

and tourism can also deteriorate and deplete the resources on which those very communities depend. Unfortunately the ability of SIDS to fully and effectively manage coastal and marine resources in a sustainable manner varies greatly. Most island Governments lack the resources and capacity for effective national surveillance and monitoring. Coral reefs are particularly rich marine ecosystems that are currently under threat. SIDS also report that bio-prospecting and bio-piracy are on the rise.

Action: All SIDS are parties to the Convention on Biological Diversity and most have taken advantage of opportunities to develop national biodiversity strategies by initiating national strategic action plans and developing national nature reserves and protected areas. Financial and other resource constraints, however, have undermined their efforts to implement these strategies. A major source of support for protecting biodiversity in SIDS has been the Global Environment Facility (GEF), especially through its role as financial mechanism for the Convention on Biological Diversity.

To implement the Barbados Programme of Action, the Food and Agriculture Organization of the United Nations (FAO) has provided technical assistance to SIDS totalling \$90 million, for 520 field projects in 38 countries. Twenty-one small island nations have signed the

International Plant Protection Convention (IPPC), which aims to prevent the introduction of pests affecting plants and plant products and to promote measures for their control. SIDS have recorded significant progress in regional cooperation in the area of fisheries, notably through the establishment of legal regimes.

In his report, the Secretary-General suggests that more attention be devoted to the protection of small islands' traditional knowledge relating to biodiversity, since there are no accepted international standards to accord intellectual property rights to communities. He expresses hope that islanders could be supported in making more productive use of their biological diversity to generate resources for development.

On marine resources, the Secretary-General notes progress in regional cooperation on fisheries, including through the establishment of legal regimes. The report mentions that international support has focused on specific areas such as fish stocks assessment, ocean observation and monitoring, and direct payments for fishery licences.

** Report of the Secretary-General, "Review of progress in the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States" (E/CN.17/2004/8), 11 March 2004, 57 pages*

Who Are the Small Island Developing States (SIDS)?

The list below includes members and observers of the Alliance of Small Island States (AOSIS) — a few of whose members are neighbouring small low-lying countries facing similar problems — as well as members and associate members of the United Nations Regional Economic Commissions.

Caribbean: Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Puerto Rico, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States Virgin Islands.

Pacific: American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Marianas, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu.

Atlantic, Indian Ocean and South China Sea: Cape Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, Sao Tome and Principe, Seychelles, Singapore.

From Barbados to Mauritius: The Programme of Action for Small Islands, Ten Years Later

“Progress in the implementation of the Barbados Programme of Action has been mixed. The small island developing States (SIDS) still face major challenges to their sustainable development, some of long standing and others of more recent origin... To further sustainable development in small island developing States, consideration should be given to creating novel strategies to strengthen the implementation of the Barbados Programme of Action. Such a programme should involve a collaborative approach that includes the small island developing States, the development partners, the donor community, the regional organizations and the United Nations system. There is, in particular, a need for more systematic monitoring and assessment to indicate progress or lack thereof in implementing the Barbados Programme of Action, and to identify the factors hindering its implementation.”

United Nations Secretary-General Kofi Annan, in a recent report on small island developing States*

The Barbados Programme of Action, which identifies priority areas and indicates necessary actions to address the challenges faced by small islands, was endorsed by 111 Governments at the Global Conference on the Sustainable Development of Small Island Developing States, held in 1994 in Barbados. In 1999, a Special Session of the UN General Assembly assessed the Programme and called on the international community to provide effective means and financial resources to support the sustainable development of small islands.

In preparation for the Mauritius International Meeting (10-14 January 2005), which will review the Barbados Programme of Action after ten years, it is useful to look at some of the key issues that it contained, the actions that have been undertaken, and what remains to be done.

