

**Report of the Global Conference  
on the Sustainable Development  
of Small Island Developing States**

**Bridgetown, Barbados, 26 April-6 May 1994**



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## NOTE

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Chapter I

RESOLUTIONS ADOPTED BY THE CONFERENCE

Resolution 1

Adoption of texts on the sustainable development of small  
island developing States

The Global Conference on the Sustainable Development of Small Island  
Developing States,

Having met in Bridgetown, Barbados, from 25 April to 6 May 1994,

1. Adopts the Declaration of Barbados and the Programme of Action for the Sustainable Development of Small Island Developing States, which are annexed to the present resolution;
2. Recommends to the General Assembly of the United Nations at its forty-ninth session that it endorse the texts referred to in paragraph 1 above.

## Annex I

### DECLARATION OF BARBADOS

We the States participating in the Global Conference on the Sustainable Development of Small Island Developing States,

Having met in Bridgetown, Barbados from 25 April to 6 May 1994,

Reaffirming the principles and commitments to sustainable development embodied in the Rio Declaration on Environment and Development, 1/ Agenda 21 2/ and the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, 3/ which were adopted by the nations of the world at the United Nations Conference on Environment and Development on 14 June 1992, as well as in the United Nations Framework Convention on Climate Change 4/ and the Convention on Biological Diversity, 5/

Recognizing that the Global Conference on the Sustainable Development of Small Island Developing States translates Agenda 21 into specific policies, actions and measures to be taken at the national, regional and international levels to enable small island developing States to achieve sustainable development,

#### Part One

Affirm that:

##### I

1. The survival of small island developing States is firmly rooted in their human resources and cultural heritage, which are their most significant assets; those assets are under severe stress and all efforts must be taken to ensure the central position of people in the process of sustainable development.

2. Sustainable development programmes must seek to enhance the quality of life of peoples, including their health, well-being and safety.

3. Full attention should be given to gender equity and to the important role and contribution of women, as well as to the needs of women and other major groups, including children, youth and indigenous people.

##### II

Small island developing States have sovereign rights over their own natural resources. Their biodiversity is among the most threatened in the world and their ecosystems provide ecological corridors linking major areas of biodiversity around the world. They bear responsibility for a significant portion of the world's oceans and seas and their resources. The efforts of small island developing States to conserve, protect and restore their ecosystems deserve international cooperation and partnership.

### III

1. Small island developing States are particularly vulnerable to natural as well as environmental disasters and have a limited capacity to respond to and recover from such disasters.

2. While small island developing States are among those that contribute least to global climate change and sealevel rise, they are among those that would suffer most from the adverse effects of such phenomena and could in some cases become uninhabitable. Therefore, they are among those particularly vulnerable States that need assistance under the United Nations Framework Convention on Climate Change, including adaptation measures and mitigation efforts.

3. Small island developing States share with all nations a critical interest in the protection of coastal zones and oceans against the effects of land-based sources of pollution.

4. Limited freshwater resources, increasing amounts of waste and hazardous substances, and limited facilities for waste disposal combine to make pollution prevention, waste management and the transboundary movement of hazardous materials critical issues for small island developing States.

### IV

Small island developing States are limited in size, have vulnerable economies and are dependent both upon narrow resource bases and on international trade, without the means of influencing the terms of that trade.

### V

To enhance their national capacities and self-reliance, small island developing States, with the assistance and support of the international community, should actively promote human resources development programmes including education, training and skills development. Their institutional and administrative capacity to implement the programme of action must be strengthened at all levels by supportive partnerships and cooperation, including technical assistance, the further development of legislation and mechanisms for information sharing.

### VI

There is an urgent need in small island developing States to address the constraints to sustainable development, including scarce land resources, which lead to difficult land and agriculture use decisions; limited fresh water; education and training needs; health and human settlement requirements; inordinate pressures on coastal and marine environment and resources; and limited means available to exploit natural resources on a sustainable basis.

### VII

1. The special role of non-governmental organizations and the importance of a partnership between Governments, intergovernmental organizations and agencies, non-governmental organizations and other major groups in implementing Agenda 21 and the programme of action at the national, subregional, regional and international levels should be recognized.

2. That partnership should include efforts to increase public awareness of the outcomes and follow-up of the Global Conference on the Sustainable Development of Small Island Developing States through all available means of communication.

## Part Two

### Declare that:

#### I

Based on the principle of the right to development, small island developing States should, in accordance with their own priorities, endeavour to achieve the goals of sustainable development by, inter alia, formulating and implementing policies, strategies and programmes that take into account development, health and environmental goals, strengthening national institutions, and mobilizing all available resources, all of which are aimed at improving the quality of life.

#### II

Through regional and subregional cooperation, small island developing States and the international community should encourage strong functional cooperation in the promotion of sustainable development by sharing information and technology, strengthening institutions and building capacity.

#### III

1. The international community should cooperate with small island developing States in the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States by providing effective means, including adequate, predictable new and additional financial resources in accordance with chapter 33 of Agenda 21; facilitating the transfer of environmentally sound technology, including on concessional and preferential terms as mutually agreed, taking into account the need to protect intellectual property rights as well as the special needs of developing countries; and promoting fair, equitable and non-discriminatory trading arrangements and a supportive international economic system.

2. The international community has a responsibility to facilitate the efforts of small island developing States to minimize the stress on their fragile ecosystems, including through cooperative action and partnership.

3. To achieve sustainable development and a higher quality of life for all people, including people of small island developing States, all States should reduce and eliminate unsustainable patterns of production and consumption, and should promote appropriate demographic policies.

4. The international community should build new and equitable partnerships for the sustainable development of small island developing States through the implementation of the Programme of Action and should send a powerful message to the world's peoples on the possibilities of joint action undertaken with a sense of common purpose and partnership.

Notes

1/ Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.

2/ Ibid., annex II.

3/ Ibid., annex III.

4/ A/AC.237/18 (Part II)/Add.1, annex I.

5/ See United Nations Environment Programme, Convention on Biological Diversity (Environmental Law and Institutions Programme Activity Centre), June 1992.

Annex II

PROGRAMME OF ACTION FOR THE SUSTAINABLE DEVELOPMENT OF  
SMALL ISLAND DEVELOPING STATES

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## PREAMBLE

1. In 1992, at the United Nations Conference on Environment and Development, the world community adopted Agenda 21. 1/ Agenda 21 reflects a global consensus and political commitment at the highest level on development and environment cooperation. The cooperation of all States is a prerequisite for the fulfilment of the objectives of Agenda 21. Such cooperation must also respond to the special circumstances and particular vulnerabilities of countries through adequate and specific approaches.

2. The Global Conference on the Sustainable Development of Small Island Developing States is the first global conference on sustainable development and the implementation of Agenda 21. Agenda 21 represents a comprehensive document, carefully negotiated and wherever referred to in the present Programme of Action should be looked to as a whole.

3. The Rio Declaration on Environment and Development 2/ identifies human beings as being at the centre of concerns for sustainable development. Development initiatives in small island developing States should be seen in relation to both the needs and aspirations of human beings and their responsibility towards present and future generations. Small island developing States have valuable resources, including oceans, coastal environments, biodiversity and, most importantly, human resources. Their potential is recognized, but the challenge for small island developing States is to ensure that they are used in a sustainable way for the well-being of present and future generations. Although they are afflicted by economic difficulties and confronted by development imperatives similar to those of developing countries generally, small island developing States also have their own peculiar vulnerabilities and characteristics, so that the difficulties they face in the pursuit of sustainable development are particularly severe and complex.

4. There are many disadvantages that derive from small size, which are magnified by the fact that many island States are not only small but are themselves made up of a number of small islands. Those disadvantages include a narrow range of resources, which forces undue specialization; excessive dependence on international trade and hence vulnerability to global developments; high population density, which increases the pressure on already limited resources; overuse of resources and premature depletion; relatively small watersheds and threatened supplies of fresh water; costly public administration and infrastructure, including transportation and communication; and limited institutional capacities and domestic markets, which are too small to provide significant scale economies, while their limited export volumes, sometimes from remote locations, lead to high freight costs and reduced competitiveness. Small islands tend to have high degrees of endemism and levels of biodiversity, but the relatively small numbers of the various species impose high risks of extinction and create a need for protection.

5. The small size of small island developing States means that development and environment are closely interrelated and interdependent. Recent human history contains examples of entire islands rendered uninhabitable through environmental destruction owing to external causes; small island developing States are fully aware that the environmental consequences of ill-conceived development can have catastrophic effects. Unsustainable development threatens not only the livelihood of people but also the islands themselves and the cultures they nurture. Climate change, climate variability and sealevel rise are issues of grave concern. Similarly, the biological resources on which small island

developing States depend are threatened by the large-scale exploitation of marine and terrestrial living resources.

6. Many small island developing States are entirely or predominantly coastal entities. Due to the small size, isolation and fragility of island ecosystems, their renowned biological diversity is among the most threatened in the world. This requires that in pursuing development special attention be paid to protecting the environment and people's livelihoods. It also requires the integrated management of resources.

7. In some small island developing States, the rate of population growth exceeds the rate of economic growth, placing serious and increasing pressure on the capacity of those countries to provide basic services to their people and placing a heavy burden on women in particular as heads of households. Although their population density may be high, many small island developing States have small populations in absolute terms, insufficient to generate economies of scale in several areas, and they therefore have limited scope for the full utilization of certain types of highly specialized expertise. They experience high levels of migration, particularly of skilled human resources, which not only places an undue burden on training facilities but also forces them to import high-cost foreign expertise.

8. The lack of opportunities for achieving economies of scale, together with their narrow resource base, tends to limit the total production of small island developing States to a narrow range of crops, minerals and industries, both manufacturing and services. Any adverse development concerning those productive sectors, whether arising from market factors, natural or environmental constraints, is likely to lead to significant reductions in output, a fall in foreign-exchange earnings and increased unemployment.

9. Partly because of their small size and partly because of their vulnerability to natural and environmental disasters, most small island developing States are classified as high-risk entities, which has led to insurance and reinsurance being either unavailable or exorbitantly expensive, with adverse consequences for investment, production costs, government finances and infrastructure.

10. Because the per capita income of many small island developing States tends to be higher than that of developing countries as a group, they tend to have limited access to concessionary resources. However, analysis of the economic performance of small island developing States suggests that current incomes are often facilitated by migrant remittances, preferential market access for some major exports and assistance from the international community, sources which are neither endogenous nor secure. Furthermore, those incomes have generally been unstable over time: natural and man-made disasters, difficulties in the international market for particular commodities and recession in some developed economies often reduce incomes in small island developing States dramatically, sometimes by as much as 20 to 30 per cent of gross domestic product (GDP) in a single year.

11. Because small island development options are limited, they present special challenges to planning for and implementing sustainable development. To meet that challenge, the most valuable asset of small island developing States is their human resources, which need to be given every opportunity to fulfil their potential and contribute meaningfully to national, regional and international development consistent with the Rio Declaration on Environment and Development and Agenda 21. Small island developing States will be constrained in meeting

those challenges without the cooperation and assistance of the international community. The sustainable development of small island developing States requires actions that address the above constraints to development. Those actions should integrate environmental considerations and natural resource conservation objectives and gender considerations consistent with the Rio Declaration on Environment and Development and Agenda 21, into the development of social and economic development policies in international, regional, subregional and/or bilateral cooperative programmes related to islands.

12. Within small island developing States the critical contribution of women to sustainable development and the involvement of youth to the long-term success of Agenda 21 should be fully recognized. Accordingly, youth should be encouraged to contribute to the decision-making process and all obstacles to the equal participation of women in this process should be eliminated to allow both youth and women to participate in and benefit from the sustainable development of their particular societies.

13. Sharing a common aspiration for economic development and improved living standards, small island developing States are determined that the pursuit of material benefits should not undermine social, religious and cultural values or cause any permanent harm to either their people or their land and marine resources, which have sustained island life for many centuries. In Agenda 21, the international community committed itself to:

(a) Adopt and implement plans and programmes to support the sustainable development and utilization of the marine and coastal resources of small island developing States, including meeting essential human needs, maintaining biodiversity and improving the quality of life for island people;

(b) Adopt measures that will enable small island developing States to cope effectively, creatively and sustainably with environmental change, as well as to mitigate impacts on and reduce threats posed to marine and coastal resources.

Those commitments were later incorporated into General Assembly resolution 47/189 of 22 December 1992, which called for a global conference on the sustainable development of small island developing States.

14. In establishing the basis for a new global partnership for sustainable development, States have acknowledged their common but differentiated responsibilities in respect of global environmental degradation as stated in Principle 7 of the Rio Declaration on Environment and Development. Principle 6 states that the special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. Under chapter 17, section G of Agenda 21, small island developing States and islands supporting small communities are recognized as a special case for both environment and development, because they are ecologically fragile and vulnerable and their small size, limited resources, geographic dispersion and isolation from markets all place them at a disadvantage economically and prevent economies of scale.

