



# 4TH GLOBAL CONFERENCE ON OCEANS, COASTS, AND ISLANDS

Working Group on Small Island Developing States (SIDS) and Implementation of the Mauritius Strategy



## POLICY BRIEF ON SIDS AND IMPLEMENTATION OF THE MAURITIUS STRATEGY



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## **Global Forum on Oceans, Coasts, and Islands--Strategic Oceans Planning to 2016**

The Global forum on Oceans, Coasts, and Islands has undertaken a strategic planning effort for the period 2006-2016 to develop policy recommendations for specific next steps needed to advance the global oceans agenda aimed at governments, UN agencies, NGOs, industry, and scientific groups. To this effect, Working Groups have been organized around 12 major topic areas related to the global oceans commitments made at the 2002 World Summit on Sustainable Development and to emerging issues facing the global oceans community.

The Working Groups have been organized and coordinated by the Global Forum Secretariat, under the direction of Dr. Biliana Cicin-Sain, Co-Chair and Head of Secretariat, Global Forum on Oceans, Coasts, and Islands, and involving the following staff from the Gerard J. Mangone Center for Marine Policy, University of Delaware: Miriam Balgos, Kateryna Wowk, Caitlin Snyder, Shelby Hockenberry, and Kathleen McCole.

### **Working Group on Small Island Developing States (SIDS) and Implementation of the Mauritius Strategy**

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

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**Policy Brief:  
Small Island Developing States (SIDS)  
and Implementation of the Mauritius Strategy**

**Lead Author  
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## Foreword

### *Small Island Developing States and Implementation of the Mauritius Strategy*

As stewards of vast ocean resources, small island developing States (SIDS) play a key role in efforts to sustainably manage ocean and coastal resources. SIDS are often the first to feel the effects of global environmental problems, due to their often small size, isolated locations, and vulnerability to climate change. It is clear that most SIDS countries are keenly aware of the importance of the marine environment and its resources to their sustainable development and economic stability. SIDS countries, however, are sometimes constrained by weak institutions and administrative processes and need enhanced human, technical, and financial resources to develop and implement cross-cutting approaches to the planning and management of oceans and coasts.

In April 1994, the Global Conference on Sustainable Development of Small Island Developing States was convened in Barbados. This was the first conference that translated Agenda 21 into a programme of action for a group of countries: the Barbados Programme of Action on the Sustainable Development of Small Island Developing States (BPoA). The BPoA set forth a fourteen point program identifying priority actions and measures to be taken at the national, regional and international levels in support of the sustainable development of SIDS.

The 2002 WSSD called for States to “undertake a full and comprehensive review of the implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States in 2004, in accordance with the provisions set forth in General Assembly resolution S-22/2...” The ten-year review of the BPoA was held in Port Louis, Mauritius in January 2005. The Mauritius International Meeting resulted in the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. The Mauritius Strategy noted the actions needed in order to achieve implementation of the BPoA. Section IV of the Mauritius Strategy relates to coastal and marine resources and includes seven items (26-32), including issues associated with delimitation of maritime boundaries, assessment of living and non-living marine resources, financial and technical assistance, capacity building, ascension to the U.N. Fish Stocks Agreement, enforcement, and the implementation of the UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, among other issues. Another outcome of the Mauritius International Meeting was the creation of the University Consortium of Small Island States to further SIDS cooperation on sustainable development education and to strengthen the national capacity of small island states to implement the Barbados Programme of Action and the Mauritius International Strategy. The five founding member institutions include the universities of Malta, Mauritius, South Pacific, Virgin Islands, and West Indies.

To contribute to the review of progress achieved on the Barbados Programme of Action at the 2005 Mauritius International Meeting, the Global Forum (with support from

UNEP/GPA) carried out several studies to ascertain progress achieved, since 1994, on the ratification of international environmental agreements, on oceans and coasts, and on related areas of climate change and sea level rise, waste management, and sustainable tourism.

