication style. Future collaboration will require special efforts on all sides as data results emerge from this project, and learn lessons from the recent climate conference in Moscow in October 2003 which was sadly an opportunity missed.

The second element will be the greater involvement of private sector organisations. The participation of the most responsible and large companies is essential for the massive investment needed to improve Russia's Arctic environment and to create a sustainable economy for all its peoples. The earlier practices of fast exploitation and environmental degradation cannot continue. Establishing modern industrial and environmental ethical practices will be a major benefit to the Arctic regions outside Russia and even globally. Major oil companies are participants. The enormous energy reserves of the Arctic provide huge opportunities for the private sector and will greatly help secure stable energy supplies to the rest of the world. Indeed the future energy plans of many countries, including the UK, are now based on the assumption of the continuity of economic Russian Gas Supplies for the next 30-50 years. The UK Government's other interest in the Arctic has been focussed on cooperation to reduce the environmental dangers of nuclear radiation in North-West Russia via the contact expert group in IAEA and the Arctic Military Environment Cooperation. The forthcoming Greenwich Forum Conference on 18<sup>th</sup> November 2003, "Unlocking the Arctic's Assets", will address UK involvement in the Arctic.

Intense international research is revealing new information about the physical, natural, and human aspects of the Russian Arctic. For example, colleagues in London, Cambridge and Bremen are measuring and predicting the progressive reduction of the average thickness of sea ice in the Arctic Ocean and also the critical processes below the ice. New remote sensing techniques are being used with the aid of satellites and instruments in the ocean. These advances which were published last week will be of great assistance for planning

future local sustainable development strategies for fishing, shipping, forestry etc.

Monitoring and assessment of the levels of anthropogenic pollution in the Arctic are essential for understanding and predicting every aspect of the marine environment, especially fisheries. Decline in the observation network in the Arctic inherited by Russia from the former Soviet Union is seriously limiting the reliability of environmental assessments. Observations are an essential part of the maintenance of specially protected marine areas in the Arctic, so that any decline is of great international significance for the environmental hot spots and also for the monitoring of potential accidents and emergencies. Data sharing is essential in the Arctic and worldwide to ensure that the observations will be effectively and widely used. Data on the state of the environment needs to be disseminated to the public almost as regularly as weather forecasts in order to inform communities and individuals. This will empower them to participate in environmental planning and hopefully to ensure action by governments and the private sector. The International Polar Year 2007/8 being promoted and organised by ICSU and supported by the WMO and the Antarctic Treaty bodies, will be an excellent opportunity to review and publicise new developments and new challenges. The Russian Government is especially keen on this focal year and has rallied powerful internal political support.

A vital element of the NPA Arctic Programme is the promotion and development of legislative and regulatory mechanisms specially tailored for the region and that take into account the interests of indigenous populations. Another aspect will be international participation in capacity building in the Arctic region of Russia for environmental protection and sustainable development of natural resources.

Turning from the Arctic to coastal zones of sub-Saharan Africa, there are also encouraging developments to report, while we also face up to the huge challenges of this region. But first one has to emphasise as ACOPS' Vice President, Seychelles' Environment Minister Mr. Ronny Jumeau, remarked at the press conference launching the Russian Project in London on October 22, that the environmental problems of the Russian Arctic and Africa are closely linked. Small island states are particularly vulnerable. Sea level rise, melting of sea ice, and possibly desertification are associated with rising global temperatures forced by greenhouse gas emissions. Those are caused by humans every where as well as by natural emissions. Extra natural emissions, as in the polar region, can be triggered by human activity. Chemicals in the ocean are an increasing cause of concern around the world. Their movement, formation and release results from local emissions, global transport by ocean currents and by many complex processes of global environmental change. Whatever the cause, the effects can be disastrous for coastal communities; just a small increase of a trace metal in Indian Ocean

fish destroys their international acceptability. This can cause havoc to fisheries with severe knock-on environmental consequences as fishermen move to harvesting other species. As these interconnections are better understood, there is a growing unity of purpose of those in environmental NGOs to collaborate and to press governments to adopt new environmentally consistent policies, in tune with the precautionary principle.

In the run up to the WSSD, a GEF-funded project known as the 'African Process' lead by ACOPS, involving experts from 11 African countries, developed a portfolio of sustainable development projects for the marine and coastal regions. Support for the African Process came from UNEP, the GPA Coordination Office, IOC, and others. These projects covered the main topics including ecological deterioration and remediation, new initiatives in sustainable tourism, marine protected areas, urban coastal environments, sustainable extractive industries for coastal areas, fisheries, and effects of climate change. The collaborative work in these projects and the networks developed have been used as the basis for other action and programmes that are now beginning.

I was impressed at the Preparatory African Process meeting at Abuja in June 2002 with the expertise and commitment to deal with the complex and deep-rooted scientific socio-economic problems of these areas. So I believe all institutions and countries should support the New Partnership for Africa's Development (NEPAD) initiative as it sets up its eight environmental programmes, one of which is to focus on coastal and marine sustainable development.

When the British Prime Minister Tony Blair said at the WSSD that it did not require rocket science to deal with environmental problems he was, of course, quite right because the problems are much more complex than the predictable dynamics of rockets! However, as Mr Brennan Secretary of Commerce of USA emphasised today, rockets and satellites are an essential tool for ocean monitoring and prediction. We decided in ACOPS to follow up on the Abuja conference on the African Process, on the impetus of the WSSD, and on the NEPAD initiative. Together with Dr. Isabelle Niang Diop of Senegal the NEPAD lead country for the environment programme, we organised a meeting in London in May 2003 at the Royal Society and Natural History Museum. Ministers, senior officials and scientists from Kenya, Seychelles, Senegal, Ghana, Nigeria, Gambia, Niger and, South Africa with support from Lord Evans, a UK minister, explained how coastal environmental issues were critical to sustainable development and even the livelihood of the 50% of the African population residing there. IOC will be publishing the full proceedings. A summary is already available on the ACOPS website.

The conference also heard about and discussed practical progress on projects by NGOs, governments, and the private sector in monitoring and remediating coastal environ-



ments including urban areas, in the formation of natural protected areas and their economic benefits for local communities, and use of high technology systems for monitoring and control of foreign fishing fleets. Dr. Kulundu emphasised how forest destruction has to cease if coasts are to recover. One hopes that more of the African academic community will be involved in the future. The successful projects should be publicised and replicated around the coastlines and the islands of Africa. Of course there should be excellent communication with countries dealing with similar coastal ecologies such as southern and eastern Asia and Latin America. As a boy I enjoyed the beautiful Indian coast described by Mr. Gupta, that the Indian Government is working to preserve. Communication and facilitation of coastal projects will be the main objective of the NEPAD coastal and marine coordinating unit, (known as COSMAR) being set up in Nairobi by the Government of Kenya thanks to the efforts of Dr. Newton Kulundu, Minister of Environment. There will be a seminar in February organised by the Ghanaian Government and Owusu Architects of London focusing on urban coastal environments – these areas are critical, because much of the

world's population will be living in these areas by the middle of this century.

The international community will, I am sure, provide assistance and advice as appropriate to these initiatives. ACOPS is committed to do so, and is already preparing the sequel to the Royal Society Conference. In addition, collaboration through existing international programmes will also be essential, including the Nairobi and Abidjan Regional Seas Conventions, the UNEP-GPA Coordination Office, and assistance programmes of OSPAR and Helsinki Commission, and the Coral Reef Initiative co-chaired by the Seychelles and the UK.

In conclusion I believe that the past four years have seen a remarkable development of effective networking with a focus on practical projects in the marine and coastal areas of Russia and Africa. The next four years should see some real delivery and widening participation of national and international bodies in these areas – particularly, I hope, that of the private sector and the academic community.



## CHALLENGES TO THE GLOBAL OCEANS ENVIRONMENT\*

**Dr. Sylvia Earle**

Director, Global Marine Programs  
Conservation International

Distinguished friends of the ocean, one and all. I am thrilled to be here on this nice wet day, how appropriate! Among other things that I do, I am explorer in residence at the National Geographic and I am often asked about what are the greatest discoveries concerning the ocean. I have reflected on the fact that, lots of things have happened in your life time, in mine, in the 20<sup>th</sup> century. You could say that this is the greatest era of exploration of discovery ever, in fact it is just the beginning. You think of all the things that we have learned about the ocean in the 20<sup>th</sup> century, what is most important? Well I think the most significant thing we've learned, is that the ocean is the cornerstone of what makes the planet work. It's the cornerstone of our life support system. It governs climate and weather, shapes planetary chemistry, generates much of the oxygen (70%), absorbs carbon dioxide, and is home for most of the life on earth. It holds 97% of the earth's water so that I think that the ocean matters to everybody on the planet no matter where we live. It is easy to see why the ocean matters in small island countries, and in coastal areas. But it matters not just for what we can take out of the ocean to eat, not just for what we can put into the ocean as a place to put things that we don't want near us on the land but because fundamentally the ocean makes the planet work. Astronauts see this from up in space, the planet is mostly blue, without the ocean earth would be as inhospitable for the likes of us as Mars is.

The second big discovery of the 20<sup>th</sup> century about the ocean, is that the ocean is not infinite in its capacity to absorb what we put in or to recover from what we take out. The ocean in fact is not able to continue functioning in the way that it has historically, thanks to the impact that human beings have had on the ocean in the 20<sup>th</sup> century. Now it's true as long as human beings have been around, like any other organism on the planet, we have influenced the world around us. But nothing can compare with the impact of the last 100 years, of the last 50 years, the last 20 years, the last 10 and the pace is picking up. In 1982 I attended a conference in London, some of you were probably there. They invited 100 people plus observers to come and try to articulate the greatest problems facing the human kind. Well that was 10 years after the

first global conference looking at environmental issues, 1972 it was a land mark time. In 1982, four things loomed large, one high above all the others. We were worried then about nuclear holocaust and items 2,3 and 4 kind of clustered together. One, the growing population, at that point 4 billion people! That was 1982. I think that in about 1800, there were 1 billion, by the 1930s there were 2 billion, by 1982 there were 4 billion and we were worried at that time about the impact on the natural resources. Two, the growing numbers yielding poverty for many. So poverty, population growth, and the third, the loss of the natural systems that form the basis of our life support system. Whether it's species, or ecosystems, across the board, the loss and deterioration of natural systems, they are all connected. If you lose the integrity of natural systems, this leads to poverty, it leads to some of the issues we're facing today in terms of security. In 1992 in Rio, issues focused on sustainable development, the sustainability within the natural world of the things we human beings like to do. And then last year in Johannesburg the issues of sustaining ourselves, our economies, while trying to maintain the underlying integrity of the natural systems that support us. It is good every 10 years to take stock but because the pace is picking up we can't wait and do it every 10 years. We have to do it constantly, review where we are, take stock and act. In the 20<sup>th</sup> century we learned more about the ocean than during all preceding human history. At the same time in the 20<sup>th</sup> century we lost more than during all preceding human history. When you take stock of the decline of wildlife in the ocean and I do think of creatures in the sea as wildlife, as many now are.

As it turned out, at this conference in Johannesburg, the ocean did emerge as a key topic with major targets and timetables articulated for integrated ocean and coastal management concerning fisheries, biodiversity conservation, protection from pollution, science and observation and special reference to small island nations. All in all, the meeting in Johannesburg was a milestone, a wake up call for many, a clear call for action and then some months later, at the end of May to early June, a number of things heightened the urgency for action. A report by Canadian scientists Boris Verm and Ransom Myers came out announcing, after a 10 year study, that in the last 50 years, (the last half of the 20<sup>th</sup> century), 90% of the big fish, the sharks, the tuna, the swordfish, the marlin,

\* Transcribed statement.

groupers, cod, many creatures that we love to eat, -we love to eat them so much that we have consumed the large majority of them- are gone. Our starting point now for trying to evaluate where do we go from here is skewed by what we have done in the last 50 years. Another announcement came out, concerning by-catch, in terms of taking creatures from the sea, which has been a recurring issue in recent times. The amount of creatures lost, killed in the process of taking the few that we consume is huge and, just to review, this past summer it was announced that we are still taking in the order of 300,000 marine mammals every year- whales, dolphins, seals, sea lions, while catching the fish we like to consume. That does not even include the birds, the turtles, the sponges, the deep sea corals and other creatures that are taken incidentally while consuming or gathering the wild fish from the sea.

