



Economic and Social Council

Distr.: General
9 February 2004

Original: English

**Commission on Sustainable Development
Twelfth session**

14 April – 30 April 2004

Item 3 of the provisional agenda

IMPLEMENTATION OF THE BARBADOS PROGRAMME OF ACTION

A Review of Progress in the Implementation of the Programme of Action
for the Sustainable Development of Small Island Developing States

– Report of the Secretary-General* –

The present report has been prepared to facilitate broad consideration of implementation of the Programme of Action for the Sustainable Development of Small Island Developing States in preparation for the comprehensive review to be undertaken at the International Meeting in 2004, in pursuance of UNGA resolution 57/ 262.

The report offers an overall assessment of progress achieved in implementation of the Barbados Programme of Action through the efforts of the SIDS, with the support of regional and international organizations including the agencies of the United Nations system, as well as the donor community.

The report concludes that progress in implementation of the BPOA has been mixed. The SIDS still face major challenges to their sustainable development. Accelerated implementation of the BPOA will require a renewal of political commitment by all States to the BPOA and to related international commitments and pledges.

* Submission of the report was delayed to reflect the outcome of the inter-regional preparatory meeting held in Nassau, Bahamas from 26 to 30 January 2004.

I. Introduction 1 - 4

II. Economic and social trends and vulnerabilities

13 A. Economic overview 5 -
19 B. Tourism.....14 -
31 C. Poverty.....20 -
34 D. Special vulnerabilities.....32 -

III. Follow-up of the agenda of the BPOA

A. Climate change and sea level rise 35 - 38
B. Natural disasters 39 - 41
C. Water, sanitation and waste 42 - 45
D. Coastal and marine resources 46 - 48
E. Land resources 49
F. Energy50 - 54
G. Biodiversity 55 - 57
H. Transport and communications 58 - 63
I. Technology 64

IV. Emerging issues

A. HIV/AIDS 65 - 70
B. Security and governance 71 - 73
C. Culture 74 - 77

V. Means of implementation

A. Institutional mechanism for the implementation of the BPOA.....78 - 94
B. Capacity development and education 95 - 102

VI. Conclusions 103 - 122

I. Introduction

1. The General Assembly, by its resolution 57/262, decided to convene an International Meeting in 2004 to undertake a full and comprehensive review of the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States (SIDS), as called for at the World Summit on Sustainable Development, held in Johannesburg in 2002.

2. The Commission on Sustainable Development at its eleventh session, in pursuance of the mandate of resolution 57/262, established the parameters of the review process to include national and regional assessments from the SIDS on the status of implementation of the Barbados Programme of Action; regional and inter-regional preparatory meeting reports; and contributions from a series of expert workshops held on issues of importance to SIDS. Reports from international organizations and agencies of the UN system were also solicited, as well as the views of the donor community and development partners of SIDS. The Commission on Sustainable Development also decided that during its twelfth session in 2004, it would convene a three-day preparatory meeting for the International Meeting. The present report has been prepared to facilitate broad consideration of implementation of the Barbados Programme of Action during this preparatory meeting.

3. The report offers an overall assessment of progress achieved in implementation of the Barbados Programme of Action through the efforts of the SIDS, with the support of regional and international organizations including the agencies of the United Nations system, as well as the donor community. It identifies the structural, institutional and financial constraints faced by SIDS, and presents an overview of trends in the international economic and political landscape which have presented significant challenges to the SIDS, and which limit their capacity to implement effectively the multi-sectoral, comprehensive Programme of Action for their sustainable development.

4. The experiences of the SIDS in their efforts toward implementation of the BPOA are summarised in the following sections. Section II provides a general perspective of the economic and social trends in SIDS and their vulnerabilities. Section III reviews the follow-up of the BPOA and the ongoing challenges of implementation of the BPOA. Other issues, some new, which have presented significant challenge to SIDS in their efforts to implement the BPOA are addressed in section IV on emerging challenges. Section V offers analysis and perspectives on means of implementation and relevant priority issues. Section VI identifies critical areas for future action to advance and enrich implementation of the Barbados Programme of Action. These include considerations for structural transformation, institutional strengthening and capacity development at the local, national and regional levels. They also affirm the importance of the continued support of the United Nations system and the donor community for the SIDS, so as to give fullest expression to the letter and spirit of the commitment to partnership through international action enshrined in the Declaration of Bridgetown ten years ago.

II. Economic and social trends and vulnerabilities

A. Economic overview

5. The economic performance of SIDS over the past decade has been mixed. With few exceptions, notably among the least developed, the SIDS have achieved on average positive annual growth rates in their economies since the adoption of the Barbados Programme of Action in 1994. Most SIDS have also recorded human development indices in the medium to high range, reflecting strong, positive performance in important social indicators, particularly literacy and health. Their generally strong economic performance, as reflected in Table 1, is attributed to the efforts of SIDS at economic diversification, focusing on tourism, the exploration of niche markets for goods and, in some successful cases, such as in the Bahamas, Barbados and Mauritius, development of the financial services sector, particularly off-shore banking services.

6. Growth in tourism and in other service sectors fared well in SIDS, particularly in the AIMS and Caribbean regions. Table 2 shows the growth in the tourism industry between 1995 and 2001, represented in tourist arrivals. This key economic sector was negatively affected by the impact of international terrorism in 2001, but has already begun to show signs of recovery, albeit with increased operating costs for security incurred.

7. Growth in the financial services sector and other business sectors including insurance has proved very successful for some SIDS. In the case of Mauritius, for example, the contribution of that sector to GDP rose from 10.1% in 1992 to 16.8% in 2001. Much attention has been given to the strengthening of legislative and institutional frameworks for more effective regulation of the sector to address concerns regarding volatility, liquidity and disclosure.

8. The economic performance of SIDS still heavily dependent on non-oil commodity exports was not as robust, because of the steady decline in commodity prices and the loss of preferential market arrangements with the institutionalization of trade liberalization in the WTO. The experience of the banana producing SIDS in the Eastern Caribbean in the late 1990s is an example of this.

9. Over the last two decades, the share of SIDS in global merchandise trade declined by half (from 0.4% of world exports of goods in 1980 to 0.2% in 2000). However, they benefited from improvements in telecommunications and were able to maintain their share of the global trade in services (0.7%). Partly due to their small size, merchandise export concentrations are substantially higher than for larger developing countries, and dependence in many cases on a few primary commodities has made export revenues volatile.

10. While some SIDS saw increased private financial flows, particularly foreign direct investment (FDI), in the 1990s, others saw declines as FDI was attracted to

countries with larger markets. Overall, FDI inflows to SIDS, illustrated in Table 3, roughly doubled from 1994 to 1999, but have declined since then.ⁱ

11. Beyond the difficulties in participating effectively in the highly competitive international trading environment inaugurated by the WTO, the SIDS also saw a decline in overall official development assistance by an average of 50%, illustrated in Table 4. Aruba, Barbados and Trinidad and Tobago recorded net negative ODA flows in 2001. At the same time, the Dominican Republic, Guyana and the Marshall Islands were among those that enjoyed a net increase in ODA over the period.

12. Notwithstanding the opportunities for economic diversification and growth presented by globalization, nearly all SIDS reported high vulnerability in economic performance, including concerns of marginalization in the challenging international economic conditions created as a result of globalization. This situation was further exacerbated for many SIDS by unforeseen natural and environmental disasters which retarded economic and infrastructural development and diverted scarce resources to rehabilitation and reconstruction. 1998 was a particularly destructive year for hurricanes and cyclones in SIDS.

13. The limited economic opportunities available to SIDS contributed to the increased migration of skilled nationals in particular, adding still another challenge to SIDS efforts to compete effectively in a high technology international environment. Dependence on remittances and development assistance from both bilateral and multilateral sources increased in many SIDS.

B. Tourism

14. While the importance and degree of development of tourism varies among SIDS, it remains a principal economic activity in a large majority of them. Tourism in SIDS increased by about 60% in the 1990s, providing expanded economic opportunities, but also posing economic, social and environmental challenges. Tourism and its economic contribution to SIDS economies are threatened by over-development, pollution, loss of biodiversity, climate change, beach erosion, social and cultural conflict, crime, and, more recently, the threat of terrorism. Following the terrorist attack of September 2001, tourism declined, but is now recovering.

