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# World Ocean Conference Bulletin

## A Summary Report of the World Ocean Conference

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### SUMMARY OF THE WORLD OCEAN CONFERENCE (WOC2009): 11-15 MAY 2009

Oceans experts from around the world convened in Manado, Indonesia from 11-15 May 2009 for the World Ocean Conference (WOC2009) and Coral Triangle Initiative (CTI) Summit. This event, hosted by the Government of Indonesia, aimed to increase cooperation between nations on managing marine resources in the context of climate change, and increase understanding of the role of oceans in regulating global climate. Ministers, high-level government officials and the heads of several multilateral and non-governmental organizations attended the meeting.

On Monday and Tuesday, participants attended the Senior Officials' Meeting, including welcoming remarks by Sinyo Harry Sarundajang, the Governor of North Sulawesi, and a keynote speech by Freddy Numberi, the Indonesian Minister of Marine Affairs and Fisheries. This was followed by thematic sessions on: ocean observations and analysis; the impacts of climate change on coastal communities; and preparedness and improving resilience of coastal communities to adapt to climate change.

On Wednesday, participants attended Global Ocean Policy Day and took part in panel-led discussions on: climate change mitigation; adaptation measures and security concerns; financing adaptation; and the future of oceans and the climate change agenda. Participants were also presented with the results of the Global Forum on Oceans, Coasts, and Islands Working Groups and the Fourth Global Conference on Oceans, Coasts, and Islands held 7-11 April 2008, in Hanoi, Viet Nam.

On Thursday, following closed negotiations held throughout the week, delegates adopted the Manado Ocean Declaration by acclamation.

On Friday, the six countries participating in the CTI, Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and East Timor, met to confirm their commitment to the Initiative through a Leaders' Declaration and adopted the CTI Action Plan.

Throughout the week, delegates also attended a number of related events, including the Ocean Science, Technology and Policy Symposium, featuring oral and poster presentations of over 500 scientific and policy papers.

### A BRIEF HISTORY OF OCEAN AND CLIMATE-RELATED PROCESSES

Climate change is considered to be one of the most serious threats to sustainable development, with adverse impacts expected on the environment, human health, food security, economic activity, natural resources, and physical infrastructure.



A *coelocanth* figures prominently in the hallway of the Grand Kawanua Convention Centre, Manado. With a face that only a mother could love, the coelocanth (known locally as the "sea king") is a member of the oldest fish species on the planet (between 360 and 400 million years old). Previously thought to be extinct, this particular specimen was caught in Manado Bay by local fishermen in 1996.

The oceans play a major role in the regulation of the earth's climate, but recently global climate change has begun to threaten marine lives and the livelihoods of coastal communities.

**UNCLOS:** The 1982 UN Convention on the Law of the Sea (UNCLOS), which opened for signature on 10 December 1982, in Montego Bay, Jamaica, at the Third UN Conference on the Law of the Sea, constitutes the main legal framework for the regulation of human activities at sea, setting forth the

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rights and obligations of states regarding the use of the oceans, their resources, and the protection of the marine and coastal environments. UNCLOS entered into force on 16 November 1994, and is supplemented by the 1994 Deep Seabed Mining Agreement and the 1995 Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA).

**UNFCCC:** The international political response to climate change began with the adoption of the UN Framework Convention on Climate Change (UNFCCC) in 1992. The UNFCCC sets out a framework for stabilizing atmospheric concentrations of greenhouse gases to avoid “dangerous anthropogenic interference” with the climate system. The UNFCCC entered into force on 21 March 1994. In December 1997, delegates at the third Conference of the Parties (COP3) in Kyoto, Japan, agreed to a Protocol to the UNFCCC that commits industrialized countries and countries in transition to a market economy to achieve emission targets. These countries, known under the UNFCCC as Annex I parties, agreed to reduce their overall emissions of six greenhouse gases by an average of 5.2% below 1990 levels between 2008-2012 (the first commitment period), with specific targets varying from country to country. The Kyoto Protocol entered into force on 16 February 2005.

**WOC2009:** Within the backdrop of UNCLOS and UNFCCC, Indonesia took the initiative to organize the WOC2009 in Manado on 11-15 May 2009, aiming to promote a strong interaction between these two regimes considering the important role of oceans in the context of climate change. WOC2009 was created for the world community to discuss current issues in the marine field related to climate change, including how the world can wisely utilize the oceans to mitigate the climate crisis. Furthermore, the intent of WOC2009 was to create a more aligned global vision around commitments to oceans and coasts through the adoption of a declaration on oceans, and to encourage participating governments and institutions to work together to improve marine resources management.

**GLOBAL OCEAN POLICY DAY:** Global Ocean Policy Day was jointly organized by the Global Forum on Oceans, Coasts, and Islands, and the Indonesian Ministry of Marine Affairs and Fisheries. The aim of the Global Ocean Policy Day was to provide an opportunity for multi-stakeholder dialogue on oceans and climate change, and present the results of the Global Forum on Oceans, Coasts, and Islands Working Groups and the 4th Global Conference on Oceans, Coasts, and Islands: Advancing Ecosystem Management and Integrated Coastal and Ocean Management by 2010 in the Context of Climate Change, held in 2008 in Hanoi, Viet Nam, which recognized the need to raise the profile of the oceans and coasts within climate change negotiations.

The First Global Conference on Oceans and Coasts at Rio+10: Toward the 2002 World Summit on Sustainable Development (WSSD) took place in 2001 in Paris, France. Participants assessed the status of oceans and coasts and progress achieved over the last decade, identified continuing and new challenges, examined options for concerted action on cross-sectoral issues and laid the groundwork for the inclusion of an oceans perspective and small island developing states (SIDS) issues in the WSSD agenda. This was followed by the Second Global Conference on Oceans, Coasts, and Islands: Mobilizing for Implementation of the Commitments Made at the 2002 WSSD on Oceans, Coasts and SIDS, which took place in 2003 in Paris, France. The Conference was organized by the

Global Forum on Oceans, Coasts and Islands, created at the 2002 WSSD, and spurred the process of initial implementation of the WSSD commitments.

The Third Global Conference on Oceans, Coasts, and Islands, took as its theme “Moving the Global Oceans Agenda Forward,” and was held in Paris, France in 2006. The meeting sought to accelerate progress in achieving international ocean policy targets, especially those related to the WSSD and the Millennium Development Goals. Participants also examined two major emerging ocean policy issues: high seas governance; and the wide-ranging effects of climate change on oceans and coastal environments.

**CORAL TRIANGLE INITIATIVE:** During the Eighth Conference of the Parties (COP8) to the Convention on Biological Diversity, in Curitiba, Brazil, in 2006, Indonesia indicated its intention to promote the establishment of marine protected areas (MPAs) in the region of the Coral Triangle, one of the richest marine biodiversity regions in the world, in collaboration with the Philippines, Papua New Guinea, East Timor, Solomon Islands, and Malaysia. This proposal was formally welcomed by 21 states during the Asia-Pacific Economic Cooperation Summit held in Australia in 2007. Following this, a CTI Senior Officials Meeting took place in Indonesia in 2007 during the UNFCCC COP13, and agreed to develop a CTI Regional Plan of Action, followed by four Coordination Committee Meetings, one Ministerial Meeting, two Preparation Committee Meetings; and a CTI Summit.

## REPORT OF WOC2009

### OPENING SESSION

Sinyo Harry Sarundajang, Governor of North Sulawesi, Indonesia, welcomed participants to the 2009 World Ocean Conference (WOC2009) on Monday, 11 May, and provided an overview of the challenges and opportunities in marine resource management within his province. He highlighted that his province has achieved harmony among a high level of cultural and ethnic diversity. He noted that the region is endowed with a wealth of marine resources, including some of the world’s most diverse coral reef systems, but lamented that these resources are in decline.



Sinyo Harry Sarundajang,  
Governor of North Sulawesi,  
Indonesia

Freddy Numberi, Minister of Marine Affairs and Fisheries, Indonesia, described the impacts of climate change on the marine environment, and said that it is incumbent upon the world’s decision-makers to develop



Freddy Numberi, Minister  
of Marine Affairs and  
Fisheries, Indonesia

environmentally sound policies for integrated coastal management in support of long term sustainable use of marine resources. He called for: increased research on the impacts of climate change on the marine environment; assessment of the adaptation needs of coastal communities; and financial resources for the implementation of action plans. Numberi highlighted the potential for the Coral Triangle Initiative (CTI) to build stronger political will among countries within this region. He concluded by officially opening WOC2009.



## SENIOR OFFICIALS MEETING

Ambassador Eddy Pratomo, Indonesia, opened the Senior Officials Meeting on Monday, 11 May, and declared the Government of Indonesia's commitment to adopting the Manado Ocean Declaration as a major outcome of WOC2009. The provisional agenda (WOC/SOM/1/1.1) was then adopted without amendment.