These data, reported in the Global Forum's 2006 Report *How Well Are We Doing?* show a high level of ratification among SIDS of major international conventions, as called for in the Barbados Programme of Action, most prominently, the Framework Convention on Climate Change, the Convention on Biological Diversity, and the Law of the Sea Convention. There has been good progress on some aspects of ocean and coastal management, such as the establishment of marine protected areas by 61% of reporting countries. Despite this progress, as of 2005, no SIDS had delimited its EEZ due to lack of capacity and/or boundary delimitation conflicts with neighboring states. Only 20% of SIDS had developed specific institutions or interagency mechanisms for the coordination of integrated coastal and ocean management, and only 7% had enacted coastal legislation. Most SIDS have not developed EEZ management plans; rather, they have created localized plans to manage fisheries and pollution issues. The SIDS countries generally face significant difficulties in surveillance and enforcement within their EEZs, due to logistical and financial constraints, as well as the expansive nature of the areas they control. Fisheries enforcement within EEZs is thus a primary area of concern and difficulty.

With regard to climate change and sea level rise, a majority of reporting SIDS had produced national sea level rise adaptation plans (63%), had a national disaster preparation and response plan (61%), and had prepared greenhouse emissions assessments (54%). On the other hand, only 20% had installed equipment for environmental monitoring such as tidal gauges and meteorological stations, 34% had implemented projects for public education about climate change and sea level rise, and 10% have produced specific assessments on the socio-economic impacts of sea level rise and climate change.

### **Discussion of SIDS Issues at the Global Conference**

The Policy Brief presents a detailed set of recommendations on actions that could be taken in the following priority areas:

- (i) Adaptation to climate change and role of integrated coastal zone management;
- (ii) Adoption of ecosystem-based approach to marine and coastal management, including fisheries;
- (iii) EEZ and high seas marine resources management;
- (iv) Capacity building for coastal and marine management; and

(v) The emerging threat of marine invasive species.

Conference participants should consider the specific recommendations made on the topics above.

Participants may also wish to focus particular attention on the following issues:

1. Generating appropriate responses and funding with respect to the effects of climate change on SIDS;
2. Enhancing the periodic monitoring of implementation of the Mauritius Strategy;
3. Enhancing the capacity of SIDS nations in coastal and EEZ management (including EEZ planning and management, continental shelf and EEZ delimitation, favorable ocean use agreements, coastal management), including their capacity to respond to and adapt to climate change and threats to their coastal areas and their ocean industries. Capacity measures might include:

--enhancing the ocean and coastal management curriculum of the University Consortium of Small Island States

--enhancing the “ocean awareness” of high-level SIDS decisionmakers through targeted high-level workshops

The leadership of Rolph Payet, Advisor to the President of Seychelles, in mobilizing and chairing the Working Group on SIDS is acknowledged with sincere thanks, as is the guidance and insights provided by the leaders of the Working Group, especially Ambassador Neroni Tuiloma Slade (first chair of the Alliance of Small Island States), Ambassador Angus Friday (current chair of the Alliance of Small Island States), and Garfield Barnwell, CARICOM. Mr. Payet’s efforts to convey a personal message from Seychelles President James Alix Michel to the Global Conference are also acknowledged with deep gratitude.

**Biliana Cicin-Sain**  
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# **Policy Brief: Small Island Developing States (SIDS) and Implementation of the Mauritius Strategy**

## **1. Introduction**

Spread across the Atlantic, Pacific and Indian Oceans, and the Caribbean and Mediterranean Seas, small island developing States (SIDS) form a distinctive group, each with their own unique characteristics but nevertheless sharing many features in common. SIDS are recognized by virtue of their small size, small populations, lack of substantial natural resources, remoteness, vulnerability to natural disasters, excessive dependence upon imports or few economic sectors, high costs of transportation and communication, inaccessibility to economies of scale and disproportionately higher costs of conducting business. Many SIDS have sought to overcome such challenges by expanding development in tourism, fisheries, sugarcane, offshore financial centers, gambling havens and trading hubs. However, through years of exploitation, the ecosystem use and service of natural ecosystems of many SIDS have reduced causing further erosion to socio-economic growth.