We had recurrent announcements about coral reefs that in the last 30 years, 30% of corals have been lost, in 50 years a total of 30% gone but maybe a total of 50% degraded or missing in action. The issue of shifting baselines has loomed large on the balance sheet just in the past couple of years, and certainly has been a matter of great discussion in the past year because of the destruction of so much so fast due to our new capability of extracting from the ocean. The finding, removing, and marketing of wildlife taken from the sea is no longer something that we can defer for future consideration. These issues loomed large at an international conference that was held in Los Cobos, Mexico called "Defying Ocean's End." It was organized by Conservation International but was actually attended by some 70 organizations, 150 people representing 20 countries. The charge of this group over a week of intense activity was to identify and develop an action plan. Graeme Kelleher, known to many of you for many years as the head of the Great Barrier Reef National Marine Park Authority and certainly active in ocean conservation for his whole life, chaired the sessions and helped keep the people in line as they considered as a cross section of areas, the Caribbean, Antarctica, the Gulf of California, the Great Coral Triangle in the South Pacific. Great attention was paid to the newly discovered number of sea mounts out in the ocean; some 50,000 mountains out in the ocean that are now known to exist that we did not know existed some 50 years ago or even for many, 10 years ago. The working groups addressed some of the issues that are being addressed here: marine protected areas, economic incentives and disincentives, ocean use and planning, the land-ocean interface, maintaining and restoring functional ecosystems, ocean governance, the great unknowns about the ocean, and the matter of communication. One of the biggest challenges that we face today, that the ocean faces, is ignorance, people still do not know how much we don't know about the ocean. They don't really appreciate how important the ocean is to all of us and there is an inertia, a complacency, born of either a lack of understanding or feeling that it is such a big problem that there is

not much that we can do to turn things around. At this conference there is a different spirit, there is a can do, must do, will do approach to solving the problems. We can turn things around, just as at the "Defying Ocean's End" conference, where we came out of that meeting addressing the need for ocean governance, to look at that 60% of the ocean that falls outside the Exclusive Economic Zones of the nations of the world. And while we have time, before it's too late, we must agree to stop destructive trawling techniques that are now being applied to these newly discovered sea-mounts. While we still have a chance to agree before this vast part of our life support system is further degraded. Of course within our own Exclusive Economic Zones we have the obligation to use the powers that we have as individual nations to act each in our own way but toward the common goal of trying to stabilize the downhill slide that we have witnessed, and to no small extent caused, in our lifetime.

Fisheries reform loomed large as a topic at Johannesburg, it loomed large as a topic in Los Cobos, it was a key recommendation in the United States of the Pew Oceans Commission the result of two years of intense study of our policies in the United States. It's something that is clearly necessary if we are to turn things around with respect to the ocean. I'm afraid that last year I upset the Minister of Fisheries in Australia, actually it was this summer, when I said that if we continue business as usual, looking at the decline of the big fish, there we were 50 years ago, and here we are today, down to 10% of some of the big creatures, tuna, cod, swordfish, if we continue another 50 years, we don't have to wait that long, continue another 30 years, with business as usual, where are the fish going to be? I said in another 30 years, commercial fishing as we know it, the extraction of wildlife from the oceans as we know it today, will no longer be possible if we continue with present policies. We must have fisheries reformed and turn things around, the same things that were recommended in Johannesburg about perverse subsidies, are gaining support around the world, we must turn what we are putting into extracting from the ocean into protecting what is there. How to do that? Marine protected areas, again, looms large as a recurrent theme. It came up again just a few weeks ago in Durban, South Africa, at the World Parks Congress. For the first time, marine protected areas were on the balance sheet when it came to protected areas in the global system of how do we take care of nature. It turns out that a careful review of what's been done on the land up to the present time suggests that about 12% of the land enjoys some form of protection. And you know the numbers for the ocean, it's a fraction of 1%. Even including places like the Great Barrier Reef or new areas designated by Australia, new areas designated in New Zealand. All over the world there are great signs of hope but we must not become complacent.

I had the chance to address the World Parks Congress and I suggested that by the time of the next congress in ten years we should aim for at least matching what we've done on the land in the last one hundred years. We don't have a hundred years to catch up. 10%, 12% by the next decade is a modest objective. It's more or less in keeping with the objectives of what was recommended in Johannesburg, by 2012 to have a network of protected areas around the ocean. Some people say we should have 20% by 2020. Callum Roberts is calling for 30% in the next 10 years. Whatever it is, we need to use all the power that we have to identify critical areas in the ocean. Critical areas that make the systems work. Areas where fish aggregate to spawn. The last thing we should do is to disrupt the fish while they're making more fish. And yet it is such a tempting target that many of the breeding aggregations in the Caribbean, in the South Pacific, in the Indian Ocean have already been found and virtually eliminated in the last 50 years.

What are the challenges facing the ocean? Perhaps the biggest one is complacency. The spirit of this conference is marked by a desire for action. What can each of us do? What can you do? What can we do together that will make a difference? Or just think of this. Ninety-five percent of the ocean remains unexplored. Ninety-nine percent of the ocean is open for exploitation. What are we going to do about that? What can we as individuals and collectively do about that? Ninety percent of the big fish are gone. We still have a chance. There's still some tuna out there, but if we wait and deliberate and have another meeting to decide once again, we should do something instead of deciding that we should do something. We need to do something; to leave this meeting with a conviction that the next step is to actually act, not talk about acting but acting.

A few weeks ago I attended the Census of Marine Life Conference in Washington, D.C.. A global kind of assessment of where are we, what do we know about the creatures in the ocean? The bottom line is that we need to know a lot more about what's going on. Assessing biodiversity is a key initiative that we need to undertake. One of the other things that I'm presently doing is working with the Harte Research Institute at Texas A&M University in Corpus Christi looking at, as one of the key thrusts for the future, pulling together the three nations that border the Gulf of Mexico in a regional way to assess the biodiversity of that area. Dr. John Tunnell is spearheading that initiative. It's something that we should do all over the world. Take stock of the assets. Let's see who's living out there in the deep ocean, in the clear ocean water. I listened last week to Craig Venter, a microbiologist, talk about how a tiny plug of water taken out of the ocean near Bermuda yielded thousands of microbes in what appeared to be just water. A short distance away in another plug, a tiny little drop out of the ocean, there were thousands more microbes that had almost no overlap with this little drop of

ocean taken less than a mile away. The diversity in the ocean, especially on a microbial level, looms large in terms of understanding how the ocean works. What are we doing with the chemistry? What are we doing with the characteristics that shape life on earth. We know that something like half of the coral reefs on the planet in our lifetime are either degraded or lost. What are we going to do about that? What we do know is that 100% of our future depends on maintaining the health of the ocean.

The goals set in Johannesburg were modest. Think about what shape the world will be in if we don't do at least as much as what was recommended in Johannesburg. I often think about what my grandchildren, now ages 4, 6, 9 and 12 will say when they are in their 50s half a century from now. It is not that people now don't care but I can just imagine them often in the future saying why did you not do something while you had the chance? Ten percent of the big fish were still around. Half of the coral reefs were still in pretty good shape. There's a lot that we did not know back when you were running things but you know you could have done something about that. Or they might say, thanks for getting started and taking action while there was still time. If we leave here and continue business as usual, where will we be in ten years if we don't do what was recommended in Johannesburg, if individually and collectively we don't get together and do more than what was recommended in Johannesburg. But if we do accept the challenge that is before us, maybe in 50 years, maybe in 30, maybe even in 10, there will be reason to celebrate the actions that are stirring right now.

As never before, this is the time, it is a pivotal time, we know enough to understand the problems. We know enough to know what actions need to be taken. Do we have the courage, the conviction, to leave here and do something about it? This is the time that perhaps will never have again. Thank you!







## BEYOND THE LAW OF THE SEA CONVENTION? STATUS AND PROSPECTS OF THE LAW OF THE SEA CONVENTION AT THE 20<sup>TH</sup> ANNIVERSARY

**Dr. Tullio Treves**

Judge of the International Tribunal for the Law of the Sea  
Professor at the University of Milan

The United Nations Convention on the Law of the Sea was opened for signature on 10 December 1982 and entered into force on 16 November 1994. Last year the United Nations celebrated with a special meeting the twentieth anniversary of the signature of the Convention. Next year, four days from now, it will be the tenth anniversary of the Convention's entry into force. November 2003, nestled between the round figures of these anniversaries, seems an appropriate time for taking stock and looking forward.

There is no doubt that today the international law of the sea is dominated by the 1982 Convention. The Convention plays a significant stabilizing role. At the same time, it is a forward-looking text flexible enough to absorb many new trends and developments. Nevertheless, it has never been, and even more so, it is not now, and most likely it will not be in the future, all the international law of the sea.

If compared with other major treaties for the codification and progressive development of international law, the Convention has been a major success as regards the number and quality of the parties it has attracted. The Convention has now 144 ratifications or accessions corresponding to more than two thirds of the existing States and including the European Community. States parties belong to all areas of the world. They are developed as well as developing, coastal, maritime and land-locked States.

We must acknowledge that progress towards universal participation in the Convention is still incomplete. Obviously, the most important missing State party is the United States. All friends of the Convention feel that participation by the United States, in light of the importance of this main actor in world politics and also of the great contribution made by it to the shaping of the Convention, is long overdue and would be a decisive step towards the consolidation of the Convention as the basic set of rules on the law of the sea. The positive attitude of the Clinton Administration and now of the Bush Administration must be welcomed. Recent hearings held at the United States Senate seem to open prospects for overcoming the obstacles met by the U.S. ratification. A few other important accessions are still missing, nonetheless. The most visible is perhaps that of Canada, another protagonist of the

Third UN Law of the Sea Conference. It may also be regretted that the few States which keep away from the Convention because of concerns relating to boundary disputes with neighbours have not yet come to recognize that, under the Convention, their situation is no worse than under customary law.

There is no doubt that the Convention enjoys great authority as a guide for the behaviour of States in maritime matters. Its authority as an instrument setting out in written form customary rules, either existing before the Convention, or crystallized or developed because of the impact of the Convention in the international community, has been confirmed, sometimes even before the entry into force of the Convention, by decisions of international courts and tribunals.

The Convention has shown from the outset that it is, at the same time, strong and resilient. The Convention is strong because no doubt has been cast on its authority as the basic set of rules concerning the rights and obligations of States in matters concerning the sea. Recent evidence of such authority are the provisions, contained, although in different form, in multilateral international agreements concluded after the 1982 Convention, according to which the new agreements are without prejudice to the rights, jurisdiction and duties of States under the Convention, and must be interpreted and applied in the context of and in a manner consistent with the Convention.

The Convention is resilient because, while States realized from the outset that it could not be considered perfect and complete, they have preferred to build upon it rather than to question its authority. So it was that Part XI was amended, before entry into force of the Convention by the well-known Implementing Agreement of 1994. So it was that the brief and somehow puzzling provisions on straddling stocks and highly migratory fish stocks were completed and expanded, in light, *inter alia*, of recent developments of international environmental law, by the so-called Straddling Stocks Agreement of 1995, which has entered into force very recently and has found a regional development in the Convention on highly migratory fish stocks in Central and West Pacific, signed at Honolulu in 2000. In order to develop the brief provisions

on historical and archaeological objects, as well as to fill the gap in the Convention as regards such objects found on the continental shelf, in 2001 an admittedly controversial Convention on underwater cultural heritage was adopted within the framework of UNESCO.

Contrary to the Implementing Agreement of 1994 which amends the Convention and becomes a necessary part of it (as, since its adoption, States must at the same time become parties to the Convention and to the Agreement), the Straddling Stocks Agreement, the Honolulu Convention, the UNESCO Convention, as well as two recent multilateral conventions on fisheries (the FAO Compliance Agreement of 1993 and the Windhoek Convention of 2001), may also be ratified or acceded to by States that are not parties to the 1982 Convention. This makes particularly relevant, as regards the authority of the 1982 Convention, the clauses mentioned above safeguarding the rights and obligations under the Convention which one finds in all these texts.

Another aspect of the Convention, which confirms its strength and resilience, is that this instrument is at the centre of a network of institutions. The Convention presupposes a highly institutionalised world, and contributes to the development of international institutions.

On one side, the Convention gives new functions to existing institutions, such as, for example, the International Maritime Organization as regards passage through straits, archipelagic sealanes, or removal (or non-removal) of abandoned and disused installations on the continental shelf. On the other side, in complying with their obligations under the Convention, States parties have set up a number of new institutions: the very Meeting of States Parties, the International Seabed Authority, the International Tribunal for the Law of the Sea, and the Commission on the Limits of the Continental Shelf. Through their participation in these institutions States parties have many opportunities to implement the provisions of the Convention in a cooperative way, to fill some of its gaps and to clarify the constructive ambiguities the necessities of negotiation have compelled the contracting parties to leave in the text.