### THEME 1: OCEAN OBSERVATION AND

**ANALYSIS:** Sarwono Kusumaatmadja, former Minister for the Environment, Indonesia, moderated the panel on ocean observation and analysis. Richard Spinrad, National Oceanic and Atmospheric Administration (NOAA), US, called for a commitment to collaborative science to assess, predict, mitigate against, and adapt to the implications of a changing climate and oceans. He acknowledged the unequivocal finding of the Intergovernmental Panel on Climate Change (IPCC) that the earth is warming and cited recent developments that give cause for concern, including findings by NOAA that indicate that if atmospheric carbon dioxide levels rise above 600ppm, the impacts of sea level rise will be unavoidable and irreversible. He also highlighted temporal and spatial changes in the migration of marine species in selected marine protected areas (MPAs) in the US, and urged countries to contribute to the US initiative to establish a global ocean monitoring system.



Sarwono Kusumaatmadja, former Minister for the Environment, Indonesia

Gabriele Goettsche-Wanli, UN Division for Ocean Affairs and the Law of the Sea (DOALOS), presented on the role of the UN system in coordinating the activities of its bodies on climate change, including the Gateway to the UN System's Work on Climate Change initiative. She emphasized the importance of the UN Convention on the Law of the Sea (UNCLOS) as the legal framework for the regulation of activities at sea and explained the fundamental role of oceans in regulating the climate system. She noted the rapid increase in anthropogenic carbon dioxide emissions in previous years, resulting in impacts such as: increased ocean temperatures; changes in marine ecosystems, including reduction of biodiversity and production; melting of polar ice caps, resulting in sea level rise; ocean acidification; and coral bleaching. She also stressed the adverse impacts of sea level rise on coastal and fisheries communities, especially on small island developing states (SIDS).



Gabriele Goettsche-Wanli, DOALOS

**THEME 2: IMPACTS OF CLIMATE CHANGE ON COASTAL COMMUNITIES:** Moderator Kusumaatmadja introduced the panel, noting the need for the scientific community to inform policy makers on how to address climate change issues in the context of coastal communities.

Moses Murihungirire, Ministry of Fisheries and Resources Management, Namibia, discussed the dynamics of biotic and abiotic components of the northern Benguela Current system. He stressed the importance of understanding such processes, noting that Namibia is a coastal state with large developed wetlands. He said that studies have recorded: seasonal

shifts in wind pressure systems; more pronounced sea surface temperature anomalies; declines in fish stocks; and more frequent harmful algal blooms over the final decades of the 20th century. He indicated that questions remain as to whether or how much these observations can be attributed to climate change. Murihungirire said that our understanding of the cause and effect of abiotic parameters such as wind and oceanic temperature along the Namibian coastline is improving and informing the prioritization of further research. Noting that the marine environment is an international discipline, he called for the assistance of other countries to improve their understanding of the relationship between scientific observations in Namibia and the impacts of climate change.



Moses Murihungirire, Ministry of Fisheries and Resources Management, Namibia



Gabriella Bianchi, FAO

Gabriella Bianchi, the Food and Agriculture Organization of the UN (FAO), presented on the implications of climate change for fisheries and aquaculture. She noted that the aquaculture sector is growing rapidly, particularly in the Asia-Pacific region, and highlighted that fish are one of the world's most traded commodities. She discussed the physical implications of climate change for fisheries, including reduction of nutrient availability, increased ocean acidification, and increased primary productivity in higher latitudes. She called for the development of strategies to reduce the vulnerability of coastal communities to the effects of climate change, and said that adaptation requires a cross-sectoral approach and adequate policy, legal and implementation frameworks. She emphasized that global ocean governance needs to be strengthened, and highlighted the advantages of an ecosystem-based approach to fisheries management.

**THEME 3: PREPAREDNESS AND IMPROVING RESILIENCE OF COASTAL COMMUNITIES TO ADAPT TO CLIMATE CHANGE:** Masnellyarti Hilman, Deputy Minister for Nature Conservation Enhancement and Environmental Degradation Control, Indonesia, presented on Indonesia's preparedness for climate-related hazards. She provided statistics indicating a consistent increase in hazards and related consequences, including: the disappearance of 24 islands between 2005 and 2007; the 14-fold increase in the economic cost of hazards since the 1950s; and the 50% increase in mortality over the same timeframe. She recognized global information systems and risk assessment frameworks as useful risk assessment tools to inform policy. Hilman stressed that although local scale projects are more expensive, they



Masnellyarti Hilman, Deputy Minister for Nature Conservation Enhancement and Environmental Degradation Control, Indonesia, responds to questions from plenary



## UNEP & Climate Change

- Lead environmental agency of the United Nations
- Climate change key issue for UNEP
- Regional Seas Program and the Global Plan of Action
- Dedicated Marine & Coastal Branch

..... Climate change & oceans part of  
UNEP Climate

Jacqueline Alder, UN Environment Programme, Coastal and Marine Branch, discussing climate change and adaptation projects of interest to delegates

provide data with greater detail and accuracy. She welcomed the results of research to date, but hoped that additional funds will be forthcoming to support local government initiatives that feed into central government adaptation programs. In response to a question on mitigation, she highlighted Indonesia's programmes to promote healthier oceans, such as: protection of oceans from land-based sources of pollution; community involvement on the protection of mangroves; and the CTI. She also underscored the need to integrate adaptation measures with poverty eradication. On education, she emphasized Indonesia's initiatives in providing information on adaptation measures to local governments, communities and schools.

Jacqueline Alder, Coordinator of the Marine and Coastal Environment Branch, UN Environment Programme (UNEP), presented on UNEP's work on climate change and adaptation projects. She highlighted UNEP's strategy on climate change, such as: mitigation projects to promote low carbon societies; communication and public awareness; enhancement of scientific understanding of climate change; and adaptation projects, including capacity building in developing states. She underscored UNEP's mandate on climate change and oceans, especially through the Regional Seas Programme and the Global Plan of Action for the Protection of the Marine



Indonesian Maritime Affairs and Fisheries Minister Freddy Numberi and Sinyo Harry Sarundajang, Governor of North Sulawesi, Indonesia, personally welcomed participants to the conference and to the reception

Environment from Land-Based Activities (GPA). She also noted the importance of building resilient marine ecosystems and social networks through the implementation of ecosystem-based management to mitigate impacts of climate change. On adaptation to climate change, she emphasized UNEP's projects, including: identification of sea level rise buffer zones, and the development of adaptive spatial marine planning. She also underscored the importance of mobilizing and managing knowledge for adaptation policy and planning through: knowledge-based planning; adaptive knowledge-based management; and development of technology for adaptation. In response to a question on states' participation in UNEP's programmes on climate change, she urged states to become members of the Regional Seas Programme.

Participants discussed the vulnerability of developing countries to climate change impacts and the need to eradicate poverty.

### **INTERNATIONAL SYMPOSIUM ON OCEAN SCIENCE, TECHNOLOGY AND POLICY**

The International Symposium on Ocean Science, Technology and Policy, took place 12-13 May 2009, featuring the oral and poster presentations of over 500 scientific and policy papers on a variety of themes, including: aquaculture; ecosystem and coastal zone management; marine resources and conservation; marine trade, industry and technology; maritime hazards and pollution; oceanography and climate change; policy, governance and capacity building; and spatial planning. A selection of presentations are summarized below.

**OPENING PLENARY:** On Tuesday, 12 May, Minister Numberi welcomed participants to the Symposium and urged scientists to provide background information on the interaction between oceans and climate change. He called for further cooperation between ocean research and technology development and emphasized the importance of developing a new approach to ocean resource management that considers the effects of climate change. He thanked participants for accepting the invitation to the Symposium, and hoped the event would enhance knowledge of oceans and climate for present and future generations.

Emil Salim, University of Indonesia, presented a keynote address, emphasizing the importance of the Pacific Ocean in regulating the climate system. He also acknowledged the role of Indonesia in the context of the CTI.

**CORAL REEF MANAGEMENT:** During the morning session, four speakers presented on coral reefs, emphasizing their importance as biodiversity hotspots and a source of both economic livelihood and coastal protection for many people. Several of the presenters warned of the dire status of corals worldwide, and in Indonesia in particular, noting that coral can only grow within a narrow thermal, optical and pH range.



Emil Salim, University of Indonesia, presented a keynote address at the opening ceremony of the International Symposium on Ocean Science, Technology and Policy



The speakers described how climate change poses a threat to these conditions by increasing ocean temperatures and ocean acidification, among other concerns. Speakers highlighted that corals are also vulnerable to: commercial trade pressures, coastal development, marine pollution, physical destruction, and unsustainable fishing. They noted that bleaching is a symptom of environmental stress and is affecting increasing numbers of coral reefs.

All of the presenters found reasons to hope that coral reefs could be saved, but only if action is taken immediately to: drastically reduce greenhouse gas concentrations; reduce physical damage to the reefs; establish MPAs; and create stable financial and livelihood alternatives for local communities to manage, monitor and conserve these resources independently. One speaker explained that such community-based management structures have also benefited from parallel efforts in educating local children and teenagers along the coasts about the importance of conserving their coral and coastal resources. Another speaker encouraged Indonesians to charge higher fees for tourists to visit national parks containing coral reefs. In response to a question from the audience, one speaker stated that despite highly effective local MPA efforts, the impacts of climate change are too universal and extreme to discount.