15. Many SIDS, particularly in the Caribbean region have well-established tourism industries built on diversified activities, strong reputations, high levels of repeat business, and a solid infrastructure including roads, telecommunications, utilities, airline services, and airport and seaport facilities. The Caribbean hosts approximately 50% of the world's cruise tourism berths, and Caribbean SIDS have made large investments in port facilities and have developed effective economic relationships with cruise lines.

16. The majority of SIDS have embarked on initiatives aimed at building a wider, more sustainable, base of support for the tourism industry among the local population, promoting participatory action and a sense of ownership in order to ensure the success of the industry. Greater attention on the part of all stakeholders to the implementation of effective sustainable tourism development is required. Key measures would include ensuring that tourism development and environmental management are mutually supportive, and that integrated planning, policies and implementation plans provide for environmental impact assessments for all tourism projects and cultural impact assessment for all large tourism operations.

17. While there is a continuing need for foreign investment and technology transfer to expand and modernize tourism infrastructure, it is important that all segments of society participate in the planning and development of tourism and that its benefits are distributed widely. Also lacking are integrated plans or planning processes that address issues such as: carrying capacity; tourism supply and demand, resource utilisation, and economic, socio-cultural and environmental impacts.

18. There is a great potential in many SIDS for the further development of ecotourism, which is currently a small share of the tourism market, but growing rapidly. Ecotourism could provide employment and generate income while helping to protect and conserve natural resources and contributing to the implementation of national biodiversity action plans. The varied cultures of the SIDS also present opportunities for the development of cultural tourism.

19. Important steps are being taken by many SIDS at national and regional levels to strengthen tourism planning and management to include environmental concerns and maximise social and economic benefits. A wide range of laws have been enacted to strengthen environmental management, including the establishment of land use standards for tourism development, integrated watershed and coastal area management systems and approaches, and strengthening environmental frameworks.

C. Social Conditions

20. SIDS for the most part rank in the high-to-medium range of UNDP's Human Development Index. Roughly half of those for which data is available on progress towards the Millennium Development Goal (MDG) on poverty reduction indicate they are on track, while the other half are either lagging far behind or, in one case, slipping back. The SIDS have been paying increasing attention to poverty eradication, consistent with their commitment to people-centred strategies of sustainable development and to the implementation of the Millennium Development Goals.

21. In the Pacific region, Papua New Guinea, one of the few countries with recent poverty data, is among those lagging behind in progress towards the MDG on poverty reduction. While abject poverty is rare in the Pacific SIDS, the lack of access to economic resources, employment, education, health care, and social protection has

resulted in relative deprivation and a poverty of opportunity. Women and children are often the most disadvantaged, along with marginalized groups such as persons with disabilities.

22. The Pacific SIDS have worked to integrate the MDGs and associated indicators into national planning processes and to monitor their implementation. Regional efforts have been made to support and reinforce national poverty alleviation activities, for example through the Forum Basic Education Action Plan, funded largely through the European Union's 9th European Development Fund, as well as NZAID.

23. Pacific development partners have been assisting in strengthening institutional capacities to quantify and assess poverty, formulate prioritized strategies, and implement and monitor direct programmes of assistance to reduce poverty. With the growing focus of the development community on 'poverty alleviation' there has been a tendency for duplication of effort and there is, therefore, a need for increased coordination and sharing of information amongst all stakeholders.

24. Poverty is a critical social problem facing all of the Caribbean countries and has been identified as a major challenge and the root cause of a wide spectrum of other socio-economic problems facing these countries, such as crime. Children constitute a large proportion of the poor and are the most adversely affected.

25. Several Caribbean countries have reaffirmed their commitment to implementing the decisions agreed at the World Summit for Social Development in Copenhagen in 1995 and in the 1996 Directional Plan of Action for Poverty Eradication adopted in Trinidad and Tobago. Poverty reduction policies, programmes and plans have been developed, coordinating mechanisms created, and a number of national poverty reduction surveys have been conducted. Social Investment Funds to meet the basic needs of the poor have either been established or are being established in several SIDS.

26. The countries of the AIMS sub-region vary greatly in the incidence of poverty. In the Maldives, for example, about 40% of the population is under the national poverty line of \$5 per day, whereas Bahrain has high levels of human development. Governments are working to raise standards of living in order to reduce poverty and many have adopted national strategies for this purpose. In many countries, greater emphasis has been placed on participatory approaches and community involvement in order to strengthen the capabilities of the poorest segments of the population through provision of resources, credit, training and empowerment.

27. Governments need to develop policies and frameworks to foster innovative micro, small and medium enterprises, revitalize productive capacity and stimulate employment opportunities. Also important is the efficient provision of government services through sound financial management and good governance, with broad-based consultation and analysis of social impacts.

28. Infant mortality rates, which are closely related to poverty, have declined over recent decades in many countries, and plans, programmes and initiatives have been developed to further reduce child mortality, where progress has been slow. Maternal mortality rates are low in many countries and have been substantially reduced, notably in several Caribbean SIDS where the MDG target has already been achieved. Some SIDS have recorded improved quality of health care services, including increased attendance by health care professionals during childbirth. However in other SIDS, particularly in the Pacific, limited access to health services, including reproductive health programmes remains a challenge. This includes the need for trained personnel and institutional strengthening, including the improvement of health centers and district hospitals.

29. Some SIDS inter-governmental organizations (IGOs) and regional political processes, including meetings of Heads of Government, have given mandates to create regional health and development commissions to advocate, review and help propel health to the centre of the development process and to draw on the results of medical and other scientific research to inform decisions at all levels. Such initiatives, however, along with the commitment to meet the Millennium Development Goals, require additional investments in health to improve the lives of the poor and vulnerable.

30. There has been considerable progress among all SIDS towards gender equality, as well as increasing recognition of the need for integration of gender into key policy and planning processes. While significant progress has been made toward their increased participation in education and the work-force, women are still under-represented in decision-making, both in enterprises and at the political level.

31. Although a number of national and regional initiatives have been initiated to tackle a range of women's issues, much remains to be done, including through the provision of training, particularly in the area of gender mainstreaming. There is also a need for accurate sex-disaggregated data to improve gender analysis for policy development and to promote gender-responsive institutions and improved gender relations.

D. Special vulnerabilities

32. The special challenges facing SIDS with respect to sustainable development were articulated in Agenda 21 and the Barbados Programme of Action, and have been reiterated in subsequent discussions. SIDS experience specific challenges and vulnerabilities arising from the interplay of factors including small populations and economies, weak institutional capacity in both the public and private sector, remoteness from international markets, susceptibility to natural disasters and climate change, fragility of land and marine ecosystems, high costs of transportation, limited diversification in production and exports, dependence on international markets, export concentration, and income volatility and vulnerability to exogenous economic shocks. As a result, their economies, including trade, financial flows and agricultural production, show greater volatility than other countries.ⁱⁱ SIDS have sought to address these challenges and

vulnerabilities aggressively through concerted and collective national and regional efforts at building resilience to shocks.

33. Over the last three decades, the particular development challenges facing SIDS due to their structural disadvantages have been recognized by the United Nations system and have received considerable attention from the international community as a result. The rationale for recognizing SIDS as a special category of countries in need of differentiated and favourable treatment by their economic partners has been underlined recently in various relevant fora, including the World Trade Organization. Many SIDS have been highly dependent on market access preferences that have been or will be eroded. Those States need special support to compensate the erosion of preferences, for example through investment incentives or assistance in economic diversification to reduce dependence on exports facing growing international competition as a result of liberalization.

34. Based in part on their economic vulnerability, a number of SIDS are recognized by the United Nations as least developed countries (LDCs), qualifying them for certain benefits related to international finance and trade. In recent years, the proposed graduation of some SIDS from LDC status has raised questions regarding the loss of such benefits. This question presently affects two SIDS (Cape Verde and Maldives) that qualify for graduation on the basis of their relatively high income (GNI) per capita and human capital measurements. Three other SIDS (Kiribati, Samoa and Tuvalu) might qualify for graduation in the medium term. In this circumstance there is agreement on the need for smooth transition policies for graduating countries, an aim that has been expressed and reiterated by the General Assembly and the Economic and Social Council.