Perhaps the most important of positive developments, confirming the strength and resilience of the Convention, is the mechanism for the settlement of disputes. Although with important limitations and exceptions, this mechanism is compulsory. In other words, disputes concerning the interpretation or application of the Convention may be submitted by one party, without the need to obtain the consent of the other, to a judge or arbitrator whose decision is binding. Since the entry into force of the Convention, a number of cases have been brought unilaterally, on the basis of the compulsory settlement clauses of the Convention, to the International Tribunal for the Law of the Sea or to Arbitral Tribunals set up under Annex VII of the Convention.

The importance of the limitations to the scope of compulsory settlement cannot be denied and has been underlined in particular in the controversial Arbitration award of 4 August 2000 on the *Southern Bluefin Tuna* case. It must be observed, nonetheless, that, even though entitled to add to the automatic limitations of article 297 “optional exceptions” through the written declarations envisaged in article 298, States parties have used such right very sparingly. About fifteen States only have made such declarations, and in some cases they have not excluded all the categories of disputes listed in article 298. Abstention from making the declarations under article 298 confirm that disputes concerning important topics are subject to compulsory adjudication. They include maritime boundary delimitation, enforcement activities in fishery matters, military activities.

Multilateral maritime negotiations held since the end of the Third UN Conference on the Law of the Sea confirm that the advantages of the mechanism for the settlement of disputes of the Convention are broadly recognized. The Straddling Stocks Agreement in 1995, the Honolulu Convention in 2000, the Windhoek Convention in 2001 and the UNESCO Convention in 2001 have adopted the rules of the Law of the Sea Convention concerning the settlement of disputes in order to settle with binding decisions disputes concerning the interpretation or application of their provisions. The Straddling Stocks Agreement extends this possibility to the settlement of disputes arising from regional or sub-regional agreements concerning straddling or highly migratory fish stocks. In this way, all these recent multilateral instruments, together with the Law of the Sea Convention, become intertwined even though not all States parties to one instrument are parties to each of the others. A complex system, broader than the 1982 Convention, is in the making. It seems significant that the unifying element of such system is the mechanism for the settlement of disputes.

The strength of the Convention appears in clear light when we consider its effects on unilateralism, the very phenomenon against whose destabilizing effects the Convention has been set up. If we look at domestic legislation adopted by States since 1982, we must recognize that the influence of the Convention in setting spatial as well as jurisdictional limits to coastal States’ claims is evident. Unilateralism has been contained. Most new legislation follows the pattern set by the Convention. Economic zones, archipelagic baselines, contiguous zones etc. have been adopted, in most cases at least, in compliance with the provisions of the Convention. Sometimes previous excessive claims have been “rolled back”; in some other cases States utilize only in part the rights recognized by the Convention. Claims, sometimes from a time preceding the adoption of the Convention, of zones or powers exceeding what the Convention permits have become rare. Their incompatibility with the Convention may be declared by the International Law of the Sea Tribunal, or by

other judicial or arbitral bodies. This happened in the *Saiga No. 2* judgment of the International Tribunal for the Law of the Sea as regards the Guinean law extending customs enforcement powers of the coastal State to a "customs radius" of 250 kilometres from the coast.

Unilateralism is not dead, however. Undeniably the limit of 200 miles set by the Convention as the external border of State jurisdiction in the economic zone, and consequently the freedoms of the high seas, are under attack. It is well known that a number of States have adopted unilateral legislation extending in various forms their jurisdiction over fishing activities conducted by foreign ships on high seas waters adjacent to their economic zone. These unilateral extensions (especially by Canada and some Latin-American States) have met strong reactions, bringing about, as a compromise, the Straddling Stocks Agreement that strengthens the flag States' responsibilities and prescribes a cooperative approach for enforcement activities, which coastal States claimed to conduct unilaterally. It is, however, far from clear whether all unilateralist States (as well as all long distance fishing States) have been convinced that the compromise set out in the Straddling Stocks Agreement is acceptable.

Trends towards the development of the protection of the environment have some times encouraged proposals for unilateral action. Sometimes provisions whose compatibility with the Convention is highly debatable are set out in multilateral agreements concluded between countries with similar interests. A recent example, which is frequently quoted, is the so-called "Galapagos Agreement" of 2000, not yet in force. It concerns certain high seas fisheries and was negotiated, in isolation from other States interested in the fisheries, by a State that is party to the Convention and three others which are not. This form of multilateral unilateralism, which could also be called militant regionalism, has met strong resistance. Even the European Community, a group of States that is bound by the Convention as a group as and in its State components, and whose general policy has always been favourable to the Convention, in reacting to recent environmental disasters, from the *Erika* to the *Prestige*, gives the impression that it considers the obligations set out by the Convention as too constraining for an adequate reaction.

One cannot forget, nevertheless, that historically unilateralism has been one of the main engines, perhaps the main engine, of the development of the law of the sea. In a world where new needs emerge and where the law cannot remain static forever, unilateral initiatives cannot be branded as always bad, as always to be fought against. They must, nevertheless, be reconciled with the general obligation of cooperation which is part and parcel of modern international law and with the rights and obligations of States parties to the Convention, as well as the rights and obligations under customary law which the Convention strongly influences, of those States that are not parties to it.

The general obligation of cooperation – whose importance the International Tribunal for the Law of the Sea has stressed more than once, lastly in its Order of 8 October 2003, as regards the protection of the marine environment – is also the basic tool for dealing, within the framework of the Law of the Sea Convention, with new problems that arise and which the Convention does not envisage directly. Such problems may sometimes emerge in disputes and be accommodated through the mechanism for the settlement of disputes which may explore the possibilities of the Convention to cope with them. Relevant examples have been, in the case-law of the Law of the Sea Tribunal, the question of the legal regime of bunkering at sea and of the consequences on the environment and on navigation of land reclamation. Another well known issue, not yet submitted to adjudication, on which a cooperative approach, perhaps in the framework of the International Seabed Authority, may be productive is that of the legal regime of bio-diversity on the bottom of the high seas, especially in connection with hydrothermal vents.

A further aspect that is taking shape and will characterize the Law of the Sea for the future is the combination and cross-fertilization of approaches which tends to overcome the separation between different branches of international law, one of which is the law of the sea with its dominant component, the 1982 Convention. The 1995 Straddling Stocks Agreement is at the same time an important law of the sea agreement and an important environmental agreement, which would have been impossible without the developments at the Rio Conference. The UNESCO Convention comes at the crossroads between the law of the sea and the law of the protection of cultural goods. The Law of the Sea Tribunal, in stressing the limitations to the use of force at sea and that "considerations of humanity must apply in the law of the seas, as they do in other areas of international law" underlined the linkages between the law of the sea and human rights law. In the *Shrimp-Turtles* case the Panel and Appellate Body of the WTO explored the intertwining of law of the sea, environmental law and international trade law. A holistic approach has been adopted by the United Nations in launching the open-ended informal consultative process established in order to facilitate the annual review of developments in oceans affairs.

While all forms of cooperation are important, a strong mechanism for the settlement of disputes and a strong reliance on courts and tribunals seems to be essential in order to address new problems as effectively and smoothly as possible. As mentioned above, the Law of the Sea Convention as well as the other multilateral instruments, which complement it, do contain such strong mechanisms for the settlement of disputes. Reliance on it, especially on its compulsory facets, is just beginning. States are just beginning to realize that they are parties to instruments, which can be used in such a way that may make going to court on most law of the sea

matters a routine and undramatic event. It may be regretted that most States parties to the Convention have not yet fully reviewed the pros and cons of expressing a preference for permanent courts, as the International Court of Justice and the International Tribunal for the Law of the Sea, in lieu of arbitration tribunals. Such preference, which could be expressed with a declaration to be made under the Convention, and which a vast majority of States parties have so far abstained from making, would probably ensure a more consistent development of the law.





## THE EVOLVING BALANCE BETWEEN NAVIGATIONAL FREEDOMS AND PROTECTION OF THE MARINE ENVIRONMENT AND ITS RESOURCES\*

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Thank you very much, Biliana, for that very gracious introduction and thank you all for remaining for this final event this afternoon of what has been a stimulating day. I am going to try and build on Judge Treves's very interesting presentation by focusing on an important transition in the Law of the Sea (LOS). The LOS Convention was designed to strike a balance between navigational freedoms and environmental protection. The idea of navigational freedoms came to us from Grotius hundreds of years ago when he described the oceans as being free in their very nature because one ship can catch fish and there'll be plenty of fish for other ships. One ship can pass through the waters, navigating freely, and the next ship could also do so. This vision is no longer accurate. We have seen that the fish are not inexhaustible and have been greatly exhausted in our time; we are seeing also that navigational freedoms have their limits and that country after country in different contexts are asserting the right to limit navigational freedoms in the name of environmental protection and in the name of security. I want to discuss the various situations we are seeing and then think through whether we can draw from these a generalized principle that maybe we are seeing a change in the law.

We still, to some extent, have high seas navigational freedoms in the Exclusive Economic Zone (EEZ) but we see over and over again and in example after example that these freedoms are limited and sometimes limited very sharply. We can start with the fishing situation. It appears pretty clearly that if you are a fishing vessel you do not have the right to move freely to the EEZ of another country without letting them know what you are doing and informing them quite clearly what you are up to. The coastal state has the right to board your ship under Article 73 and we've seen in recent decisions of Judge Treves's Tribunal that there is almost a presumption that if you are going through another country's EEZ and you are a fishing vessel, and you have not told them what you are doing, that you are doing something illegal. This has come up in the context of the search for the

Patagonian toothfish. In the *Monte Confurco* case, which involved the Seychelles against France, the *Monte Confurco* was going through France's claimed EEZ around Kerguelen in the Antarctic, and its master said well, we are just passing through, we caught our fish before we got here, and we are just going through to another area for fishing, and this is in the remote Southern Ocean areas. But France said, no, we assume that this vessel was fishing while it was in the Kerguelen EEZ, it had fish in its hold, the fish was frozen but there was a huge amount of it, and the ship had made no effort to tell France what it was doing. And so from those bare facts, the tribunal accepted the French point of view and said basically that there is a presumption that if you have a lot of fish in your hold and you are a fishing vessel and you are in somebody else's EEZ that you are doing something illegal. The lesson is very clear to any fishing vessel that if you want to hold on to your cargo you better let the country know that you're going to pass through its EEZ.

So fishing vessels do not have freedom of navigation. What about commercial merchant vessels? They can be boarded too, under Article 220, by the coastal state if there is a suspicion that they are creating pollution risks. Article 220 is written carefully of course, but it does quite clearly say that the coastal country can demand information, can physically inspect if there is any kind of a substantial discharge or a threat of significant pollution to the environment and can detain the vessel if the discharge threatens coastal resources. That is a clear limitation on navigational freedom. And then we have the *Prestige* disaster a year ago, which Judge Treves referred to, which will be seen as a turning point because it is an example of countries taking the unilateral steps that Judge Treves referred to in a way that will ultimately change the LOS. The breakup of the *Prestige* caused enormous damage in the coastal regions of Spain, Portugal and France. Spain and France announced almost immediately that they were going to look at every single-hulled tanker that goes through their EEZ if it is 15 years old or more. If they find the ship

\* Transcribed address; also presented at the Conference on the Regime of the Exclusive Economic Zone: Issues and Responses organized by the Ship and Ocean Foundation Institute for Ocean Policy, on December 9-10, 2003, in Honolulu, Hawaii, as a paper titled "The Disappearing Right to Navigational Freedom in the Exclusive Economic Zone," publication forthcoming in *Marine Policy*.



to be unseaworthy, they will require it to leave the EEZ. This is a huge unilateral decision made by coastal countries that are also maritime powers, asserting that to protect coastal resources they have the right to restrict navigational movement. Portugal rather quickly joined in this initiative, and then, these three countries plus Belgium and the UK have been working in the IMO to declare their entire EEZs more or less as particularly sensitive sea areas from which single-hulled oil tankers would be excluded.