In the afternoon, five speakers considered more specific aspects of coral reef management. Two presentations focused on the varying efficacy of different artificial reef structures in different areas to seed and promote the growth of desired coral species. Another outlined a management plan developed at Komodo National Park, Indonesia, to render the associated MPA environmentally secure, economically strong, and socially responsible. A fourth speaker showed a video featuring the rapid, six month recovery period of coral following a volcanic eruption that had obliterated the reef. The final presentation weighed different options available for reef rehabilitation.

**SHARKS AND RAYS:** Natasha Stacey, Charles Darwin University, Australia, presented findings of pilot research designed to improve knowledge of whale shark migrations in East Indonesia and create whale shark conservation opportunities for Indonesian fishers. According to Stacey, satellite tracking has shown that these sharks migrate to Indonesia and East Timor, but little is known about aggregation locations, population dynamics, and threats. She said that in response, a pilot project was established to work with Bajo communities in Kupang, Ba'a and Papela. She noted that while Bajo fishers have a cosmological affinity with whale sharks that prevents them from hunting the species, fishers in adjacent areas do not hold such beliefs and actively fish them.

She also highlighted that whale sharks have often been seen throughout East Timor and Indonesian waters and that an Australian satellite tag was recovered off the Kupang coast. There is not much of an industry based on whale sharks due to low fin prices, said Stacey, emphasizing that most catches have been accidental. She believed that this research has the potential to grow into a monitoring programme or a whale shark sea-ranger group that could supplement the livelihoods of locals through alternatives to illegal fishing. In response to a question on the positive effect of MPAs on whale sharks in



Local singers entertained delegates during the conference

Indonesia, Stacey acknowledged that there are some benefits, but that this only provides protection of parts of their migratory trajectory.

Katherine Short, World Wide Fund for Nature (WWF), presented on the conservation and management of sharks in the Coral Triangle. Short said that responsible shark utilization consists of responsible management, trade and consumption. She noted that two CTI members are major shark-fishing countries, with Indonesia and Malaysia ranked first and tenth in the world, respectively. Short recommended that CTI management plans provide a platform for completing a National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks).

Trian Yunanda, Indonesian Ministry for Marine Affairs and Fisheries, spoke on the Draft Indonesian NPOA-Sharks. He told participants that the drafting process is ongoing, with the first meeting in 2005 and the last working group meeting in September 2007. He outlined the draft NPOA structure and details to be covered in the section on Key Actions, and cited financial constraints as the main impediment to completing Indonesia's NPOA-Sharks.

#### **MARINE CONSERVATION:** Roger McManus,



Roger McManus,  
Conservation International,  
US

Conservation International, US, presented on the future of the CTI, emphasizing the need to reverse the declining trends of environmental quality and ecosystem services in the region. On funding perspectives for the CTI, he highlighted current investments from Australia, Singapore, the US and the Asian Development Bank, underscoring the need to assure sustainable funding through stewardship. He noted that the

CTI's success depends on the regional and national plans, which have to include goals such as: the establishment of large-scale marine management regimes or seascapes; implementation of MPAs and ecosystem management; conservation of biodiversity; and global change.

Craig Starger, University of California Los Angeles, US, presented on inferring patterns of connectivity and defining conservation priorities in the Coral Triangle through the integration of genetics and modeling. Alan



Craig Starger, University of  
California Los Angeles, US

White, The Nature Conservancy (TNC), US, presented on MPA networks in the Coral Triangle, including lessons from the Marine Learning Partnership. He described MPA networks as a collection of individual MPAs or reserves operating cooperatively and synergistically, at various spatial scales, with a range of protection levels. He acknowledged the large number of MPAs already established in the Coral Triangle region, but noted the lack of information available on connectivity and how well these MPAs have been managed. He said the Marine Learning Partnership evaluated the effectiveness of six MPAs in the Coral Triangle region, noting that illegal, unreported and unregulated fishing (IUU) and commercial overfishing were identified as major impacts in the area. He stressed the need for capacity building opportunities for MPA managers, noting the lack of understanding about MPA networks among managers and scientists. White recommended that basic planning and management of the MPA networks be improved.

Beth Polidoro, IUCN, US, presented on the identification of important conservation zones for supporting key biodiversity areas and MPA designation using species-level information in the Coral Triangle. She emphasized that marine conservation planning has largely been conducted in the absence of comprehensive species-specific information, stressing the potential role of the IUCN Red List of threatened species in informing this process. She explained that the IUCN threatened species category includes vulnerable, endangered and critically endangered species. Under the IUCN Red List of marine species, she said the Global Marine Species Assessment will consider over 20,000 species by 2012. She concluded that the IUCN Red List data feeds into all goals of the CTI and provides a baseline of available scientific information.

Moonyeen Alava, First Philippine Conservation Incorporated, Philippines, presented on the use of IUCN Red List Assessments as indicators in the CTI. Carissa Klein, University of Queensland, Australia, presented on conservation planning, focusing on coral reefs. She emphasized the benefits of using MARXAN software to assist in zoning for competing objectives, such as conservation and extraction of natural resources.

**SUSTAINABLE MARINE TOURISM:** Sapta Nirwandar, Ministry of Culture and Tourism, Indonesia, stressed that to be sustainable, tourism must both improve the local community's quality of life and preserve the environment. He highlighted



Robin Engel, Song Line Cruises of Indonesia

Indonesia's high levels of diversity, and described efforts to promote tourism.

Robin Engel, Song Line Cruises of Indonesia, provided recommendations for the sustainable development of the marine tourism industry in Indonesia, stressing that this will increase appreciation for marine resources and prospects for conservation. Regarding cruise ships, he indicated that it is preferable to start with an industry

based on smaller vessels and highlighted that fishing vessel over-capacity should be refitted and transformed to serve eco-tourism. He lamented the high levels of garbage littering Indonesia's beaches and said that beach cleaning should be a top priority for communities seeking to attract tourism.



Participants during the session on "Sustainable Marine Tourism"

Bet Lagarens, University of Waterloo, Canada, remarked upon the rapid growth of marine tourism, adding that this presents both opportunities and threats. She presented the case of Bunaken Island National Park, Indonesia, and the impacts that tourism has had, including disturbance of the coral reef and harassment of fauna, and natural threats such as the recent outbreaks of the coral-eating crown-of-thorns starfish.

Dita Trisnawan, University of Indonesia, presented on coastal and marine tourism in Indonesia, stressing the importance of understanding the "political ecology of change" that tourism introduces. He called for an interdisciplinary approach to evaluating the potential costs and benefits of tourism.

Pedro Fernandez, Polytechnic University of Madrid, Spain, presented on the impact of tourism on coastal Viet Nam, noting that a sharp rise in the numbers of visitors has resulted in rapid and poorly planned development of resorts and environmental degradation.

Geoffrey Wall, University of Waterloo, Canada, called for an integrative approach to coastal tourism that supports sustainable livelihoods, taking into consideration other economic sectors and non-tourism options. He said that current tourism planning is overly focused on hospitality and often neglects broader planning needs. He presented a joint initiative by Canada and China to implement integrated coastal zone management in Hainan, China, with the goal of strengthening institutions and developing human resources through education and outreach activities.

Didin Junaedi, Indonesian Marine Tourism Association, presented on strategic perspectives of small island marine tourism development, emphasizing the need to expand Indonesian tourism beyond Bali. He highlighted current limitations, including lack of infrastructure and skilled human resources, and accessibility of remote islands.

#### GLOBAL OCEAN POLICY DAY

Global Ocean Policy Day featured an opening plenary session on Wednesday, 13 May, followed by panel-led discussions on: climate change mitigation; adaptation measures and security concerns; financing adaptation; and the future of oceans and the climate change agenda. Participants were also



Gellwynn Jusuf, Ministry of Marine Affairs and Fisheries, Indonesia

presented with a summary report of the preparatory sessions that led up to the event.

#### OPENING PLENARY:

Global Ocean Policy Day opened with a presentation by Gellwynn Jusuf, Ministry of Marine Affairs and Fisheries, Indonesia. He described the Global Ocean Policy Day as a historic undertaking requiring multiple stakeholders to emphasize the connections between global climate change





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

and the oceans and coasts. Biliana Cicin-Sain, Global Forum on Oceans, Coasts, and Islands, reflected on the convergence of governmental, inter-governmental, and non-governmental organizations, and science and industry sectors to deal with the urgent economic and environmental ramifications associated with oceans and climate change. She highlighted the subjects to be deliberated at Global Ocean

Policy Day, including: the role of the oceans in sustaining life, regulating climate, and serving as an alternative source of energy; adaptation measures to assist coastal-dwelling people; ecosystem-based approaches for preserving biodiversity and human communities; mustering sufficient financial commitments; capacity building; the involvement of civil society and the private sector.

Minister Numberi emphasized the indispensable environmental and economic role of the oceans. He described the limited ability of the ocean to act as a buffer against climate change and that despite all the concern, cause for cautious optimism remains if action is taken now. He emphasized the need to bring the issues discussed at Global Ocean Policy Day to the attention of the 15th meeting of the Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC COP15) meeting in Copenhagen in December 2009, and reinforced the Indonesian government's commitment to these proceedings. Global Ocean Policy Day was officially opened when Minister Numberi rang a ceremonial gong, which was met with applause from the assembled delegates.