III. Follow-up of the agenda of the BPOA

A. Climate change and sea level rise

35. Climate change and sea-level rise pose a major threat to SIDS. The very existence of some SIDS, including the Maldives, Tuvalu and many other islands in the Pacific, are threatened by sea-level rise due to global warming. More immediately, global warming and climate change has brought an increase in the number of extreme weather events, coral bleaching, coastal erosion, disruption of agricultural activity, reduced resilience of land and marine ecosystems, and an increase in vector-borne diseases. Climate change and sea level rise threaten serious economic damage to many SIDS, particularly in highly developed areas right on the coast with buildings and infrastructure for tourism, fisheries and other important economic activities. Much effort has been given to vulnerability assessment, adaptation planning and capacity building to address the threat of climate change. This has included the implementation of a range of national and regional enabling activities designed to strengthen institutional capacity and information networks.

36. In the Caribbean region, a number of regional activities have been undertaken since 1994 to address climate change, including Caribbean Planning for Adaptation to

Global Climate Change (CPACC) and Mainstreaming Adaptation to Climate Change (MACC), both funded by GEF and other donors. CARICOM has recently established a Climate Change Center, which is still in its early implementation stages, and its long-term sustainability will require further international support.

37. In the Pacific region, similar efforts have been undertaken with the establishment in 2000 of a Regional Framework for Action on Climate Variability, Change and Sea Level Rise, and the development of a Pacific Umbrella Partnership Initiative on Adaptation. The Pacific Islands Climate Change Assistance Project (PICCAP) has been undertaken with support from GEF, UNDP and the South Pacific Regional Environmental Programme (SPREP).ⁱⁱⁱ

38. At the international level, donor support has increased in some areas. At the Ninth Conference of Parties of the United Nations Framework Convention on Climate Change (Milan, December 2003), the need to augment support for the trust funds to facilitate SIDS participation was highlighted. Ratification and implementation of the Kyoto Protocol as an important step towards the effective management of greenhouse gas emissions is also important. The UN system has also supported a number of activities as part of SIDS climate change efforts, including cross-sectoral initiatives to examine climate change and health in the SIDS regions.

B. Natural disasters

39. SIDS remain extremely vulnerable to natural and man-made disasters. Since the adoption of the BPOA, SIDS have collectively suffered the effects of numerous extreme weather events annually. SIDS face the continued challenge of dealing with the unpredictability, frequency and intensity of these events. 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 SIDS.

40. In seeking to build resilience to disasters, SIDS have given greater attention to disaster preparedness and planning. Attention has also been given to anthropogenic factors, which exacerbate the damage caused by the natural disaster. In this regard, governments have sought increasingly to work with community based groups in partnership to increase public awareness and participation in disaster prevention and mitigation. Much effort has also been put into the establishment of disaster management agencies, and some SIDS have established national early warning systems and disaster mitigation plans, including oil spill contingencies. Still, contingency planning and response preparedness in SIDS remain fairly weak, and disaster management and response offices are inadequately staffed with trained personnel.

41. National action has been complemented by more coordinated regional initiatives for disaster preparedness, management and recovery. Projects have been initiated by regional institutions like the South Pacific Regional Environment Programme and the Caribbean Disaster and Emergency Response Agency, with the cooperation and support

of international agencies. Regional efforts to upgrade meteorological services have been undertaken, both for climate change and disaster preparedness. At the international level, the review of the 1994 Yokohama Strategy is bringing renewed attention to both national and regional deficiencies in existing strategies. Activities for 2005-2015 are to be developed for the 2nd World Conference on Disaster Reduction in January 2005.

C. Water, sanitation and waste

42. While there has been significant development in the area of freshwater resources, watershed management in many SIDS is still weak, because of inadequate technical equipment and trained technicians, insufficient data on groundwater systems, inadequate watershed planning and management systems. This has resulted in the inadequate monitoring of the supply and quality of freshwater. There is need to promote at the community level greater awareness and understanding of the impact of economic activities such as mining, forestry and agriculture on water resources. Poor effluent disposal, the use of fertilizers and pesticides, and increased saltwater intrusion represent continued threats to limited freshwater sources in SIDS. New technologies are being tested successfully in some SIDS, such as scavenger wells for extracting underground freshwater overlying salt water, and reverse osmosis for desalination. Another cost-effective approach to improving water supplies in SIDS is rain water harvesting: although it has historically been neglected, it is gaining popularity in many SIDS and developing countries.

43. Sanitation is a high priority for SIDS due to the impact of untreated sewage on health, water quality and the environment. Some SIDS have in recent years seen increases in gastro-intestinal incidence, in particular among children, as a result of contaminated water polluted by untreated sewage. Untreated wastewater discharged into coastal waters has contributed significantly to eutrophication, damaging coastal ecosystems and coral reefs. Such contamination, in addition to harming health and the environment, can have major negative impacts on tourism.

44. Most SIDS also continue to grapple with the challenge of solid waste management, which is constrained by inadequacy of financial resources, weak institutional capacity, lack of trained personnel, and limited space for landfill. Most SIDS lack effective waste management legislation, policies, plans and systems.

45. A UNDP sponsored expert meeting on waste management in SIDS held in Cuba in 2003 identified several national and local level technologies that could be suitably adapted for SIDS needs. Recognizing that SIDS needs in this area are considerable, international support could be channeled through regional institutions and initiatives where they exist.

D. Coastal and marine resources

46. Many SIDS have large coastal zones and very large exclusive economic zones (EEZ) relative to their size, populations and economies. Fisheries and other marine

resources are economically critical in many SIDS, 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.

47. 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. Addressing these issues has been a focus of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).^{iv} Support has also been provided by the Global Environment Facility under the focal areas of biodiversity and international waters.^v

48. Managing the large coastal and marine areas is a major challenge for the sustainable development of SIDS. Most SIDS lack the resources, institutional capacity, and scientific and technical expertise for effective national surveillance, monitoring and management. Regional organizations in the Pacific and Caribbean regions are promoting cooperative mechanisms. Progress in regional cooperation has been achieved in the area of fisheries, including through the establishment of legal regimes. International support has been targeted on specific areas such as fish stocks assessment, ocean observation and monitoring, and direct payments for fishery licenses.

E. Land resources

49. There is wide variability in the quality and availability of land resources among SIDS. In many cases, the good quality agricultural land is already used intensively, posing challenges for food security in the context of continuing population growth. Inappropriate land use, deforestation and lack of adequate planning have caused soil erosion in many SIDS, degrading the already limited land resources. At the regional level, SIDS have been cooperating in their implementation of the UN Convention to Combat Desertification (UNCCD), and in establishing research into pest management and improved crops. SIDS have also been taking initiatives to diversify agricultural production in response to declining revenues from traditional export crops. For export products, there is a need to strengthen quality control to meet increasingly stringent requirements of export markets.^{vi}

F. Energy

50. For the majority of SIDS, imported petroleum is the chief source of primary commercial energy and is essential for transportation and electricity generation. The cost of electricity generation is relatively high due to transportation costs, small-scale generating systems and small and scattered population centres. The high cost of power is an obstacle to foreign investment, and represents for most SIDS a significant proportion of import costs.

51. A reduction in energy imports based on renewable energy generation, or on increased energy efficiency and conservation measures, could contribute significantly to

improving the economic and environmental situation of SIDS. However, in many SIDS, there is limited awareness of energy efficiency and conservation measures, misconceptions regarding the potential of renewable energy, and lack of capacity for new energy technologies.

52. Most SIDS have renewable energy resources that could be developed to reduce dependence on energy imports. Many have developed or are developing hydropower, geothermal power, solar power, wind power and biomass energy, in some cases through private-public partnerships. In a number of SIDS, small-scale solar photo-voltaic (PV) power systems have been used to provide electricity in rural areas and remote islands on a pilot scale, but more work on financing and institutional arrangements is needed to realize their full potential. Wind power has become an economically viable option for commercial energy services in many SIDS as a result of recent technological advances. Biomass fuel, often from agricultural or agro-industrial residues, is a potential substitute for fossil fuel and would contribute to agricultural incomes as well.