So, we are seeing major maritime powers asserting the right to protect their coastal areas, and I see this as a validation once again of the precautionary principle, a dominating idea that has taken over the international law field. People disagree as to what exactly the precautionary principle means, but it requires an assessment of the project that shifts the burden to the person taking the initiative to justify that the project is safe; it requires an examination of alternative technologies; and it allows decision makers to put limits on activities even if the science is unknown or not complete. Again, the LOS Tribunal has taken a lead. Judge Treves in the *Southern Bluefin Tuna* case explained that the provisional measures that the court issues are an example of a precautionary approach that is built in to the whole system of the Tribunal and the LOS Convention. We have seen, as Judge Treves explained, that the duty to cooperate which is such an important part of the precautionary principle has been required in two very recent cases. In the *MOX (Mixed Oxide) Plant* case, Ireland complained about the releases from the Sellafield nuclear power plant into the Irish Sea, which is the most radioactive body of water in the entire world now. The British were expanding the plant and the court, I think quite properly, required the British to exchange information and to coordinate closely and negotiate with the Irish with regard to any future steps that they may take in that plant. Even more recently, in the case between Malaysia and Singapore, the Tribunal said prudence and caution require that the two countries establish consultative mechanisms. The innovative aspect of this recent decision was that the court went beyond just imploring the two countries to cooperate but it actually required them to establish a group of independent experts. The experts were to conduct a study and assess the risks and effects of Singapore's land reclamation. Singapore was required to modify its activity as appropriate, in light of the recommendations of the independent experts.

In the Pacific there is a huge concern about the shipments of ultra-hazardous radioactive materials which are going back and forth now between Japan and the United Kingdom and France in canisters. The Japanese want their nuclear waste reprocessed. They do not have the technology to do it at this point, so they send it to Europe to be reprocessed and then it comes back sometimes as plutonium, sometimes as MOX (mixed oxide) fuel which is part plutonium, part uranium,

and as high-level waste. It never goes through the Suez Canal because of the insurance requirements there and perhaps the security concerns. It does not go through the Strait of Malacca because the countries of that region have insisted that it not go there, so it tends usually to come around the Cape of Good Hope and then south of Australia to the Tasman. This route goes through the EEZs of Vanuatu and the Federated States of Micronesia and sometimes the Solomons, which are quite concerned about the risks that result from this. The risks include sinkings, which would create a dead zone for hundreds and thousands of years; the technology to raise the vessel from the deep ocean is not there. That would be bad enough, but worse would be a collision followed by a high intensity fire which could burn for days and at very high temperatures with this kind of cargo. The final risk is sabotage which in our present world we must be very concerned about. Ships as you know sink all the time; the *MSC Carla* in 1997 was an example of a shipment of radioactive cargo in the North Atlantic with canisters of cesium that sank and broke apart in heavy waves and it was never brought up and sits there at the bottom of the ocean. It was simply broken apart by gale-force winds.

My favorite recent collision is the *HMS Nottingham*, which is a British warship that was on patrol in the Tasman in 2002. It was there to protect the shipment of the MOX fuel because Greenpeace was going to have a flotilla of protesters, and so the British sent a warship down to breakup the Greenpeace protesters. But in the process the *Nottingham* hit a well-marked rock near Lord Howe Island. It had to be towed into Sydney and put on a bigger boat to take back to Europe to be rebuilt. So ships do collide and accidents do happen. These are realistic things to worry about, including sabotage. When the British nuclear ship was going through the Panama Canal a couple of years ago, Greenpeace protesters simply got on the ship as it was going through the Canal, which is undefended. It is impossible to defend and easy for anybody to get into. The Panama Canal simply meanders through Panama and it is easy for anybody to do anything they want to a boat passing through if they are so inclined.

The Pacific Islanders are taking notice of the European action and seeing the Europeans protect their coast by their unilateral activities, and are saying that they should be able to take some unilateral activities as well. The LOS Convention (Articles 22 and 23) does see nuclear materials as distinct and as different and as requiring a separate regime. As that international regime has not been fully developed, many coastal countries argue that they should be able to impose unilateral rules until the international regime has emerged. The countries are saying they have the right of consultation, which the LOS Tribunal has repeated is mandatory. They have a right to a full and comprehensive environmental assessment (Articles 204, 205, 206 make that clear). There is a duty to en-

gage in contingency planning (Article 199 is very clear on this) and there is a right to have a full and comprehensive liability regime developed, which Article 235 requires, and the liability regime requires strict liability. A neutral tribunal must define damages realistically to protect the fragile economies of Pacific Island nations, which rely on fishing and tourism. An incident involving a nuclear ship even if there is no measurable release of radioactivity at the present time could very well destroy those industries for them. We have a model from the oil industry that allows us to understand that there should be a fund available that would provide compensation in these situations.

Another example of a unilateral initiative that has been taken is Chile's law on nuclear safety where they said that any ship carrying nuclear cargo going through their EEZ must get permission by complying with safety regulations that they spell out in the law. We have a situation at the present time where a nuclear reactor that's been dismantled in California in San Onofre is awaiting shipment for burial to South Carolina. To get from California to South Carolina, you have to go around Cape Horn, since the Panama Canal is too narrow for this kind of shipment. This route is an extremely treacherous way to travel because of gale force winds 200 days out of the year. The US State Department first told Southern Carolina Edison not to comply with the Chilean law and to simply go without asking permission. The US Department of Transportation apparently disagreed with the State Department and pointed out that it probably does make sense to consult with the Chileans and work out some contingency plan with them, because ships do sometimes need to seek shelter in the waters of a coastal state and it would be useful and important for the Chileans to be prepared if there was any accident. **(In the spring of 2004, after this speech was given, the United States abandoned this shipment altogether and decided to leave the reactor in California.)**

Let me move to the military arena. We have some countries that have argued for the last 20 years that military maneuvers should not be permitted in the EEZ. We have other countries that have insisted just as strongly that military maneuvers are permitted in the EEZ. We also have the underlying question whether the LOS Convention applies in times of armed conflict or war, or threats thereof. And we have had recently several interesting incidents involving quasi-military activity, such as the US surveillance plane flying along the Chinese coast that came into contact with a Chinese plane in April 2001, had to land on Hainan Island, and was then seized by the Chinese. They eventually gave it back to the United States but only after making it clear that they viewed the surveillance as unacceptable behavior. The US has taken the position that surveillance is permitted and we also take the position that hydrographic mapping of the sea floor is permitted

in the EEZ even though marine scientific research would not be permitted without consent. In other words the US takes the position that hydrographic mapping is not marine scientific research and therefore is not governed by Article 246 and the consent regime. We have been using a ship called the *Bowditch* to map the sea floor and the Chinese have ordered the *Bowditch* out of its waters, as did India recently. China then enacted a law which makes it clear that they think that all survey and mapping activities in the EEZ is covered by this consent regime and therefore is not something that is permitted as a high sea freedom.

The *Soson* incident from December 2002 presents another example of how we are seeing new concerns that affect our concept of navigational freedom. The *Soson* was a Cambodian registered ship that was carrying North Korean missiles to Yemen. Spanish sailors (with US support) landed on the *Soson* and investigated its cargo hold and engaged in some military action to overwhelm the ship. They finally decided after a couple of days that what they had done was a violation of international law. They then let the ship go on its merry way but the US subsequently decided to formalize what it had done in the *Soson* situation in the Proliferation Security Initiative, whereby shipping would be subject to investigation whenever it seemed to present a threat of the movement of weapons of mass destruction. The US has been cagey about what exactly it is going to do when it apprehends such ships, but has been conducting a series of exercises. To some extent it reminds us of the Cuban missile crisis in 1962 when President Kennedy said that the US would investigate and inspect the ships coming and going into and out of Cuba. That was a very specific short-term endeavor and whether this larger endeavor by the US and its allies is going to be seen as legitimate or not remains to be seen.

Just one final example in conclusion, the NATO countries are now engaging in a new form of military technology called low frequency active sonar whereby, in order to determine a location of enemy submarines, a very loud speaker is put into the water. People sometimes call it an acoustic cannon because it makes a sound in the ocean louder than any other sound that has ever been put in the ocean at the level of what it would be if you were right in front of a rock band. The sound is there for long periods of time, and it extends over huge areas of the ocean and the use of related sonar has led to the beaching of cetaceans quite frequently around the planet in the last couple of years as this technology has been tested. We recently had a pretty good ruling from a US court that the Navy would have to restrict its testing to a very narrow area which happens to be in East Asia right along the Chinese and Korean coast and in the area around Japan. I'm not sure why that area has been picked but in any event that is where testing is going to continue. The US court restricted the Navy dramatically, but the ques-

tion is then raised: Does it violate international law for one country to test this technology in other countries' EEZs if it damages their living resources? Does international law have a remedy or a mechanism for them to use to protect themselves?

Taken together, these examples of coastal states taking unilateral initiatives to protect their coastal environment and their security interests indicate that a new principle of international law has emerged, which allows countries to restrict navigation in their EEZ based on the nature of the ship and its cargo, based on the demands of the precautionary principle, and based on the demands that countries have for protecting their own security.

Thank you again for your attention and I look forward to the next two days of discussions.



## ORGANIZING FOR THE GLOBAL WATER AGENDA: LESSONS LEARNED AND LINKS TO THE OCEANS

**Mr. Emilio Gabbrielli**

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### How the Global Water Partnership was Established and Why

The solutions to current and coming crises will not, for the most part, be found in new and extraordinary technological advances. Instead they will be found through changing the way we use and manage water. The present sectoral approaches lead to fragmented and uncoordinated development and management of the resource. There is a better way to manage water: it is *Integrated Water Resources Management (IWRM)* — an approach to land and water management that seeks to balance human, industrial, agricultural and environmental needs. To do this successfully, all users of water — government departments, academics, community groups, NGOs, the private sector and other interest groups — need to get together to share information, understand data and work together to solve their problems. The Global Water Partnership (GWP) was created as a global network in 1996 to do just this.

### Working in Partnership

Although a holistic approach to managing water is gaining acceptance, it was not until the Dublin Conference on Water and the Environment in 1992 (see Box 13) and the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992, that a more comprehensive approach to water management — moving from sub-sectoral to cross-sectoral water management — was believed necessary for sustainable development. To set about doing this means creating ownership among the stakeholders and a need for them to work in partnership with each other. An inclusive partnership where all the stakeholders have a say allows the creation of a neutral platform on which things can get done in a sustainable way.

But working in partnership is not easy, it is a slow, complex process. I am sure that few would dispute the pre-eminence of Australia in understanding the relationship between land use and water. In the late 1970s, the Murray-Darling Basin Commission was being conceived. This remarkable effort towards integrated basin management has now succeeded in bringing together all major stakeholders in this huge basin, but it took more than 15 years to do so. Yet, though it is widely recognized as one of the most advanced and suc-

cessful experiences in integrated management of a drainage basin, it has still not achieved the reversal of many unsustainable agricultural practices and probably could never have done so in such a short time. This gives a clear indication of the difficulties of producing sustainable solutions through cultural change and mediation of different interests beyond the goodwill of single actors. Critically though, the necessary changes in the way people work will certainly not happen unless there is a strong *political commitment* to create the enabling environment to facilitate these changes.

### A New Coordinating Mechanism

This awareness, together with the need for participatory institutional mechanisms to involve all sectors of society in the decision-making processes, called for a new coordinating mechanism. In response to this demand the World Bank, the United Nations Development Programme (UNDP), and the Swedish International Development Cooperation Agency (Sida) created the Global Water Partnership (GWP) in 1996. This initiative was based on promoting and implementing IWRM through the development of a worldwide network of partnerships that could pull together financial, technical, policy and human resources to address the critical issues of sustainable water management.

With a mission to support countries in the sustainable management of their water resources through IWRM, the GWP network was established to help influence policy for the adoption and implementation of IWRM to provide water security for all. The GWP network has the task of persuading policy makers and those associated with the management of water to move away from the present fragmented, sub-sectoral practices and instead, integrate water resources management policies and practices to provide holistic cross-sectoral water management.

From the outset, the GWP was conceived as a partnership among all those involved in water management. To get the right people to talk together, GWP set up regional, country and area water partnerships to promote and implement IWRM. Today, GWP has established Water Partnerships in South America, Central America, the Mediterranean, Central and Eastern Europe, South Africa, Eastern Africa, West Africa, Central Asia and Caucasus, South Asia, Southeast Asia,



### Box 13. The Dublin Principles on which GWP is Based

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.
3. Women play a central part in the provision, management and safeguarding of water.
4. Water has an economic value in all its competing uses and should be recognized as an economic good.

China and Australia. Other regions planning to establish Water Partnerships are Central Africa, the Caribbean and the Pacific Islands.