Angela Cropper, Deputy Executive Director, UNEP, acknowledged the important interface between climate change and oceans, but recommended further elements to be considered by Global Ocean Policy Day, including other interconnected impacts to oceans ecosystems, such as: overfishing, deep seabed mining and pollution. Cropper recalled the activism of the 1980s and early 1990s, which provided the basis for taking a precautionary approach to climate change. She noted the current status of global fish stocks, stressing the need for integrative approaches to reverse their decline. On the impacts



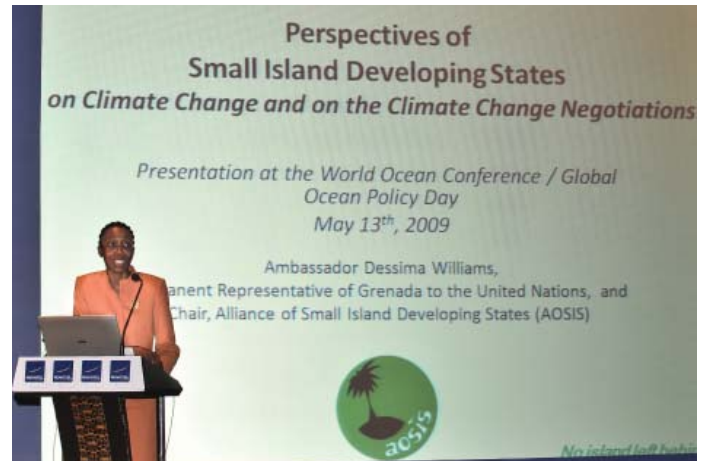
Angela Cropper, Deputy Executive Director, UNEP

of climate change to SIDS, she noted the lack of adaptation measures enacted since the adoption of the 1994 Barbados Programme of Action. She urged Global Ocean Policy Day participants to develop a unified approach to oceans management.

Van Duc Nguyen, Ministry of Natural Resources and Environment, Viet Nam, described changes in weather patterns and associated impacts on coastal zones and oceans, including:



Van Duc Nguyen, Ministry of Natural Resources and Environment, Viet Nam



Ambassador Dessima Williams, Permanent Representative of Grenada to the UN and AOSIS Chair

temperature rise; droughts; and modification of ecosystems, fisheries and aquaculture. He noted that Viet Nam is a poor country and acknowledged the need for international support for implementation of adaptation measures.

Ambassador Dessima Williams, Permanent Representative of Grenada to the UN and Chair of the Alliance of Small Island States (AOSIS), presented on perspectives of SIDS on climate change and on climate change negotiations. She said AOSIS comprises a group of 43 SIDS in the African, Indian Ocean, Caribbean and Pacific regions that focuses on climate change and sustainable development issues. She revealed that the main objective for SIDS at UNFCCC COP15 is to reach agreement on: a common and shared vision; mitigation and adaptation measures; and financing proposals. Ambassador Williams stressed that the challenges of climate change are applicable to all coastal communities and hoped that a strong agreement will be reached at the Copenhagen meeting.

#### PANEL 1: CLIMATE CHANGE MITIGATION:

Cropper opened the first panel and thanked the eight panelists for their attendance. Patricio Bernal, Executive Secretary, Intergovernmental Oceanographic Commission of the UN Educational, Scientific and Cultural Organization (IOC/UNESCO), stressed the need to explore new ways to mitigate the impacts of climate change. According to Bernal, new options worth exploring for carbon offsets include ocean carbon capture and storage and mangrove restoration. Tony Haymet, Scripps Institution of Oceanography, US, underscored the lack of an urgent response to scientific findings on climate change. The exponential rise in carbon dioxide from burning fossil fuels has increased ocean acidity, said Haymet, noting that subsequent research suggests that this corrosive water will dissolve vast calcium carbonate coastlines including those of eastern North America.



Speakers from the opening ceremony applauded the proceedings





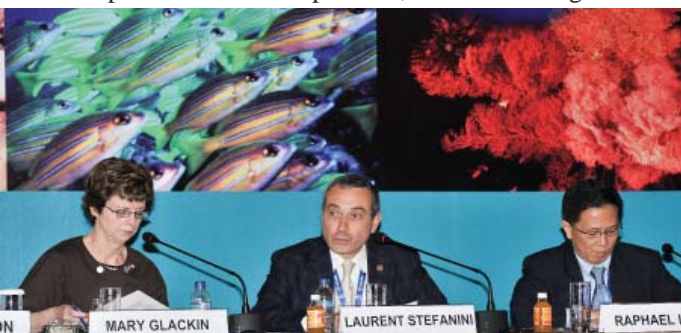
Panel on "Climate Change Mitigation". L-R: Angela Cropper, Deputy Executive Director, UNEP; Ove Hoegh-Guldberg, University of Queensland, Australia; Patricio Bernal, UNESCO; Tony Haymet, Scripps Institution of Oceanography, US; Roberto Calcagno, Prince Albert Oceanographic Foundation, Monaco; Bernard Giraud, Danone Group, France; Christophe Lefebvre, IUCN; Jeff Price, WWF, US; and Duncan Currie, Greenpeace International, New Zealand.

Ove Hoegh-Guldberg, University of Queensland, Australia, declared that if UNFCCC COP15 negotiations are only based on limiting carbon dioxide concentrations to 450ppm and temperature increases to two degrees Celsius, catastrophic consequences will result. He supported comments made by Williams that policy has misunderstood scientific messages and must aim for more stringent targets. He suggested that a 40% probability of exceeding catastrophic thresholds is like playing Russian roulette.

Roberto Calcagno, Prince Albert Oceanographic Foundation, Monaco, stressed the importance of adequate communication between the scientific world, civil society and policy makers and invited participants to contribute to the Monaco Ocean Summit to be held 1-2 April 2010. Bernard Giraud, Danone Group, and Christophe Lefebvre, Councilor for IUCN, then informed participants of the benefits of mangrove restoration shown by African pilot projects.

Jeff Price, WWF-US, encouraged participants to consider the critical assumptions underlying the discussions of climate change. He stated that saving the oceans will require achieving an 80% reduction in greenhouse gas emissions and halting nearly all deforestation. Duncan Currie, Greenpeace International, emphasized that the loss of marine biodiversity will lead to a reduction in the resilience of the ocean. He discouraged using ocean fertilization as a means of sequestering carbon dioxide and promoted ecosystem- and precautionary-based approaches to protect the oceans. He described alternative energy sources including tides, currents and waves, encouraged both the creation of MPAs and closing the governance gap on the high seas, and emphasized the importance of the ocean in any agreement at UNFCCC COP15. Questions from the floor called for more immediate access to scientific and policy information and the permanent review of oceans within UN General Assembly processes.

**PANEL 2: ADAPTATION MEASURES AND SECURITY CONCERNS:** Ambassador Laurent Stefanini, Ministry of Foreign and European Affairs, France, cautioned that there is a climate change "point of no return" beyond which adaptation will not be possible, and called for greater



L-R: Mary Glackin, NOAA, US; Ambassador Laurent Stefanini, Ministry of Foreign and European Affairs, France; and Raphael Lotilla, PEMSEA, Philippines



L-R: Nicole Glineur, GEF; Thabit Zahran Al Abdessalaam, UAE; and Poh Poh Wong, Coordinating Lead Author, IPCC Fourth Assessment Report

cross-sectoral coordination on adaptation strategies. Raphael Lotilla, Partnerships in Environmental Management for the Seas of East Asia, noted the many cross-cutting issues that affect sustainable development and stressed the need for partnerships at the local and global level for integrated coastal management. He described key governance considerations, including long term planning and institution building and highlighted that several East Asian countries have enacted laws supporting integrated coastal management.

Poh Poh Wong, Coordinating Lead Author, IPCC Fourth Assessment Report, highlighted the areas most vulnerable to the impacts of climate change, including low lying coasts, islands and mega-deltas. He said that "disastrous multi-meter sea level rise" is expected, and emphasized the importance of mangrove planting as an adaptation measure to tackle climate change impacts such as sea level rise. He also noted other benefits of mangrove planting not directly associated with climate change, such as an adaptation measure for tsunamis. Wong underscored the need to start implementing adaptation measures immediately to reduce the respective costs.

Nicole Glineur, Global Environment Facility (GEF), presented on adaptation measures, noting that climate change will result in losses of coastal lands and mangrove ecosystems, reducing their ability to provide food and income. She said communities and ecosystem-based responses should be at the heart of adaptation strategies. Glineur also noted that adaptation measures should encompass: the combination of modern science with traditional knowledge; empowerment of community decision-making; and management of ecosystem services. She cited the Samoa Project on Integrated Climate Change Adaptation and the Pacific Alliance Sustainability programme as GEF-supported examples of adaptation projects in coastal and marine areas.