53. The use of organic wastes - including sewage, household garbage, and office paper - in waste-to-energy or biogas systems could contribute to increased energy independence while reducing pollution, contributing to waste disposal, and providing a source of organic fertilizer. Also untapped are the vast energy resources of the tropical ocean, although that will require substantial technological advances to be viable.

54. There is a need for technology transfer and national and regional capacity building in renewable energy and energy efficiency. Regional task forces have been established for developing regional energy policies, as well as programmes for the dissemination and use of energy efficiency and renewable energy technologies. However, a lack of sufficient financing to go beyond pilot or demonstration projects is a key constraint. There are also practical problems relating to policy frameworks and legislation in some SIDS preventing the widespread application of such technologies. International support has been made available to study such obstacles.

G. Biodiversity

55. Many SIDS, as a result of their geographical isolation, have a large number of unique species of plants and animals and hence make a relatively large contribution to global biodiversity. As a result of the small size, however, their ecosystems are small and vulnerable to disruption by climate change or other human activities. SIDS therefore have many rare, endangered and threatened species.^{vii} Coral reefs are particularly rich marine ecosystems that are under threat. A major source of support for protecting biodiversity in SIDS has been the Global Environment Facility (GEF), through its role as financial mechanism for the Convention on Biological Diversity and its focal areas of biodiversity.

56. All SIDS are parties to the Convention on Biological Diversity and most have developed national biodiversity strategies. Financial and other resource constraints, however, have undermined SIDS' efforts to implement these national strategies. Those efforts should benefit from the decision by parties at their February 2004 Conference to strengthen work on island biodiversity^{viii}. For many SIDS the protection of traditional

knowledge relating to biodiversity is also very important. This is an area in which further attention at the international level is required, since there still do not exist accepted international standards to accord intellectual property rights to communities or multiple entities.

57. At the same time, SIDS report that bio-prospecting and bio-piracy continue to rise, and regional approaches are recommended in the face of limited capacities and resources. Strengthening networks and partnerships to provide ongoing support to existing community-based conservation areas, and to encourage the development of new ones, is also recognized as an effective way to achieve genuinely sustainable development and effective protected area conservation at the community level. Integrated, programmatic approaches to addressing biodiversity issues are needed. Further international support toward such integration would be more beneficial in the long term than the project-based assistance seen to date.

H. Transport and communications

58. The isolated and remote nature of many SIDS means that transport and communications are central to maintain contact and linkages with the rest of the world. Transport and communications networks in SIDS are often fragmented, costly due to monopoly service providers, and generally poorly developed and maintained. Poor long-term planning and needs assessment have resulted in inadequate maintenance of existing assets and development of new assets.

59. High transportation costs due to long distances and small volume add substantially to the costs of doing business in SIDS. A recent study supported by the Commonwealth Secretariat^{ix} concluded that the penalty for smallness, which is greater for exports than for imports, is quite large, particularly for maritime transportation. Small scale trade also involves delays as larger cargos are assembled.

60. The challenges of transportation logistics facing SIDS can be substantial. People in Kiribati and Micronesia must travel from one end of their archipelagic states to the other by way of the United States. Transportation linkages between countries in each region are complicated by a lack of coordination of airline schedules, often requiring indirect travel through de facto hubs such as Fiji and Puerto Rico. Regional policies have yet to effectively address this problem, hampering trade and tourism development.

61. The rapid development of information and communication technology holds the potential of reducing the isolation of SIDS, connecting them more extensively to the rest of the world. This in turn opens up possible new economic opportunities, which have been exploited to varying degrees by the SIDS – e.g., remote information processing, technical support and call center services. Within the context of the development of science and technology in SIDS, there are fledgling initiatives aimed at strengthening ICT literacy and skills development. International support for infrastructure development as well as for supporting the promotion of appropriate policies is required.

62. While SIDS recognize the potential of information and communication technologies, there is a digital divide within and among SIDS, with new technologies just beginning to penetrate many SIDS. Delays in exploiting the opportunities offered by these technologies threaten to further increase the already wide gaps between developed and developing countries, particularly SIDS.

63. In an effort to assist SIDS, the United Nations has developed a project called RANET-Pacific to link remote locations in the Pacific with SIDSNet. RANET-Pacific will build on the successful RANET project for Africa that used satellite data transmission, wind-up radios (no batteries, no electricity), solar powered computers, and desktop radio transmitters. RANET-Africa has been providing vital weather, water and climate information to remote villages in Africa and has had a positive impact on agricultural production as well as improving use of the available freshwater. It is expected that similar results can be achieved in the Pacific. In addition, SIDSNet has expanded to include a regional presence in all three SIDS regions (based in Jamaica, Mauritius and Samoa). A developing partnership with UNDP is also promising a better integrated platform for SIDS networks as well as for establishing a roster of SIDS experts, best practices and SIDS success stories. Further international support is required for infrastructure development and policy development.

I. Technology

64. Accessing and implementing appropriate technology has been a continuing challenge for SIDS. Specific application areas for science and technology are wide-ranging including agriculture, forestry, fisheries, water resources, marine science, energy, climate change, land use management and planning, transportation, and sustainable development. There has been very limited funding available to SIDS for this purpose. The lack of capacity for science and technology underscores the potential role for regional and national universities based in SIDS. However, tertiary institutions in SIDS have, to a large extent, faced many challenges in making the transition from conventional education, to producing the trans-disciplinary education, research and consulting services needed to develop individual, institutional and systems capacity required to respond to the challenge of sustainable development. The proposal for a SIDS universities consortium could thus be very helpful to the further development of appropriate technologies for SIDS.

IV. Emerging Issues

A. HIV/AIDS

65. SIDS must also address HIV/AIDS, which is increasingly prevalent in many countries. HIV/AIDS is particularly devastating for countries with limited skilled work forces, taking a severe toll on their economies as the economically active succumb to

AIDS-related illnesses, income levels are reduced, and the social fabric is undermined. The management of HIV/AIDS is both an urgent health issue and a development issue.

66. The incidence of HIV/AIDS is a major concern in the Caribbean, which ranks second only to Sub-Saharan Africa in terms of regions hardest hit by HIV/AIDS. The region has an estimated 2.3% adult HIV prevalence, and some countries have substantially higher prevalence rates. The AIDS epidemic in the Caribbean has shifted to younger populations, especially the females. The epidemic has already begun to impact on Caribbean societies and economies through the loss of human potential and productivity and in terms of economic costs. Most HIV/AIDS cases occur among people aged 15-39, the prime productive and reproductive age group.

67. The Regional Conference on HIV/AIDS held in Barbados in September 2000 was widely considered as the defining moment in regional awareness and commitment to respond aggressively to this pandemic in the Caribbean. Practical measures introduced by countries include: the introduction of anti-retroviral treatment; implementation of nationwide AIDS awareness campaigns and HIV/AIDS education programmes; and national AIDS prevention and control programmes.

68. In the Pacific region, a number of activities targeting HIV have taken place since 1994. Although in most countries the known prevalence has remained relatively low, the levels of risk factors for HIV transmission are high. More recently, there has been a substantial increase in momentum in the region's efforts to fight HIV, with significant new initiatives including the Regional project under the Global Fund to Fight AIDS, Tuberculosis and Malaria, which will strengthen treatment and care, prevention, and surveillance of HIV/AIDS in eleven countries.

69. In AIMS countries, HIV/AIDS is becoming more widespread. The first cases of HIV/AIDS in Cape Verde, for example, were recorded in 1986. As of 1997, the incidence was estimated at between 1.5 to 2.0%.

70. Many SIDS have responded to the HIV/AIDS pandemic by establishing high level Councils or Commissions charged with the responsibility of facilitating, coordinating and monitoring the control and prevention of HIV/AIDS. In Barbados, responsibility for HIV/AIDS management is located in the Office of the Prime Minister. In the 1980s, the Government of Cape Verde prepared a national programme on the fight against AIDS, and the 2002-2006 National Strategic Plan to combat AIDS targets HIV infected youth, street children, seamen, fishermen, the military and detainees. Mauritius, since 2001, has developed a national anti-AIDS strategy involving all stakeholders, with incentives to NGOs to join in the effort.