15. It is in that context that the present Programme of Action addresses the special challenges and constraints facing small island developing States. Because sustainable development is a process and not a phenomenon, the Programme of Action focuses on the next steps that can be taken along the comprehensive path to sustainable development which will follow the principles endorsed by Governments at the United Nations Conference on Environment and Development. The Programme of Action contains a synopsis of actions and policies that should be implemented over the short, medium and long terms. The reports of the

regional technical meetings, held in preparation for the Global Conference, remain an important point of reference since they contain a broad collection of recommended actions for the pursuit of sustainable development in small island developing States.

16. The Programme of Action presents a basis for action in 14 agreed priority areas and defines a number of actions and policies related to environmental and development planning that should be undertaken by small island developing States with the cooperation and assistance of the international community. In general, financing for the implementation of the Programme of Action will come from countries' own public and private sectors. National elements, for inclusion in the medium- and long-term sustainable development plans of small island developing States, are recommended, along with the measures necessary for enhancing their endogenous capacity. Regional approaches to sustainable development/environment problems and technical cooperation for endogenous capacity-building are proposed. And the role of the international community is outlined, including its role in providing access to adequate, predictable, new and additional financial resources; optimizing the use of existing resources and mechanisms in accordance with chapter 33 of Agenda 21; and adopting measures for supporting endogenous capacity-building, in particular for developing human resources and promoting the access of small island developing States to environmentally sound and energy-efficient technology for their sustainable development. In that context, non-governmental organizations and other major groups should be fully involved.

17. The Programme of Action identifies priority areas and indicates the specific actions that are necessary to address the special challenges faced by small island developing States. In fulfilling those actions, several cross-sectoral areas are identified, for example, capacity-building, including human resource development; institutional development at the national, regional and international levels; cooperation in the transfer of environmentally sound technologies; trade and economic diversification; and finance.

## I. CLIMATE CHANGE AND SEALEVEL RISE

### Basis for action

18. Small island developing States are particularly vulnerable to global climate change, climate variability and sealevel rise. As their population, agricultural land and infrastructure tend to be concentrated in the coastal zone, any rise in sealevel will have significant and profound effects on their economies and living conditions; the very survival of certain low-lying countries will be threatened. Inundation of outlying islands and loss of land above the high-tide mark may result in loss of exclusive economic rights over extensive areas and in the destruction of existing economic infrastructure as well as of existing human settlements. Global climate change may damage coral reefs, alter the distribution of zones of upwelling and affect both subsistence and commercial fisheries production. Furthermore, it may affect vegetation and saline intrusion may adversely affect freshwater resources. The increased frequency and intensity of the storm events that may result from climate change will also have profound effects on both the economies and the environments of small island developing States. Small island developing States require all available information concerning those aspects of climate change, as it may affect their ability to enable appropriate response strategies to be developed and implemented.

19. The process established by the United Nations Framework Convention on Climate Change 3/ and the ongoing negotiations of its Intergovernmental Negotiating Committee are important international actions aimed at addressing the threat of climate change, mitigating its adverse impacts on small island developing States and assisting them in adapting to its adverse consequences. It is becoming clear that the commitments contained in Article 4.2 (a) and (b) of the Framework Convention, in particular those related to emissions of greenhouse gases, should be considered inadequate for the long term and further action may be required to make satisfactory progress towards achieving the objective of the Framework Convention. In that regard, the consideration at the first meeting of the Conference of the Parties of the adequacy of those and all other relevant commitments under the Convention, in particular those aimed at achieving effective adaptive response measures, is of the utmost importance to small island developing States and the international community. The development and use of renewable sources of energy and the dissemination of sound and efficient energy technologies are seen as having a central role in mitigating the adverse impact of climate change.

A. National action, policies and measures

- (i) Ensure early ratification of or accession to the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the Ozone Layer 4/ and other related legal instruments.
- (ii) Monitor, survey and collect data on climate change and sealevel rise.
- (iii) Formulate comprehensive adjustment and mitigation policies for sealevel rise in the context of integrated coastal area management.
- (iv) Assess the effects and the socio-economic implications of the impact of climate change, climate variability and sealevel rise on small island developing States.
- (v) Map areas vulnerable to sealevel rise and develop computer-based information systems covering the results of surveys, assessments and observations as part of the development of adequate response strategies, adaptation policies and measures to minimize the impact of climate change, climate variability and sealevel rise.
- (vi) Improve public and political understanding of the potential impacts of climate change.
- (vii) Formulate comprehensive strategies and measures (including the preparation, facilitation and collection of information) on adaptation to climate change that would contribute to a better understanding of the range of issues associated with the development of methodologies to facilitate adequate adaptation to climate change.
- (viii) Promote a more efficient use of energy resources in development planning and use appropriate methods to minimize the adverse effects of climate change on the sustainable development of those resources.
- (ix) Increase participation in the bilateral, regional and global research, assessment, monitoring and mapping of climate impacts, including the

adoption of oceanographic and atmospheric measures and policies and the development of response strategies.

#### B. Regional action

- (i) Create and/or strengthen programmes and projects to monitor and improve predictive capacity for climate change, climate variability and sealevel rise, and to assess the impacts of climate change on marine resources, freshwater and agricultural production, including pests.
- (ii) Develop and/or strengthen mechanisms to facilitate the exchange of information and experiences among small island developing States, and to promote technology transfer and training in those States in response to climate change, including preparedness response.
- (iii) Provide technical assistance for ratification or accession to the United Nations Framework Convention on Climate Change and assist those Parties that have ratified the Framework Convention in assuming their major responsibilities under it.
- (iv) Support national efforts aimed at developing strategies and measures on adaptation to climate change as well as the development of technical guidelines and methodologies to facilitate adequate adaptation to climate change.

#### C. International action

- (i) Implement immediately the prompt-start resolution agreed to by the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change.
- (ii) Support small island developing States in responding to the call by the Intergovernmental Panel on Climate Change for vulnerable coastal nations to develop integrated coastal zone management plans, including measures for responding adaptively to the impacts of climate change and sealevel rise.
- (iii) Provide improved access to financial and technical resources for monitoring variability and change of climate and sealevel rise, for assessing the impacts of climate change, and for developing and implementing response adaptation strategies in a timely manner, recognizing the specific vulnerabilities and disproportionate cost borne by small island developing States.
- (iv) Provide improved access to information from the activities carried out to reduce uncertainties of climate change and assist the inter-island exchange of this information.
- (v) Provide access to environmentally sound and energy-efficient technology to assist small island developing States in conserving energy.
- (vi) Support the activities of intergovernmental, regional and subregional organizations aimed at assisting small island developing States in

coping effectively and creatively with climate change, climate variability and sealevel rise, including providing systems for systematic and continuous research, monitoring, surveying and data collection, as well as assessment, in the areas of climate change, climate variability and sealevel rise, coral reefs, the role of oceans in the world climate, tidal variations and the salt water intrusion of freshwater.

- (vii) Provide improved access to financial and technical resources to assist small island developing States, which are particularly vulnerable to the adverse effects of climate change, in meeting the costs associated with the development of national and regional strategies, measures and methodologies to facilitate adequate adaptation to climate change.

## II. NATURAL AND ENVIRONMENTAL DISASTERS

### Basis for action

20. Small island developing States are prone to extremely damaging natural disasters, primarily in the form of cyclones, volcanic eruptions and earthquakes. In some islands, the range of these disasters includes storm surges, landslides, extended droughts and extensive floods. A recent study by the former Office of the United Nations Disaster Relief Coordinator (currently the Department of Humanitarian Affairs of the United Nations Secretariat) has shown that at least 13 of the 25 most disaster-prone countries are small island developing States. Due to climate change, such events, including drought, are perceived to be occurring with increasing frequency and intensity. Natural disasters are of special concern to small island developing States because of their small size; their dependence on agriculture and tourism which are particularly vulnerable to natural and environmental disasters; their narrow resource base; and the pervasive impact of such events on their people, environment and economies, including the loss of insurance coverage. For countries affected by such natural disasters, those particular characteristics mean that the economic, social and environmental consequences are long-lasting and that the costs of rehabilitation are high as a percentage of gross national product (GNP). For similar reasons the impact of oil-spills and other environmental disasters can also be severe.

### A. National action, policies and measures

- (i) Establish and/or strengthen disaster preparedness and management institutions and policies, including building codes and regulatory and enforcement systems, in order to mitigate, prepare for and respond to the increasing range and frequency of natural and environmental disasters and promote early warning systems and facilities for the rapid dissemination of information and warnings.
- (ii) Strengthen the capacity of local broadcasting to assist remote rural and outer island communities within countries and among neighbouring countries during disaster events.
- (iii) Establish a national disaster emergency fund with joint private and public sector support for areas where insurance is not available in the commercial market, taking into account the relevant experience to be gained from the operation of similar funds.

- (iv) Integrate natural and environmental disaster policies into national development planning processes and encourage the development and implementation of public and private sector pre- and post-disaster recovery plans, drawing on the capacity of the United Nations Department of Humanitarian Affairs and bearing in mind the International Decade for Natural Disaster Reduction.
- (v) Strengthen cultural and traditional systems that improve the resilience of local communities to disaster events.

#### B. Regional action

- (i) Establish and/or strengthen, where appropriate, regional institutions to complement and support national efforts in disaster mitigation, preparedness and management.
- (ii) Establish and/or strengthen, where appropriate, mechanisms for sharing experience, information and resources, including expertise, among small island developing States.
- (iii) Increase access to telecommunication links and satellite facilities for disaster monitoring, assessment and information exchange.
- (iv) Establish and/or strengthen existing regional mechanisms and communication systems for rapid response to disasters.
- (v) Facilitate, as appropriate, the setting up of necessary regional committees for the International Decade, which could serve as a platform for the exchange of ideas, information and strategies for natural disaster reduction in each region.
- (vi) Support the operation of a national disaster emergency fund, taking into account the relevant experience to be gained from the operation of similar funds, as well as the enactment of standardized building codes and relevant legislation.

#### C. International action

- (i) Assist small island developing States in establishing and/or strengthening national and regional institutional mechanisms and policies designed to reduce the impacts of natural disasters, improve disaster preparedness and integrate natural disaster considerations in development planning, including through providing access to resources for disaster mitigation, preparedness, response and recovery.
- (ii) Improve access to technology and relevant training to assist with hazard and risk assessment and early warning systems, and to assist with the protection of islands from environmental disasters consistent with national and regional strategies for disaster management.
- (iii) Provide and facilitate technical support and training for disaster preparedness (including early warning) and relief programmes through the offices of the Department of Humanitarian Affairs of the United Nations Secretariat, the World Meteorological Organization, the United Nations Development Programme (UNDP), the United Nations Environment



Programme (UNEP), the International Maritime Organization, the International Telecommunication Union and other relevant international organizations.

- (iv) Encourage the International Decade for Natural Disaster Reduction and the World Conference on Natural Disaster Reduction, which will be held in May 1994, to give special recognition to small island developing States so that their unique characteristics will be taken into account in developing natural disaster reduction management programmes.
- (v) Through the offices of the Department of Humanitarian Affairs, support and facilitate the collection, storage, exchange and dissemination of information useful for pre-disaster planning, as well as disaster preparedness (including early warning), response and recovery, and facilitate the exchange of cooperation between regions.

### III. MANAGEMENT OF WASTES

#### Basis for action

21. The shortage of land areas and resources available for safe disposal, population growth and the increase in imports of polluting and hazardous substances combine to make pollution prevention and the management of wastes a critical issue for small island developing States. Wastes in those States tend to be highly visible, but due to their limited capacity to monitor the waste stream the true extent of the problem remains poorly understood. For small island developing States, the disposal of wastes is a serious constraint to sustainable development: both land and sea-based sources of pollution require urgent attention.

22. All small island developing States share the problem of how to safely dispose of solid and liquid wastes, particularly the wastes generated by urbanization, which otherwise result in the contamination of groundwater and lagoon areas. Point source pollution from industrial wastes and sewage, inappropriately sited and poorly managed garbage dumps and the disposal of toxic chemicals are significant contributors to marine pollution and coastal degradation. Limited land area makes the option of landfill disposal unsustainable in the long term. Incineration, while reducing the volume of wastes, is prohibitive in terms of cost and still requires the disposal of ash containing potentially hazardous substances in high concentrations. Pressure on forests to provide fuelwood and to expand agricultural development together with heavy use of agricultural chemicals also aggravate downstream pollution and sedimentation problems.