These Water Partnerships, consisting of leading water professionals in the regions and countries, work by encouraging stakeholders to come together at regional, country and local levels to discuss common water problems and, in partnership with each other, devise appropriate IWRM solutions to resolve these problems. To bring coherency to the work across the network, GWP has collated its activities into a single overall comprehensive work plan. To help achieve its goals, GWP has developed strategic alliances and cooperation with all those involved in water management, both those in the immediate circle such as the World Water Council, the World Wildlife Fund, the Water Supply and Sanitation Collaborative Council, the UN agencies, the World Conservation Union and so on, and those involved in development issues and processes such as the ministries of development, ministries of finance, the industrial and professional associations, NGOs and others.

To support the network in adopting and implementing IWRM, GWP has pulled together various sources of knowledge and expertise in water resources management. In response to regional and country needs, five programs, or *Associated Programs*, have been identified – capacity building, knowledge management, flood management, river basin management, and groundwater management – to support IWRM program and tools. Although each of these programs has its core business based in a specific area, all promote their services in the context of IWRM. These programs are not owned or directed by the Partnership but are independent programs hosted within different organizations and whose services can be found through the GWP network.

### The Dialogues

The current water crisis is mainly a crisis of water *governance* (see Box 14). Consequently, resolving the challenges in this area is recognized as one of the most important elements of managing water to address, if we are to achieve sustainable water resources development and management.

The Dialogue on Effective Water Governance, undertaken by GWP in partnership with the United Nations Development Programme (UNDP) and the International Council for Local Environment Initiatives (ICLEI), promotes better water governance around the world by bringing stakeholders together to examine the political processes and analyze water governance systems. The issues discussed vary depending on the socio-political context as countries have different cultural and political traditions and regimes. Although some issues are country specific, there are many areas where common experiences are shared. The activities include multi-stakeholder workshops, roundtables on the political processes, and electronic conferencing. Dialogues on Water, Food and Environment and on Water and Climate are also being conducted.

### Freshwater Communities and GWP Impact on Global Policy

International events are key to raising political will around the world. The 2<sup>nd</sup> World Water Forum in The Hague in 2000 and the 3<sup>rd</sup> World Water Forum in Japan both resulted in Ministerial Declarations to support the adoption and implementation of IWRM. On a broader level, the Millennium Summit in 2000 and the World Summit on Sustainable Development in Johannesburg in 2002 called for a wide-ranging set of actions that required IWRM to be implemented as a solution towards the alleviation of poverty and increasing health.

### Box 14. What is Water Governance?

Water governance refers to the range of political, social, economic and administrative systems that are in place to regulate the development and management of water resources and provision of water services at different levels of society. Governance issues have important implications for the management of water resources at all administrative levels — global, regional, national and local — and are a prerequisite for the successful implementation of Integrated Water Resources Management (IWRM).



All GWP's efforts over the past several years to influence the political agenda have resulted in the effectiveness of GWP being often mentioned in ministerial and official statements on water management, in water being at the top of agenda for many countries, and a call at the World Summit for Sustainable Development (WSSD) in 2002 for all countries to develop national IWRM and water efficiency plans by 2005.

At regional and country level for example, capacity building for IWRM networks has been established in many regions including West Africa, Southern Africa, Southeast Asia, and South America; community-based training and practical workshops on IWRM have been held in Southeast Asia, and undergraduate and postgraduate courses on IWRM are being introduced in universities in Southeast Asia, Southern Africa and elsewhere. IWRM has been adopted as official policy in countries in many GWP regions such as Thailand, Philippines, Vietnam, and Namibia; and special Working Groups on Water Resources Management have been established in the Association of Southeast Asia Nations (ASEAN) and with the Southern Africa Development Community (SADC).

### **Was GWP Successful?**

The External Review of GWP, performed in 2002–2003, noted that, “in 6 years GWP has set up a global network that has already made an effective and significant contribution to the global recognition of Integrated Water Resource Management. GWP has influenced policy and brought about change in legislation in the governance and management of water.” The overall Recommendation of the External Review concluded that, “GWP should continue to be regarded as a cost-effective and valuable instrument for progressing reform and awareness in the global water sector.”

### **Why has GWP Been Successful?**

Of the many reasons for the success of GWP, three stand above all others. The network:

- is flexible and rapidly capable of adapting to changing circumstances centered on substance, not governance issues;
- responded to real perceived need for IWRM;
- gained credibility at the global level. For example, GWP established a key role in the World Water Forum and other similar international events, including the WSSD processes, by involving several highly influential personalities at international level to raise political awareness. Concurrently, GWP did the same thing at regional/country level by bringing political and decision-makers into the Water Partnerships, by involving highly influential personalities at national level, and getting involved with the WSSD processes.

### **Challenges Ahead**

To date GWP has been successful in advocating for IWRM and establishing Water Partnerships as platforms for multi-stakeholder dialogues on water resources management. The challenge ahead is how to transform all of this into effective action on the ground, especially after the 2002 World Summit on Sustainable Development put water high on the agenda and set the target for starting the process of establishing national IWRM plans by 2005.

### **Working with the Freshwater Community**

There are several areas where the oceans community can work together with the freshwater community, notably with:

- major drainage/river basin organizations, for example, those responsible for rivers draining into Baltic, Mediterranean, Black Sea and so on;
- the Global International Water Assessment (GIWA) that is run out of UNEP;
- IUCN on the “Environmental Flows” concept that includes the coastal dimension;
- The IUCN “Water and Nature Initiative” (WANI) that looks at river basin management and the ecosystems approach where the estuarine and coastal ecosystems are very much in focus;
- UNEP, as its water policy is centered on freshwater-coast interactions;
- UNEP on the WEHAB (Water, Energy, Health, Agriculture and Biodiversity) documents from the WSSD – that consistently mention IWRM and ‘ICARM’ (integrated coastal and river management).





## TOWARD ACHIEVING WSSD OBJECTIVES AT THE REGIONAL LEVEL

**Mr. Alan Simcock**

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of the North-East Atlantic

This paper seeks to look at two main questions:

- What are the commitments from the 2002 World Summit on Sustainable Development (WSSD) that need action at the regional level?
- What can be done at the regional level to promote the achievement of these goals?

In doing so, it draws particularly on the experience of my region (the North-East Atlantic, including the North Sea, the English Channel and the Celtic Seas). That region is particularly fortunate in the resources on which it can draw and on the number of States it has with high levels of commitment to environmental conservation but, even with these advantages, there are problems in delivering the WSSD commitments. Nevertheless, our experience can perhaps help suggest how implementation of some of the commitments can be addressed.

The section of the WSSD Programme of Implementation that deals with the oceans contains commitments in six fields: oceans as an ecological component of the Earth's ecosystem; fisheries; conservation; land-based marine pollution and degradation; shipping and marine science. This paper therefore examines the commitments with a regional component under each of these headings. In doing so, it does not use the full texts of these commitments, but abbreviates the texts of the commitments in order to bring out the most important elements and to ease reading. It must be stressed that the full text is what needs to be considered. Likewise, this paper summarises a number of OSPAR instruments and agreements: before drawing any conclusions at other than a general level, it is necessary to look at the full texts.

### Oceans as a Component of the Earth's Ecosystem

There are three WSSD commitments under this general heading that have a clear regional component:

- a. encourage the application by 2010 of the ecosystem approach;
- b. promote integrated coastal and ocean management;
- c. strengthen regional cooperation and inter-regional co-ordination.

What can regions do to promote the achievement of these commitments? There seem to be a number of actions which can be taken at the regional level and where international agreements can help:

- a. agree on how to apply the ecosystem approach;
- b. develop shared views on spatial planning and management;
- c. improve their working methods and help each other - especially in monitoring and assessment.

The ecosystem approach provides a crucial foundation for the WSSD suite of commitments. It is therefore important to make an early start on developing it. OSPAR and HELCOM (the Baltic Sea Marine Protection Commission (the Helsinki Commission)) have decided to work together on this, and at their Joint Ministerial Meeting in June 2003 endorsed a common Statement on the Ecosystem Approach. The main features of this are:

- a. the need to identify critical processes for maintaining structure and functioning of ecosystems;
- b. commitments to manage human activities that impact:
  - i. interactions within food-webs ("multi-species approach"), especially through capture fisheries;
  - ii. interaction between biota and the physical and chemical background, which is especially relevant to preventing pollution and other forms of degradation of the marine environment.

In doing all this, it is essential to remember the limits on our current scientific knowledge and to ensure that we apply the precautionary principle.

In applying an ecosystem approach, there is an inevitable tension between sectoral and holistic aspects. Action has to be sectoral:

- a. the UN Convention on the Law of the Sea sets up sectoral machinery;
- b. national structures are in most cases sectorally focused;
- c. management of human activities has to be sectoral, since that is the way that they are organised.

Nevertheless, the sea is one environment and we are com-

mitted to a holistic approach. How do we achieve integration?

The approach that OSPAR is pursuing is the establishment of ecological quality objectives. To do this, we have identified 10 main ecological quality issues:

1. Reference points for commercial fish species
2. Threatened and declining species
3. Sea mammals
4. Birds
5. Fish communities
6. Benthic communities
7. Plankton communities
8. Habitats
9. Nutrient budgets and production
10. Oxygen consumption

For each of these issues, ecological quality elements are identified. The aim is that these elements will identify the “envelope” within which it can reasonably be expected that the marine ecosystems will be in a healthy and flourishing condition. On each of these elements, an ecological quality objective (EcoQO) will be established. These EcoQOs are intended to guide the formulation and implementation of policies that can act as “levers” to move the real world in the directions indicated by the EcoQOs.

So far, 10 ecological quality elements have been agreed for a North Sea pilot project. As examples, the following five can be taken:

- a. *Commercial fish species* – the estimates of fish stocks should be above precautionary reference points agreed for each species;
- b. *Seals* - no population decline of more than 10% of the estimated population;
- c. *Harbour porpoises* – the by-catch should be below 1.7% of the estimated population
- d. *Seabirds* - deaths among the carcasses collected on the shores which can be attributed to oiling should be less than 10% of all deaths;
- e. *TBT Contamination* – the levels of “imposex” (development of male characteristics by females) in dog whelks (*Nucella lapillus*) should be below a specified low level on a standard index.

A second field of action where international agreement can help towards the WSSD commitments is that of spatial planning and management of the maritime area. States have many controls over the sea areas under their jurisdiction: these concern the development and use of harbours, offshore installations, areas for fishing for sedentary species, underwater cables, military areas, dumping and so on. Through international organisations other controls are also set up. For example, the

International Maritime Organization (IMO) establishes traffic separation schemes, areas to be avoided, etc. At present, these controls are very diverse: the issues considered in decision-making are different, the procedures give differing opportunities for input by those affected and other stakeholders. It is far from clear that this haphazard patchwork will help deliver the WSSD commitments. A more considered approach seems needed.

Most of the machinery is a matter for national, not international, decision making. But the common interest in the marine environment, even where this is subject to national jurisdiction can justify some consideration at the regional level. OSPAR is therefore setting up a pilot project on spatial planning in the North Sea area. This currently aims:

- a. to identify what controls already exist;
- b. to see what common principles can be derived;
- c. to see how extra-national interests can be affected by national decisions;
- d. to consider how national processes can take better account of the interests of all stakeholders, whether national or extra-national.

### **Sustainable Fisheries**

The WSSD commitments on fisheries with a regional component can be summarised as:

- a. Maintain or restore stocks to levels that can produce the maximum sustainable yield where possible not later than 2015;
- b. Implement UN and associated regional fisheries agreements;
- c. Implement the 1995 Code of Conduct for Responsible Fisheries and international plans of action;
- d. Urgently develop national and regional plans of action for that purpose;
- e. Proper allocation of straddling stocks and highly migratory fish stocks;
- f. Eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity.

These issues have been considered extensively in other sessions of the conference, and it is not appropriate to go over them in detail here.

It is, however, important to note the important linkages between fisheries management and the implementation of the ecosystem approach. This is acknowledged in the OSPAR EcoQOs, and represents a commitment by the OSPAR Contracting Parties to seek to carry through action by the appropriate fisheries management authorities to achieve these objectives.

The commitments in this section to sustainable aquaculture are, furthermore, a field where collaborative action is needed,

both between the States in a region and between different authorities. Questions arise about the location of aquaculture installations, their impact on nutrient levels, the impact of the veterinary medicines used and the genetic impact of farmed stocks on wild stocks. There is a case for ensuring consistent approaches between all those in a region who are regulating the different aspects of aquaculture in order to move towards sustainability.