B. Security and governance

71. Peace and security, political stability, rule of law and respect for human rights, as important factors in the promotion and advancement of good governance, are being addressed by SIDS. There is a growing reluctance of international investors and donors to

allocate funds to countries lacking stability through the rule of law, transparency and accountability in government administration. Combating corruption is viewed by SIDS as integral to achieving more effective, fair and efficient governments.

72. Transnational organized crime such as money laundering and trafficking in illicit drugs and arms is of continuing concern to SIDS. Escalating crime and inadequate national security represent significant challenges for Caribbean SIDS in particular. Of particular concern to nearly all countries is the increasing transshipment and use of illegal drugs and small arms, and the rapidly growing incidence of violent crime. Most SIDS are responding to these challenges through a variety of anti-crime initiatives and increased surveillance. However, the limited capacity of law enforcement and other control agencies and the inadequacy of legal frameworks continue to undermine SIDS efforts.

73. Recent terrorist events and related activities have highlighted the vulnerability of the most productive sectors of the region's economies. This has been exacerbated by the international obligations mandated to address these new security concerns. All countries have obligations under Security Council resolution 1373 on threats to international peace and security caused by terrorist acts (28 September 2001). These obligations created particular difficulties for all SIDS, especially those with large coastal areas and archipelagos to monitor.

C. Culture

74. SIDS have begun to examine more closely the importance of culture and cultural development in national and regional strategies for their sustainable development. There is growing recognition that an effective development strategy for SIDS should be cognizant of and responsive to the unique historical and cultural realities of the people. Culture plays a crucial role in fostering sustainable development, as it represents the collective adaptation of SIDS populations to their environments and embodies much valuable knowledge. Culture is also a force for social cohesion, stability and the maintenance of peace and security.

75. The SIDS are now reassessing the role of culture in the implementation of the Barbados Programme of Action, because it presents the opportunity to unlock the creative potential of their peoples, and to develop vibrant cultural industries. There are significant socio-cultural and economic benefits to be derived from developing cultural and entertainment industries in areas such as music, art, craft, the literary and culinary arts, fashion, festivals, theatre, film and cultural tourism. The potential for transforming the creativity that resides in the people into commercially viable activities and exports for job and wealth creation is considered significant and largely untapped in SIDS.

76. The development of these creative industries that have been documented by UNCTAD and UNESCO as being among the fastest growing in the world economy today, will likely have a positive impact on the lives of the poor, particularly youth and women in SIDS societies, since these groups invariably foster producers of cultural products and services. Importantly, it offers talented youth opportunities that provide alternatives to crime and drugs. Cultural tourism also enhances and diversifies the tourism product, while promoting greater sensitivity to the environment.

77. SIDS' indigenous industries are thus increasingly being considered as an opportunity to diversify SIDS economies and to strengthen their comparative advantage in the global economic environment. In this context, there is a need to take action to protect the SIDS natural, tangible and intangible cultural heritage and intellectual property rights; to develop cultural policies; to bring focus to indigenous peoples; and to develop creative cultural industries which present significant economic opportunities for both national and regional development.

V. Means of implementation

A. Institutional mechanism for the implementation of the BPOA

78. There is considerable evidence of the efforts of the SIDS toward implementation of the Barbados Programme of Action. With the support of the international community, and in particular with the assistance of regional inter-governmental organizations and the agencies of the United Nations system, perceptible progress has been achieved. This is reflected in the implementation of legislation and institutional frameworks to ensure a more integrative, coordinated approach to implementation of the three dimensions of sustainable development, and the design of policies taking into account the need to ensure environmental protection and the sustainable use of natural resources while promoting sustained economic growth and social equity.

79. There has also been broader acknowledgement of the importance of an inclusive, participatory approach to sustainable development. Most SIDS have thus enacted legislation and regulations to strengthen national sustainable development strategies, established local and national institutions, formed partnerships with civil society, and sought to promote more widely at the local level awareness of sustainable development and individual and community responsibility in ensuring its advancement.

80. Greater attention has also been given to formulation and execution of national sector strategies and action plans in key sectors, notably coastal zone management, watershed management, urban planning, waste management and the development of renewable energy sources. Of note is the wide participation of SIDS in Multilateral Environment Agreements and other development frameworks. Most SIDS are Party to UNCLOS and related Agreements such as that on the Management of Straddling Fish Stocks, and have ratified the Framework Conventions on Climate Change, Biological Diversity and Desertification. Active participation in MARPOL and the UNEP Regional Seas Programmes is also recorded. Efforts have been made at the national and regional levels to develop appropriate policies to ensure compliance with these agreements, and to raise public awareness of their regimes.

81. For the most part these efforts have been pursued within the constraints of limited financial resources, and weak institutional, human and technological capacity. Significant infusion of new resources would be required to support the successful mainstreaming of sustainable development into national policy.

82. In this regard, the SIDS have faced challenges in implementation and compliance, in many cases because of the absence of expert personnel and appropriately equipped institutions to meet reporting and other requirements including legislative and policy reform, and insufficient resources to ensure effective monitoring and enforcement. Reporting requirements have been found particularly onerous because of the number of MEAs and other framework agreements requiring regular submissions. The streamlining of reporting requirements is considered desirable.

83. The gap in national capacity, particularly as regards the dearth of highly skilled personnel and appropriate technology has often been met by regional organizations. The integration of a regional approach as a central strategy in the implementation of the BPOA has been particularly effective, since it has facilitated the pooling of scarce resources - financial, skilled human and technological for the benefit of all SIDS in the region. This strategy has promoted greater efficiency and coherence in implementation. In addition to the management of regional programmes for sustainable development and the promotion of intra-regional coordination, these institutions have provided valuable support in research, technical and policy advice in their areas of competence. Regional level implementation has been pursued by the respective Regional Economic Commissions and by regional technical and inter-governmental organizations.

84. In the Pacific, the South Pacific Regional Environment Programme (SPREP) and the Secretariats of the South Pacific Forum (SOPAC) and the Pacific Island Forum (PIF) contribute significantly to the definition of regional strategies in support of the BPOA at the national and regional levels. This is achieved through very effective programmes supporting capacity building, policy development and the coordination of national and regional action.

85. In the Caribbean, regional support for the BPOA is pursued through a Joint Work Programme of the Subregional Headquarters of ECLAC and the Caribbean Community Secretariat, which jointly serve as the interim secretariat for the BPOA. Wider regional support for BPOA implementation has been mobilized through an Inter-Agency Collaborative Group, including a network of Caribbean regional organizations as well as the regional offices of the UN agencies. Further strengthening of regional coordination for implementation of the BPOA in the Caribbean is desirable.

86. The AIMS SIDS have also identified the need for a coordinating mechanism for implementation of the BPOA. The region currently is serviced solely by the Indian Ocean Commission, which has limited membership from among the AIMS SIDS. The IOC serves as interim Secretariat for the BPOA, operating with considerable human and financial resource constraints.

87. Strengthening the regional institutional infrastructure is considered an efficient and effective approach to comprehensive BPOA implementation and support. In addition to the advantages of scale in the respective regions, they offer the most effective mechanism for inter-regional SIDS collaboration, on which the SIDS have placed great

value. The scope of these institutions to undertake SIDS-specific research is also of particular importance, as most SIDS lack the capacity for systematic, accurate data-gathering, and there is therefore often very little data on the smaller SIDS with which to inform national and regional decision-making or to guide development agencies and donor countries.

88. Implementation of the BPOA and sustainable development strategies of SIDS have benefited from the ongoing support of multilateral development agencies, and those of the UN system in particular, a number of which have made important contributions to the collection of SIDS-specific data. In addition to valuable research on SIDS published in their Environment Outlook series, UNEP has provided regional and national support to SIDS in many areas, including the management of marine protected areas, control of land-based sources of pollution, coral reef management and assessment and various conservation initiatives associated with its Regional Seas Programme.