23. There is also growing concern about the transboundary movement of toxic and hazardous waste, including the use of small island developing States for the disposal of waste generated by other countries. The isolation and oceanic location of small island developing States and their dependence on a marine and limited terrestrial resource base make them highly vulnerable to contamination by toxic and hazardous wastes and chemicals, and radioactive materials. The passage of ships carrying toxic and hazardous wastes, chemicals and radioactive materials is of international concern and of priority concern to small island developing States. There is a need to develop and enhance the emergency response capacities necessary to protect marine and coastal environments from accidents and incidents relating to marine transport. Emergency response

capabilities and any damage compensation arrangements must not impose an unreasonable burden on small island developing States.

24. Given that long-term disposal options are limited and will constrain sustainable development, small island developing States will need to look for ways of minimizing and/or converting wastes, such as sewage, into a resource (e.g., fertilizer for agriculture). This will include action ranging from limiting imports of non-biodegradable and hazardous substances to changing community attitudes to the disposal and use of sewage. In the short term, existing wastes require effective disposal, but at the same time incentives to continue waste generation should be avoided.

A. National action, policies and measures

- (i) Develop fiscal and policy incentives and other measures to encourage environmentally sustainable imports and local products with low waste or degradable waste content.
- (ii) Develop and implement appropriate regulatory measures, including emission discharge and pollution standards, for the reduction, prevention, control and monitoring of pollution from all sources; for the safe and efficient management of toxic, hazardous and solid wastes, including sewage, herbicides, pesticides and industrial and hospital effluent; and for the proper management of disposal sites.
- (iii) Ratify and implement relevant conventions, including the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal 5/ and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention of 1972), 6/ as well as relevant regional conventions.
- (iv) Formulate and implement public awareness and education campaigns designed to gain local recognition of the need to control wastes at the source; of the value of reuse, recycling and appropriate packaging; and of the possibilities for converting wastes to resources in culturally appropriate ways.
- (v) Introduce clean technologies and treatment of waste at the source and appropriate technology for solid waste treatment.
- (vi) Develop information systems and baseline data for waste management and pollution control, monitoring the types and quantities of wastes, for both sea- and land-based sources of pollution.
- (vii) Establish port reception facilities for the collection of waste in accordance with annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78). 7/
- (viii) In conformity with the Basel Convention and relevant decisions taken by the parties to that Convention, formulate and enforce national laws and/or regulations that ban the importation from States that are members of the Organisation for Economic Cooperation and Development (OECD) of hazardous wastes and other wastes subject to the Basel Convention, including hazardous wastes and other wastes destined for recycling and recovery operations.

## B. Regional action

- (i) Develop regional pollution prevention programmes, including regional centres for pollution prevention that would conduct demonstration projects, workshops and multimedia presentations tailored to specific groups; the development of economic incentives to further pollution prevention and waste management; relevant legislation; a coordinated and focused monitoring programme; and, where appropriate, the development of waste management and prevention trust funds.
- (ii) Remove and dispose of existing hazardous wastes, such as polychlorinated biphenyls, with the technical assistance of developed countries.
- (iii) Establish clearing-houses and increase the collection and synthesis of data and information on the sources, levels, amounts, kinds, trends and effects of pollution and waste on marine and coastal systems, as well as on processes and technologies for addressing pollution control from land and sea-based sources.
- (iv) Establish regional mechanisms, including conventions where appropriate, to protect the oceans, seas and coastal areas from ship-generated wastes, oil spills and the transboundary movement of toxic and hazardous waste, consistent with international law.
- (v) Examine ways to resolve disputes concerning waste disposal practices affecting small islands and encourage a collaborative examination of the issues of liability and redress in the context of the Basel Convention.
- (vi) Facilitate the formulation and implementation of public awareness and education campaigns designed to gain local recognition of the need to control wastes at the source; the value of reuse, recycling and appropriate packaging; and of the possibilities for converting wastes to resources in culturally appropriate ways.
- (vii) Establish, where appropriate, regional centres for the training and transfer to cleaner production technologies and the management of hazardous wastes generated at the national level.

## C. International action

- (i) Support the strengthening of national and regional capabilities to carry out pollution monitoring and research and to formulate and apply pollution control and abatement measures.
- (ii) Support the strengthening of institutions to provide assistance to Governments and industry in the adoption of clean production technologies as well as in the prevention of pollution and the handling, treatment and disposal of hazardous wastes.
- (iii) Accept the right of small island developing States to regulate, restrict and/or ban the importation of products containing non-biodegradable and/or hazardous substances and to prohibit the transboundary movement of hazardous and radioactive wastes and materials within their jurisdiction, consistent with international law.

- (iv) Ensure that the international conventions and arrangements and related negotiations on marine pollution, in particular any amendments to the London Convention of 1972 but also in relation to land-based sources of marine pollution, take into account the interests and capacities of small island developing States.
- (v) Support measures to assist small island developing States in improving their capacity for the negotiation, follow-up and implementation of international conventions or arrangements, as well as for related negotiations on marine pollution, in particular any amendments to the London Convention of 1972 but also in relation to land-based sources of marine pollution.
- (vi) Assist in the implementation of monitoring and pollution prevention programmes and the establishment of port reception facilities for the collection of wastes in accordance with annex 5 of MARPOL 73/78.
- (vii) Enhance international cooperation in the establishment of waste management facilities, the control of toxic chemicals and pollution prevention as components of international investment projects, whether funded by multilateral or private sources.
- (viii) Assist small island developing States in assessing the impact of land-based sources of marine pollution and to develop mechanisms to eliminate or minimize the pollution source.
- (ix) Improve the access to resources of national and regional efforts to formulate and implement public awareness and education campaigns that are designed to gain local recognition of the need to control wastes at the source; the value of reuse, recycling and appropriate packaging; and of the possibilities for converting wastes to resources in culturally appropriate ways.
- (x) Ensure that the Basel Convention group of experts developing guidelines for monitoring the effects of the management of hazardous wastes on human health and the environment takes into account the concerns of small island developing States.
- (xi) Provide improved access to financial and technical resources to assist small island developing States in establishing regional centres for the training and transfer of cleaner production technologies and the management of hazardous wastes, and in developing inventories to register the training and technical activities of international organizations related to waste management and cleaner production.

#### IV. COASTAL AND MARINE RESOURCES

##### Basis for action

25. Sustainable development in small island developing States depends largely on coastal and marine resources, because their small land area means that those States are effectively coastal entities. Population and economic development - both subsistence and cash - are concentrated in the coastal zone. The

establishment of the 200-mile exclusive economic zone has vastly extended the fisheries and other marine resources available to small island developing States. Their heavy dependence on coastal and marine resources emphasizes the need for appropriate and effective management.

26. The development and management of programmes designed to achieve the ecologically and economically sustainable utilization of coastal and marine resources are major challenges for small island developing States. The lack of an integrated approach to coastal and marine area management has limited the effectiveness of past and present management measures which is increasingly resulting in coastal habitats being degraded through pollution, natural resources being overexploited and growing conflicts between competing resource uses. Development patterns have also had an adverse impact on traditional management systems, an impact in many cases exacerbated by the effects of natural hazards and extreme events, such as hurricanes/cyclones/typhoons, storm surges and abnormally high tides.

#### A. National action, policies and measures

- (i) Establish and/or strengthen, where appropriate, institutional, administrative and legislative arrangements for developing and implementing integrated coastal zone management plans and strategies for coastal watersheds and exclusive economic zones, including integrating them within national development plans.
- (ii) Design comprehensive monitoring programmes for coastal and marine resources, including wetlands, in order to determine shoreline and ecosystem stability, and also document and apply, as a basis for integrated coastal zone planning and decision-making, traditional knowledge and management practices that are ecologically sound and include the participation of local communities.
- (iii) Develop and/or strengthen national capabilities for the sustainable harvesting and processing of fishery resources and provide training and awareness programmes for the managers (Government and local communities) of coastal and marine resources.
- (iv) Ratify and/or adhere to regional and international conventions concerning the protection of coastal and marine resources and combat unsustainable fishing and related practices.

#### B. Regional action

- (i) Develop and/or strengthen the capacity of regional organizations to undertake activities in coastal and marine areas, including research into commercial and non-commercial fisheries with a view to sustainable harvesting and utilization, as well as surveys on reef, estuary, wetland and lagoon resources. Also monitor and promote innovative ways to sustainably develop territorial waters and exclusive economic zones, including providing support for aquaculture, mariculture, coral reef and mangrove programmes.
- (ii) Develop a methodology for integrated coastal zone management appropriate to small island developing States, particularly very small, low elevation and coral islands.

- (iii) Develop and/or strengthen regional clearing-houses for coastal and marine environmental information to facilitate the collection, synthesis and sharing of relevant information, knowledge and experience among small island developing States in a structured and systematic way.
- (iv) Develop programmes to enhance negotiating and related skills for the management and exploitation of coastal and marine resources, including the negotiation of fisheries agreements.
- (v) Develop and/or strengthen regional capabilities for the effective surveillance and monitoring of activities in the exclusive economic zones of small island developing States.
- (vi) Harmonize policies and strategies for the coordination of the sustainable management and utilization of coastal and marine resources.

#### C. International action

- (i) Develop mechanisms for the gathering and sharing of information and expertise, particularly interregionally among small island developing States, including geographic information systems (GIS) techniques and facilities for the assessment of coastal and marine resources, including the regional nodes of the UNEP Global Resource Information Database.
- (ii) Cooperate in facilitating mutually advantageous fishing agreements between small island developing States and foreign fishing groups; take account of the concerns and characteristics of those States within the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks; and encourage and facilitate the full participation of small island developing States in the Conference and in the implementation of the Conference outcomes.
- (iii) Assist with the establishment and/or strengthening, where necessary, of new institutional and administrative arrangements for the development of integrated coastal zone management plans and their implementation.
- (iv) Support small island developing States in establishing national and regional capabilities for the effective surveillance and monitoring of activities within their exclusive economic zones, setting up regional and other joint-venture fishing enterprises, developing inventories of marine resources and regional approaches to the sustainable management of their exclusive economic zones, and strengthening regional marine research centres.
- (v) Use the relevant results of the World Coast Conference 1993, held at Noordwijk, the Netherlands, from 1 to 5 November 1993 as well as the ongoing work within the UNEP Regional Seas Programme to assist small island developing States with the development and implementation of integrated coastal zone management plans, to improve international coordination in that field and to develop strategies to prevent further marine and coastal degradation.

- (vi) Monitor the results of the Meeting of Government-designated Experts Focusing on the 1985 Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-Based Sources, to be held in Montreal from 6 to 10 June 1994, which are expected to be useful for assisting small island developing States in that area.
- (vii) Include, in means of building capacity for integrated coastal zone management planning and implementation, strengthening regional and international networks, including South-South relationships; increasing public awareness and participation; enhancing relevant education and increasing training activities; ensuring the involvement and participation of non-governmental organizations and other major groups; supporting the development of concepts, methodologies and tools; and supporting and strengthening international research and improvements in monitoring, the results of which should be integrated into policy development, planning and decision-making.

## V. FRESHWATER RESOURCES

### Basis for action

27. Freshwater resources are vital for meeting basic needs and the inadequate protection of the quality and supply of freshwater resources can set important limits to sustainable development. Many health hazards in developing countries are related to poor water quality and limited water quantity. Because of their small size and particular geological, topographical and climatic conditions, many small island developing States face severe constraints in terms of both the quality and quantity of freshwater. This is particularly the case for low-lying coral-based islands, where groundwater supplies are limited and are protected only by a thin permeable soil. Even where rainfall is abundant, access to clean water has been restricted by the lack of adequate storage facilities and effective delivery systems.

28. Inadequate action to safeguard watershed areas and groundwater resources poses a further long-term threat, while in urban areas rapid population growth, changes in economic strategies and a growing per capita use of freshwater are significant challenges. In that context, sound long-term management strategies for water catchment and storage areas, including the treatment and distribution of limited water supplies, are of particular economic and environmental importance. Such strategies may involve substantial capital investment and ongoing maintenance programmes, which may affect the real cost of water. A common threat to the freshwater resources of small island developing States is the contamination of supply by human and livestock waste, industry-related pollution and, in some cases, pesticides and other agricultural chemicals. All strategies need to take account of the possible constraints to water supply from low groundwater recharge in times of drought, salt-water intrusion, and inundation as a result of climate change and sealevel rise. Such intrusions are made even more likely as a result of over-abstraction, particularly during times of extended drought. In that regard, due consideration must be paid to the primacy of the need to supply water for sanitation purposes.

29. The Political Statement and Action Programme, adopted at the International Ministerial Conference on Drinking Water and Environmental Sanitation, held in the Netherlands in 1994 (E/CN.17/1994/12, annex), could serve as one of the important bases for small island developing States in implementing relevant portions of chapter 18, programme area D, of Agenda 21.

