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<th>Title</th>
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<td>Nanyang Technological University</td>
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Coming to the Rescue of the Oceans:  
The Climate Change Imperative

Sam Bateman and Mary Ann Palma

17 August 2009

The link between the oceans and climate change is receiving greater international attention with Indonesia emerging as a leading player in efforts to address the difficult problems involved.

INDONESIAN PRESIDENT Susilo Bambang Yudhoyono, in opening the World Ocean Conference (WOC) in Manado in May 2009, said that “we must come to the rescue of the oceans”, and “preserve them as our legacy for future generations”. His call for greater efforts to protect the oceans was supported by US Secretary of State Hilary Clinton. This growing interest in the health of the world’s oceans is driven mainly by greater appreciation of the links between the oceans and climate change.

Over 70 per cent of the Earth’s surface is ocean, but the importance of oceans and the problems they face has only been understood in recent times. Critical links between the state of the oceans and climate have been under-appreciated. The oceans have an enormous capacity to store heat and absorb carbon dioxide. They have a determining role in climate systems and climate change. They regulate global temperatures and have great impact on human health and well-being, marine ecosystems and biodiversity, energy resources, occurrence of natural disasters, and water resources.

The World Ocean Conference

The Inter-governmental Panel on Climate Change (IPCC) and other scientific sources have highlighted ocean changes associated with climates confronting small islands and coastal communities, such as ocean warming, sea level rise, changes to ocean circulation, changes in polar regions, and ocean acidification. Ocean acidification, as a result of increased absorption by the oceans of carbon dioxide, is a huge and vastly under-appreciated problem that could lead to wholesale extinction of coral reefs and marine species. Nevertheless, there are still uncertainties surrounding the precise impacts of climate change on the oceans due to insufficient research and analysis.

The WOC was a global forum attended by thousands of delegates representing governments, industries, academia, non-governmental organisations, and the media from 70 countries. It discussed the importance of the oceans in determining world climate systems, as well as adverse impacts of
climate change on ocean resources and ecosystems. It examined measures by which states can manage their activities to adapt to effects of climate change.

Key outputs of the WOC included the Manado Ocean Declaration. This emphasised the commitment of nations to address impacts of climate change on small islands, coastal areas, and communities depending on marine resources. It includes action statements on issues such as management and sustainable use of marine living resources and coastal ecosystems; integrated coastal and ocean management; reduction of pollution from sea- and land-based sources; marine scientific research; and integrated ocean and observation systems.

Way Forward

There are three factors that will determine whether outcomes are achieved from the WOC. The first factor is how the Manado Ocean Declaration will translate rhetoric into actions by states at domestic and regional levels. This requires further leadership by Indonesia and support from other nations.

The second factor is how the Declaration might impact on future international and regional meetings. These include the forthcoming 15th Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC) in Copenhagen in December 2009. This may introduce significant changes to the UNFCCC and the Kyoto Protocol. Oceans should be high on the agenda at Copenhagen, but the conference could bog down on greenhouse gas emission controls and carbon trading schemes.

The third factor is how Indonesia will deal with challenges related to climate change and set an example for other developing countries. In the last decade, Indonesia has taken a leading role in addressing ocean-related issues. It has hosted major international meetings such as the 2nd APEC Ocean-related Ministerial Meeting in 2005 and the UN Climate Change Conference in 2007, as well as the WOC. In doing so, Indonesia has been prepared to lead on climate change issues, even if it means getting ahead of other developing countries.

Domestically, Indonesia has set standards and policies in ocean and coastal management, particularly by promoting integrated coastal zone management, establishing marine protected areas, conserving marine resources, and implementing rehabilitation programmes for coral reefs. To lead in implementing the Manado Ocean Declaration, Indonesia will need to continue actions to promote healthy oceans and seas. These include measures to increase public awareness and responses to concerns of climate change and sustainable ocean management. In this respect, Indonesia is not alone. Other countries face similar difficulties.

Regional Implications and Singapore’s Role

As a vast maritime region, the Asia-Pacific has an enormous interest in ensuring that new threats and risks in the oceans are addressed. The WOC set a high benchmark for future international management of the oceans and addressing their links with climate change. The problems involved deserve much greater attention in the region than they have received hitherto. The focus must be on achieving real outcomes rather than just talking. Indonesia has cemented its position as the leading ASEAN nation on ocean affairs. It has also become a principal player in oceans management at the global level.

While Singapore has a relatively small maritime domain of its own, nevertheless it is an important maritime nation with a large stake in international oceans management and healthy oceans. In the spirit of the Manado Declaration, this requires an inter-agency and inter-disciplinary approach that brings together different government agencies, academia and the private sector.

There is an opportunity for Singapore to establish itself as a regional hub for marine and maritime
affairs. It has the necessary scientific, technological and policy skills although hitherto maritime affairs, other than those associated with shipping and the resolution of maritime sovereignty, have not been high on the national agenda.

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