89. FAO's assistance to SIDS on the use of hurricane resistant crops and forestry methods, its support for implementation of the FAO Code of Conduct for Responsible Fisheries through the strengthening of fishery administrations in SIDS as well as its information and advice on food security policies and strategies have been of great value to SIDS. FAO data collection and statistical analysis specific to SIDS is also of particular value.

90. UNESCO's Small Island Voice initiative, which combines ICTs with print, radio, television and other media in promoting the involvement of civil society, including youth in discussion on critical development issues has been one of its more recent successes for SIDS. Its contribution to the development of culture and enhancing opportunities for youth is of increasing importance to SIDS, which seek to further develop cultural industries, tap the creativity of the youth, while creating income generating opportunities for them.

91. UNDP has contributed significantly to capacity development in SIDS, most recently through the capacity 2015 programme, which has sponsored a series of workshops aimed at building the resilience of SIDS to their inherent vulnerabilities, through capacity development in key sectors and areas of the BPOA.

92. The Department of Economic and Social Affairs, through its SIDS Unit will continue to provide substantive support to the implementation of the BPOA, including through the preparation of analytical reports and studies, monitoring BPOA implementation and reviewing progress achieved; providing substantive support in the follow-up to the Johannesburg Plan of Implementation relating to SIDS, provision of technical cooperation advisory services, including through SIDSnet, and bringing into this process the collective efforts and activities of the agencies of the United Nations system through the coordination of an Inter-Agency Task Force.

93. The Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (OHRLLS)

will undertake advocacy work in favour of the small island developing States in partnership with the relevant parts of the United Nations as well as with civil society, media, academia and foundations. In this regard, the Office will assist in mobilizing international support and resources for the implementation and coordinated follow-up of the Programme of Action for the Sustainable Development of Small Island Developing States.

94. Continued support from the UN system and the international donor community is necessary for the more meaningful implementation of the BPOA.

B. Capacity development and education

95. Capacity development remains one of the most urgent requirements for SIDS in their pursuit of sustainable development. The weakness of national institutions and the lack of administrative and technical capacities have constrained efforts toward sustainable development, particularly in the smaller SIDS, and stakeholder participation has been limited. There is also limited institutional capacity for monitoring and evaluation, including data collection, analysis and interpretation.

96. Valuable support has been extended to the SIDS in this respect by UNDP through its Capacity 21 and Capacity 2015 programmes, which have strengthened national and regional capacities to assess the vulnerability of SIDS in key sectoral and cross-sectoral areas, with a view to defining effective integrated responses to strengthen SIDS resilience. Focus has been given to the strengthening of public and private sector institutions, as well as to developing sound planning at the national and regional levels.

97. Still, despite these efforts, SIDS have not achieved the requisite capacity for effective planning. Efficient planning – involving both the public and private sector partners at the sectoral and cross-sectoral levels – is critical to any strategy for addressing vulnerability through building resilience. The mitigation of environmental vulnerability, for example, requires an holistic response at the social, educational and economic levels. A central strategy of SIDS, that of building resilience to their unique vulnerabilities, demands an integrated, inter-sectoral approach to decision-making and policy-planning, and a coordinated, consultative arrangement among all development stakeholders. The SIDS are increasingly taking into account the interdependence of decision-making and action among sectors in the implementation of the Barbados Programme of Action.

98. At the professional and technical level, there are a very limited number of professionals in SIDS with the knowledge and skills required to integrate effectively the three dimensions of sustainable development. Furthermore, migration of skilled professionals has reduced the already limited professional pool in SIDS. Professional development is constrained as a result of the limited availability of technical resources, ongoing opportunities to enhance skills, and access to information.

99. In higher education, existing curricula are patterned after developed country educational systems, producing graduates with knowledge and skills that are more suited to developed countries than to the needs of developing, often rural, communities. Consequently there is an urgent need for comprehensive curriculum review to ensure that national capacity development needs are met. Such reviews should involve a partnership approach involving government ministries, local community groups and educational institutions. Above all, there is a need to link education and training programmes with national and local sustainable development needs.

100. Primary and secondary education in SIDS is often designed to prepare students for universities even though, in most SIDS, less than 5 percent of children go on to university. There is rarely adequate provision for the large majority who do not complete the formal schooling system. The majority of people in SIDS do not have opportunities for continuing education after they leave primary or secondary school. There is therefore a need for informal education, public information and awareness raising in order to develop the capacity of people to contribute to sustainable development at the community and national levels.

101. Most current education and training programmes in sustainable development focus on the environmental dimension. In many cases, they do not adequately address key sustainable development issues of SIDS. For example, higher education in SIDS generally needs to address waste management, coastal zone management, climate change and sea level rise, energy management, water resources management, land use, protection of biological diversity, and globalization. Few teachers have the appropriate training to address these issues effectively.

102. In general, there is little public awareness of the concept of sustainable development and little understanding of the links between environmental, economic and social issues. There is also a very limited understanding of environmental processes, ecosystems, biological diversity, carrying capacity, and other critical aspects of sustainable development. The lack of public awareness, and the resulting difficulty in changing public behaviour, is in part due to a shortage of professionals with an understanding of sustainable development and the communications skills to communicate them to the public. Education at all levels needs to address key issues of sustainable development, including sustainable use of energy, water and other natural resources, and link resource use to social issues. Education should also consider the relations of humans and human activities to nature and the environment, and include traditional knowledge and values.

IV. Conclusions

103. Progress in implementation of the BPOA has been mixed. The SIDS still face major challenges to their sustainable development, some ongoing and others of more recent origin. Key emerging challenges include those related to the implementation of effective strategies for poverty eradication and the pursuit of people-centred

development, coping with the effects and the cost of international security threats on travel and tourism, the development of cultural industries, and addressing urgently the growing problem of HIV/AIDS. Accelerated implementation of the BPOA will require a renewal of political commitment by all States to the BPOA and to related international commitments and pledges.

104. It is important that SIDS ensure that tourism development is pursued within the context of an integrated development plan, cognizant of social considerations and environmental management requirements. There is need to ensure wide community understanding of and participation in national tourism strategies. Financial and technical support from regional and international tourism organizations in support of national efforts would be useful, including assistance in the development of guidelines and best practices appropriate for maximizing social, economic and environmental benefits – or, as relevant, minimizing harms – from tourism development. Partnership initiatives in this regard should be encouraged.

105. Concerted efforts are required to address the economic, social and environmental dimensions of poverty. Attention must be given to poverty reduction initiatives. Sustained poverty reduction will require empowering the poor to implement productive activities. A particular challenge will be to meet the needs and aspirations of the youth as they prepare to join the workforce. Skills training and other non-formal training programmes are urgently required. International support is needed to SIDS' efforts to achieve the MDGs, in particular for those lagging behind in reducing poverty and those with persistently high child mortality. Support is also needed for national and regional programs to combat HIV/AIDS, vector-borne and non-communicable diseases, including through resources (affordable drugs), research, and awareness campaigns.

106. The development co-operation community also needs to redouble support for SIDS' efforts to reduce their vulnerability to shocks, including through diversification of their economies. Many SIDS have been dependent on preferential market access, which multilateral trade liberalization will render less important, and these countries need special assistance in strengthening trade capacity. Due consideration should also be given to compensatory mechanisms and adjustment measures to cushion losses from erosion of preferences and to ease the transition to the free market. Other concerns of SIDS deriving from economic globalization include: the treatment by the WTO of subsidy measures by SIDS intended to compensate for their inherent structural disadvantages; the need for assistance from UNCTAD and other relevant institutions to enhance SIDS' capacity for trade policy analysis and trade negotiations, including through integrated assessments of the impacts of trade-related measures on key sectors such as agriculture and services, including tourism.

107. At the international level there is a need agreement on the implementation of smooth transitional measures for graduating LDCs.