#### A. National action, policies and measures

- (i) Develop, maintain and protect watershed areas, irrigation systems, distribution networks and appropriate catchment systems and promote effective programmes for water conservation and prevention of water contamination through, inter alia, the development of integrated national water plans, the use of appropriate incentives and regulatory measures, community involvement in management and conservation, forest management and reforestation and investment strategies.
- (ii) Adopt appropriate standards for the management of freshwater resources, and develop and strengthen low-cost monitoring and assessment capabilities, linked to water resource databases, for relevant decision-making tools, including forecasting models for water management, planning and utilization.
- (iii) Strengthen procedures to monitor and respond to the impacts on water resources of natural and environmental hazards, in particular the impacts of climate change and climate variability, including drought and sealevel rise.
- (iv) Encourage the development and acquisition of appropriate technology and training for cost-effective sewage disposal, desalination and rainwater collection to provide sufficiently high quality potable freshwater, including opportunities for technology interchange among small island developing States.
- (v) Strengthen national capacities to make decisions among competing demands for the allocation of limited water resources.

#### B. Regional action

- (i) Develop and strengthen initiatives for regional cooperation in training and research to assist Governments in the development and implementation of integrated water resource plans, including the conservation and rehabilitation of watersheds, the protection of groundwater, setting standards for the management of those resources, fostering public awareness and water quality monitoring.
- (ii) Provide technical assistance for the assessment and/or development and transfer of appropriate technology for water collection, distribution and protection, in particular sewage disposal technology.

#### C. International action

- (i) Improve access to environmentally sound and energy efficient technologies for the catchment, production, conservation and delivery of freshwater, including rainwater catchment, water treatment systems and desalination, and also foster the exchange of information on water treatment methods.
- (ii) Enhance the capacity of small island developing States to develop and implement integrated water resource plans, including water resource allocation and management, the conservation and rehabilitation of



watersheds, the protection of groundwater, fostering public awareness and water quality monitoring.

- (iii) Assist training and public awareness campaigns in building up an endogenous capacity relating to water management and conservation, and appropriate rainwater catchment systems.
- (iv) Support the establishment of methodologies aimed at assessing the adverse impact of climate change on freshwater resources and develop appropriate response and mitigation measures.

## VI. LAND RESOURCES

### Basis for action

30. The small size of most small island developing States, coupled with land tenure systems, soil types, relief and climatic variation, limit the area available for urban settlement, agriculture, mining, commercial forestry, tourism and other infrastructure, and create intense competition between land use options. Most aspects of environmental management in small island developing States are directly dependent on, or influenced by, the planning and utilization of land resources, which in turn are intimately linked to coastal zone management and protection in those States.

31. For human requirements to be met in a sustainable manner, competing demands for the use of land resources must be resolved and more effective and efficient ways of using those natural resources must be developed and adopted. As populations grow in small island developing States, there is a need for resolution of competing demands, particularly where land is limited and where commercial development of comparatively large tracts of land can result in shifts in small scale and subsistence agriculture to marginal lands.

32. The major long-term land management issue in small island developing States is the degradation of the limited land area due to a variety of factors, including overuse because of high population pressure on a limited resource base; deforestation due to unsustainable commercial logging or permanent conversion to agricultural or grazing pursuits; and other episodic events, such as fire. Natural events, such as catastrophic cyclones, are also major contributors. Land degradation of that kind results in accelerated erosion and a resultant decline in fertility and productivity, a deterioration in water quality and the siltation of rivers, lagoons and reefs. Deforestation is also linked to a decline in the continuity and quality of village water supply, the depletion of genetic, wood and non-wood plant resources, and the fading away of traditional forest, lagoon and reef-based subsistence life systems.

33. The search for an improved quality of life, with its increased demands for cash income, has led to greater production of export cash crops, increasing areas of cultivation and resulting in more mechanized production systems. In the past, unsustainable agricultural practices in those areas have contributed to deforestation, the loss of multiple purpose trees from the rural landscape and the agrochemical pollution of soils, freshwater and coastal resources. There is, however, much that can be learned from traditional systems of food production and the use of plants to promote sustainable agriculture and land management.

34. The conclusions and recommendations of the Interregional Conference of Small Island Countries on Sustainable Development and Environment in Agriculture, Forestry and Fisheries, held in Barbados from 7 to 10 April 1992, 8/ contain the consensus position of small islands in the agricultural sector. The Bridgetown Declaration 9/ emanating from that ministerial Conference affirmed the determination and commitment of those countries to pursue sustainable development policies that ensure the long-term viability of their agriculture, forestry and fisheries sectors.

A. National action, policies and measures

- (i) Develop and improve national databases and the dissemination of information to relevant groups, especially local communities, youth and women, for land-use planning and management, including estimates of the carrying capacity, economic and environmental value of land resources, along with appropriate decision-making tools, such as land/geographic information systems.
- (ii) Prepare and/or review land-use plans in conjunction with agricultural, forestry, mining, tourism, traditional land-use practices and other land-use policies, with a view to formulating comprehensive land-use plans and zoning so as to protect land resources, ensure sustainable and productive land-use and guard against land degradation, pollution and exceeding island carrying capacity.
- (iii) Encourage appropriate forms of land tenure, improved land administration and a greater appreciation of the integrated nature of land development in order to facilitate sustainable land-use.
- (iv) Formulate and enforce laws, regulations, and economic pricing and incentives in order to encourage the sustainable and integrated use, management and conservation of the land and its natural resources.
- (v) Support appropriate afforestation and reforestation programmes, with appropriate emphasis on natural regeneration and the participation of land owners, in order to ensure watershed and coastal protection and reduce land degradation.
- (vi) Improve the availability, affordability and environmental quality of shelter in human settlements, in accordance with chapter 7 of Agenda 21.
- (vii) Increase attention to national physical planning in both urban and rural environments, focusing on training to strengthen physical planning offices, including the use of environmental impact assessments and other decision-making tools.

B. Regional action

- (i) Provide appropriate training and other capacity-building opportunities for small island developing States, including systems for providing a continuous surveillance of the rate and extent of land-use changes and monitoring adverse environmental effects, in order to facilitate the implementation of national actions.

- (ii) Collect, synthesize and share among small island developing States, in a structured and systematic way, relevant information, knowledge and experience on sustainable land-use practices and policies, including issues pertaining to environmental, agricultural, forestry, mining and other land-based sectors, market intelligence information, and the assessment of potential interested overseas investors.

### C. International action

- (i) Support the improved availability of shelter and the improved economic and environmental quality of human settlements for small island developing States in accordance with chapter 7 of Agenda 21.
- (ii) Facilitate the development and improvement of national databases and the dissemination of information to relevant groups, especially local communities, youth and women, for land-use planning and management, including estimates of the carrying capacity, economic and environmental value of land resources, along with appropriate decision-making tools such as land/geographic information systems.
- (iii) Facilitate more effective international and interregional cooperation, coordination, collaboration and technical exchanges in the fields of agriculture, forestry and other land-use, through international and interregional networks and training programmes.

## VII. ENERGY RESOURCES

### Basis for action

35. Small island developing States are currently heavily dependent on imported petroleum products, largely for transport and electricity generation, energy often accounting for more than 12 per cent of imports. They are also heavily dependent on indigenous biomass fuels for cooking and crop drying.

36. Small island developing States will continue to be heavily dependent on petroleum fuels and biomass both in the short and medium term. However, the current uses of those fuels tend to be highly inefficient. Increased efficiency through appropriate technology and national energy policies and management measures will reap both financial and environmental benefits for small island developing States.

37. The renewable energy resources endowments of small island developing States vary greatly. All have substantial solar resources, which have still not been developed to their full potential. Wind potential is highly variable with location, both within and between countries. Hydroelectric power is a possibility only for some islands. Biomass endowment is common but unequal. Studies of the potential for geothermal, ocean thermal energy conversion and wave energy are continuing.

38. Several constraints to the large-scale commercial use of renewable energy resources remain, including technology development, investment costs, available indigenous skills and management capabilities. Small-scale application for rural electrification has been sporadic. The use of renewable energy resources as substantial commercial fuels by small island developing States is dependent on the development and commercial production of appropriate technologies.

#### A. National action, policies and measures

- (i) Implement appropriate public education and awareness programmes, including consumer incentives to promote energy conservation.
- (ii) Promote the efficient use of energy and the development of environmentally sound sources of energy and energy-efficient technologies, paying special attention to the possibilities of using, where appropriate, economic instruments and incentive structures and the increasing economic possibilities of renewable sources of energy.
- (iii) Establish and/or strengthen, where appropriate, research capabilities in the development and promotion of new and renewable sources of energy, including wind, solar, geothermal, hydroelectric, wave and biomass energy, and ocean thermal energy conversion.
- (iv) Strengthen research capabilities and develop technologies to encourage the efficient utilization of non-renewable sources of energy.

#### B. Regional action

- (i) Establish or strengthen research and policy capabilities in the development of new and renewable sources of energy, including wind, solar, geothermal, hydroelectric, wave and biomass energy.
- (ii) Assist, where appropriate, in the formulation of energy policies, standards and guidelines for the energy sector that are applicable to small island developing States, and enhance national capacity to effectively plan, manage and monitor their energy sectors.
- (iii) Gather and disseminate information, and promote regional cooperation and technical exchanges among small island developing States on energy-sector issues, including new and renewable sources of energy.

#### C. International action

- (i) Support the research, development and utilization of renewable sources of energy and related technologies and improve the efficiency of existing technologies and end-use equipment based on conventional energy sources.
- (ii) Formulate and ratify international agreements on energy-sector issues in relation to sustainable development in such areas as carbon emissions and the transportation of petroleum (for example, the use of double-hulled tankers).
- (iii) Develop effective mechanisms for the transfer of energy technology and establish databases to disseminate information on experience in the use of new and renewable sources of energy as well as on the efficient use of non-renewable energy sources.
- (iv) Encourage international institutions and agencies, including public international financial institutions, to incorporate environmental efficiency and conservation principles into energy-sector-related

projects, training and technical assistance, and, where appropriate, to provide concessionary financing facilities for energy-sector reforms.

- (v) Develop effective and efficient ways of utilizing, disposing of, recycling and reducing the by-products and waste of energy production.

## VIII. TOURISM RESOURCES

### Basis for action

39. Tourism has contributed much to the development of small island developing States and, as one of only a few development options for those small States, will continue to be very important for their future growth. It could also stimulate the development of other sectors. However, if not properly planned and managed, tourism could significantly degrade the environment on which it is so dependent. The fragility and interdependence of coastal zones and the unspoilt areas on which eco-tourism depends calls for careful management. One of the special tourist attractions of small island developing States is the distinctiveness of their cultures. The diversity and fragility of their environments are reflected in the diversity and fragility of their cultures. The protection of the former is an important condition for the protection of the latter.

40. Capital investment in tourism, particularly for the necessary infrastructure, is costly. There is usually great competition for land resources among tourism, agriculture and other land uses. Large increases in tourism and the overdevelopment of tourism in particular areas or in whole islands could be environmentally and culturally disruptive and detrimental to other valuable sectors, such as agriculture. It is imperative, therefore, that the development of tourism be carefully planned, particularly in relation to compatible land uses, water management, coastal zone management and the development of parks and protected areas. Tourism, like all forms of development in the coastal zone, needs to be carefully integrated within the existing cultural and environmental constraints and opportunities present within small island developing States. Eco-tourism, linking areas of high ecological value to low-impact tourism, may present important and environmentally sustainable opportunities for tourism development in small island developing States.

### A. National action, policies and measures

- (i) Ensure that tourism development and environmental management are mutually supportive.
- (ii) Adopt integrated planning and policies to ensure sustainable tourism development, with particular attention to land-use planning and coastal zone management, requiring environmental impact assessments for all tourism projects; the continuous monitoring of the environmental impact of all tourism activities; and the development of guidelines and standards for design and construction taking into account energy and water consumption, the generation and disposal of wastes and land degradation, the proper management and protection of eco-tourism attractions, and the carrying capacity of areas for tourism.

- (iii) Identify and develop facilities to meet specific niche markets, particularly in eco-tourism, nature and cultural tourism, and involve local populations in the identification and management of natural protected areas set aside for eco-tourism.
- (iv) Adopt measures to protect the cultural integrity of small island developing States.

#### B. Regional action

- (i) Ensure that tourism and the environment are mutually supportive in cooperation schemes at the regional level including, where appropriate, through harmonizing standards and regulations.
- (ii) Encourage the assessment and development of potential complementarities among small island developing States, including the development of packaged options covering several islands and joint marketing and training programmes.
- (iii) Establish or strengthen regional mechanisms for the exchange of information on the development of a safe and sustainable tourism sector, using, as appropriate, the capacities of regional tourism organizations.