CLIMATE CHANGE, NATURAL AND ENVIRONMENTAL DISASTERS

Situation: The very existence of the Maldives, Tuvalu and several other small islands is threatened by sea-level rise due to global warming. Global warming and climate change have also brought an increase in coral bleaching, coastal erosion, disruption of agricultural activity, reduced resilience of land and marine ecosystems, and increased prevalence of some diseases. On some islands, the ocean has already reclaimed some land areas, and freshwater supplies are increasingly corrupted by rising tides. In his latest report, the UN Secretary-General emphasizes that climate change and sea-level rise can inflict serious economic damage on many small islands, particularly in highly developed coastal areas where buildings and infrastructure for tourism, fisheries and other important economic activities are located.

International Meeting to Review the Implementation of the
Programme of Action for the Sustainable Development of Small Island Developing States
Mauritius, 10–14 January 2005 • www.un.org/smallislands2005

Regarding natural disasters, the Secretary-General mentions in his report that, since the adoption of the Programme of Action, small island nations have collectively been forced to face “the unpredictability, frequency and intensity” of numerous extreme weather events each year. “Because of the consequent diversion of resources from long-term development plans to deal with reconstruction and rehabilitation, natural disasters continue to pose a formidable challenge to sustainable development for most of them,” the report states.

Action: “Climate change and sea level rise” is the first item in the Barbados Programme of Action. At the national level, most of the small island States have strengthened their response to climate change by initiating arrangements to establish permanent national climate change focal points within their Governments. They have ratified the Kyoto Protocol on climate change, for which SIDS have been calling for immediate entry into force.

To provide better forecasts, with the help of the World Meteorological Organization (WMO), small islands have upgraded their data collection systems that enable them to collect, analyse and interpret meteorological data. Although contingency planning and response preparedness in SIDS remain fairly weak at the national level, this has been alleviated to some extent by regional initiatives. Twelve countries have engaged in Caribbean Planning for Adaptation to Climate Change, a project designed to support the participating countries in preparing to cope with the adverse effects of global climate change, particularly sea-level rise in coastal and marine areas. Some areas of concern remained, though, namely vulnerability assessment, adaptation planning and related capacity building. A second phase called Mainstreaming Adaptation to Climate Change is currently being conducted to facilitate an enabling environment for climate change.

Small island States are deeply concerned that the world’s collective failure so far to reduce greenhouse emissions has increased their vulnerability, and they would like to be better supported to adapt and protect themselves.

In his report, the Secretary-General stresses the importance of adaptation to climate change, disaster preparedness and risk management, and calls for integrated planning and decision-making on coastal zone management, fisheries, agriculture, tourism, energy, health and water resource management. “Crucially, the international community needs to redouble efforts to put in place an effective regime to deal with climate change and its consequences,” he states.

FRESHWATER, LAND RESOURCES AND WASTE MANAGEMENT

Situation: On volcanic and atoll islands, surface and groundwater resources are limited. Elsewhere, when the nature of the soil is not an issue, freshwater supplies have continued to be polluted and demand has increased due to urbanization. However, the situation of small island nations varies widely. While some face food security challenges because of poor soil quality, the smaller islands and the atolls are practically self-sufficient. Small islands still face deficiencies in water availability, water catchments and storage, pollution of water resources, saline intrusion and leakage in the delivery system.

While there has been significant development in the area of freshwater resources, notes the Secretary-General in his report, watershed management in many small island developing States is still weak, because of the inadequacy of technical equipment, trained technicians, data on groundwater systems, watershed planning and management systems. “This has resulted in the inadequate monitoring of the supply and quality of freshwater,” he notes. The report mentions that some islands have seen increases in gastrointestinal illness, in particular among children, as a result of water being polluted by untreated sewage. Untreated waste water discharged into coastal waters has contributed significantly to damaging coastal ecosystems and coral reefs.

Already scarce, land resources are further subjected to competing demands by population pressure, deforestation and soil erosion. The scarcity of land affects waste management as well. Population growth and the development of tourism generate more waste while there are simply not enough disposal sites. The pressure that existed ten years ago on land resources has since been further exacerbated.