106. Mainstreaming adaptation to climate change into an inter-sectoral sustainable development strategy should remain a priority for SIDS. This calls for integrated

planning and decision-making on coastal zone management, fisheries, agriculture, tourism, energy, health, and water resource management. Regional institutions for the monitoring and assessment of climate change and sea level rise should be strengthened to afford the SIDS the requisite technical and skilled human resources for more effective management of national climate change adaptation projects. Projects such as that proposed in the Pacific Umbrella Partnership Initiative on Adaptation should be aggressively pursued. Continued financial support from the international donor community, including agencies like the GEF, is required to strengthen national institutional, human and technological capacity for the SIDS to meet UNFCCC mandates. Crucially, the international community needs to redouble efforts to put in place an effective regime to deal with climate change and its consequences.

107. To be effective, disaster preparedness and risk management should be reflected in the national sustainable development strategies of SIDS, and integrated in all sectoral policies and plans. Institutional strengthening and capacity development would strengthen long-term inter-agency coordination. Regional institutions should be strengthened to provide the required research, risk assessment and forecasting, and to assist SIDS with emergency response and mitigation measures. There is need for cooperation with the international community, in particular, international financial institutions, to address the issue of affordable insurance and re-insurance schemes for SIDS. Regional insurance schemes also need to be explored. This is considered integral to building resilience in these disaster prone countries.

108. With respect to freshwater resources, sanitation and waste, there is need for more effective legislation, management and enforcement measures. Improved tracking and management of the movement and disposal of hazardous and toxic substances is particularly important for the protection of SIDS fragile marine ecosystems. The concerns of SIDS regarding the exposure of their marine ecosystems to the transshipment of nuclear waste and the absence of compensatory regimes or emergency funds in the event of accidents should be appropriately addressed at the international level.

109. Financial, technical and technological support for the development of SIDS appropriate waste management systems would be very welcome. Partnership initiatives to support SIDS recycling, re-use and other environmentally sound waste management systems should be explored.

110. A continuing challenge remains that of devising and implementing policies and approaches for integrated watershed, coastal zone and marine ecosystem management. These are acutely needed as population pressures and land-based activities risk seriously degrading coastal and marine ecosystems in many SIDS, threatening to undermine the sustainability of economically important tourism industries. Continued support from regional and international agencies which support programmes for the protection of the marine environment from pollution should be secured. Special attention and support should be given to the management of ship waste, including the problem of alien invasive species in ship ballast discharge.

111. The strengthening of regional organizations for fishery assessment and management is important. Legislation is required to empower national and regional agencies to undertake monitoring, surveillance and enforcement measures to minimize IUU fishing and over-harvesting of fishery resources. SIDS also would benefit from technical support in the mapping and monitoring of their extensive EEZs. Such capacity is best developed and maintained at the regional level. International financial and technical support to SIDS for effective policing of their EEZs would be very welcome.

112. With respect to land resources, SIDS require support to strengthen land tenure and management systems, and to implement appropriate technologies to enhance agricultural production and diversify husbandry, particularly for small landholders. Support is also needed for the strengthening of food processing and marketing infrastructure. The general lack of capacity at the national level to combat land degradation and the effects of drought needs to be urgently addressed. There is also recognition of the need to integrate indigenous knowledge into land use planning.

113. All SIDS should complete national energy policies, and ensure that they are integrated into national sustainable development policies and plans. Energy efficiency initiatives and the development of projects in renewable energy should be pursued with the support of regional organizations and the international community. Regional initiatives to support the research and development of alternate sources of energy should be identified and strengthened. Regional development banks could play an important facilitating role in this regard. International support for the development of renewable energy sources appropriate to SIDS through investment and partnership initiatives should be explored. Existing mechanisms, such as the UN Renewable Energy Fund, could be strengthened to support SIDS efforts.

107. At the national level, all SIDS are committed to preparing national sustainable development frameworks, including through the involvement of civil society and broad-based inclusive dialogue. Greater synergy among decision-makers from the planning, environmental, social and finance ministries/agencies is very desirable. In this context the establishment and strengthening of National Sustainable Development Councils could also be revisited. Support for the strengthening of community groups and local bodies to enhance their capacity to participate meaningfully in sustainable development decision-making should be pursued.

108. A critical requirement in implementing national sustainable development strategies is a supporting infrastructure for the effective exchange and movement of information. With international backing, SIDSNet should be restructured and enhanced to support capacity development in SIDS, including through coordination with other relevant sustainable development networks, such as Capacity 2015 Information and Learning Network. Suggestions for improvement of SIDSNet include upgrading its design to encourage wider community usage, cataloguing capacity development methodologies, and establishing regional oversight committees.

109. To further sustainable development in SIDS, consideration should be given to creating novel strategies to strengthen implementation of the BPOA. Such a programme should involve a collaborative approach including the SIDS, 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 BPOA, and to identify the factors hindering such implementation. This could be undertaken within the new framework and the established programme of work of the Commission on Sustainable Development.

110. There is a need for strengthened regional mechanisms for cooperation to share information and lessons learned, to promote regional and inter-regional exchange, and to undertake joint projects and research activities, thus enhancing the generation and dissemination of information to support implementation of sustainable development in SIDS. Regional mechanisms should also assist SIDS by devising ways and means for developing and implementing these strategies.

110. The establishment of effective sustainable development financing mechanisms is needed, including through regional development banks. This should encompass innovative financing, such as social investment funds to help alleviate poverty. There is also a need to develop a small grants program for capacity development for sustainable development, using UNDP for seed funding. The GEF small grants program is now being extended, and will provide opportunities in this regard. Additional sources of seed funding should be identified. Sustainable development financing mechanisms could cover provision of the following:

- a. Energy investments dedicated to address SIDS energy vulnerability, finance energy efficiency improvements at all levels, and develop renewable energy resources.
- b. Capacity development investments, including for education system reform, capacity for the implementation of the MDGs, and for proper training for sustainable development.
- c. Direct assistance programs for poverty alleviation, including micro-credit schemes for the rural and urban poor, particularly women.
- d. Collective insurance for SIDS in the face of climate change and increased vulnerability to natural disasters.
- e. Technology transfer to make available to SIDS technologies for the management of water resources and waste, for energy efficiency and renewable energy development, and for improved monitoring of meteorological conditions and various potential impacts from climate change, including biodiversity, disease prevalence, and productivity of land and marine resources.

- f. Programs to assist the development and protection of traditional and indigenous knowledge.
- g. Active exploration of ways to make more productive use of the SIDS' natural and indigenous endowments – such as their rich cultures and biological diversity – to generate resources for development should be pursued. In this regard, protection of the indigenous intellectual property of SIDS is also important.

111. In the area of capacity building, international and regional support and assistance would be welcome for the proposed establishment of a consortium of SIDS tertiary institutions for capacity development and education, and standards setting for sustainable development in SIDS. There is a need to ensure that sustainable development education and training provides linkages between sectors such as water, energy, land and coastal zones. There should be national level commitment to ensure that education maintains a strong relevance to local conditions, notably by reviewing curriculum to meet the needs of the community. Practical applications of education in management and participatory skills are needed, as well as Information and Communications Technology (ICT) and vocational training.

112. The success of SIDS implementing this Programme of Action at the national level will depend on effective human, institutional and technical capacity related to policy development, monitoring of implementation and coordination, especially through the support of regional organizations. At the global level, it is essential that development partners support agreed goals and assist in the implementation of actions to achieve them, particularly through the provision of financial and technical support.