Thabit Zahran Al Abdessalaam, Environment Agency, United Arab Emirates, said climate change is expected to have large effects on socioeconomic conditions, food security and biodiversity. He emphasized that adaptation requires strategies to reduce the negative impacts of climate change, including: long-term monitoring programmes; the development of coastal resources atlases, and the use of models and tools to forecast species and habitat responses. He cited the Masdar and Estidama initiatives in Abu Dhabi as examples of climate change strategies, which include clean energy, green building, and energy conservation projects.

**PANEL 3: FINANCING ADAPTATION:** Al Duda, GEF, identified the many financial opportunities available for climate change projects. He also acknowledged the many billions of dollars that may be needed for adaptation, noting, however, that GEF has provided US\$2 billion in grants and co-sponsored US\$14 billion towards projects in the last 15 years. Duda emphasized that GEF funding can facilitate





Participants during the conference

many marine projects to cope with climate variability. He recommended that participants should: submit funding proposals; work with climate change negotiators to ensure that they discuss ocean initiatives at climate meetings; and engage with GEF and other funding institutions to support their projects. David McCauley, Asian Development Bank, commented on the recent mobilization of adaptation resources, particularly in Asia. He noted the opportunities provided by the ambitious fifth GEF budget replenishment; numerous bilateral funding sources for climate initiatives; and the rapid expansion of global carbon markets.

Rolph Payet, Special Advisor to the President of Seychelles, spoke on why SIDS require financing for mitigation and adaptation. He supported the need for local communities to receive the billions of dollars identified by the other panelists. Payet also acknowledged recent World Bank research that reveals that trade between SIDS is about 10 to 15 times more than that between continental states, and that disaster damage is also much higher as a percentage of GDP.

Michael Koehler, European Commission, highlighted the importance of creating economic incentives for developed and developing countries to keep temperatures from increasing by more than two degrees Celsius. Koehler stressed the need for policy and financial instruments to contribute to effective climate change adaptation. He suggested that effective emissions trading systems might help finance the inevitable high costs associated with these ideas. Subsequent discussion arose over developing convergent versus country-specific solutions for climate change concerns, and creating economic opportunities for SIDS to tackle climate change and coastal problems.

**SUMMARY REPORTS FROM PREPARATORY MEETINGS:** Bill Eichbaum, WWF-US, presented on the central role of the oceans in climate negotiations. He said the oceans represent the most important natural carbon sink, noting that destabilized marine environments can exacerbate global warming. He emphasized the gravity of climate-induced ocean changes, stressing that poorer coastal communities will require funding and technical assistance for mitigation and adaptation. On the importance of including ocean and climate issues within climate negotiations, he called for: an increase in science-based action through influencing IPCC; a strong interplay between UNFCCC and other conventions; adoption of a ministerial declaration at Copenhagen; and an official statement under Article IV of the UNFCCC, on commitments by parties. He emphasized that a mitigation strategy based on thresholds of a two degree Celsius temperature increase by mid-century or 450ppm atmospheric concentrations of carbon dioxide is insufficient. Patricio Bernal, IOC/UNESCO, said that the mitigation ability of oceans has not received enough attention, but added that upcoming consultations with IPCC are designed to change this. He stressed that adaptation strategies need to be developed for different scales,

including: global legal frameworks and financing mechanisms; regional integration of climate into regional institutions; and participation of affected communities.

Lynne Hale, TNC, called for an approach to ecosystem-based adaptation that enhances resilience of natural systems while using them as a cost-effective infrastructure against climate change impacts. She said that greater investment in ecosystem-based adaptation is needed, along with incentives for climate-smart development. She noted that meeting new challenges will place strain on existing institutions.

Peter Bjornsen, GEF, discussed adaptive management institutions and highlighted that climate change compounds existing pressures on the marine environment, such as pollution and overfishing. He also said that adaptation efforts should build upon existing institutions and their wealth of experience.

Rolph Payet, Seychelles, presented on “addressing the climate divide,” stressing that the world’s large economies need to make major steps toward mitigation. Salvatore Arico, UNESCO, described the role of MPAs in adaptation, noting that greater biodiversity allows for adaptation and the maintenance of important ecosystem services.

Gunnar Kullenburg, former Executive Secretary, IOC/UNESCO, presented on ocean-based mitigation, noting that this needs to be mainstreamed within climate negotiations. He indicated uncertainties associated with carbon capture and storage in seabeds, including its impact on sea life and leakage potential, and called for a financial mechanism for the development of ocean-based hydrokinetic energy.

Philippe Vallette, World Ocean Network, called for the mobilization of public and private sectors through awareness campaigns at multiple levels and the promotion of “ocean ambassadors.” Werner Ekau, International Ocean Institute, Germany, presented outcomes of a workshop on ocean governance held in Thailand just prior to the WOC2009. He reported that participants agreed on the need for existing agreements to be implemented, and that this will require greater institutional capacity.

#### **THE OCEAN AND CLIMATE CHANGE AGENDA:**

Andrew Hudson, GEF, said that consensus was reached on the feasibility of adaptation measures, but noted that depending on the nature and magnitude of the actual impacts of climate change, they may be inadequate. He emphasized the need for science to predict the effects of climate change. Hudson stressed that ocean acidification will constitute the major impact of climate change to which oceans will be unable to adapt. On the serious impacts of nitrogen input into the oceans, he encouraged the negotiation of a nitrogen convention to control respective impacts.



Susilo Bambang Yudhoyono, President of Indonesia, planted a tree while the media watched





President Yudhoyono inaugurated the World Ocean Conference

Raphael Bille, Institute for Sustainable Development and International Relations, said the world needs a progressive, global and planned revolution to tackle climate change. He called for the incorporation of oceans and coasts into UNFCCC discussions, noting that UNFCCC COP15 will provide such an opportunity, but further actions will be required.

Biliana Cicin-Sain, Global Forum on Oceans, Coasts, and Islands, outlined the objectives of Global Oceans Conference 2010 (GOC2010) to be held at UNESCO in Paris from 3-7 May 2010, which will coincide with the 50th anniversary of the IOC/UNESCO. Possible themes include: oceans, climate and security; integrated marine and coastal policies; ecosystem-based management progress markers; marine biodiversity; integrated governance of marine areas; capacity building in developing countries; and mobilizing public and private sectors for global ocean stewardship. Patricio Bernal eagerly anticipated GOC2010 as an important mechanism for continuing to emphasize the ocean agenda. Ambassador Laurent Stefanini spoke about emission reduction goals and the overlap of GOC2010 and the international year of biodiversity. Chair Michael Koehler underlined the need to integrate oceans, seas, coasts and islands into discussions of climate change and suggested that market mechanisms might lead to more responsible management of marine resources.

**FINAL STATEMENT:** The main outcomes of Global Ocean Policy Day included recommendations for the UNFCCC process, on the following themes:

- **Mitigation**, encompassing: the adoption of the precautionary approach in order to reduce greenhouse gas emissions; proper regulation of the use of oceans to mitigate effects of climate change, under which ocean fertilization should be discouraged; and the promotion of ocean-based renewable energy.
- **Adaptation strategies** that ensure the resilience of marine ecosystems and protect coastal communities.
- **Financing** from developed countries to assist developing countries in: conducting research; adopting mitigation strategies; developing early warning systems; and promoting carbon offset and clean development mechanisms based on mangrove planting, conservation of reefs and ecosystems.
- **Capacity building and technology exchange**, especially for adaptation and mitigation measures in developing countries and SIDS.
- **Involvement of civil society and private sector** in assisting mitigation and adaptation measures.

### MINISTERIAL/HIGH LEVEL MEETING

The WOC2009 Ministerial/High Level Meeting was held on Thursday, May 14, and included an opening plenary, thematic panels on issues surrounding oceans and climate change, and a closed session to adopt the Manado Ocean Declaration.

**OPENING PLENARY:** A musical jamboree opened the day's ceremonies, anticipating the arrival of the President of Indonesia, Susilo Bambang Yudhoyono. The Manado State University Choir sang, "Save Our Planet," a song written and composed by President Yudhoyono. Minister Numberi reported on progress at WOC2009, discussing the connections between the oceans and climate change, and expressed hope for the successful adoption of the Manado Ocean Declaration.

President Yudhoyono praised WOC2009, the CTI summit, and those assembled. He delineated the distressed state of the world's oceans and the urgent need for humanity to rescue the very seas it has endangered. President Yudhoyono said that the WOC2009 contributes to the implementation of Article 192 of UNCLOS, namely the obligation of parties to protect and preserve the marine environment. He also suggested that the WOC2009 strengthens the UNFCCC, and will serve to elevate the importance of oceans at COP15. He described UNCLOS as an important step forward in the global governance of the oceans and the adoption of the Manado Ocean Declaration as the next important step. He concluded by officially inaugurating WOC2009.

