



SMALL ISLAND DEVELOPING STATES

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION of UNESCO



OCEAN GUARDIANS

**Attaining Sustainable Development of Marine Resources
and Sound Management of the Oceans and Coastal Areas**

The vast ocean spaces governed by Small Island Developing States (SIDS), while rich in potential, constantly threaten the very survival of the communities that depend on them. In response, the Intergovernmental Oceanographic Commission (IOC) of UNESCO is coordinating international support and providing scientific expertise in order to assist SIDS in meeting the challenges of sustainable development.

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Small islands could, in fact, more aptly be called large ocean states since their land area represents only a small fraction of the total space under their jurisdiction.

With the establishment of the 200-mile economic zone, for most islands the ocean to land ratio exceeds 30:1; for some it averages 200:1.

Managing huge ocean spaces, Small Island Developing States bear heavy responsibilities. Frequently weakened by natural disasters, economically impeded by their size and remoteness and often struggling with the issues of development associated with globalization, SIDS require support and expertise to manage their important marine and coastal resources.

The international community is committed to work together with this purpose in mind. Cooperation and coordination of marine scientific activities, services and capacity building are needed at global, regional and local levels to overcome the significant challenges SIDS face on the path to development and prosperity.

The Intergovernmental Oceanographic Commission (IOC) of UNESCO: As the focal point in the United Nations' system for ocean sciences and services, IOC's mission is to promote international cooperation and coordinate programmes in research, services and capacity building in order to learn more about the nature and resources of the ocean and coastal areas, and to apply that knowledge for the improvement of management, sustainable development and the protection of the marine environment.

Experience in understanding the oceans and their resources: Since its establishment in 1960, IOC has developed considerable skills and had notable achievements addressing issues that are particularly relevant to SIDS, including:

- Climate change and sea-level rise;
- Natural disasters;
- Coastal and marine resources;
- Biodiversity resources;
- Marine science and technology;
- Sustainable capacity development and education for sustainable development.

A brief introduction highlighting just a few of the programmes focusing on these issues appears on the final page.

Commitment to the initiative: The UN Millennium Development Goals call for the creation of global partnerships for development and urge assistance for Small Island Developing States. In response, the 129 Member States of the IOC express their willingness to work together in a collective effort with SIDS and other international organizations to develop the tools necessary to build marine science and observation capacity. These tools implement strategies that build resilience and capacity, and address distinct SIDS' vulnerabilities, including improved monitoring as a means of providing early warnings—critical for preventing hazards from becoming disasters.

Building access to knowledge through international cooperation: IOC as a global leader in the development of ocean sciences and services for the benefit of the world community, also acts as a broker connecting different areas and aspects of ocean sciences via the exchange of information, expertise and technology at the regional and global level. In this way, IOC is a gateway through which SIDS can benefit from the results and applications of regional and global observations and programmes.

Maintaining the momentum: The IOC is a crossroads for the ocean community, providing a forum for the collaboration of a broad range of stakeholders. In November 2003, the Global Forum on Oceans, Coasts and Islands, held at UNESCO's Paris headquarters, assembled a consortium of individuals from governments, intergovernmental organizations, NGOs and academia to raise awareness and stimulate support for the global oceans agenda. Such continuing dialogue facilitates the comprehensive, holistic approach needed to address the governance, management and capacity needs of SIDS.

The way forward: The integrated, sustained network that IOC offers can help SIDS strengthen their regional and local institutions in marine sciences and services by providing technical assistance, partnerships and capacity building. IOC is poised to translate science and technology into action, and continue to develop the tools that will benefit Small Island Developing States in managing their large ocean domains effectively.



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IOC DECLARATION

to the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of **SMALL ISLAND DEVELOPING STATES**

Adopted by the IOC Executive Council, July 2004

The Intergovernmental Oceanographic Commission of UNESCO affirms its will to:

- Act as a focal point to encourage interactions in marine science and observations across relevant bodies of the UN system and other organizations;
- Further develop partnership in capacity building in marine science and services at regional and national levels, particularly with SIDS;
- Develop the Global Ocean Observing System (GOOS) as an operational system that could provide support to achieve the integrated management of marine and coastal resources of SIDS and also for better forecasts of the conditions of the oceans and seas;
- Promote the development and implementation of programmes on Integrated Coastal Area Management in SIDS countries;
- Promote the use of scientific knowledge for management decisions and policymaking and facilitate access to this knowledge through international cooperation in general, and South-South marine science cooperation in particular; and support ocean policy and governance programmes in all regions;
- Work to increase public awareness of the importance of the oceans and coasts for SIDS' sustainable development, including through the Global Forum on Oceans, Coasts and Islands.