### Conservation and Management of the Oceans

The WSSD commitments in this field which have a regional component can be summarised as:

- a. Maintain productivity and biodiversity;
- b. Implement the Jakarta Mandate;
- c. Develop and apply diverse approaches, including establishing representative networks of marine protected areas by 2012;
- d. Halt the loss of marine biodiversity;
- e. Implement global conservation conventions and initiatives such as RAMSAR, CBD, etc.

What can regions do to promote fulfilment of these commitments? The following seem to be important:

- a. Agree on conservation priorities;
- b. Agree methods to identify and manage marine protected areas;
- c. Agree what constitutes an ecologically coherent network of well managed marine protected areas;
- d. Agree how to measure success in marine conservation.

In the OSPAR region, these goals are brought together in the OSPAR Biodiversity Strategy. This is a four-fold strategy, endorsed by 2003 OSPAR Ministerial Meeting:

- a. Identify threatened or declining species and habitats;
- b. Assess impacts of human activities;
- c. Establish an "ecologically coherent network of well managed marine protected areas";
- d. Apply the ecosystem approach (see above), within the developing European Marine Strategy.

In identifying threatened and/or declining species and habitats, the OSPAR Commission has:

- a. Adopted a set of criteria (the Texel/Faial criteria), together with guidance on how they should be applied, to establish common approaches to identifying the species and habitats about which there is concern;
- b. Agreed and Initial OSPAR List of Threatened and/or Declining Species and Habitats, which was endorsed by the Ministerial Meeting of the Commission in June 2003.

The OSPAR Commission is now working on what action by

what authorities is needed to deliver the necessary protection for the species and habitats identified.

Regarding marine protected areas, the OSPAR Commission has adopted the OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas, which aims to create by 2010 an ecologically coherent network of well managed marine protected areas, which will be a joint network with HELCOM. This Recommendation commits the Contracting Parties to apply the agreed Guidelines on selection and management of such areas.

The identification and selection criteria start from ecological criteria, which cover:

1. Threatened or declining species and habitats/biotopes
2. Important species and habitats/biotopes
3. Ecological significance
4. High natural biological diversity
5. Representativity
6. Sensitivity
7. Naturalness

The agreements also cover prioritisation, management approaches and arrangements for monitoring and reporting.

The commitments imply a range of actions:

Action by each Contracting Party (where action is being taken under the EC Birds or Habitats Directives for any area, this is to be regarded as sufficient):

- a. By end of 2005, select and report on their areas;
- b. Develop a management plan for each area;
- c. Establish management measures within their competences, and seek management measures from other competent authorities
- d. Carry out periodic reviews

*Collective consideration of:*

- e. What is needed to establish a joint OSPAR/HELCOM network of marine protected areas;
- f. How well the national actions will establish by 2010 an ecologically coherent network of well managed marine protected areas in the OSPAR area;
- g. What action is needed to obtain management measures from other competent authorities;
- h. What collective action by OSPAR, and joint action with HELCOM, as necessary, is needed to achieve the network.

The third aspect of the OSPAR Biodiversity Strategy is the review of the impacts of a candidate list of human activities to see where action would be justified and what measures would be needed. This list is additional to the issue of dumping, which is regulated directly by one of the Annexes to the OSPAR Convention and covers:



1. Sand and gravel extraction
2. Dredging for navigational purposes
3. Other exploration for minerals (especially oil and gas)
4. Location of new offshore installations (pollution from these is considered separately)
5. Offshore wind-energy parks
6. Cables and pipelines
7. Land reclamation
8. Introduction of non-native species
9. Tourism

Action has already been taken on some of these (sand and gravel, offshore wind-energy parks), and action is under development on most of the others. This is set out in the work programme of the OSPAR Biodiversity Committee (for which see the OSPAR website).

### **Land-based Marine Pollution and Degradation**

In the field of combating land-based pollution and degradation, the WSSD implementation programme naturally focuses on the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA). At the regional level, the most significant commitments are:

- a. Mobilize resources to implement the GPA;
- b. Develop the regional programmes of action foreseen by the GPA;
- c. Make every effort to achieve substantial progress by 2006, with a target of at least 40 national programmes in place by that date.

The fields of where regional action on land-based pollution and degradation are worth considering include:

- a. Hazardous substances;
- b. Eutrophication;
- c. Radioactive substances;
- d. Siltation from land erosion.

In the OSPAR region, siltation is not a major concern, and is not therefore further discussed here. But it is also important to remember the possibility of pollution from offshore installations, especially those for oil and gas – which OSPAR originally treated as a form of land-based pollution.

In 1998, OSPAR adopted strategies on hazardous substances, eutrophication and radioactive substances, which were reviewed and endorsed by the Ministerial Meeting of the Commission in 2003.

In the field of hazardous substances, the OSPAR Strategy provides, in summary, for:

- a. **Ultimate objective** – Achieving concentrations in the marine environment near background values for natu-

rally occurring substances and close to zero for man-made synthetic substances;

- b. **Time Frame** – Making every endeavour to move towards the target of the cessation of discharges, emissions and losses of hazardous substances by the year 2020.

The first issue to address is which substances to consider. The starting point has to be OSPAR's 30 years work on a variety of hazardous substances. The problem is whether we can be certain that we are working on the most significant substances. The solution adopted is to draw up a List of Chemicals for Priority Action. To do this, we have adopted a "dynamic selection and prioritisation mechanism" – DYNAMEC, which is described in more detail in the OSPAR Annual Report for 2000/2001.

Having identified the chemicals for priority action, the next step under the OSPAR agreed procedures is to draw up a "Background Document" for each of the substances on which action may be needed. These cover the identification of:

- a. the properties of the substance(s) in question;
- b. sources of pollution with these substances which may affect the marine environment;
- c. the main pathways to the marine environment and their loads;
- d. the mechanisms of the adverse effects on seas and marine ecosystems;
- e. existing obligations for control and possible further measures;
- f. the consequences of implementing such measures;
- g. recommended action.

These Background Documents are agreed by the OSPAR Commission and published on the OSPAR website. The OSPAR Commission then follows up the action recommended.

On eutrophication, the OSPAR Strategy likewise provides for:

- a. **Ultimate objective** – Combating eutrophication to achieve and maintain a healthy marine environment where eutrophication does not occur;
- b. **Timeframe** – Progressive implementation, making every endeavour to achieve, by the year 2010, a healthy marine environment where eutrophication does not occur.

There is already a wide range of existing instruments to combat eutrophication – especially the EC Directives on Urban Waste Water Treatment and on Nitrates in Agriculture. The work which OSPAR is pursuing is to agree the eutrophication status of the OSPAR maritime area – a task completed for the first time in June 2003, to evaluate the effectiveness of the existing measures and, if need be, to see if further measures are needed.

On radioactive substances, the OSPAR Strategy provides for:

- a. **Ultimate aim** – Concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances - allowing for:
  - a. legitimate uses of the sea;
  - b. technical feasibility;
  - c. radiological impacts on man and biota.
- b. **Time Frame** – By the year 2020, discharges, emissions and losses of radioactive substances are to be reduced to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero.

This strategy is being implemented by drawing-up and submitting for collective examination national plans, showing how the elimination or reduction of discharges of radioactive substances from both nuclear and non-nuclear sources will be achieved to meet the 2020 goal. This is accompanied by developing the means to establish a collective overview of progress towards this goal.

What do the prevention, control and elimination of pollution from offshore installations mean?

- a. The control of the use of hazardous substances offshore, through a harmonised set of procedures;
- b. The control of oil and other discharges from well operations, including a commitment for a 15% reduction in absolute terms by 2006 in the amount of oil in “produced water”, in spite of the large expected increase in the amount of produced water discharged;
- c. Reaching decisions on the most environmentally appropriate for handling historic cuttings piles which have not been dispersed by tidal action;
- d. Control of air emissions and flaring;
- e. Control of disposal of the low-level radioactive scale which accumulates on pipes and tanks.

### Shipping

In the field of shipping, the WSSD commitments focus principally on:

- a. Enhancing maritime safety and protection against vessel pollution by actions at all levels;
- b. Implementing IMO instruments;
- c. Addressing the problem of invasive alien species in ballast water.

In Europe and the North Sea action towards these goals is focused on:

- a. Improved Port State control, particularly under the Paris Memorandum of Understanding;

- b. Waste management plans for ports, (including compulsory delivery of waste before ships leave port);
- c. Possible requirements on ships entering ports;
- d. Improved surveillance and prosecution, including a North Sea Network of Investigators and Prosecutors;
- e. Possible Particularly Sensitive Sea Areas (PSSAs) in Baltic and NE Atlantic;
- f. The development of a Regional Ballast Water Plan under the existing IMO Guidelines and the forthcoming IMO Convention.

### Transport of Radioactive Substances

The transport of radioactive substances by sea is a very politically sensitive issue in the North Sea and the North-East Atlantic. It was specifically addressed by the 2002 North Sea and 2003 OSPAR Ministerial declarations, which are on similar lines to the WSSD commitments. Work in this field will probably focus on the follow-up to the recent conference on this subject organised by the International Atomic Energy Agency in July 2003.

### Marine Science

In the field of marine science, the WSSD commitments focus on:

- a. Improving the scientific understanding of the marine environment;
- b. Improving integrated assessment at regional levels;
- c. Building capacity in marine science, information and management;
- d. Starting a series of Global Marine Assessments.

The first and last steps towards an integrated oceans policy have to be the cycle of monitoring, assessment and policy review. This need is common to all policy-making, but is particularly important for the oceans because our knowledge of the oceans is still so very limited.

For OSPAR, Annex IV of the OSPAR Convention imposed new obligations for comprehensive monitoring and assessment of the quality status of the marine assessment. In addition, Articles 28 and 32 imposed new obligations on reporting on implementation and assessment of compliance.

OSPAR work in this field has a long history:

- 1983 - German North Sea Assessment
- 1987 - Collective North Sea Assessment
- 1993 - North Sea Quality Status Report
- 1992 - OSPAR Convention - Annex IV *Monitoring and Assessment*
- 1994 - Joint Assessment & Monitoring Programme (JAMP)

2000 - Quality Status Report on NE Atlantic

2003 - Revised JAMP

Work is now focused on implementing the revised JAMP, with the aim of producing by 2010 a further comprehensive Quality Status Report. The JAMP includes a Comprehensive Atmospheric Monitoring Programme (CAMP), a Coordinated Environmental Monitoring Programme (CEMP) (including monitoring of pollutants in biota, sediments and seawater) and a Comprehensive Study of Riverine Inputs and Direct Discharges (RID).

This is supplemented by a series of further reporting:

- a. Liquid discharges from nuclear installations;
- b. Waste and other materials dumped at sea;
- c. Mercury losses from chlor-alkali plants;
- d. Discharges, waste handling and air emissions from offshore installations;
- e. Marine protected areas, species and habitats (*evolving*).

The experience of OSPAR in this field confirms the paradoxical statement of the English author, G. K. Chesterton – “If a job is worth doing, it is worth doing badly” – in other words, if a task is really important, then the product will be worthwhile even if it is not perfect. Provided allowances are made for possible errors when conclusions are drawn, a review and assessment of what is known can be helpful, even if it only shows what the main gaps in knowledge are that need to be filled.

## Conclusion

This presentation has attempted to identify the tasks that can be done at the regional level in order to help fulfil the WSSD commitments, and give examples of how one region is addressing this.

The OSPAR work will increasingly be placed in a multi-regional framework as a European Marine Strategy, covering the Arctic Ocean, the Baltic Sea, the Black Sea, the Mediterranean Sea and the North-East Atlantic, is developed. The European Marine Strategy is an initiative of the European Community, under its 6<sup>th</sup> Environmental Action Programme, but is intended to cover all European States. This should make significant contributions, particularly in getting better handling of the data collected.

In conclusion, those interested in oceans policy should WATCH THIS SPACE! – [www.ospar.org](http://www.ospar.org).

## SUMMARY AND CONCLUSIONS

In Part IV, we bring together the summary points on the WSSD targets presented earlier in the volume along with a summary table (Table 4), which highlights major progress achieved.