#### C. International action

- (i) Promote the recognition by the international community of both the value of tourism in small island developing States and the fragility of the resources on which it depends, and of the resulting need for international support to encourage its sustainable development.
- (ii) Facilitate efforts, at the national and regional levels, to assess the overall impact of the economic, social and ecological aspects of tourism, plan sustainable tourism and to develop eco- and cultural tourism.

### IX. BIODIVERSITY RESOURCES

#### Basis for action

41. Small island developing States are renowned for their species diversity and endemism. However, due to the small size, isolation and fragility of island ecosystems, their biological diversity is among the most threatened in the world. Deforestation, coral reef deterioration, habitat degradation and loss, and the introduction of certain non-indigenous species are the most significant causes of the loss of biodiversity in small island developing States.

42. In the past, there has been a strong emphasis on the collection of more information. In small island developing States where limited and biologically precious resources are being threatened, while the lack of sufficient information is often cited as a rationale for inaction, there is often enough information to identify areas requiring in situ conservation. Although more information will be required in order to develop appropriate management plans,

information collection should no longer be a prior condition for in situ conservation projects.

43. The nature of traditional, often communal land and marine resource ownership in many island countries requires community support for the conservation effort. Without that local support and commitment and the opportunity to integrate sustainable income generation into the conservation effort, even the most highly studied and well planned conservation area will not be sustainable.

44. Some of the most precious biological resources for islanders, environmentally, economically and culturally, are marine and coastal rather than terrestrial. This requires a conservation focus that takes into account customary land and reef tenure systems and practices, which may differ from that usually found in the larger developed countries. Other considerations include the adequacy of basic institutional support for conservation efforts (staff, vehicles etc.) and access to financial resources to help start innovative projects.

45. A number of international and regional conventions exist concerning the conservation and sustainable utilization of biological resources, which are expected to provide a sound legal framework of potential benefit to the sustainable development of small island developing States.

#### A. National action, policies and measures

- (i) Formulate and implement integrated strategies for the conservation and sustainable use of terrestrial and marine biodiversity, in particular endemic species, including protection from the introduction of certain non-indigenous species and the identification of sites of high biological significance for the conservation of biological diversity and/or for eco-tourism and other sustainable development opportunities, such as sustainable agriculture, training and research.
- (ii) Ratify and implement the Convention on Biological Diversity, 10/ the Convention on International Trade in Endangered Species of Wild Fauna and Flora 11/ and other relevant international and regional conventions.
- (iii) Promote community support for the conservation of biological diversity and the designation of protected areas by concentrating on educational strategies that increase awareness of the significance of biodiversity conservation, in particular the fundamental importance to resource-owning communities of a diverse biological resource base.
- (iv) Generate and maintain buffer stocks or gene banks of biogenetic resources for reintroduction into their natural habitat, especially in the case of post-disaster restoration and rehabilitation.
- (v) Develop or continue studies and research on biological resources, their management and their intrinsic socio-economic and cultural value, including biotechnology.
- (vi) Conduct detailed inventories of existing flora, fauna and ecosystems to provide basic data needed for the preservation of biodiversity.

- (vii) Ensure that the ownership of intellectual property rights is adequately and effectively protected. Ensure, subject to national legislation and policies, that the technology, knowledge, and customary and traditional practices of local and indigenous people, including resource owners and custodians, are adequately and effectively protected, and that they thereby benefit directly, on an equitable basis and on mutually agreed terms, from any utilization of such technologies, knowledge and practices, or from any technological development directly derived therefrom.
- (viii) Support the involvement of non-governmental organizations, women, indigenous people and other major groups, as well as fishing communities and farmers, in the conservation and sustainable use of biodiversity and biotechnology.

#### B. Regional action

- (i) Encourage countries to give priority to known, existing sites of biological significance - while recognizing that there are many important sites whose biological significance remains unknown - and to build up community support for the protection of those areas including their protection from the introduction of non-indigenous species.
- (ii) Promote regional studies of the socio-economic and cultural value of biological resources, including genetic engineering, intellectual property rights and access to biotechnology, with the participation of existing or strengthened scientific institutions, relevant international agencies and non-governmental organizations.
- (iii) Promote the establishment of regional gene-bank centres for research, seeking the development and introduction of more resistant and productive varieties of species, and provide the appropriate legal and technical procedures for the use of those biological resources.
- (iv) Coordinate information exchange, training and technical assistance in support of national efforts to establish and manage conservation areas and for species conservation, including the identification and use of traditional knowledge and techniques for resource management that assist the conservation of biological resources and diversity.
- (v) Promote and/or strengthen already existing regional scientific institutions that can operate as reference centres for problems related to the conservation and sustainable management of biodiversity.
- (vi) Strengthen the capacity of regional organizations to provide technical support and coordination in the development of inventories of flora, fauna and ecosystems and, where feasible, to establish regional databases and gene banks.
- (vii) Support the development of adequate and effective legal mechanisms for the protection of intellectual property rights.



### C. International action

- (i) Provide improved access to financial and technical resources for the conservation of biological diversity, including funds for basic institutional and logistic support for the conservation and management of biological diversity, with priority to be accorded to terrestrial as well as coastal and marine biodiversity, such as coral reef ecosystems.
- (ii) Improve access to environmentally sound biotechnology, including know-how and delivery mechanisms.
- (iii) Ensure that the activities of relevant international organizations, agencies and programmes of the United Nations as well as relevant non-governmental organizations are closely coordinated with and supportive of identified regional small island developing States centres or ongoing programmes in the conservation and sustainable use of biodiversity and biotechnology.
- (iv) Make greater use of import restrictions under the Convention on International Trade in Endangered Species of Wild Fauna and Flora on products from endangered species endemic to small island developing States.
- (v) Support national and regional actions for developing inventories of flora, fauna and ecosystems, including training and technical assistance.
- (vi) Support strategies to protect small island developing States from the introduction of non-indigenous species.
- (vii) Promote the full involvement of non-governmental organizations, women, indigenous people and other major groups, as well as fishing communities and farmers, in the conservation and sustainable use of biodiversity and biotechnology.

### X. NATIONAL INSTITUTIONS AND ADMINISTRATIVE CAPACITY

#### Basis for action

46. To address the environmental resource management priorities essential to the sustainable development of small island developing States, national institutional and administrative arrangements are increasingly embracing the interrelated nature of activities in their limited land area. The integration of environmental considerations into the national decision-making processes is considered to be the single most important step to be taken by small island developing States to ensure that those problems are addressed and that the principles of sustainability guide all future development.

47. Economic imperatives must be evaluated from the perspective of socio-environmental considerations if the natural resource base is to be preserved for the benefit of present and future generations and social and cultural values safeguarded. Economic development must become sustainable development by incorporating environmental and resource management. This requires the adoption of interdisciplinary approaches to both planning and

decision-making, as well as, to the extent possible, the encouragement of public participation in the process.

48. Formal integration of economic and environmental considerations will necessitate a series of institutional adjustments within government administrations, accompanied by across-the-board strengthening of environmental administrative capacity. This must happen at all levels of government, including at the local level. Many forms of institutional adjustment are conceivable and should be tailored to specific country needs. It is recognized that that process would benefit from public participation.

49. Many countries have prepared environmental strategies and plans that integrate environment and development; they are seen as the first step in a process leading to the wide application of sustainable development principles. For those plans to promote sustainable development, however, they must be utilized for national decision-making, including at all appropriate levels of government, in order that environment and development policy can be carefully integrated.

#### A. National action, policies and measures

- (i) Strengthen institutional arrangements and administrative capacity, including cross-sectoral/inter-ministerial committees and task forces, in order to integrate environment and economic policy into national planning and across sectors and ensure the capacity to implement Agenda 21 and the decisions of the Global Conference.
- (ii) Develop implementation strategies and schedules, including financing, for both regional and national activities.
- (iii) Establish or strengthen environmental agencies with adequate financial and staff resources.
- (iv) Increase the awareness and involvement of non-governmental organizations, local communities and other major groups in public education, national planning and the implementation of sustainable development programmes.
- (v) Improve public education in order to familiarize local, provincial/State and national bodies with environmental laws already in existence, facilitate discussion of the value of environmental legislation and standards to local communities and open wider discussion on more culturally appropriate penalties for the contravention of laws and regulations.
- (vi) Develop appropriate national, provincial/State and local environmental regulations that reflect the needs and incorporate the principles of sustainability, create appropriate environmental standards and procedures, and ensure their integration into national planning instruments and development projects at an early stage in the design process, including specific legislation for appropriate environmental impact assessment for both public and private sector development.
- (vii) Give sustainable development task forces or their equivalent the official authority and validity to permit their continued meeting as interdisciplinary and communally representative advisory bodies.

- (viii) Provide adequate resources for the enforcement of environmental regulations.
- (ix) Enact the domestic legislation required for the implementation of the wide range of international environmental conventions and agreements directly relevant to small island developing States.
- (x) Establish national information nodes on the sustainable development of small island developing States in order to encourage, at the international level, the development of a small islands' sustainable development information network to facilitate the exchange of experience among small island developing States.

#### B. Regional action

- (i) Assist, where appropriate, with the preparation and implementation of national environmental strategies and plans.
- (ii) Provide appropriate research, training and information dissemination in order to facilitate the mainstreaming of environment in development planning and decision-making and coordination among sectors.

#### C. International action

- (i) Improve access to financial and technical assistance in order to strengthen national institutions and administrative and operational capacity.
- (ii) Support the development of a small islands' sustainable development information network to facilitate the exchange of experience among small island developing States.
- (iii) Assist in providing training and capacity-building services to facilitate the ratification and implementation of appropriate international instruments.
- (iv) Promote closer cooperation to improve national and international measures to combat illicit drug trafficking and money laundering.

### XI. REGIONAL INSTITUTIONS AND TECHNICAL COOPERATION

#### Basis for action

50. The limited human resources and small size of small island developing States makes it especially important to pool those resources through regional cooperation and institutions. It is essential that effective support for regional projects be coordinated through regional bodies. This is desirable to avoid duplication and achieve complementarity of assistance.

51. Regional organizations, both United Nations and non-United Nations, can play a key role in facilitating efficient and effective assistance to small island developing States. Regional organizations are also useful vehicles, in many instances, for the implementation of regional programmes. The programming,

administrative and implementation capacities of those bodies can further be improved with the support of member nations and other donors.

52. Currently, multilateral and bilateral donors undertake their own regional programming exercises through regular dialogue with small island developing States and relevant bodies. Non-governmental organizations also deliver services at the national and regional level in support of regional programmes.

A. National action, policies and measures

- (i) Support regional organizations through membership and budgetary contributions.
- (ii) Encourage improved coordination and collaboration among regional bodies and between the international community and regional programmes.

B. Regional action

- (i) Improve coordination among regional bodies for the sustainable development of small island developing States as outlined in Agenda 21.
- (ii) Formulate regional programmes and strategies jointly between regional bodies and national authorities consistent with Agenda 21.
- (iii) Develop a small island developing States technical assistance programme to promote inter- and intraregional cooperation on sustainable development in small island developing States.
- (iv) Establish, where appropriate, and support regional sustainable development centres to facilitate the sustainable development of small island developing States in the areas of research, training, the development of endogenous technology, the transfer of technology and the provision of legal and technical advice, taking into account the work of existing relevant institutions, including universities.
- (v) Draft model environmental provisions as a guide for countries, leaving to each small island developing State the incorporation of country-specific provisions to reflect the variety and diversity of national and customary laws and procedures, and encourage, where appropriate, the harmonization of environmental legislation and policies within and among small island developing States with a view to ensuring a high degree of environmental protection.
- (vi) Prepare environmental law training manuals for both lawyers and others working in the environmental field.
- (vii) Conduct regional and in-country workshops on environmental law subjects, including environmental conventions and treaties, environmental impact assessment, heritage, pollution, civil enforcement, prosecution and environmental mediation.
- (viii) Assess and inform small island developing States about the content, notification processes, financial and legal implications of relevant

international environmental instruments and conventions in order to encourage small island developing States to accede to and implement them.

### C. International action

- (i) Support environmental law offices within regional and subregional organizations to implement regional approaches, including the development of relevant expertise.
- (ii) Improve access to financial and technical resources for the development and/or strengthening of regional bodies in order to respond to the sustainable development needs of small island developing States.
- (iii) Improve coordination with relevant regional/subregional bodies to implement Agenda 21 and the decisions of the Global Conference.
- (iv) Strengthen regional bodies in order to improve their capacity to respond to the sustainable development needs of small island developing States.