### THEME 1: OCEANS AND COASTS AND THE EFFECTS OF CLIMATE CHANGE:

**Peter Garrett**, Minister of Environment, Heritage and the Arts, Australia, hoped that consensus could be reached on the Manado Ocean



The Manado State University Choir sang, "Save Our Planet," a song written and composed by President Yudhoyono





Peter Garrett, Minister of Environment, Heritage and the Arts, Australia

Declaration, based on a unified vision. He announced Australia's renewed commitment to reduce marine debris and called for cooperation from other countries on this issue. He also drew upon several Australian initiatives that other countries can benefit from, including: the BLUElink ocean forecasting tool; the BleachWatch coral monitoring program; and the Reef Rescue initiative to reduce nutrient input into the Great Barrier Reef by 20% over five years.

Rolph Payet, Special Advisor to the President of Seychelles, emphasized that "killing the marine environment is killing ourselves." Payet expressed concern regarding the serious over-exploitation of global fish stocks, particularly tuna, and warned that the decline in fisheries will impact impoverished fishing communities the most. He cautioned that climate change will tip the balance of fisheries management in favor of fisheries collapse and mentioned various marine initiatives by the Seychelles, such as: MPA networks; marine species sanctuaries; and fisheries regulation. Payet emphasized the support of the GEF and various UN agencies in addressing threats to oceans, through programmes such as: the GPA and Large Marine Ecosystems (LMEs), and noted the important role of regional fisheries management organizations in this process.



Rolph Payet, Special Advisor to the President of Seychelles

Ambassador Melba Pria, Mexico's Ambassador to Indonesia, presented on human activities that threaten the oceans. She introduced the Mexican climate change programme, and noted the development and implementation of a national environmental policy for sustainable development of oceans and coasts, based on the ecosystem approach. On further actions, she noted the need for: identification of common regional priorities; identification of transboundary issues; development of specific actions related to LMEs; the adaptive enhancement of a legal framework; and enhancement of coordination mechanisms.



Ambassador Melba Pria, Mexico's Ambassador to Indonesia

In the discussion that followed, some delegates commented on the importance of: addressing IUU fishing and marine pollution. Kiribati expressed concern over the impacts of climate change, such as sea level rise and sea surges to small island states.

**THEME 2: OCEAN'S ROLE IN ADDRESSING CLIMATE CHANGE:** Mary Glackin, Deputy Under Secretary, NOAA, presented on the challenges of climate change. She emphasized the important role of observation systems and cited the Research Moored Array for African-Asian-Australian Monsoon Analysis as an example of advancing monsoon research and forecasting. Glackin cited



Hillary Clinton, Secretary of State, US, addresses the audience in a televised speech

the partnership between NOAA and the Indonesian Ministry of Marine Affairs and Fisheries signed during WOC2009 on data and information gathering to facilitate decision-making on climate-related risks. She stressed that climate change consequences will be felt rapidly in the coming years, and noted the important role of adaptive management, empowerment of communities through capacity building, and partnerships with universities. A video message from Hillary Clinton, Secretary of State, US, was shown to participants. She acknowledged the role of WOC2009 in clarifying the interaction of oceans and climate change, reminded participants of the important humanitarian concerns related to climate change, and supported the Manado Ocean Declaration.

Ambassador Laurent Stefanini promoted the ocean as a source of alternative energies including offshore windmill technologies, waves and currents, and thermal sources. He described France's interest in taking a leading role in these efforts based on its marine resources, technological experience, and institutional support. He outlined France's goals to: implement a national plan for renewable energy; develop the technology and infrastructure required to harness alternative energy sources; and reduce the dependency of tropical developing islands on France for energy.

Heherson Alvarez, Presidential Adviser on Global Warming and Climate Change, the Philippines, presented on improving coastal community preparedness and resilience to climate change impacts. He summarized the high vulnerability to climate change of countries within the Association of Southeast Asian Nations (ASEAN) and detailed the resulting human, ecological and financial costs experienced by the Philippines. He emphasized adaptation as essential, and held up the Sagay Marine Reserve and Visayan Sea as models for community-based management of coral reefs, coastal resources and coastal communities. The Philippines maintained the need to reduce greenhouse gas emissions and pursue renewable energies for local adaptation purposes. In closing, Alvarez echoed a plenary statement by the Philippines, saying that WOC2009 should be used to bring solutions to UNFCCC COP15 and more funding for countries to act now, rather than as a platform for articulating statements that merely identify the problems. In the discussion, Thailand and the Maldives called for further research and development to assist countries in improving their conservation and management practices.

**THEME 3: THE FUTURE OF OUR OCEANS AND COASTS:** Rachmat Witoelar, Minister of Environment, Indonesia, expressed his optimism for positive preparations for UNFCCC COP15. Witoelar recognized ocean and coastal zones as among the ecosystems most impacted by climate

change. He called for assistance for developing countries to respond to the oceanic and coastal impacts of climate change, but noted that this response must not only be multilateral, but also bilateral and unilateral. Witoelar also suggested numerous clean development mechanism activities that could be considered by UNFCCC, including: mangrove management, tidal energy for power generation, oceanic carbon capture and storage.

Alfadil Ali Adam, Under Secretary for the Ministry of Environment, Sudan, highlighted various ways that ocean communities could contribute toward preparations and outcomes of the UN Commission on Sustainable Development review on the oceans 2014-2015. He identified priority areas, including: water and sanitation; energy; health and environment; agriculture; and biodiversity. Adam agreed with Witoelar that collaborative governance at all levels is required to respond to the impacts of climate change on ocean and coastal environments, but added that further efforts are required to facilitate community involvement in formal deliberations. He noted that communities can assist by: engaging in monitoring and conservation activities; contributing to early warning programmes including contingency planning; and increasing disaster reduction capacity.

Patricio Bernal, Executive Secretary, IOC/UNESCO, spoke on improving synergy to reduce climate change impacts on the oceans, focusing on the UN System. He underscored the central role of the UN Secretary-General and Chief Executives Board in: normative leadership and public awareness raising; convening the world's leaders; and assisting negotiations, implementation of agreements and operational activities. He noted the UN system initiatives on: adaptation; technology transfer; reducing emissions from deforestation and degradation; financing mitigation and adaptation action; and capacity building. Bernal also stressed further actions to be taken by states, the UN and other international institutions, private sector and individuals to reduce the impacts of climate change, emphasizing the need to "seal the deal" at UNFCCC COP15.

In the discussion that followed, Fiji explained that despite its early support for UNCLOS, the Convention does not address the relationship between oceans and climate change, and announced Fiji's eagerness to adopt the Manado Ocean Declaration to conserve marine resources and promote food security. The UK anticipated that the WOC2009 and the Manado Ocean Declaration will inform UNFCCC COP15, and the US encouraged those gathered to learn about and implement successful existing programmes. Mozambique stated its support for the proceedings.

In the afternoon, following closed negotiations held throughout the week, delegates adopted the Manado Ocean Declaration by acclamation. Several country delegations, including Angola, the Philippines and Namibia, expressed their appreciation to Indonesia for hosting WOC2009. The Philippines stressed that countries brought together in Manado must continue to promote enhanced cooperation to achieve the intended common goals outlined in the Declaration.

**ADOPTION OF THE MANADO OCEAN DECLARATION:** Minister Numberi called for international solidarity in ensuring that UNFCCC COP15 negotiations consider coastal and oceanic dimensions of climate change, and show commitment to building ocean resilience in response to this threat. Numberi remarked on the cooperation demonstrated at WOC2009, and urged countries to continue supporting this partnership.

**Summary of the Declaration:** The Manado Declaration synthesizes key messages conveyed by Ministers and the Heads of Delegations assembled at WOC2009, recognizing: the crucial role of the ocean as a component of the global climate system and in moderating its weather systems, and that the oceanographic processes that result from this interaction will affect the rate of climate change.

It covers an array of issues of collective concern, including the need to: commit to long-term conservation, management, and sustainable use of marine living resources; establish national strategies to sustainably manage marine and coastal ecosystems and enhance their resilience; reduce marine pollution; increase understanding and information exchange on coasts, oceans and climate change, particularly in developing countries; and establish and effectively manage MPAs, including resilient networks.

The Declaration also: recognizes the importance of improving understanding of the impact of climate change on the ocean, and the need to consider ocean dimensions to inform adaptation and mitigation strategies as appropriate; and invites participants to consider how coastal and ocean dimensions could be appropriately reflected at UNFCCC COP15.

#### **MANGROVE PLANTING CEREMONY**

On Friday morning, a mangrove planting and beach cleaning activity took place in Mokupa Village, Minahasa, North Sulawesi, Indonesia. The gathering was intended to demonstrate corporate social responsibility in action and to raise local support for planting mangroves and protecting the coasts. Local officials expressed hope that the ceremony would encourage similar planting and cleaning endeavors in communities throughout Sulawesi and Indonesia.

The event was sponsored by the International Federation of Red Cross and Red Crescent Indonesia and local partners, including: the North Sulawesi Environment Board, the Minahasa District Forestry Department, the North Sulawesi Red Cross Federation, the Tondano Watershed Management Board, the Indonesia Secretary Association Manado, and the Forestry Department. A series of speeches were given by: Gatot Suwondo, President Director, Bank Negara Indonesia; Jantje Sagow, Vice Regent, Minahasa; Janot Mendler de Suarez, former Acting Director and Project Coordinator, GEF/ International Waters Learning Exchange and Resource Network. These officials were joined by community members and several hundred schoolchildren to plant mangroves along the beach and in the shallow water. A beach cleanup and a live instrumental music performance followed.