Despite progress in the majority of these states, at least 20% of them are still qualified as Least Developed Countries or LDCs. As these states grow in real GDP terms, many face 'graduation' which leads to loss of access to low interest loans and attractive development concessions. Coupled with their inability to cost-effectively compete on the global arena and their extreme economic vulnerability, it is evident that SIDS will continue to impact negatively on the status of their coasts and oceans. Sustainable development in SIDS is thus questionable in the long-term unless these disparities

and their specific vulnerabilities are not addressed by the international community.

SIDS are also especially vulnerable to climate change as concluded by the IPCC. The Fourth Assessment Report of the IPCC is also of the view that SIDS have legitimate concerns over their future based upon observational records, experience with current patterns and consequences of climate variability, and climate model projections. The same report concludes with a very high level of confidence that SIDS will be affected by global sea level rise, which will increase coastal inundation, erosion and magnify the impact of storm surges and affect coastal agriculture. Coral bleaching, climate change impact on fisheries and ocean acidification are threats that will undermine food security and livelihood in SIDS. Changes in precipitation will also affect water resources availability, which will in turn affect biodiversity (including high-altitude islands) and other ecosystems dependent upon water. Climate change will as directly impact human health in SIDS as well as key economic sectors such as tourism and fisheries.

The attention of the global community on the vulnerability of SIDS began in 1989 when the United Nations General Assembly (UNGA) approved a resolution (GA 44/206) on the possible adverse effects of sea-level rise on islands and coastal areas, particularly low-lying coastal areas. This was further reinforced at the Rio Earth Summit in 1992, whereby the vulnerability and specific needs of islands was enshrined in Agenda 21, Chapter 17G. However, it was not until 1994, when the Small Islands Developing States gathered together in Barbados and



developed the Barbados Programme of Action (BPoA) for the Sustainable Development of Small Island Developing States that the specific issues of SIDS took centre stage. Subsequent reviews of the BPoA culminated in the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States in Mauritius in January 2005. A decade on, the meeting reaffirmed the continued validity of the 1994 Barbados Programme of Action as the framework for sustainable development in SIDS, whilst also taking into account the WSSD Plan of Implementation and the Millennium Development Goals. The resulting Mauritius Strategy for the further implementation of the Programme of Action for the sustainable development of SIDS builds on and reassesses the 15 major areas of concern adopted in Barbados and highlights new priorities and emerging issues including culture, graduation from LDC status, trade, and the role of modern information and communication technologies.

The Mauritius Strategy specifically called for priority to be given to ocean and coastal issues, including action to complete delimitation of maritime boundaries of SIDS, assessment of seabed resources, effective monitoring and enforcement of their territories, implement sustainable fisheries strategies including support from distant fishing nations, strengthen capacity to implement international ocean and maritime laws, increase ocean observing systems and development of sound ocean policies. On the issue of coastal policy, the Mauritius Strategy called for integrated coastal management policies supported by the management of coastal ecosystems, including coral reefs, the implementation of networks of marine protected areas, and called for support from the international community to address the issue of coral

bleaching, sea level rise, and coastal degradation.

The SIDS Working Group of the Global Forum on Oceans, Coasts, and Islands recognizes the Mauritius Strategy as the overarching framework for addressing the sustainable management of coastal and ocean resources as an integral part of the sustainable development of SIDS.

## **2. Overview of General Status and Trends**

Further to the adoption of the Mauritius Strategy, a number of initiatives have been launched to support the implementation of this strategy in SIDS.

The Convention on Biological Diversity (CBD) Programme of Work on Island Biodiversity, adopted in 2006, is the first-ever programme of work dedicated to island biodiversity. Since the adoption of the work programme, the CBD secretariat has established a number of partnerships to promote its implementation, for example with the South Pacific Regional Environment Programme (SPREP) to support the implementation of the programme of work and several regional initiatives, such as the Action Strategy for Nature Conservation in the Pacific Islands Region, the development of a web portal on island biodiversity, and workshops focusing on ecosystem approach in protected areas and tourism.

The Global Island Partnership (GLISPA), a global SIDS initiative by island state leaders to build leaderships and partnerships to support the island biodiversity programme of work, has been successful in mobilizing over 30 million USD for implementation of the Pacific Challenge, an initiative aimed at conserving more than 20% of the marine ecosystems of SIDS in Micronesia. In 2006, many SIDS had made efforts

towards establishing marine protected areas but challenges remain, especially in the management and protection from development encroachment of these areas.