## XII. TRANSPORT AND COMMUNICATION

### Basis for action

53. Transport and communications are the lifelines linking small island developing States with the outside world, with each other and within their own countries, and are an important means of achieving sustainable development. Distance and isolation have resulted in relatively high transport costs, including high transport insurance costs, for many small island developing States. The quality and frequency of international shipping and air services are largely beyond the control of island States. Domestic markets are too small to provide economies of scale and the remoteness of many rural and outer-island communities constrains options and increases costs. While national airlines are necessary to serve the local market, especially in archipelagic States, they tend to fragment the regional market. The constraining influence of those factors on the sustainable development of island countries cannot be underestimated.

54. The environmental uses associated with transport and communications development, including quarantine, also need to be properly addressed. Such issues include land transport, which has been found to be one of the greatest degraders of the urban environment, at both national and regional levels and which appears to have lagged behind improvements and major changes in transport services.

55. Devising innovative approaches to resolving transport and communications problems, such as the development of low-cost high-tech methods for the moving of cargo, and improving community access to telephone, radio and related services are major challenges. Improving the management and maintenance of existing transport and communications infrastructure is a further challenge. In building new infrastructure, particular consideration needs to be given to maintenance and recurrent cost issues.

#### A. National action, policies and measures

- (i) Continue efforts to strengthen transport services and facilities at both the national and local levels, paying particular attention to environmental protection, safety, and innovative energy-efficient and low-cost transport solutions.
- (ii) Upgrade domestic communication facilities, including radio and telephone coverage, to remote rural and outer island communities, and continue efforts to improve international telecommunications links.
- (iii) Address quarantine problems and requirements stemming from changing transport situations and longer-term climatic changes.

#### B. Regional action

- (i) Foster increased cooperation in civil aviation, shipping and telecommunications, including exploring possibilities for the consolidation of national airline services, recognizing the important contribution that could be made through the regional planning of transport and telecommunications facilities and networks.
- (ii) Develop effective quarantine services, including through upgrading existing plant protection and related programmes.
- (iii) Encourage the application of appropriate communications technologies to promote sustainable development in areas such as education, health, eco-tourism and other areas critical to sustainable development, including the promotion of greater public awareness.

#### C. International action

- (i) Develop innovative energy-efficient transport solutions to move people and cargo to and from island ports without the need to establish high-cost infrastructure.
- (ii) Cooperate with national and regional bodies in designing and enforcing effective quarantine systems.
- (iii) Improve access to financial and technical resources in support of regional organizations that are coordinating and advising small island developing States in the fields of transport and communications.
- (iv) Promote research and development in telecommunications and transportation that is relevant to the sustainable development of small island developing States.
- (v) Promote improved international telecommunications at the lowest possible cost for small island developing States, while recognizing the need to create an environment conducive to investment in telecommunications infrastructure and service to benefit local business and people.

### XIII. SCIENCE AND TECHNOLOGY

#### Basis for action

56. Science and technology are crucial for the achievement of sustainable development. There would be considerable benefit if all countries incorporated environmentally friendly technologies to a greater extent. However, in small island developing States, science and technological capacity remains underdeveloped both in terms of research and development institutions and of the availability of scientists to serve such institutions on a sustained basis. At the same time, some island peoples survive on traditional knowledge and its application, which is being threatened in small island developing States increasingly driven to adopt modern technologies and scientific understanding. A better integration of contemporary and traditional knowledge could also prove beneficial.

57. Many new environmentally sound technologies relevant to economic activities in small island developing States are becoming available, information concerning which and the ability to assess which are crucial for technological change to achieve sustainable development. Science and technological capacity require trained people to serve in production enterprises, to engage in training and to help in the assessment and adaptation of imported technologies.

58. Small island developing States will benefit from increased access to imported technologies to facilitate their sustainable development. However, an improved capacity to tap local knowledge and to develop environmentally sound endogenous technologies is also an important step towards sustainable development in a number of areas, including agriculture, agricultural processing, construction, communications and the marine sciences.

59. Trained people are needed in a wider range of fields in order to ensure adequate training and capacity for environmental impact and technology assessment. Limited national capacities mean that in a number of those areas, emphasis will have to be given to regional and subregional approaches and joint ventures with the international community. Encouragement of private sector involvement could also be very important because of limited governmental capacity to undertake both training and research and development.

#### A. National action, policies and measures

- (i) Ensure that science and technology policy is closely linked to national environmental strategies and sustainable development plans and is responsive to local and sectoral sustainable development needs, emphasizing self-sufficiency and the minimization of import dependency.
- (ii) Give greater emphasis to research and development, as well as to training for science and technology and economic development generally, and for environmental and technology assessment in particular; refine analytical tools for natural resource accounting; and encourage the development and use of information and communications technology to overcome size and isolation problems.

- (iii) Promote research and development in areas where endogenous technologies and traditional practices have great relevance, including agriculture, agricultural processing, waste-recycling, ethnobiology and biotechnology, construction and renewable energy, ensuring that mechanisms are in place for the appropriate protection of intellectual property rights in accordance with relevant international conventions.
- (iv) Encourage the use of endogenous, environmentally friendly technologies by establishing regulations, standards and economic incentives.
- (v) Develop or ensure access to databases on environmentally sound technologies of local relevance and collect consistent time-series data for monitoring the performance of sustainable development.
- (vi) Promote and strengthen the role of women in science and technology disciplines.

#### B. Regional action

- (i) Develop or strengthen efforts, through relevant regional organizations and institutions, to assist small island developing States in assessing technology, developing databases on environmentally sound technologies, conducting relevant research and development and training, and developing appropriate information systems to share experience within and among small island developing States.
- (ii) Encourage appropriate regional standards and the standardization of analytical methods as well as scientific inter-calibration exercises in order to facilitate the exchange of data.
- (iii) Develop and strengthen regional ocean sciences networks, with particular reference to data collection and the dissemination of information relevant to small island developing States.

#### C. International action

- (i) Facilitate the access to and development of environmentally sound technologies that are relevant to small island developing States, including coastal zone management and marine and ocean sciences, using, inter alia, joint ventures, joint research and development programmes and financial mechanisms.
- (ii) Strengthen the coordination and networking of the various national centres, regional organizations and institutions, and international organizations working in areas of science and technology in order to facilitate information flows, database creation and access, and greater collaboration and technical cooperation in programmes.
- (iii) Encourage development within the international community, including the United Nations system, of appropriate programmes in support of regional and national efforts to build the science and technology capacities of small island developing States, including those that increase the output and range of their limited human resources, taking into account relevant activities of the Commission on Sustainable



Development and the Commission on Science and Technology for Development.

- (iv) Take account of the needs of small island developing States in the action plan for training in integrated coastal zone management being developed cooperatively by UNDP and the Division for Ocean Affairs and the Law of the Sea of the United Nations Secretariat.
- (v) Facilitate the full involvement of scientists and other experts from small island developing States in marine scientific research.
- (vi) Promote the free flow of, and access to, data and information resulting from marine scientific research, particularly as it relates to monitoring in small island developing States.
- (vii) Accelerate the development of the coastal module of the Global Ocean Observing System, due to its particular importance to small island developing States.

#### XIV. HUMAN RESOURCE DEVELOPMENT

##### Basis for action

60. Human beings are at the centre of concerns for sustainable development and thus significant attention must be given to projects that will enhance the quality of human life in small island developing States. Projects should be undertaken with a view to not only the contribution that individuals, groups, communities and nations can make towards sustainable development but more importantly how those projects will ultimately affect the well-being of those living in small island developing States.

61. The smallness and vulnerability of small island developing States necessitates that special attention be paid to population issues, education and training, and health for effective human resource development. The need for attention to human resource development issues is demonstrated by poor health and social services; poor nutrition and housing; low levels of female participation in development; the current insufficiency of education, information and means, as appropriate, for the responsible planning of family size; and inadequate family planning services. In addition, the uncounted costs of drug abuse include rising health costs, increased unemployment and the diversion of scarce human resources. High population densities and growth, as well as depopulation in some areas, are constraints to achieving sustainable development in many small island developing States. Increasing attention must be given to the concept of island carrying capacity and environmental health, especially for fragile and highly populated environments in urban areas, coastal zones and hillsides.

62. It is a matter of high priority to strengthen national educational and training mechanisms in order to facilitate the flow of information on sustainable development issues, enhance public awareness of the environment and encourage participation in the implementation of effective solutions. A key requirement is to promote access to and improve the quality of basic education.

63. Environmental education and science training, particularly on issues specific to small island developing States, are essential to developing environmental awareness. Training in environmental management and sustainable

development are needed at all levels of the education system. For professional training, multidisciplinary approaches are needed. There is a demand for knowledge on the environment to meet both educational and professional needs. Areas in which more training is greatly needed are science and technology generally; technology assessment; environmental impact assessment; environmental management and sustainable development; environmental chemistry; environmental engineering; physical planning and the development of geographic information systems; and information and communications technology.

64. Chapter 6 of Agenda 21 recognizes the close dependency of human health on a healthy environment and provides a list of priority actions. Although some small island developing States have implemented relevant activities, the overall improvement in the health of their populations continues to slow down. Furthermore, in many cases the health conditions of vulnerable groups, such as poor women and children, have actually deteriorated.

#### A. National action, policies and measures

- (i) Infuse sustainable development ideas into education curricula at all levels and promote participation by all groups, emphasizing the link between environment and social and economic issues, and continue to improve access to scientific, mathematics and technical training.
- (ii) Incorporate population issues into the mainstream of decision-making and planning mechanisms of government, including developing comprehensive population policies consistent with sustainable development objectives while respecting and promoting the dignity and the fundamental rights of the human person and of the family.
- (iii) Improve urban/rural settlements, in consultation with local communities, by giving priority to the improvement of basic services, such as access to potable water, environmentally sound sewage treatment and disposal, shelter, education, family planning and health care, as well as to the elimination of poverty; ensuring that development projects are people-centred and have explicit environment and health objectives; ensuring adequate resources for public health and preventive medicine activities; and considering urban development options, including decentralization.
- (iv) Direct efforts to improve urban/rural settlements through the promotion of projects aimed at the elimination of poverty that give priority to the improvement of basic services such as shelter and comprehensive public health, including potable water, sewage disposal, maternal and child health care, the responsible planning of family size and other specific measures aimed at health promotion and disease prevention.
- (v) Encourage the use of distance training to meet the expanding educational demand and the large demand for knowledge and training in the area of the environment.
- (vi) Promote and strengthen the role of major groups, including non-governmental organizations and women, in the creation and implementation of sustainable development initiatives.

- (vii) Seek to improve the quality of education, training and human resource development by upgrading basic education and technical/vocational skills training and by making improvements, where necessary, to national management and planning capacities and labour market linkages.
- (viii) Encourage the use of traditional knowledge and skills in environment, resource management and health, and the use of community groups to assist in promoting environmental awareness.

#### B. Regional action

- (i) Support national efforts to develop appropriate curricula for sustainable development at all levels, including the introduction, development and/or access to interdisciplinary training in environmental sciences at a tertiary level, and improve the coordination of training activities on sustainable development and environmental issues that are being conducted throughout small island developing States by different organizations, including non-governmental organizations.
- (ii) Assess the impact of urbanization on the physical and human environments and provide health evaluation and impact assessment capability for small island developing States.
- (iii) Enhance regional cooperation in educational and human resource development and improve the responsiveness of education centres to regional requirements.

#### C. International action

- (i) Support efforts to develop curricula for sustainable development, in particular tertiary level courses on environmental management and sustainable development, encouraging multidisciplinary approaches.
- (ii) Provide appropriate resources to meet the particular population concerns of small island developing States, including the implementation of any relevant outcomes of the International Conference on Population and Development.
- (iii) Improve the coordination and targeting of the education and human resource development programmes provided by the development partners of small island developing States.
- (iv) Support national and regional efforts to improve education and human resource development in small island developing States.
- (v) Encourage and support technical cooperation among small island developing States and other developing countries as a means of enhancing sustainable development.
- (vi) Support efforts to promote and strengthen the role of small island developing States in the creation and implementation of sustainable development initiatives.

- (vii) Support basic regional and national formal and informal health training institutions and research on the technology and health problems of small island developing States, paying more attention to malaria, nutrition, drugs, acquired immunodeficiency syndrome (AIDS) and maternal and infant health care, and support national and regional efforts to improve urban/rural settlements.
- (viii) Support an integrated approach to drug-abuse control, in accordance with international conventions, including the Single Convention on Narcotic Drugs, 1961, 12/ 14/ the Protocol amending the Single Convention on Narcotic Drugs, 1961, 13/ 14/ the Convention on Psychotropic Substances (1971), 15/ and the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988). 16/
- (ix) Support environmental education programmes specific to island environments and adapted to all levels, including primary and secondary schools, with curricula and materials tailored to the interests and needs of end-users.
- (x) Continue to support and increase, where possible, scientific and technical training in order to promote sustainable development.
- (xi) Support programmes aimed at increasing the involvement of community-based organizations in conservation and natural resource management programmes, including planning and decision-making.
- (xii) Provide assistance for the training of policy makers in the area of natural resources management, including policy related courses for the resolution of competing demands, the multiple use of resources and other policy related environmental issues.
- (xiii) Support small island developing States in their efforts to improve urban/rural settlements, by promoting projects aimed at human development and the elimination of poverty, particularly urban development options such as decentralization, and by ensuring that such projects have adequate resources.