Local schoolchildren gather in the waters to plant mangroves and clean the beaches





CTI member Heads of State. L-R: Derek Sikua, Prime Minister of the Solomon Islands; José Manuel Ramos-Horta, President of East Timor; Susilo Bambang Yudhoyono, President of Indonesia; Maria Gloria Macapagal-Arroyo, President of the Philippines; Michael Somare, Prime Minister of Papua New Guinea; and Najib Tun Razak, Prime Minister of Malaysia

### CORAL TRIANGLE INITIATIVE SUMMIT

**OPENING SESSION:** On Friday, 15 May, Susilo Bambang Yudhoyono, President of Indonesia, opened the meeting as Chair and thanked other CTI members and support partners, including the Australian and the US Governments, the Asian Development Bank, the GEF, Conservation International, TNC, and WWF. He acknowledged the many efforts since the UN Conference of Sustainable Development in 1992 to protect and manage the oceans sustainably, but said that these efforts are insufficient. President Yudhoyono declared that he will: issue a Presidential Decree on the CTI; establish the Sulawesi MPA bordering East Timor; increase the total area of Indonesian MPAs from 13.5 to 20 million hectares by 2020; double the national budget for CTI Plan of Action activities; and pledge US\$5 million toward CTI.

Gloria Macapagal-Arroyo, President of the Philippines, welcomed the CTI, emphasizing its common purpose to protect the environment. She described the Coral Triangle region as a hot spot of marine life, which requires protection. She said that in light of current climate change threats, it is time to reconsider our approach to environmental management to maintain our “sacred relationship with Mother Earth,” and drew attention to the development of the CTI Regional Plan of Action to be adopted at this meeting. She also noted the Philippines’ initiatives on: creating MPAs; adopting integrated coastal management; promoting the ecosystem approach to fisheries management; and developing partnerships with the other states, NGOs and private sector to protect marine resources.

Jose Ramos-Horta, President of East Timor, confirmed his country’s commitment to multilateralism on environmental issues, and drew attention to the threat that declines in fish stocks pose to coastal livelihoods and food security. He cautioned that oceans also serve as a vector for pollution and disease, underscoring the need for international cooperation, and said that the CTI Regional Plan of Action will serve as a basic roadmap for moving forward. He expressed regret that as one of the world’s poorest nations, East Timor does not have the capacity to monitor illegal fishing, which has stolen US\$36 million worth of fish in 2008 alone, and encouraged the development of an international task force on fisheries monitoring that draws upon naval forces.

Michael Somare, Prime Minister of Papua New Guinea, stressed that future generations depend on the conservation of natural resources, and highlighted his country as an epicenter of biodiversity. He underscored that the CTI National Plans of Action must address a full range of threats. He urged a collective approach to addressing issues such as illegal fishing and protection of sensitive marine species, such as turtles and dugongs, and land-based pollution. He noted that donor

support should be based on the Paris Declaration on Aid Effectiveness, emphasizing that ownership of Action Plans rests with individual member states. He announced that Papua New Guinea will allocate US\$2 million to the implementation of the CTI.

Derek Sikua, Prime Minister of the Solomon Islands, congratulated President Yudhoyono on his visionary leadership for hosting the first CTI Summit. He informed participants that, with support from relevant non-governmental organizations, his Cabinet has established a unit within his Government to implement the CTI Plan of Action. He reiterated his commitment to work in partnership with CTI members, and stressed that they must retain ownership and not allow outside institutions to drive the process.

Prime Minister Najib Abdul Razak, Malaysia, said adopting the CTI Regional Plan of Action is an important step toward the protection of the marine biodiversity in the region. He underscored that the development of maritime countries depends on their efforts to sustainably exploit marine resources, emphasizing the importance of, *inter alia*, understanding large marine ecosystems and coastal processes. He said nearly 75% of all coral species in the world are found in the Coral Triangle. He also drew attention to Malaysia’s prime scientific sailing expedition to be launched on 15 June 2009 as an ongoing effort to complement the CTI, and announced Malaysia’s contribution of US\$1 million to the CTI.

President Yudhoyono proposed that the permanent CTI Secretariat would be established in Indonesia to facilitate the implementation of the CTI on Coral Reefs, Fisheries and Food Security Regional Plan of Action, which was then adopted by acclamation.

**SIGNING OF THE CTI LEADERS DECLARATION:** CTI member Heads of State signed the CTI Leaders Declaration and a stone inscription to commemorate the first CTI Summit. These were signed in unison as a symbol of their commitment to achieving CTI goals together.

**PARTNERS DIALOGUE:** Minister Numberi announced that despite introducing the regional plan of action for the Coral Triangle, much remains to be done. He said that pursuant to WOC2009, new goals include: the formulation of implementation strategies at both national and local levels; enhancing coordination between countries and partners; and developing financial mechanisms. Co-Chair Lawrence Greenwood, Jr., Vice President, Asian Development Bank, proposed the agenda, which was adopted without comment.

**Outcomes of the CTI Summit and CTI Road Map:** Kay Kalim, Deputy Secretary with the Department of Environment and Conservation, Papua New Guinea, reviewed the outcomes of the CTI Summit, including the development of systematic financial planning processes and a working group to develop a regional strategy on financial resources.

**Session 1: Post-Manado Implementation:** The Philippines reiterated its commitment to match Indonesia’s financial contributions and described its interests in: implementation; supporting scientific studies; strengthening enforcement capabilities; and improving the management and protection of MPAs, mangroves and the South China Sea. Malaysia pledged its full cooperation for implementing the proposed CTI Road Map, emphasizing an interest in capacity building and developing inter-coastal and ecosystem-based management plans. Solomon Islands declined to submit a statement. Papua New Guinea identified several priority activities, including MPAs and fish reserves, and encouraged long-term commitments to and consistency across projects.



East Timor recognized that “on this historic day, we’ve reached the final stage of the first step toward a better world,” and in so doing acknowledged the technical officers who made this possible. He told participants that the East Timorese National Coordination Committee will be formed in an integrated way and that the national legal framework will reflect the commitments in the National Plan of Action. He said that East Timor plans to declare additional MPAs and take action on the devastation of fish stocks caused by IUU fishing using two patrol boats to be operational within the next few years. He echoed President Ramos-Horta, saying that the best way to help is through direct assistance to the government and not intermediate agencies.

The National Secretariat for Indonesia announced its intent to provide priority actions and timelines for implementation of the National Plan of Action. He recognized MPAs as an effective management tool to: promote sustainable fisheries; improve eco-tourism; and adapt to climate change. He said that the Indonesian Secretariat’s aim is to strengthen strategic management; increase capacity; strengthen science and information. He expressed a need for assistance from a wide range of sources to implement Indonesia’s goals effectively.

Australia pledged their long-term support for CTI members, and recognized that broader regional cooperation has been made possible through CTI. He announced a multi-year commitment to help support CTI Members achieve their goals, including an: immediate AUD\$2 million contribution; technical advisory assistance to support an effective CTI Secretariat; marine conservation planning and policy training starting with Indonesia and Papua New Guinea; a scoping study to identify economic drivers and solutions for destructive fishing practices in the Coral Triangle; and assistance to establish a marine mammal conservation strategy across the region. He said the CTI development partners agreed to work cooperatively, share information, maximize the support to fill in gaps in regional and national plans of action, liaise with a strong secretariat, and called for the adoption of coordination mechanisms.

The US confirmed the support of its new administration for CTI at national and regional levels, and offered to direct assistance through the CTI Secretariat.

#### **Session 2: Effective CTI partnership coordination:**

The Philippines urged partners to agree on establishing one coordinating group with a structure that is supported by the partners. He emphasized the importance of coordination through “one voice” to communicate common concerns at multiple levels. Other delegates emphasized the need for establishing clear coordination mechanisms. Malaysia supported the creation of formal and informal platforms to facilitate information sharing and bilateral and multilateral agreements.

**Remarks by partner organizations:** TNC offered to assist CTI negotiations to be more coordinated. The GEF said that it has committed US\$63 million to fund conservation of this area known as “the Amazon of the seas,” US\$45 million of which has already been allocated to nine projects. The Asian Development Bank said that CTI members must: have firm and full ownership and leadership; align efforts with the priorities of the national plans of action; and reduce transaction costs for CTI members.

Roger Milliken, Jr., on behalf of TNC, WWF, and Conservation International, praised the CTI’s stewardship of marine resources as progressive and transformative and congratulated governments on their adoption of the CTI Plan of Action and the signing of the Leaders Declaration. He committed to informing decision-makers and implementation

bodies with the best available scientific information, and working with governments to engage both private and public sector interests.

The ASEAN Centre for Biodiversity described its activities that have supported the CTI goals, including: a marine gap analysis; capacity building efforts; communication and community relations. The Wildlife Conservation Society offered congratulations and expressed interest in partnering with the CTI to support science, capacity building and innovative marine conservation. UNEP offered technological support and UN Development Programme expressed delight as a partner of CTI, proposing to help access funding for various initiatives. IUCN extended its congratulations and offered support on behalf of the Pacific Nature Conservation Roundtable and its network of agencies and commissions. Co-Chair Greenwood, Jr. summarized the afternoon’s proceedings.