ANNEX

Table 1.
GDP per capita in SIDS 1995 to 2001

	GDP per capita (current US\$) ^a		Compound annual growth rate of real GDP per capita ^b
	1995	2001	1995-2001
Antigua and Barbuda	7737	10204	2.9
Aruba			..
Bahamas	10836	14855.8	..
Bahrain	9972	12012	1.5
Barbados	7126	9255	3.4
Belize	2748	3128	1.5
Cape Verde	1254	1259	3.2
Comoros	352	278	-1.4
Cook Islands	5366	4388	..
Cuba	1983	2548	..
Cyprus	13589	11504	3.2
Dominica	2919	3367	1.2
Dominican Republic	1553	2500	5.0
Fiji	2592	2046	1.1
Grenada	2883	4682	3.4
Guinea-Bissau	226	174	-2.2
Guyana	839	936	2.0
Haiti	312	431	-0.7
Jamaica	2303	2990	-0.9
Kiribati	592	468	-0.1
Maldives	1482	1806	2.7
Malta	8588	9245	2.7
Marshall Islands	2202	1938	..
Mauritius	3517	3779	4.2
Micronesia, Federated States	2009	2215	..
Nauru	3772	2500	..
Netherlands Antilles	11518	12149	..
Niue			..
Palau	5493	6179	..
Papua New Guinea	978	545	-2.1
St. Kitts and Nevis	5305	6396	2.5
St. Lucia	3955	4994	-0.4
Saint Vincent and the Grenadines	2308	1904	2.4
Samoa	1210	1402	4.2
Sao Tome and Principe	347	312	0.0
Seychelles	6778	7850	-2.1
Singapore	23806	20544	2.4
Solomon Islands	975	760	-5.9
Suriname	1268	1965	3.3
Tokelau			..
Tonga	1573	1284	1.6
Trinidad and Tobago	4227	6817	4.7
Tuvalu	1284	1342	..
US Virgin Islands			..
Vanuatu	1323	1085	-2.3

Source: a.) World Statistics Pocket book on SIDS, DESA Statistics Division; GDP estimates by DESA Statistics Division for GDP per capita, in current US dollars, 1995 and 2001.

b) World Development Indicators, World Bank, for real GDP per capita growth rates.

Table 2
Change in tourist arrivals in SIDS 1995 and 2001

SIDS	Tourism arrivals (000)		
	1995	2001	Compound annual growth rate 1995-2001
Antigua and Barbuda	212	232	1.5
Aruba	619	683	1.7
Bahamas	1598	1577	-0.2
Bahrain	1369	1991	6.4
Barbados	442	515	2.6
Belize	131	181	5.5
Cape Verde	28	44	7.8
Comoros	23	24	0.7
Cook Islands	48	56	2.6
Cuba	742	1561	13.2
Cyprus	2100	2434	2.5
Dominica	60	74	3.6
Dominican Republic	1776	2649	6.9
Fiji	318	410	4.3
Grenada	108	125	2.5
Guinea-Bissau			..
Guyana	106	75	-5.6
Haiti	145	143	-0.2
Jamaica	1147	1248	1.4
Kiribati	3	1	-16.7
Maldives	315	461	6.6
Malta	1116	1214	1.4
Marshall Islands	6	5	-3.0
Mauritius	422	578	5.4
Micronesia, Federated States	11	11	0.0
Nauru			..
Netherlands Antilles	775	726	-1.1
Niue	53	55	0.6
Palau	53	55	0.6
Papua New Guinea	11	14	4.1
St. Kitts and Nevis	79	84	1.0
St. Lucia	231	261	2.1
Saint Vincent and the Grenadines	60	68	2.1
Samoa	68	85	3.8
Sao Tome and Principe	6	5	-3.0
Seychelles	121	125	0.5
Singapore	7137	7522	0.9
Solomon Islands	12	21	9.8
Suriname	43	57	4.8
Tokelau			..
Tonga	29	43	6.8
Trinidad and Tobago	260	336	4.4
Tuvalu	1	1	0.0
US Virgin Islands	454	485	1.1
Vanuatu	44	50	2.2

Source: World Statistics Pocket book on SIDS; DESA Statistics Division

Table 3
FDI Inflows to SIDS 1990-2001 (Millions of dollars)

Country	1990-1996 (annual average)	1999	2000	2001	2002
Antigua and Barbuda	28	31	33	39	36
Aruba	26	392	-144	-319	241
Bahamas	41	149	250	101	200
Bahrain	650	454	364	81	218
Barbados	12	17	19	19	11
Belize	16	50	19	40	52
Cape Verde	10	53	34	9	14
Comoros			1	0	1
Cuba	1	9	-10	4	4
Cyprus	81	685	804	652	297
Dominica	24	18	11	12	14
Dominican Republic	205	1,338	953	1,079	961
Fiji	71	-20	-25	90	77
Grenada	19	42	37	49	41
Guinea-Bissau	2	9	1	1	1
Guyana	84	48	67	56	44
Haiti	1	30	13	4	6
Jamaica	160	524	468	614	479
Kiribati		1	1	1	1
Maldives	8	12	13	12	12
Malta	122	815	604	294	-375
Mauritius	21	49	277	32	28
Netherlands Antilles	-17	-22	-63	-1	-15
Papua New Guinea	295	296	96	63	50
Samoa	3	2	-2	1	1
Sao Tome & Principe		1	2	6	2
Seychelles	24	60	56	59	63
Singapore	6,856	13,245	12,464	10,949	7,655
Solomon Islands	10	-19	1	-12	-7
St. Kitts and Nevis	20	58	96	88	81
St. Lucia	36	83	55	22	22
St. Vincent & the Grenadines	29	56	29	21	19
Suriname	-16	-24	-97	-27	-85
Tonga	1	2	5	1	2
Trinidad & Tobago	317	366	472	685	737
Tuvalu					
Vanuatu	29	13	20	18	15
Total	9,169	18,823	16,924	14,743	10,903
a = estimates					

Table 4
ODA received by SIDS (OECD)

SIDS	ODA received by SIDS (OECD) \$USm	
	1994	2001
Antigua and Barbuda	4.03	8.59
Aruba	18.28	-1.70
Bahamas	0.94	8.45
Bahrain	44.71	17.88
Barbados	-0.83	-1.15
Belize	29.38	21.39
Cape Verde	121.64	76.46
Comoros	38.85	27.65
Cook Islands	14.25	4.80
Cuba	47.08	50.66
Cyprus	44.19	49.71
Dominica	17.18	19.89
Dominican Republic	61.61	105.40
Fiji	40.96	25.96
Grenada	18.17	11.51
Guinea-Bissau	174.77	58.60
Guyana	78.89	101.76
Haiti	601.61	165.83
Jamaica	109.12	54.01
Kiribati	15.35	12.43
Maldives	29.91	24.95
Malta	42.40	1.71
Marshall Islands	49.36	74.01
Mauritius	14.32	21.70
Micronesia, Federated States	104.07	137.60
Nauru	11.12	7.26
Netherlands Antilles	37.77	58.89
Niue	6.95	3.32
Palau	201.89	34.18
Papua New Guinea	323.54	203.10
St. Kitts and Nevis	4.70	10.62
St. Lucia	27.52	16.23
Saint Vincent and the Grenadines	9.41	8.64
Samoa	48.37	43.07
Sao Tome and Principe	50.06	37.92
Seychelles	12.85	13.50
Singapore	16.86	0.97
Solomon Islands	47.95	58.84
Suriname	60.39	23.19
Tokelau	3.01	3.88
Tonga	35.25	20.27
Trinidad and Tobago	21.35	-1.73
Tuvalu	7.37	9.51
US Virgin Islands		
Vanuatu	41.74	31.58

Source: *UNSD Millennium Indicator Database*

Notes

ⁱ World Investment Report 2003, UNCTAD.

ⁱⁱ Small States: Meeting Challenges in the Global Economy, Report of the Commonwealth Secretariat/World Bank Joint Task Force on Small States, April 2000, <http://wbln0018.worldbank.org/html/smallstates.nsf?OpenDatabase>.

ⁱⁱⁱ www.gefonline.org/projectList.cfm

^{iv} www.gpa.unep.org

^v www.gefweb.org/Projects/focal_areas/focal_areas.html

^{vi} FAO (2004), "FAO and SIDS: challenges and emerging issues in agriculture, forestry and fisheries", paper presented at Inter-Regional Conference of Small Island Development States, Bahamas, 26-30 January 2004.

^{vii} www.grida.no/climate/ipcc_tar/wg2/630.htm

^{viii} See Convention on Biological Diversity, *Multi-Year Programme of Work of the Conference of the Parties up to 2010*, Draft decision submitted by the Chair of Working Group II, Seventh meeting, Kuala Lumpur, 9-20 and 27 February 2004, Agenda item 26, UNEP/CBD/COP/7/L.7, 17 February 2004.

^{ix} Winters, L.A., Martins, P.M. "Beautiful but Costly Business Costs in Small Economies" University of Sussex, 2003. (sponsored by the Commonwealth Secretariat)