UNDESA, the arm of the UN responsible for SIDS issues, convened a number of regional intergovernmental meetings to take the Mauritius Strategy forward. These meetings, held between October and November 2005, brought together stakeholders to discuss follow-up to the Mauritius Strategy for Implementation and agreed for the development of enabling mechanisms to be developed at the national, regional and international levels. The meetings were held in St. Kitts & Nevis (5-7 October), Samoa (17-19 October), Seychelles (26-28 October), and Rome (15-16 November). Subsequently, UNDESA has organized a number of workshops aimed at mainstreaming sustainable development and adaptation to climate change into national agendas. Within the framework of the Commission on Sustainable development (CSD), DESA has been instrumental in advancing ocean energy issues and the Mauritius Strategy, dedicating a day for the SIDS at the yearly meetings of the CSD.

The 2008 CSD theme focuses on land management, rural development, agriculture, drought and desertification. The theme can indeed be linked to climate change impacts such as sea level rise (e.g. through loss of coastal areas and arable land due to salinisation). This theme is also linked to the efforts of the FAO (Food and Agriculture Organisation) to address the issue of and Climate change which will culminate into a High-Level Conference on World Food Security and the Challenges of Climate Change and Bioenergy to take place 3 - 5 June 2008. Prior to this the FAO has been instrumental in bringing the SIDS issues to the highest levels, for example in November 2005, it organised a one-day Special Ministerial Event on Food Security

and Sustainable Development in Small Island Developing States. The main aim of this meeting was to endorse the preparation of a series of project proposals on issues concerning food security and environment resilience with respect to agriculture and fisheries. On specific coastal and ocean issues, at a high level meeting of the FAO on food security in SIDS, it was resolved that FAO would establish regional programmes for food security in all of the SIDS regions, as well as provide support for the promotion of responsible fisheries and trade.

Efforts at gaining representation at the World Trade Organization have attracted some support but are far from being acceptable. In order to maintain membership in regional trade blocks and global organizations, SIDS pay considerably more than larger economies on a per capita basis, thus reducing their ability to participate adequately in regional partnership agreements and hence secure essential development objectives as required under the Millennium Development Goals.

The Global Environment Facility (GEF) has funded over 180 USD million worth of projects in SIDS, which inevitably touch on coastal and ocean issues. The GEF has recently announced that it will be increasing its assistance to SIDS, targeting biodiversity, climate change, international waters and ozone as focal areas. GEF now has the portfolio responsibility for the Adaptation Fund, an important financial mechanism for supporting adaptation of SIDS to climate change.

Intrinsic and systemic disadvantages impact on sustainable development and environment protection in many SIDS. In many cases, the coastal areas and oceans are affected as a result of extensive tourism development, pollution, over-fishing, trawling, mining, waste disposal, oil pollution and coral reef destruction.

Furthermore, the increasing impacts of climate change coupled with the fact that these SIDS have very little or no access to the means to adapt to climate change places an enormous burden on their limited human and financial resource. Often, SIDS governments have had to divert precious budgetary resources to address damage caused by increases in extreme events. Such events as hurricanes and floods cause damage in excess of 20% of GDP in many SIDS.

The Global Forum on Oceans, Coasts and Islands, created at the WSSD, has been instrumental in advancing the SIDS agenda, especially as it concerns sustainable development of coasts and oceans. The Global Forum is committed to the implementation of the WSSD Ocean targets, ocean issues identified within the Mauritius Strategy, and in advancing capacity development needs on ocean and coastal management in SIDS countries.

WSSD recognized that islands and coastal areas form an integrated and essential component of the earth's ecosystem and are thus critical for global food security and for sustaining economic prosperity and the well-being of many national economies. It also outlined a number of actions at all levels, *inter alia*:

**Ratification of island states to the United Nations Law of the Sea** – The majority of SIDS have ratified UNCLOS, however in 2006 not one of the SIDS had successfully delimited their EEZs or deposited the appropriate instruments with the UN Division of Ocean Affairs and Law of the Sea. However many are now in the process of finalizing their submission to UNCLOS on the delimitation of their EEZs and continental shelves with the support of key UN Agencies such as UNEP and in some areas the government of Norway has provided substantial support.