### 1. Addressing Cross-Sectoral Aspects

Programs in integrated coastal management need to:

- be scaled up to encompass larger parts of coastal areas, and ultimately the entire coastal area and EEZ. The setting of specific timelines for accomplishing this would be useful.
- receive specific funding to support the implementation of coastal management programs so that programs can go from planning into the operation phase.
- expand their activities in poverty reduction and public health
- link to watershed and river basin management

Management of ocean areas further offshore, including entire EEZs will require:

- new concepts, approaches and structures
- lesson sharing among countries
- assistance to developing and SIDS countries to delimit EEZs and continental shelves and to establish appropriate governance mechanisms

Regional-level marine ecosystem efforts, such as LMEs and regional seas:

- LME experience can be relied upon as a major source of experience for applying the ecosystem approach by 2010
- LMEs, Regional Seas, and other regional entities, working together, need to develop specific goals and procedures at the regional level to implement the global WSSD targets

### 2. Enhancing United Nations Coherence

A new interagency mechanism on oceans has been created by the highest levels of the UN system: the Oceans and Coastal Areas Network, subsequently renamed UN-Ocean,

paralleling UN-Water, the UN inter-agency mechanism for coordination of water issues.

New modalities for coordination among UN Agencies and programs, applicable to the new networks under the High Level Committee on Programmes have been defined as part of the follow-up of WSSD.

The Terms of Reference for UN-Ocean have been defined as well as a list of interested agencies identified. Specifics of how the mechanism will operate are to be defined by the network.

NGO involvement is expected to materialize at the level of specific Task Forces addressing different issues.

### 3. Establishing a Global Marine Assessment

A detailed proposal for the design and operation of the Global Marine Assessment has been prepared by the Group of Experts

States and others are in the process of discussing the draft and of considering the mobilization of financial and human resources to put the GMA into effect

### 4. Advancing Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities

UNEP-GPA is working to help countries develop national programmes of action (NPA) by 2006. Building on the experience of countries that have developed NPAs, it is recommended that countries integrate NPAs with sustainable development strategies and/or poverty reduction strategy papers.

There is an indication that the 2006 H2O target of 40 countries actively involved in developing or implementing NPAs will be exceeded

Links between the oceans community and the freshwater community urgently need to be strengthened and used to build integrated responses to the problems of watershed/coastal/marine degradation

The incorporation of GPA objectives into LME, coral reefs, ICM, as well as in biodiversity and marine protected area



programs and strategies is recognized as a key factor towards the successful implementation of these programs.

## **5. Addressing the Issues of SIDS**

A draft of the strategy document for the Mauritius International Meeting has been prepared and agreed to by the SIDS countries and the G77/China, and is now under further negotiation.

The Mauritius International Meeting has been rescheduled to January 10-14, 2005.

Assessments conducted for the Barbados+10 preparatory process underscore the central role of oceans and coasts for the environmental, social, and economic well-being of SIDS.

An important need of SIDS countries, articulated both in the JPoI and in the preparatory process of the Mauritius International meeting, is the delimitation and management of coastal areas, Exclusive Economic Zones, and continental shelves.

To accomplish the above purposes, the further development of institutional frameworks for ocean and coastal management and capacity building in the field should take place.

Important steps in the development of a Regional Ocean Policy, providing guidance for both regional and national-level ocean policies, have been taken in the Pacific Islands region.

## **6. Improving Fisheries Management**

The JPoI targets, along with the 1982 UN Convention on the Law of the Sea and all the international instruments adopted since UNCED, represent an overwhelming set of commitments that fisheries authorities have to implement.

In regard to IUU (Illegal, Unregulated and Unreported fishing) and reduction in fishing capacity, the development and implementation of national plans (NPOAs) by the lack of mobilization of technical and ODA (Overseas Development Assistance) support required.

The WSSD targets are connected to each other in terms of drivers, processes, measures and impacts, which are not explicitly reflected in the target dates. The degree of adoption of the ecosystem approach in fisheries and aquaculture by 2012 and the extent of recovery of many presently overfished fisheries to MSY by 2015 are linked to the success of capacity-reduction programmes, the elimination of harmful subsidies, and the degree of uptake and success of ICAM

(Integrated Coastal Area Management) as a central paradigm for coastal area management. In order to have healthy capture fisheries, aquaculture capacity must be developed with less impacting production strategies.

Though overlooked by WSSD, elements of demand-oriented management should be developed to complement the conventional supply-oriented management, e.g., the development of equitable eco-labeling systems.

Agreement in definitions and measurements of Fishing Capacity and Excess Capacity needs to be obtained as a priority, leading to the development of a system of indicators. Formal reporting of actions taken and achievements in implementing the FAO International Plans of Action should also be strengthened.

The importance of effective and targeted public awareness and educational programs, the direct involvement of key players such as the fishing industry, retailers, and other stakeholders in fisheries management, and increased international/bilateral cooperation on highly migratory species and shared stocks in the implementation of responsible fisheries strategies, cannot be over-emphasized.

Since only 10% of the total fisheries captures take place in the high seas, it would be very important to more forcefully develop national ocean policies with integrated fisheries policies for the EEZs. Furthermore, the LME approach should be adopted to provide a vantage platform for focused temporal and spatial assessments and monitoring efforts in support of management aimed at the long-term productivity of marine habitats and sustainable utilization of marine resources such as fisheries. Better connections should be developed, however, with existing decision-making systems.

## **7. Expanding and Improving Management of Marine Protected Areas, Biodiversity, and Coral Reefs**

Tangible steps in operationalizing networks of MPAs have been taken, in the 7th meeting of the Conference of Parties of the Convention on Biological Diversity, which has specified guidance for national frameworks of MPAs in the context of integrated coastal and marine management

The CBD, among others, has emphasized the urgency of also developing MPAs in marine areas beyond national jurisdiction

Mobilization of people and resources to achieve the WSSD goal of networks of MPAs by 2012 is beginning in some places, e.g., in the Pacific Islands through an NGO coalition. Some unmet needs in this area:



- Operationalizing the notion of “networks of MPAs” in the context of specific marine regions

- Setting up of sub-targets or intermediate goals to be reached prior to 2012

## 8. Mobilizing Resources Towards the Achievement of WSSD Targets on Oceans, Coasts, and Islands

Mobilization of human and financial resources on a timely basis, growth in management capacity, greater involvement by the private sector, greater involvement of NGOs and the public, are all essential for the attainment of the WSSD goals related to oceans, coasts, and SIDS.

### • *Financing*

There is a need to carry out analyses of flows of development assistance related to oceans, coasts, and SIDS. At present, it is difficult to put together an overall picture on development assistance on oceans, coasts, and SIDS from bilateral and multilateral sources.

There are perceived gaps in development assistance on oceans, coasts, and SIDS—especially for the implementation of ICM programs and of multilateral “soft law” agreements.

To enhance coordination among development assistance efforts from bilateral and multilateral donors, periodic Roundtables of Donors should be convened, at both the global level and in various regions.

Further study of the need for and possible modalities of a global oceans fund should be pursued, learning from the experience of existing global funds in other areas.

### • *Sustainable Development Partnerships*

Regarding the WSSD Sustainable Development Partnerships, preliminary analysis of the status of partnerships in the oceans, coasts, and SIDS area suggests a mixed picture, with some partnerships being well financed, effective, and generating additional partnerships, while other partnerships are getting off the ground very slowly. Some obstacles mentioned included: limited government involvement and commitment, few partnerships include the private sector, funding allocations for ocean, coasts, and SIDS issues are often not properly targeted or insufficient, certain issue areas are barely addressed by partnerships, certain regions are less represented in partnerships, limited regional and thematic coordination might lead to duplication or dispersion of efforts, linkages with different sectors (e.g., water, transportation, energy) are

rarely addressed and potential lessons from other experiences remain unutilized.

The most relevant lessons of broad application are: (a) the involvement of high-level political actors is fundamental to the identification of priorities and the mobilization of funding support for the partnerships; (b) multi-agency participation is helping improve institutional coordination at both the national and regional levels; (c) networking of partnerships and practitioners is proving vital to the sharing of experience and lessons learned, particularly on a regional basis. (d) Participation in partnership fairs and forums can provide inputs on establishing and building partnerships to facilitate matchmaking, securing resources for these initiatives in the future, bringing together different actors, and enhancing cross-sectoral communication and collaboration; and (e) partnerships can provide an important opportunity to introduce the application of the ecosystem approach to meet the 2010 target recommended by WSSD.

A strategy for the enhancement and development of partnerships on oceans, coasts and islands could be based on the development of a “mechanism for partnership facilitation” led by the Global Forum. The mechanism could have four elements:

1. A list of ongoing and potential partnerships, identifying lead organizations, other partners, goals, contact information, and a written partnership description in sufficient detail to determine the relevance of the partnership to the reader's interest.
2. A description of “lessons learned” (as supplied by Global Forum participants on the basis of their experience in partnership implementation).
3. A description of potential sources of resources to support partnerships.
4. A description of partnerships activities organized on a regional and subregional basis aimed at practitioners.

### • *Capacity building*

While there are many capacity building efforts related to ocean and coastal management, there are key obstacles that prevent scaling up, coordination, and targeting of these initiatives. These include short-term nature of the efforts; fragmentation and lack of coordination; not context specific and responsive to local, national, or regional priorities; not supported through long-term targeted financing.

In order to develop a critical mass of integrated coastal and ocean managers and professionals, there is a need to develop a global strategy for capacity building in the field which assesses existing programs and identifies gaps, formulates an action plan for sustained capacity building and utilization, and defines modalities to make capacity building programs more relevant to end users.

• **NGOs and Private Sector**

NGOs and foundations are approaching WSSD targets by: developing policies, building political will, working with partners, demonstrating good practice, implementing on the ground projects, and contributing to scientific debate. NGOs may vary in specific implementation techniques but they carry out common strategies, especially in addressing WSSD targets in MPAs and fisheries. Outstanding issues that they need to deal with include: providing sustainable financing for MPAs, developing a legal framework and implementation of high seas MPAs, developing a global baseline of current MPA coverage, building political will to implement MPAs and sustainable fisheries, implementing an effective monitoring and evaluation system for MPAs, and developing new approaches to mitigate IUU fishing.

A growing number of industries are beginning to factor in environmental considerations in the way they do business, e.g., the aquarium fish trade, fisheries, and coastal tourism. Sustainable practices, based on international prescriptions, such as the FAO Code of Conduct for Responsible Fisheries and the principles of integrated coastal management are finding their way into private sector initiatives. In coastal tourism, strategies to influence the private sector into adopting a more sustainable approach to tourism investments include: establishment of fiscal or financial incentives that help direct investments towards sustainable tourism; reinforcement of environmental legislation and regulations applicable to large private tourism development projects and/or the reinforcement of supervision of voluntary, self-regulatory schemes; and designation of marine protected areas.

• **Public Involvement**

Public involvement in the resolution of oceans, coasts, and islands issues requires a change in environmental behavior that may be facilitated by public education initiatives. Concerned public education and media organizations actively involved in oceans issues agree that the following are all essential in facilitating the achievement of WSSD targets in oceans, coasts, and SIDS: raising and maintaining mass media interest; providing adequate information on oceans issues; mobilizing educational organizations in reaching very large audiences; mobilizing educational organizations at all levels in order to integrate ocean issues into programs implementing the U.N. Decade of Education for Sustainable Development; engaging people into action that is beneficial to the environment by focusing on communicating priority messages to the public; mobilizing all stakeholders to get involved in Ocean Day and other events; determining the best tools for reaching specific target groups; and identifying and providing funding for educational activities and campaigns.