65. The recommendations and language contained in the present chapter should in no way prejudge discussions at the International Conference on Population and Development, to be held in Cairo from 5 to 13 September 1994.

#### XV. IMPLEMENTATION, MONITORING AND REVIEW

66. Effective implementation, monitoring and review of the present Programme of Action is essential for the sustainable development of small island developing States. The Programme of Action provides an opportunity for the international community to demonstrate its commitment to the means of implementation adopted in Agenda 21. Since small island developing States are among the most environmentally vulnerable, the United Nations system and the international community, in line with Principle 6 of the Rio Declaration on Environment and Development and on the basis of chapter 17, section G of Agenda 21, shall give special priority to the situations and the needs of small island developing States in the implementation of the Programme of Action. That will require, in particular, providing adequate resources for implementation and actions at the national, regional and international levels.

67. The implementation of the Programme of Action shall be consistent with a number of parallel international processes important to the sustainable development of small island developing States that contain relevant provisions. Those processes include the Commission on Sustainable Development; the United Nations Framework Convention on Climate Change; the Convention on Biological Diversity; the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks; the United Nations Convention on the Law of the Sea; 17/ the International Conference on Population and Development; the intergovernmental negotiations on land-based sources of marine pollution of UNEP; the Intergovernmental Negotiating Committee for the Elaboration of a Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (INCD); the World Coast Conference 1993; the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movements and Management of Hazardous Wastes within Africa; 18/ the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and other relevant international instruments for the control of transboundary movements of hazardous wastes and their disposal; the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region; the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Convention on Wetlands of International Importance Especially as Waterfowl Habitat; 20/ the Fourth World Conference on Women; the World Summit for Social Development; and the World Conference on Natural Disaster Reduction. Support for the participation of small island developing States in those processes will be important and those processes will need to reflect the outcome of the Global Conference on the Sustainable Development of Small Island Developing States. As small island developing States develop their approaches for sustainable development, the international community should pursue actions that will improve the capacity of small islands to address a number of specific issues, making the most efficient use possible of opportunities in other international forums to ensure an integrated and comprehensive approach.

68. As recognized in Agenda 21, Governments will be primarily responsible for the implementation of the Programme of Action. The sustainable development of small island developing States will require the development of national and regional strategies, plans, policies and processes. International cooperation to support and complement such efforts will be essential. The United Nations system has a key role to play in close cooperation and coordination with other international, regional and subregional organizations, which are called upon to contribute in large measure to that effort. For small island developing States, regional and subregional efforts have proved successful and will remain the principal instruments for collective action. Consistent with Agenda 21, the implementation of the Programme of Action will also require the engagement and active participation of major groups, including women; children and youth; indigenous people and their communities; non-governmental organizations; local authorities; workers and their trade unions; business and industry; the scientific and technological community; and farmers.

#### A. National implementation

69. Small island developing States have begun to implement Agenda 21. In many cases, national strategies have been or are being developed as a basis for action. Further progress is required in order to ensure that environmental considerations are given appropriate significance, in particular at central levels of decision-making, and that there is a full integration of environmental and developmental considerations at both micro- and macro-levels respecting

domestic, environmental and cultural values. Considerable emphasis has been placed on building endogenous capacity throughout the Programme of Action, which will require considerable effort to implement.

70. Progress in the implementation of Agenda 21 and the decisions of the Global Conference will depend ultimately on the resources that small island developing States can mobilize from internal and external sources to meet the great challenges of sustainable development in general and capacity-building in particular.

71. Critical to the effective implementation of the objectives, policies and mechanisms agreed to by Governments in all programme areas of Agenda 21 will be the commitment and genuine involvement of all social groups. New participatory approaches to policy-making and implementation of sustainable development programmes will be necessary at all levels. In that regard, there is a special role for groups that include women, youth, senior citizens, indigenous people and local communities, as well as the private sector, labour and non-governmental organizations. As stated in Agenda 21, one of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making.

72. Some of the important actions necessary at the national level are described below.

#### 1. Finance

73. The implementation of the Programme of Action will require adequate resources to reflect the increased significance attached to sustainable development considerations in national development planning. Environment and development strategies will also need to be integrated at the outset of decision-making processes so as to ensure that macroeconomic policies are supportive of national sustainable development goals and priorities. In that regard, while in general the financing for the implementation of the Programme of Action at the national level will come from the public and private sectors of small island developing States, various financing channels, including those referred to in chapter 33 of Agenda 21, need to be explored in line with the specific circumstances of small island developing States.

74. In addition, resources at the national level should be further increased to meet the sustainable development goals and priorities articulated in the light of the Programme of Action, by optimizing the impact of available resources and by exploring possibilities for increasing the use of economic instruments, promoting private sector investment and using innovative financial mechanisms with a view to achieving an appropriate mix between traditional regulation and market-based mechanisms. A move towards increasing the use of economic instruments could be regarded as an important indirect complementary mechanism for the financing of sustainable development at the national level.

75. Among possible innovative financial mechanisms, small-scale grants and micro-enterprise loans for sustainable development activities at the community level should be explored.

76. For small island developing States, in particular the least developed amongst them, official development assistance (ODA) is a major source of external funding. To maximize the benefits and impact of that financial and

technical assistance, operational mechanisms should be reviewed and/or developed to ensure the fullest possible coordination among donors, small island developing States and relevant international and non-governmental organizations, taking into account local and community concerns.

## 2. Trade

77. In order to achieve greater and more stable export earnings, small island developing States should seek to develop a more diversified production structure for goods and services that exploits existing or potential comparative advantages and is consistent with environment and development policies that are mutually supportive.

## 3. Technology

78. Measures should be encouraged to enhance the capacity for developing indigenous technology, including the capacity to manage, assess, acquire, disseminate and develop technologies, and for utilizing appropriate and environmentally sound technologies, while adequately and effectively protecting intellectual property rights. Efforts should also be made to ensure, subject to national legislation and policies, that the technology, knowledge and customary and traditional practices of local and indigenous people, including resource owners and custodians, are adequately and effectively protected and that they thereby benefit directly, on an equitable basis and on mutually agreed terms, from any utilization of such technologies, knowledge and practices or from any technological development directly derived therefrom.

## 4. Legislation

79. New legislation should be developed and existing legislation revised, where appropriate, to support sustainable development, incorporating customary and traditional legal principles where appropriate, backed up with training and adequate resources for enforcement.

## 5. Institutional development

80. Appropriate national measures for institutional development should be adopted to integrate environmental, population and development strategies in national and sectoral development planning in order to achieve sustainable development.

## 6. Information and participation

81. Efforts should be made to increase the awareness and involvement of non-governmental organizations, women, local communities and other major groups in national planning, the development of environmentally sound and sustainable technologies, and the implementation of sustainable development programmes. They should include establishing or strengthening networks for the dissemination of information to assist effective participation in the planning and implementation of sustainable development activities.

## 7. Human resource development

82. National capacity-building should be increased at all levels by promoting public awareness and human resource development, including education, training and skill development, particularly of technicians, scientists and decision makers, to enable them to better plan and implement sustainable development programmes.

### B. Regional implementation

83. In addition to ongoing programmes for the sustainable development of small island developing States, and recognizing the need to implement all activities within the Programme of Action, a number of important programmes and measures are necessary at the regional level to support national priorities. Those programmes and measures are described below.

#### 1. Finance

84. Coordinated approaches should be developed to the extent possible, using the mechanisms for consultations referred to in paragraph 132 below, as appropriate, to mobilize financial resources for national and regional efforts to implement sustainable development, including improving access to financial resources, continuing to encourage private investment and identifying opportunities for introducing innovative financial mechanisms.

85. Regional development banks and other regional and subregional organizations should also be encouraged to increase their technical and, as appropriate, financial assistance in support of sustainable development in small island developing States at the community, national and subregional levels, including through mechanisms that can provide small-scale grants and micro-enterprise loans.

#### 2. Technology

86. The cooperative development and sharing of appropriate technology through regional organizations and centres/networks should be encouraged as a means of supporting the sustainable development of small island developing States.

#### 3. Legislation

87. National efforts to develop comprehensive legislation in support of sustainable development and to ratify and implement international conventions should be supported. Legal training and training manuals in the areas of environmental impact assessment, cultural heritage, pollution, civil enforcement, mediation, and prosecution should be supported and, where appropriate, the harmonization of environmental legislation and policies within and among small island developing States in order to ensure high levels of environmental protection should be encouraged.



#### 4. Institutional development

88. National efforts to implement effective institutional models, at all levels, for integrating environmental and population considerations within development and sectoral planning, including the development and implementation of appropriate approaches to integrated coastal zone management should be supported.

#### 5. Human resource development

89. National efforts at capacity-building through human resource development, particularly through increased training at all levels, particularly of technicians, scientists and decision makers, should be promoted and supported to facilitate all aspects of planning and implementing programmes for sustainable development.

### C. International implementation

90. The Programme of Action is part of the process of the implementation of Agenda 21, in particular, chapter 17, section G.

#### 1. Finance

91. The implementation of the Programme of Action will require the provision of effective means, including adequate, predictable, new and additional financial resources in accordance with chapter 33 of Agenda 21 to reflect the increased significance attached to sustainable development considerations in small island developing States. The international community should supplement national efforts on the part of small island developing States for the implementation of Agenda 21 and the Programme of Action through mechanisms to maximize access to concessional financial and technical assistance, and grant assistance, at the levels necessary to support their sustainable development efforts.

92. To that end, it is essential to honour all financial commitments contained in Agenda 21, taking into account, inter alia, Principle 6 of the Rio Declaration on Environment and Development. In particular, there is a need to activate the commitment made at UNCED to maximize the availability of adequate, predictable, new and additional resources using all available funding sources and mechanisms, as laid down in chapter 33 of Agenda 21. In that respect, there is a need to ensure better and more efficient use of ODA and other existing external sources of finance. In addition, the use of innovative financing mechanisms, taking into account the objectives and provisions of chapter 33 of Agenda 21, should be explored. Furthermore, there is a need to coordinate the efforts of donors and recipients.

93. The international community should provide to small island developing States concessional financial and technical assistance, and grant assistance, at the levels necessary to support their sustainable development. International financial and technical assistance should take account of the specific development needs and priorities, at the national and regional levels, of small island developing States, as outlined in the Programme of Action; of their sustainable development potential; and of the prospects for increasing their contribution to global sustainability. The concessional assistance provided to small island developing States, both multilaterally and bilaterally, should be

targeted where it is most needed and should be consistent with their sustainable development objectives and priorities.

94. Since global environmental problems, particularly with respect to climate change, biological diversity and international waters, are of great significance and concern to small island developing States, the restructured GEF should be seen as an important channel of assistance in those areas, through the provision of new and additional resources. In the determination of eligibility criteria related to funding, and in the development of project proposals for funding, GEF should pay due attention to the special needs and requirements of small island developing States.

95. The international community should seek to ensure that international institutions, including financial institutions, pay appropriate attention to the needs and priorities of small island developing States identified in the Programme of Action. In that regard, the UNDP Capacity 21 programme is particularly applicable. The international community should also support, as appropriate, increased access to credit, including the facilitation of micro-enterprise loans and the establishment of environmental trust funds, and should promote foreign direct investment, joint ventures and other private sector initiatives in accordance with national laws. In that context, a supportive international and domestic economic climate conducive to sustained economic growth and development is important in order to achieve sustainability.

## 2. Trade

96. In order to achieve sustained economic growth and sustainable development, small island developing States need to develop overseas markets for value-added exports in areas in which they are internationally competitive. In addition, many small island developing States are dependent on the international commodity markets for a major proportion of their export receipts. Poor market access and reliance on a single commodity are among the problems faced by many small island developing States. The need for a supportive international economic climate and an open and non-discriminatory trading system is essential, as demonstrated by the conclusion of the Uruguay Round, to the sustained economic growth and sustainable development of the small island developing States. Trade liberalization with a view to enhancing access to markets for the exports of small island developing States is particularly important.

97. Given their limited possibilities for generating local value-added, deriving from their small market size, narrow resources base and limited production of inputs, special efforts are needed to assist small island developing States to increase their production and exports. Towards that objective, special consideration should be given, where appropriate, to the local value-added criteria applicable to the exports of small island developing States.

98. The international community should seek to develop better functioning and transparent international commodity markets. The international community should also assist small island developing States in their efforts to achieve greater diversification of commodity sectors within a macroeconomic framework that takes into account a country's economic structure, resource endowments and market opportunities, as well as environmental considerations. In that connection, the fulfilment of measures designed under paragraph 2.16 of Agenda 21 is relevant to the sustainable development of small island developing States.