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The Member States of the Intergovernmental Oceanographic Commission invite the delegates and representatives at the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States to be held in Mauritius, in January 2005, to reaffirm:

1. The importance of the oceans and seas for sustainable development of SIDS;
2. The role of IOC as the competent marine science body of the UN; and
3. The need for governments and funding organizations to provide the resources necessary to implement marine science and observation capacity building in SIDS.

The Member States of the Intergovernmental Oceanographic Commission wish to reaffirm that they are also prepared to promote, improve and strengthen international cooperation in general, and South-South marine science cooperation in particular, as a way to increase the sharing of endogenous capacity in marine and coastal science and technology knowledge.

Courtesy Laurent Teiller



‘The world oceans and their adjacent seas, and the living and non-living resources they contain, are a necessary element for the survival of life as we now know it.’

IOC Declaration to the World Summit on Sustainable Development, Johannesburg 2002



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Intergovernmental Oceanographic Commission Programmes

HOW CAN SIDS BENEFIT?

The Global Ocean Observing System (GOOS)



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A vast global network of ships, buoys and satellites involved in sustained ocean observations is continuously being assembled and put into operation as the Global Ocean Observing System (GOOS). GOOS provides information on the present state of the sea and its contents for oceanic and atmospheric forecasting, ocean and coastal zone management, and global environmental change research. GOOS data can be converted into a variety of products to meet the needs of a wide range of users, including ocean and coastal area managers and policymakers.

The Global Sea Level Observing System (GLOSS), a part of GOOS, represents a collaborative effort in the establishment of high quality global and regional sea-level monitoring networks. The main component of GLOSS is a global core network of 290 sea-level stations around the world. Information gathered by GLOSS is applied to global and regional climate assessment, oceanographic and coastal sea-level research, as well as operational forecasting and impact analysis.

Further information can be found at the GOOS and GLOSS Web sites:

<http://ioc.unesco.org/goos/>

<http://www.pol.ac.uk/psmsl/programmes/gloss.info.html>.

Integrated Coastal Area Management (ICAM)



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ICAM assists IOC Member States in developing holistic management policies to address the economic, environmental and social pressures that converge in the world's coastal areas to present intensified challenges to their sustainable development.

ICAM confronts issues such as marine pollution, storm surges and coastal flooding, coastal erosion, environmental hazards, and submarine groundwater discharge by engaging scientists from a range of disciplines including the social sciences, governments and the private sector, as well as local populations, to develop and implement scientifically sound, socially and economically feasible management practices.

Further information can be found at the ICAM Web site:

<http://ioc.unesco.org/icam/>.

Coral Reef Targeted Research



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Examining how the health of coral reef ecosystems changes in response to human activities and climate change is fundamental to understanding the global impacts of these modern realities. Coral

reefs act as a barometer measuring both the health of the world's oceans and global climate change. Moreover, understanding the close socio-economic relationship between these ecosystems and the numerous coastal populations that depend on them is fundamental to their wise management.

IOC's coral reef activities include a global project to coordinate, integrate and synthesize research on climate change and coral reefs. The information is applied to management practices and policies, participation in global monitoring efforts, and contributions to collaborative studies that examine the relationships between coral reef ecosystems and the coastal populations.

Further information can be found on IOC's Web site:

<http://ioc.unesco.org/coralbleaching/>.

International Oceanographic Data and Information Exchange (IODE)



The IODE system of IOC is a network of National Oceanographic Data Centres that acquire and exchange marine scientific information. Through IODE, IOC promotes the timely, free and unrestricted international exchange of valuable oceanographic data essential for advancing the scientific understanding needed to inform managers and policymakers on marine and coastal issues.

IOC provides support for Member States in establishing National Oceanographic Data Centers and training in data interpretation and application.

Further information can be found at:

<http://ioc3.unesco.org/iode/> IODE Web site.

<http://www.odincarsa.net> ODINCARSA (Caribbean) Web site.

<http://www.odinafrica.net> ODINAFRICA (Africa) Web site.

Tsunami Warning System



© Matt Chow, Pacific Tsunami Museum

The IOC provides continuous support to the International Tsunami Information Center (ITIC) and the Tsunami Warning System in the Pacific (ITSU). Both ITSU and ITIC are used for monitoring, predicting and issuing rapid warnings when tsunamis occur, as well as developing mitigation plans, storing information and maintaining records on such events.

Further information can be found at the ITSU Web site:

<http://ioc.unesco.org/itsu/>.

More information on IOC and other programmes is available at:

<http://ioc.unesco.org>.

Harmful Algal Blooms:

<http://ioc.unesco.org/hab/default.htm>.

Training, Education and Mutual Assistance:

<http://ioc.unesco.org/tema/>.

UN Division for Sustainable Development's Small Island Developing States:

<http://www.un.org/esa/sustdev/sids/sids.htm>.

Small Island Developing States Network (SIDSnet):

<http://www.sidsnet.org/>.

Global Forum on Oceans, Coasts and Islands

<http://www.globaloceans.org>.

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