**Promote implementation of Agenda 21, Chapter 17** – This comprehensive list of guidance actions remains valid to this day. Regional SIDS assessments leading up to the Mauritius International Meeting indicate that there are still many gaps in implementation and coordination of integrated coastal zone management. The Global Island Partnership with the support of the CBD Work Programme on Island Biodiversity has been able to promote the protection of significant marine areas in the Pacific (e.g. Micronesia Challenge), strengthening of Protected Area management in the Indian Ocean, and the launching of the Caribbean Challenge in May 2008. These efforts, combined with financial support from key partners are significant contributors to the Biodiversity 2010 targets as well. Management and conservation of resources on the high seas remains a formidable challenge for SIDS in view of their limited resources. However, some SIDS have pushed strongly for international bans on deep sea trawling and other destructive forms of fishing in the high seas.

Implementation of integrated coastal zone management in the majority of the SIDS is still not haphazard and in 2006, it was reported that only 20% of countries had developed specific institutions or interagency mechanisms for the coordination of integrated coastal and ocean management; and only 7% had enacted national coastal zone acts. Some of the challenges include weak institutional structures, lack of capacity, inconsistent policies, poor consultation with stakeholders and little consideration and investment in environment issues. Since only 32% of the SIDS have in place Environment Impact Assessment regulations and processes, coastal development still occurs at an unprecedented pace with serious consequences for the ecological services provided by coastal ecosystems. The availability of effluent quality standards

and management of solid wastes is also an important concern. Although the majority of SIDS have laws pertaining to water and coastal pollution, very few (about 27%) have in place working mechanisms for the management and minimisation of wastes. The Global International Waters Assessment (GIWA) singled out solid waste as one of the growing threats to ecological damage in SIDS.

In general, SIDS are still unable to put in place robust management mechanisms to address the threat of climate change. Significantly more effort needs to be made to establish strategies and mechanisms for adaptation to climate change. SIDS have been particularly instrumental in advancing global and regional issues, such as the memorandum for the protection of various marine species under the Convention on Migratory Species. Significant resources have been allocated by the GEF to meet the goals of mainstreaming biodiversity in island economic sectors, sustainable fisheries, large marine ecosystem management, and transboundary diagnostic analyses (TDA/SAPs). UN agencies, in particular UNEP and UNDP, have been active in promoting reduction of land-based sources of pollution, reduction in oil spills and other forms of pollution, as well as strengthening mechanisms and environmental management tools such as Environment Impact Assessment and Risk Assessments. The European Union through the African, Caribbean and Pacific group of states (ACP) cooperation framework has also provided support in developing approaches to coastal marine resource management and sustainable fisheries.

The ability of SIDS to adapt to climate change represents one of the highest areas of concern. Assessments undertaken by the Global Forum on Oceans, Coasts and Islands in 2006 revealed that very few SIDS have developed appropriate

adaptation plans. Those most likely to have developed adaptation action plans are those SIDS which have benefited from the National Adaptation Plan of Action (NAPA) programme, which is open only to LDC SIDS. The NAPA process identified priority activities that are required for adaptation to climate change. According to the 2006 data, although 63% of SIDS have a national sea level rise adaptation plan, only about 22% have established national institutions to handle climate change and adaptation issues. Despite the fact that many SIDS are located in potentially hazardous zones, such as cyclone belts, tsunami risk areas, storm surges and volcanic eruptions, only about 49% have a national agency responding to disaster preparedness and only 29% have early warning systems in place. Such systems are important foundations for establishment of adaptation mechanisms at the national and the community level. Efforts to ensure that all SIDS develop national adaptation plans are critical to ensure relevant enabling institutions are established, appropriate development of national and grassroots capacities as well as robust financing mechanisms are established. Adaptation to climate change is central to sustainable development and ocean governance in SIDS.