**Closing session:** Chair Numberi noted further steps to be taken immediately, including: the financial support for national activities, the establishment of coordination and communication mechanisms throughout all levels, and invited partners to the next CTI meeting to be convened in 2009.

The CTI Summit closed on the evening of 15 May, 2009, and in turn, brought to a close the World Ocean Conference.

## UPCOMING MEETINGS

### **SEVENTH INTERNATIONAL CONSULTATION ON THE ESTABLISHMENT OF THE SOUTH PACIFIC RFMO:**

This meeting will be held 18-22 May 2009, in Lima, Peru, to discuss the establishment of the South Pacific Regional Fisheries Management Organization. For more information, contact: Robin Allen, Executive Secretary; tel: +64-4-499-9889; fax: +64-4-473-9579; e-mail: interim.secretariat@southpacificrfmo.org; internet: <http://www.southpacificrfmo.org/>

### **INTERNATIONAL MARINE CONSERVATION CONGRESS:**

This meeting is scheduled for 20-24 May 2009, in Washington DC, US, and will encompass the Second International Marine Protected Areas Congress. For more information, contact: John Cigliano; tel: +1 610.606.4666, ext. 3702; e-mail: [John.Cigliano@cedarcrest.edu](mailto:John.Cigliano@cedarcrest.edu) or [IMCC2009@conbio.org](mailto:IMCC2009@conbio.org); internet: <http://www2.cedarcrest.edu/imcc/index.html>

### **TWENTY-SIXTH ANNUAL MEETING OF THE NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION:**

This meeting will be held 2-5 June 2009, in Molde, Norway. For more information, contact: NASCO Secretariat; tel: +44-131-228-2551; fax: +44-131-228-4384; e-mail: [hq@nasco.int](mailto:hq@nasco.int); internet: <http://www.nasco.int/>

### **INTER-AMERICAN TUNA COMMISSION AND AGREEMENT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM ANNUAL MEETING:**

This meeting will take place 4-12 June 2009, in La Jolla, California, US. For more information, contact: Brian Hallman, Assistant Director; tel: +1-858-546-7100; fax: +1-858-546-7133; e-mail: [bhallman@iattc.org](mailto:bhallman@iattc.org); internet: <http://www.iattc.org/>

### **TENTH MEETING OF THE UN OPEN-ENDED INFORMAL CONSULTATIVE PROCESS ON OCEANS AND THE LAW OF THE SEA:**

This meeting will take place 17-19 June 2009, in UN headquarters, New York, US. For more information, contact: UNDOALOS; tel: +1-212-963-3969; fax: +1-212-963-5847; e-mail: [doalos@un.org](mailto:doalos@un.org); internet: <http://www.un.org/Depts/los/>





**INTERNATIONAL WHALING COMMISSION – 61ST MEETING:** This meeting and its associated meetings will take place from 22-26 June 2009, in Madeira, Portugal. Its Scientific Committee will meet from 31 May - 12 June 2009. Other associated meetings will be held from 13-21 June 2009. For more information, contact: IWC Secretariat; tel: +44-1223-233-971; fax: +44-1223-232-876; e-mail: secretariat@iwcoffice.org; internet: <http://www.iwcoffice.org/>

**WESTERN AND CENTRAL PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL - 145TH MEETING:** The meeting will take place from 22-25 July 2009, in Kona, Hawaii. For more information, contact: Mark Mitsuyasu, Fisheries Programme Officer; tel: +1-808-522-8220; fax: +1-808-522-8226; e-mail: Mark.Mitsuyasu@noaa.gov; internet: <http://www.wpcouncil.org/>

**NORTHWEST ATLANTIC FISHERIES ORGANIZATION ANNUAL MEETING:** This meeting will occur 21-25 September 2009, in Bergen, Norway. For more information, contact: Barbara Marshall; tel: +1-902-468-5590; fax: +1-902-468-5538; e-mail: bmarshall@nafo.int; internet: <http://www.nafo.int/>

**ASIA PACIFIC FISHERIES COMMISSION EXECUTIVE COMMITTEE – 72ND SESSION:** This session will take place 23-25 September 2009, in Seoul, Republic of Korea. For more information, contact: Simon Funge-Smith, Secretary APFIC; tel: +66-2697-4149; fax: +66-2697-4445; e-mail: simon.fungesmith@fao.org; internet: <http://www.apfic.org/>

**SOUTH EAST ATLANTIC FISHERIES ORGANIZATION – 6TH ANNUAL MEETING:** This meeting will occur 5-8 October 2009, in Windhoek, Namibia, and will be preceded by a meeting of the Scientific Committee. For more information, contact: Ben van Zyl, Executive Secretary; tel: +264-64-220387; fax: +264-64-220389; e-mail: info@seafo.org; internet: <http://www.seafo.org/>

**COMMISSION FOR THE CONSERVATION OF SOUTHERN BLUEFIN TUNA – 16TH MEETING:** This meeting will take place 20-23 October 2009, on Jeju Island, Republic of Korea. For more information, contact: Robert Kennedy, CCSBT Executive Secretary; tel: +61-2-6282-8396; fax: +61-2-6282-8407; e-mail: rkennedy@ccsbt.org; internet: <http://www.ccsbt.org/>

**ANNUAL MEETING OF THE NORTH EAST ATLANTIC FISHERIES COMMISSION (NEAFC):** The contracting parties of the NEAFC will meet for their annual meeting from 9-13 November 2009, in London, UK. For more information, contact: NEAFC Secretariat; tel: +44-20-7631-0016; fax: +44-20-7636-9225; email: info@neafc.org; internet: <http://www.neafc.org/>

**INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNA – 21ST MEETING:** This meeting will take place 16-22 November 2009, in Recife, Brazil, and will be preceded by a working group on sport and recreational fisheries and a compliance committee meeting. For more information, contact: ICCAT Secretariat; tel: +34-914-165-600; fax: +34-914-152-612; e-mail: info@iccat.int; internet: <http://www.iccat.int/>

**EAST ASIAN SEAS CONGRESS 2009:** This congress will occur 23-27 November 2009, in Manila, the Philippines. It will be organized around the theme: "Partnerships at Work: Local Implementation and Good Practices." For more information, contact: EAS Congress Secretariat; tel: +63 (2) 929 2992; fax: +63 (2) 926 97 12; e-mail: congress@pemsea.org; internet: <http://www.pemsea.org/eascongress/>

**UNFCCC COP15 AND KYOTO PROTOCOL COP/MOP 5:** The fifteenth session of the Conference of the Parties to the UNFCCC and fifth session of the Meeting of the Parties to the Kyoto Protocol are scheduled to take place from 7-18 December 2009, in Copenhagen, Denmark. For more information, contact: UNFCCC Secretariat; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.int; internet: <http://en.cop15.dk/>

**WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION - 6TH SESSION:** This session will be held 7-11 December 2009, in Papeete, Tahiti. For more information, contact: WCPFC Secretariat; tel: +691-320-1992; fax: +691-320-1108; e-mail: wcpfc@mail.fm; internet: <http://www.wcpfc.int/>

**NINTH ROUND OF INFORMAL CONSULTATIONS FOR STATES PARTIES TO THE UN FISH STOCKS AGREEMENT:** This meeting is tentatively scheduled for 15-29 March 2010, at UN headquarters, New York, US. For more information, contact: UNDOALOS; tel: +1-212-963-3962; fax: +1-212-963-5847; e-mail: doalos@un.org; internet: <http://www.un.org/Depts/los/>

**UNFSA REVIEW CONFERENCE:** This meeting is tentatively scheduled for 24-28 May 2010, at UN headquarters, New York, US. For more information, contact: UNDOALOS; tel: +1-212-963-3962; fax: +1-212-963-5847; e-mail: doalos@un.org; internet: <http://www.un.org/Depts/los/>

## GLOSSARY

AOSIS	Alliance of Small Island States
ASEAN	Association of Southeast Asian Nations
COP	Conference of the Parties
CTI	Coral Triangle Initiative
DOALOS	UN Division for Ocean Affairs and the Law of the Sea
FAO	Food and Agriculture Organization of the UN
GEF	Global Environment Facility
GOC2010	Global Oceans Conference 2010
GPA	Global Plan of Action for the Protection of the Marine Environment from Land-Based Activities
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union of the Conservation of Nature
IUU	Illegal, unreported and regulated
MPA	Marine Protected Area
NOAA	National Oceanic and Atmospheric Administration
SIDS	Small Island Developing States
TNC	The Nature Conservancy
UNCLOS	UN Convention on the Law of the Sea
UNDP	UN Development Programme
UNEP	UN Environment Programme
UNESCO	UN Educational, Scientific and Cultural Organization
UNFCCC	UN Framework Convention on Climate Change
WOC2009	World Ocean Conference 2009
WSSD	World Summit on Sustainable Development
WWF	World Wide Fund for Nature