Action: Over the last decade, some water management technologies have been tested successfully in some islands. For instance, a new “scavenger” technology for wells, introduced in the Marshall Islands with assistance from the United Nations and the North American National Weather Service (NOAA), is an inexpensive, practical solution for controlling saltwater intrusion when groundwater is drawn. As a result of the Barbados Programme of Action, some small island countries have made significant progress in dealing with domestic waste management issues, while most are still lacking financial and technical capacity. In some small island developing States, the private sector has become involved in recycling biodegradable and non-biodegradable materials, such as paper, plastics, metal

cans and used oil. Economic incentives to reduce wastes, such as a deposit refund system for cans and bottles, have been introduced and are in use in virtually all regions. However, small islands have expressed a growing concern with regard to the security and environmental implications of the disposal and transport of radioactive materials and the lack of liability and compensation regimes.

In his report, the Secretary-General calls for more effective legislation, management and enforcement measures with respect to freshwater resources, sanitation and waste, and encourages improved tracking and management of the movement and disposal of hazardous and toxic substances to ensure the protection of the fragile marine ecosystems of SIDS. He also welcomes financial, technical and technological support for the development of appropriate waste management systems in small island developing States.

TOURISM, ENERGY AND TRANSPORT

Situation: “Tourism and its contribution to the economies of small island developing States are threatened by overdevelopment, pollution, loss of biodiversity, climate change, beach erosion, social and cultural conflict, crime and, more recently, the threat of terrorism,” the Secretary-General says in his report. Tourism, which remains a principal economic activity for most SIDS, increased by about 60 per cent during the 1990s. Negatively affected after the terrorist attacks of September 2001, this sector is now recovering.

Small islands have traditionally depended and still rely on imports of petroleum products for much of their energy needs, especially for transportation and electricity generation. And because many remote and rural areas have little or no access to modern and affordable energy, they often turn to fuelwood, thus contributing to deforestation. The cost of electricity generation is relatively high because of transportation costs, small-scale generating systems and low-density, scattered populations. The high cost of power is an obstacle to foreign investment, and represents for most islands a significant proportion of import costs.

Isolated and distant from the mainland, the small islands lack adequate international and domestic transport facilities and services. Transport and communications networks are often fragmented and costly, due to monopoly service providers. They are generally poorly developed and maintained. Furthermore, security requirements to counter terrorism have introduced financial demands that add to already high transport costs for many islands.

Action: The Secretary-General, in his report, acknowledges the important steps being taken by many small islands, at the national and regional level, to strengthen tourism planning and management so as to include environmental concerns and maximize social and economic benefits. These include the establishment of land use standards for tourism development, integrated watershed and coastal area management systems and approaches. For instance, five Caribbean nations launched in 2003 the eco-tourism “Blue Flag Caribbean pilot project” with the goal of improving water quality and enhancing environmental education and management in tourism operations. The Secretary-General also encourages the island nations to ensure that tourism development “is pursued within the context of an integrated development plan that is cognizant of social considerations and environmental management requirements.”

Many islands have developed or are developing hydropower, geothermal, solar and wind power, and biomass energy, in some cases through private-public partnerships. In a number of islands, small-scale solar photovoltaic (PV) power systems have been used to provide electricity in rural and remote areas on a pilot scale. The Secretary-General’s report calls for more seed funding and energy investments to address the energy vulnerability of small island developing States, improve their energy efficiency at all levels and develop renewable energy resources.

BIODIVERSITY, COASTAL AND MARINE RESOURCES

Situation: Many small island developing States, including the Dominican Republic, Fiji, Haiti, Jamaica and Mauritius, have a high percentage of unique and diverse animal and plant species. The ecosystems of many islands are small and vulnerable to disruption by climate change or other human activities. SIDS therefore have many rare, endangered and threatened species. Population growth and development, natural disasters and the introduction of alien species threaten biodiversity.

Fisheries and other marine resources are economically critical in many islands, providing a large share of the food supply, employment, economic activity and income. These resources are threatened by overexploitation, destructive harvesting, land-based pollution, pollution from ships, coastal development, climate change and invasive alien species. The greatest threat to the coastal and marine environment comes from land-based sources of pollution, including human wastes, industrial effluent and agricultural run-off. If they are not properly managed, fishing industries