### **3. Priority Policy Issues**

While progress has been achieved on protected area management and integration of socio-economical issues within the governance of oceans, significant gaps exist including in the:

- (i) Adaptation to climate change and role of integrated coastal zone management;
- (ii) Adoption of ecosystem-based approach to marine and coastal management, including fisheries;

(iii) EEZ and high seas marine resources management;

(iv) Capacity building for coastal and marine management; and

(v) The emerging threat of marine invasive species.

Major hurdles to addressing those gaps include lack of in-country structures to mainstream adaptation to climate and enforce wiser coastal practices. Efforts by UNDESA and UNESCO could be further strengthened. Lack of resources, for example, to tackle the issue of high seas management, is critical, as most of the SIDS do not even have enough resources to manage their own EEZs. Strengthening mechanisms to reduce IUU fishing and the use of satellite technology may reduce costs and make management of EEZ, as well as high seas resources, much more affordable. The adoption of ecosystem-based management requires further emphasis and efforts aimed at operationalising it in SIDS needs to be explored, as it involves consideration of a number of significant steps such as good data collection and analysis, modeling tools, and interpretive skills. Strengthening of research and university infrastructure is a critical need to successfully adopt Ecosystem-based Management (EBM) and for it to become relevant to policy-makers. However, its use becomes ever more critical as resources are further constrained by rising demand and human pressure. The threat of marine invasive species is real and some studies have been undertaken in some SIDS, such as the Seychelles, by IUCN. However, there is a need to consider the ramifications to coastal livelihood and food security in the SIDS.

#### **4. Goals, Targets, and Objectives to Address Priority Areas**

(i) Adaptation to climate change and role of integrated coastal zone management:

- Network of global expertise on adaptation, adaptation technologies assembled and disseminated;
- Capacity building in adaptation planning, integrated coastal zone management and mainstreaming;
- An assessment of climate change risks in the context of SIDS and adaptation plan defined;
- Adaptation strategy developed and implemented within a multi-stakeholder framework;
- Required policy, institutional and legal reforms undertaken with the aim of mainstreaming adaptation;
- Awareness and communication strategy developed and implemented.

(ii) Adoption of ecosystem-based approach to marine and coastal management, including fisheries:

- Access to global databases such as FishBase, ReefBase, WCMC strengthened and national data management systems put in place;
- A needs analysis undertaken with a view to implement EBM in SIDS;
- Resources and sustainable financing plan identified and developed;
- Linkages with research institutions and strengthening of university research departments undertaken;
- Existing models, such as those for coral reefs, are extended for use in developing decision scenarios to illustrate to policy-makers the relevance of EBM in sustainable management of coastal and marine resources;
- Approaches to include stakeholders, including the private sector, put in place.

(iii) EEZ and high seas marine resources management:

- Framework for sustainable ocean policy and law which recognizes the sustainable management of fisheries resources, responsible shipping traffic and movements, precautionary seabed resources exploitation including oil/gas extraction, networks of representative protected areas, environmentally sound aquaculture/mariculture development, coastal management, and access and benefit sharing bio-prospecting regimes in place;
- Capacity building to implement oceans policy in place;
- Innovative and cost-effective technologies, including those based upon satellite communications allowing the monitoring of the oceans and the activities of humans, transferred to SIDS;
- Existing knowledge networks on practices and management of the oceans are strengthened and expanded to reflect the emerging management challenges and potential solutions.

(iv) Capacity building for coastal and marine management:

- Research institutions and universities strengthened to deliver ocean, coastal management and fisheries related courses and curricula at various levels;
- Capacity building workshops on the key priorities areas implemented;
- Public sector management and policy-making tools adopted and strengthened.

(v) Threat of marine invasive species:

- Baseline data assessment and identification database in place;
- Capacity building in monitoring for invasive implemented;
- Biosecurity strategy and measures in place, including established procedures for minimizing risk of introductions introduced;
- Awareness programme developed to implement the biosecurity strategy.

## 5. Recommendations to Achieve Targets

These priority issues all fall under two basic categories, Climate Change and Biodiversity. Whilst there is a global mechanism for advancing island biodiversity, the one for climate is less clear, although much effort has been placed by the Alliance of Small Island States (AOSIS) in the climate change negotiations.