Table 4. Toward Implementation of WSSD Goals on Oceans, Coasts, and Small Island Developing States: A Summary

	Operationalization of WSSD goals	Assessment of Current Status	Development of Strategies	Mobilization of People and Resources	Institutional Changes	Likely Outcomes
<b>1. Addressing Cross-sectoral aspects</b>		Coastal management programs need to: scale up; put more emphasis on poverty reduction; receive funding for implementation  National ocean policy development/EEZ planning is a growing practice—lesson drawing among nations is essential  SIDS and other developing countries need assistance in EEZ and continental shelf delimitation and management	Strategies for implementing WSSD targets are being developed at the regional level, e.g., East Asia (PEMSEA), Pacific Islands Regional Ocean Policy, ICM protocol in the Mediterranean  LME experience should be built upon in application of ecosystem approach by 2010			
<b>2. Enhancing UN Coherence</b>	The UN Chief Executives Board for Coordination's High Level Committee on Programmes was tasked to lead the development of improved collaborative UN arrangements in oceans and coastal areas	Enhanced coordination of activities in oceans and coasts requires review and harmonization of ongoing activities and addressing emerging challenges.	A UN mechanism to review joint and overlapping ongoing activities is needed.		New interagency mechanism for UN coordination on oceans and coasts "UN-Oceans" has been created  The Terms of Reference for UN-Oceans have been defined, and the list of interested agencies identified	
<b>3. Establishing a Global Marine Assessment</b>		Consultant's report has assessed current status	Group of Experts has developed a draft strategy for the GMA	The draft GMA strategy is being discussed at the UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea in June 2004		
<b>4. Advancing Implementation of the GPA</b>			HO Conference in Cairns, Australia (May 2004) developed a strategy for advancing GPA implementation by 2006			The 2006 target of 40 countries actively involved in developing or implementing NPAs will probably be exceeded
<b>5. Addressing the Issues of SIDS</b>		A number of analyses on progress achieved since Barbados 1994 are ongoing	AOSIS has developed a strategy paper for the Mauritius International Meeting—which is currently under negotiation  The Mauritius International meeting has been rescheduled to January 10-14, 2005			
<b>6. Improving Fisheries Management</b>		-Application of ecosystem approach to fisheries is in progress and for some species likely to be well implemented by 2012  Development and implementation of national plans of action (NPOAs) has begun  Regional fishery management organizations have undertaken a review of their mandates and functions with the view to improving their performance				
<b>7. Improving Management of MPAs, Biodiversity, and Coral Reefs</b>	Tangible steps have been taken in operationalizing MPA networks, especially through COP of Biodiversity Convention			Mobilization in some areas, e.g., Pacific through NGO efforts		
<b>8. Mobilizing Resources Towards the Achievement of WSSD Targets on Oceans, Coasts, and Islands</b>	Sustainable Development Partnerships continue to be established	Preliminary analysis of the status of partnerships in oceans, coasts (27), and SIDS (18) shows that some are doing very well and spurring new partnerships. Others are having difficulties with funding, and government and private sector commitments		Creation of some networks and umbrella regional partnerships with involvement of governments and stakeholders		



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## **APPENDICES**



## Appendix A.

**The Johannesburg Plan of Implementation Text**

(The verbatim text related to oceans, coasts, and islands  
in the Plan of Implementation agreed to at the World Summit on Sustainable Development,  
September 29, 2002)

**V. Protecting and managing the natural resource base of economic and social development**

30. Oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries. Ensuring the sustainable development of the oceans requires effective coordination and cooperation, including at the global and regional levels, between relevant bodies, and actions at all levels to:

- (a) Invite States to ratify or accede to and implement the United Nations Convention on the Law of the Sea, which provides the overall legal framework for ocean activities;
- (b) Promote the implementation of chapter 17 of Agenda 21 which provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas through its programme areas of integrated management and sustainable development of coastal areas, including exclusive economic zones; marine environmental protection; sustainable use and conservation of marine living resources; addressing critical uncertainties for the management of the marine environment and climate change; strengthening international, including regional, cooperation and coordination; and sustainable development of small islands;
- (c) Establish an effective, transparent and regular inter-agency coordination mechanism on ocean and coastal issues within the United Nations system;
- (d) Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem and decision 5/6 of the Conference of Parties to the Convention on Biological Diversity;
- (e) Promote integrated, multidisciplinary and multisectoral coastal and ocean management at the national level, and encourage and assist coastal States in developing ocean policies and mechanisms on integrated coastal management;
- (f) Strengthen regional cooperation and coordination between the relevant regional organizations and programmes, the UNEP regional seas programmes, regional fisheries management organizations and other regional science, health and development organizations;
- (g) Assist developing countries in coordinating policies and programmes at the regional and subregional levels aimed at the conservation and sustainable management of fishery resources, and implement integrated coastal area management plans, including through the promotion of sustainable coastal and small-scale fishing activities and, where appropriate, the development of related infrastructure;

(h) Take note of the work of the open-ended informal consultative process established by the United Nations General Assembly in its resolution 54/33 in order to facilitate the annual review by the Assembly of developments in ocean affairs and the upcoming review of its effectiveness and utility to be held at its fifty-seventh session under the terms of the above-mentioned resolution.

31. To achieve sustainable fisheries, the following actions are required at all levels:

- (a) Maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015;
- (b) Ratify or accede to and effectively implement the relevant United Nations and, where appropriate, associated regional fisheries agreements or arrangements, noting in particular the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks and the 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas;
- (c) Implement the 1995 Code of Conduct for Responsible Fisheries, taking note of the special requirements of developing countries as noted in its article 5, and the relevant Food and Agriculture Organization of the United Nations (FAO) international plans of action and technical guidelines;
- (d) Urgently develop and implement national and, where appropriate, regional plans of action, to put into effect the FAO international plans of action, in particular the international plan of action for the management of fishing capacity by 2005 and the international plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing by 2004. Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by flag States, to further the international plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing;
- (e) Encourage relevant regional fisheries management organizations and arrangements to give due consideration to the rights, duties and interests of coastal States and the special requirements of developing States when addressing the issue of the allocation of share of fishery resources for straddling stocks and highly migratory fish stocks, mindful of the provisions of the United Nations Convention on the Law of the Sea and the Agreement for the Implementation of the Provi-

sions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, on the high seas and within exclusive economic zones;

(f) Eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity, while completing the efforts undertaken at WTO to clarify and improve its disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries;

(g) Strengthen donor coordination and partnerships between international financial institutions, bilateral agencies and other relevant stakeholders to enable developing countries, in particular the least developed countries and small island developing States and countries with economies in transition, to develop their national, regional and subregional capacities for infrastructure and integrated management and the sustainable use of fisheries;

(h) Support the sustainable development of aquaculture, including small-scale aquaculture, given its growing importance for food security and economic development.

32. In accordance with chapter 17 of Agenda 21, promote the conservation and management of the oceans through actions at all levels, giving due regard to the relevant international instruments to:

(a) Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction;

(b) Implement the work programme arising from the Jakarta Mandate on the Conservation and Sustainable Use of Marine and Coastal Biological Diversity of the Convention on Biological Diversity, including through the urgent mobilization of financial resources and technological assistance and the development of human and institutional capacity, particularly in developing countries;

(c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use; and watershed planning and the integration of marine and coastal areas management into key sectors;

(d) Develop national, regional and international programmes for halting the loss of marine biodiversity, including in coral reefs and wetlands;

(e) Implement the RAMSAR Convention, including its joint work programme with the Convention on Biological Diversity, and the programme of action called for by the International Coral Reef Initiative to strengthen joint management plans and international networking for wetland ecosystems in coastal zones, including coral reefs, mangroves, seaweed beds and tidal mud flats.

33. 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 alteration and destruction of habitats, and nutrients, by actions at all levels to:

(a) 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;

(b) 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;

(c) 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 accelerated environmental changes and development pressures;

(d) 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.

34. Enhance maritime safety and protection of the marine environment from pollution by actions at all levels to:

(a) Invite States to ratify or accede to and implement the conventions and protocols and other relevant instruments of the International Maritime Organization (IMO) relating to the enhancement of maritime safety and protection of the marine environment from marine pollution and environmental damage caused by ships, including the use of toxic anti-fouling paints and urge IMO to consider stronger mechanisms to secure the implementation of IMO instruments by flag States;

(b) Accelerate the development of measures to address invasive alien species in ballast water. Urge IMO to finalize the IMO International Convention on the Control and Management of Ships' Ballast Water and Sediments.

35. Governments, taking into account their national circumstances, are encouraged, recalling paragraph 8 of resolution GC (44)/RES/17 of the General Conference of the International Atomic Energy Agency (IAEA) and taking into account the very serious potential for environment and human health impacts of radioactive wastes, to make efforts to examine and further improve measures and internationally agreed regulations regarding safety, while stressing the importance of having effective liability mechanisms in place, relevant to international maritime transportation and other transboundary movement of radioactive material, radioactive waste and spent fuel, including, inter alia, arrangements for prior notification and consultations done in accordance with relevant international instruments.

36. Improve the scientific understanding and assessment of marine and coastal ecosystems as a fundamental basis for sound decision-making, through actions at all levels to:

(a) Increase scientific and technical collaboration, including integrated assessment at the global and regional levels, including the appro-



priate transfer of marine science and marine technologies and techniques for the conservation and management of living and non-living marine resources and expanding ocean-observing capabilities for the timely prediction and assessment of the state of marine environment;

(b) Establish by 2004 a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments;

(c) Build capacity in marine science, information and management, through, inter alia, promoting the use of environmental impact assessments and environmental evaluation and reporting techniques, for projects or activities that are potentially harmful to the coastal and marine environments and their living and non-living resources;

(d) Strengthen the ability of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, FAO and other relevant international and regional and subregional organizations to build national and local capacity in marine science and the sustainable management of oceans and their resources.

\* \* \*

## VII. Sustainable development of small island developing States

58. Small island developing States are a special case both for environment and development. Although they continue to take the lead in the path towards sustainable development in their countries, they are increasingly constrained by the interplay of adverse factors clearly underlined in Agenda 21, the Programme of Action for the Sustainable Development of Small Island Developing States and the decisions adopted at the twenty-second special session of the General Assembly. This would include actions at all levels to:

(a) Accelerate national and regional implementation of the Programme of Action, with adequate financial resources, including through GEF focal areas, transfer of environmentally sound technologies and assistance for capacity-building from the international community;

(b) Further implement sustainable fisheries management and improve financial returns from fisheries by supporting and strengthening relevant regional fisheries management organizations, as appropriate, such as the recently established Caribbean Regional Fisheries Mechanism and such agreements as the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean;

(c) Assist small island developing States, including through the elaboration of specific initiatives, in delimiting and managing in a sustainable manner their coastal areas and exclusive economic zones and the continental shelf (including, where appropriate, the continental shelf areas beyond 200 miles from coastal baselines), as well as relevant regional management initiatives within the context of

the United Nations Convention on the Law of the Sea and the UNEP regional seas programmes;

(d) Provide support, including for capacity-building, for the development and further implementation of:

(i) Small island developing States-specific components within programmes of work on marine and coastal biological diversity;

(ii) Freshwater programmes for small island developing States, including through the GEF focal areas;

(e) Effectively reduce, prevent and control waste and pollution and their health-related impacts by undertaking by 2004 initiatives aimed at implementing the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities in small island developing States;

(f) Work to ensure that, in the ongoing negotiations and elaboration of the WTO work programme on trade in small economies, due account is taken of small island developing States, which have severe structural handicaps in integrating into the global economy, within the context of the Doha development agenda;

(g) Develop community-based initiatives on sustainable tourism by 2004, and build the capacities necessary to diversify tourism products, while protecting culture and traditions, and effectively conserving and managing natural resources;

(h) Extend assistance to small island developing States in support of local communities and appropriate national and regional organizations of small island developing States for comprehensive hazard and risk management, disaster prevention, mitigation and preparedness, and help relieve the consequences of disasters, extreme weather events and other emergencies;

(i) Support the finalization and subsequent early operationalization, on agreed terms, of economic, social and environmental vulnerability indices and related indicators as tools for the achievement of the sustainable development of the small island developing States;

(j) Assist small island developing States in mobilizing adequate resources and partnerships for their adaptation needs relating to the adverse effects of climate change, sea level rise and climate variability, consistent with commitments under the United Nations Framework Convention on Climate Changes, where applicable;

(k) Support efforts by small island developing States to build capacities and institutional arrangements to implement intellectual property regimes;

59. Support the availability of adequate, affordable and environmentally sound energy services for the sustainable development of small island developing States by, inter alia:

(a) Strengthening ongoing and supporting new efforts on energy supply and services, by 2004, including through the United Nations system and partnership initiatives;

(b) Developing and promoting efficient use of sources of energy, including indigenous sources and renewable energy,

and building the capacities of small island developing States for training, technical know-how and strengthening national institutions in the area of energy management;

60. Provide support to SIDS to develop capacity and strengthen:

- (a) Health-care services for promoting equitable access to health care;
- (b) Health systems for making available necessary drugs and technology in a sustainable and affordable manner to fight and control communicable and non-communicable diseases, in particular HIV/AIDS, tuberculosis, diabetes, malaria and dengue fever;
- (c) Efforts to reduce and manage waste and pollution and building capacity for maintaining and managing systems to deliver water and sanitation services, in both rural and urban areas;
- (d) Efforts to implement initiatives aimed at poverty eradication, which have been outlined in section II of the present document.

61. Undertake a full and comprehensive review of the implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States in 2004, in accordance with the provisions set forth in General Assembly resolution S-22/2, and in this context requests the General Assembly at its fifty-seventh session to consider convening an international meeting for the sustainable development of small island developing States.

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