The Island Biodiversity Programme needs to be further strengthened to be able to address those specific priority areas. Whilst the GEF has set aside significant resources through its RAF for projects in SIDS, the capacity of SIDS to access these funds is still limited. Consequently the GEF has embarked on national capacity self-assessment programmes, and also developed approaches at supporting SIDS. The GEF should be further strengthened to be able to address the specific needs of SIDS and the implementation of the CBD Work Programme on Island Biodiversity. Priority areas such as adoption of ecosystem-based approach to marine and coastal management, including fisheries; capacity building for coastal and marine management; and addressing the threat of marine invasive species can be adequately covered by the Global Environment Facility with the support of CBD, FAO, UNESCO-IOC and UNEP Regional Seas.

The management of areas under the jurisdiction of SIDS poses a challenge as these areas are extensive and resources are limited to ensure monitoring, enforcement and management. The European Union through its ACP Programme could be further enhanced to cover the EEZ and high seas marine resources management priority issues. In 2006, the EU funded a regional tuna tagging and tuna fisheries monitoring programme for the islands of the Western Indian Ocean. Through this initiative, considerable capacity was developed at the regional level for the management of industrial fisheries. The UNEP/GRID-Arendal 'shelf programme' was established to support SIDS in the delimitation of their EEZ exercise. Almost 22 states have received support, such as the collection and analysis of seabed data. They also wish to explore opportunities to develop the capacity of SIDS to manage resources within areas of national jurisdiction and on the high seas.

As for climate change, the adoption of the Adaptation Fund under the Global Environment Facility represents an important step forward in establishing a workable mechanism for promoting adaptation in SIDS. Clearly GEF now has to set-up the appropriate accessibility mechanisms, but above all build support for consolidating the Adaptation Fund. The Sea Level Rise Foundation, established as a platform of excellence on sea level rise and adaptation in SIDS, may provide one such approach.

A proportion of funds being generated under the Clean Development Mechanism (CDM) and other voluntary carbon trading schemes should be devoted towards the Adaptation Fund, as it is unlikely that new and uncommitted funds will be diverted to the Adaptation Fund. Synergies with the private sector, including Type-two partnerships, are another important financing modality that will need to be explored. Type-two partnerships emerged

from the World Summit on Sustainable Development as partnerships between parties, including the private sector, which emerged 'outside' the formal negotiation process.

The University Consortium of Small States (UCSIS) was launched in Mauritius in 2005 with the mandate to enhance knowledge and advanced graduate studies in SIDS. The role of tertiary level education is fundamental to economic growth and sustainable development in SIDS. Whereas, many SIDS face the problem of brain drain, tertiary level education tries to incorporate SIDS challenges within the curriculum and promote research and development into SIDS issues. The UCSIS needs to be further strengthened as a platform to stimulate development in SIDS, better governance of the oceans and in responding to climate change.

## **6. Other Areas of Concern**

A number of other issues of concern include ocean-related forms of energy, marine genetic resources, ocean acidification, land degradation, disaster response and tsunami early warning systems, and algal blooms.

The Global Forum is an important platform for enabling SIDS issues to be integrated across a number of member organizations. The Forum also allows a number of issues to be discussed, which are cross-sectoral in nature, and serves to bring together biodiversity, climate change and other global issues. The Global Forum is also firmly rooted in the Global Summits on Environment and other global processes such as the Mauritius Strategy. It is therefore important that the Global Forum continues to be supported. Emissions reduction approaches and mitigation technologies are opportunities and also dangers that many SIDS will face

as solutions to global climate change are sought. For example, extensive seeding of the oceans to capture carbon may disrupt the very ecosystems that support life in SIDS and a likely cause of red tides. Such experiments need careful study as to likely impacts and long-term consequences to the oceans. The Global Forum should call for further studies and evaluations before such wide scale experiments are undertaken in the oceans. There is a growing body of research on ocean energy technologies. It is important that SIDS benefit from these technologies in order to contribute to climate change mitigation.

UNESCO could in particular strengthen its work in SIDS by increasing focus on harmful algal blooms, coastal management issues, and global ocean observing systems – including sea level rise monitoring.

## **7. Conclusions and Future Projections (to be completed)**

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