99. Taking into account the relevant work of international economic and trade organizations, a study should be undertaken on the effects of trade liberalization and globalization on the sustainable development of small island developing States, including relevant recommendations.

3. Transfer of environmentally sound technologies, cooperation and capacity-building

100. The transfer of environmentally sound technologies, cooperation and capacity-building, technical cooperation among developing countries, including among small island developing States, and the development and use of indigenous technology constitute a crucial process for achieving sustainable development in small island developing States. In particular, the promotion of and access to environmentally sound technologies is a key requirement for enhancing the endogenous capacity of small island developing States.

101. In the context of small island developing States, there is a particular need to focus on disseminating information regarding available technology; improving the endogenous capacity of small island developing States to absorb, manage and utilize environmentally sound technologies through, inter alia, education and training; promoting, facilitating and financing access to and the transfer of environmentally sound technologies and corresponding know-how, in particular to developing countries, on favourable terms, including on concessional and preferential terms, as mutually agreed, ensuring the need to adequately and effectively protect intellectual property rights as well as taking into account the special needs of developing countries; and ensuring, as appropriate, the need to adequately and effectively protect the technology, knowledge and customary and traditional practices of local and indigenous people, including resource owners and custodians.

102. The fulfilment by Governments and international organizations of the measures described in paragraph 34.18 of Agenda 21 is also of critical importance to small island developing States.

(a) Information

103. The use of the existing, as well as the establishment of, collaborative networks of subregional and regional research and information systems, in particular mechanisms to facilitate access by small island developing States to information, should be supported.

104. Information on environmental emergencies that may result from poor or inappropriate application of technologies, as well as early warning information aimed at preventing natural and environmental disasters, should be disseminated.

105. UNDP should be invited to coordinate a feasibility study in collaboration with the small island developing States and relevant subregional organizations for the implementation of a small island developing States information network (SIDS/NET). Such a study should be completed before the commencement of the forty-ninth session of the United Nations General Assembly.

106. UNDP should be invited to coordinate a feasibility study, in collaboration with small island developing States and relevant subregional organizations, to develop a small island developing States technical assistance programme (SIDS/TAP) to promote inter- and intraregional cooperation on sustainable development. An integral component of SIDS/TAP should be the compilation of a

directory of institutions and scholars with recognized expertise in the sustainable development of small island developing States. The study and the initial compilation of the directory should be completed before the commencement of the forty-ninth session of the United Nations General Assembly.

107. To support small island developing States in identifying and developing facilities for eco-, nature and cultural tourism, as identified in chapter VIII, section A, subparagraph (iii) and section C, subparagraph (i), and consistent with current approaches to conserve biological diversity in small island developing States, relevant international organizations, in particular the International Union for the Conservation of Nature (IUCN) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), should, in close collaboration with small island developing States and through their relevant regional organizations, facilitate the listing of areas within small island developing States for listing under natural and cultural provisions of the World Heritage Convention. Those areas, and others conserved using community-based, participatory approaches, would form the basis of small island developing States/Heritage - a comprehensive network/trail of sites of natural and cultural significance throughout small island developing States.

(b) Capacity-building

108. The national capacities of small island developing States to assess, manage, absorb and utilize new technologies should be strengthened. In that context, the existing administrative infrastructure will need to be strengthened so as to train personnel at all levels and educate the end-users of those technologies. The process should include training and skills development, especially for women, youth and indigenous people.

109. Small island developing States should cooperate among themselves and with other developing countries that are in a position to do so with a view to developing and improving environmentally sound technologies. The international community should extend its full support to initiatives aimed at promoting technology cooperation and capacity-building among small island developing States and other developing countries.

110. The Commission on Sustainable Development plays an important role in monitoring and focusing on proposals for mechanisms to promote the transfer, use and dissemination of environmentally sound technologies that should be explored in the implementation of the Programme of Action.

(c) Finance

111. Bilateral and multilateral donors should strive to increase their financial support at the national, regional and international levels for activities that are designed to promote and facilitate the transfer of environmentally sound technologies and capacity-building to small island developing States.

#### 4. Legislation and training

112. International environmental law is an increasingly complex subject that requires careful analysis with respect to its applicability to, and integration with, national law. Regional and international programmes to enhance the capacity of small island developing States to develop and implement appropriate national environmental legislation are very important. Such programmes should include providing support to small island developing States for:

(a) Training, including in all aspects of environmental law and, where applicable, customary law;

(b) Strengthening their capacity to participate effectively in the negotiation of new or revised agreements or instruments;

(c) Initiating national implementation of international agreements or instruments.

## 5. Vulnerability index

113. Small island developing States, in cooperation with national, regional and international organizations and research centres, should continue work on the development of vulnerability indices and other indicators that reflect the status of small island developing States and integrate ecological fragility and economic vulnerability. Consideration should be given to how such an index, as well as relevant studies undertaken on small island developing States by other international institutions, might be used in addition to other statistical measures as quantitative indicators of fragility.

114. Appropriate expertise should continue to be utilized in the development, compilation and updating of the vulnerability index. Such expertise could include scholars and representatives of international organizations that have at their disposal the data required to compile the vulnerability index. Relevant international organizations are invited to contribute to the development of the index. In addition, it is recommended that the work currently under way in the United Nations system on the elaboration of sustainable development indicators should take into account proposals on the vulnerability index.

### D. Institutional arrangements, monitoring and review

115. Existing international funding sources and mechanisms should ensure that available financial resources, including new and additional financial resources, are effectively applied to address the specific needs and concerns of small island developing States identified in the Programme of Action.

116. Donors should utilize appropriate international coordination mechanisms to focus attention on the special needs of small island developing States.

#### 1. Intergovernmental follow-up

117. The Commission on Sustainable Development, in carrying out its functions in accordance with General Assembly resolution 47/191 and its Multi-Year Thematic Programme of Work, should include in its consideration matters related to the implementation of the outcome of the Global Conference on the Sustainable Development of Small Island Developing States. To that effect, the Commission on Sustainable Development should, inter alia:

(a) Make arrangements for monitoring and reviewing, in a distinct and identifiable manner, in the context of its Multi-Year Thematic Programme of Work and the annual consideration of cross-sectoral issues, the implementation of the provisions agreed upon in the Programme of Action;

(b) Carry out an initial review of the progress achieved and steps taken to implement the Programme of Action, to be undertaken by the Commission on Sustainable Development in 1996 in accordance with its Multi-Year Thematic Programme of Work. Furthermore, in 1997, when the Commission will carry out the overall review of Agenda 21 with a view to preparing for the 1997 special session of the General Assembly, the Commission should recommend specific modalities for the full review of the Programme of Action in 1999. That full review would include the question of the convening of a second global conference in accordance with chapter 17, section G of Agenda 21;

(c) Recommend that the sub-item on the agenda of the General Assembly entitled "Global Conference on the Sustainable Development of Small Island Developing States", under the item "Environment and sustainable development", be retained and amended to read "Implementation of the outcome of the Global Conference on the Sustainable Development of Small Island Developing States".

## 2. Reporting

118. In preparation for the reviews in 1996 and 1999, the Secretary-General should prepare analytical reports on the implementation of the Programme of Action, identifying, where possible, any obstacle to its implementation. The Secretary-General's reports should include consideration of system-wide coordination and inputs from the relevant regions.

119. The reports should also analyse activities in respect of regional implementation and should include:

- (a) Activities of United Nations agencies at the regional level;
- (b) Activities of other appropriate non-United Nations regional and subregional organizations;
- (c) Multilateral, regional and bilateral activities;
- (d) National level activities;
- (e) Activities of non-governmental organizations, women and other major groups;
- (f) Means by which the coordination of United Nations regional activities has taken place at the inter-agency level, together with suggestions for improvement.

120. The Secretary-General should also prepare reports for the reviews in 1996 and 1999 that contain updated information on current donor activities in support of the sustainable development of small island developing States, as well as on the adequacy of international resources devoted to the Programme of Action.

121. In that context, all States and relevant organs, organizations and bodies of the United Nations, as well as other organizations and groups, are invited to provide information on action taken to implement the Programme of Action.

### 3. Inter-agency coordination

122. The Programme of Action should provide in the context of Agenda 21 the principal basis for the coordination of activities within the United Nations system for the sustainable development of small island developing States. To ensure the effective implementation of the Programme of Action by the United Nations system and taking into account the relevant provisions contained in chapter 38 of Agenda 21 and resolution 47/191, the Inter-Agency Committee on Sustainable Development should make the necessary provisions to consider, on a regular basis, system-wide coordination in the implementation of Conference outcomes.

### 4. Secretariat support structure

123. It is essential for the follow-up to the Conference and the implementation of the Programme of Action that a clearly identifiable, qualified and competent entity within the Department for Policy Coordination and Sustainable Development of the United Nations Secretariat be put in place to provide secretariat support for both intergovernmental and inter-agency coordination mechanisms. To that end, the necessary resources should be provided, relying on the most efficient and cost-effective use of resources, to fulfil the following functions:

(a) Provide substantive secretariat support to intergovernmental and inter-agency processes related to the monitoring, review and coordination of the implementation of the Programme of Action;

(b) Act as a liaison and focal point for Governments, organs, programmes and agencies of the United Nations system, as well as other relevant intergovernmental and non-governmental organizations, on matters related to the follow-up to the Conference and the implementation of the Programme of Action;

(c) Prepare reports to be submitted to the Commission on Sustainable Development, and other relevant bodies, on the implementation of the Programme of Action, drawing on the inputs from all appropriate sources;

(d) Provide support, as appropriate, to other activities emanating from the Programme of Action.

### 5. Organs, programmes and organizations of the United Nations system

124. In the implementation of the Programme of Action, all relevant organs, programmes and organizations of the United Nations system have an important role within their respective areas of expertise and mandates in supporting and supplementing national efforts. The relevant programmes being carried out by the United Nations system and the relevant regional and multinational organizations in the regions and individual countries should be recognized, consolidated and expanded or rationalized, as appropriate. Initiatives to promote economies of scale through integration should also be encouraged. Where applicable, the common objectives of members of regional integration arrangements should be taken into account.

125. As set forth in Agenda 21, UNEP, taking into account development perspectives, should continue to provide policy guidance and coordination in the

field of the environment, including in the implementation of the Programme of Action for the sustainable development of small island developing States.

126. As set forth in Agenda 21, UNDP should continue to carry out its mandate as the lead agency in organizing United Nations system efforts towards capacity-building at the local, national and regional levels, and in fostering the United Nations collective thrust in support of the implementation of the Programme of Action through its network of field offices.

127. The United Nations Conference on Trade and Development should have a strengthened capacity to carry out, in accordance with its mandate, the research and analysis necessary to complement the work of the Department for Policy Coordination and Sustainable Development with respect to the implementation of the Programme of Action.

128. The Secretary-General is requested to report to the General Assembly at its forty-ninth session on action taken by the organs, organizations and bodies of the United Nations system to implement the Programme of Action and in that regard invite them to consider the establishment of focal points for the implementation of the Programme of Action.

#### 6. Regional and subregional cooperation and implementation

129. In accordance with Agenda 21, regional and subregional cooperation will play an important role in the implementation of the Programme of Action for the sustainable development of small island developing States. The United Nations regional commissions, regional development banks and regional and subregional economic, environmental and technical cooperation organizations can contribute to that process by:

- (a) Promoting regional and subregional capacity-building;
- (b) Promoting the integration of environmental concerns in regional and subregional development policies;
- (c) Promoting regional and subregional cooperation, where appropriate, regarding transboundary issues related to sustainable development.

130. Regional intergovernmental technical, economic and environmental organizations have an important role to play in helping Governments to take coordinated action to solve environment issues of regional significance.

131. As has been highlighted within the Programme of Action, pooling the limited human resources of small island developing States through regional cooperation and institutions is a necessary part of their progress towards sustainable development. Regional actions, based on priorities identified in the national strategies and plans of many small island developing States, require better coordination of effort, stronger regional organizations and improved access to regional and external financial and technical resources, both public and private. To assist in those efforts, renewed emphasis should be given to a more effective implementation of relevant international programmes, including coordination and interchange between regions and among islands within regions.



132. To facilitate the coordination and implementation of the Programme of Action, a mechanism for consultation should be identified or devised, where appropriate, within each region. That would include:

- (a) Donors and recipients;
- (b) Relevant United Nations organizations, regional commissions and non-United Nations regional and subregional organizations and banks;
- (c) Appropriate arrangements for the participation of non-governmental organizations.

133. Relevant non-United Nations regional and subregional organizations, including regional economic integration organizations, should be encouraged to take the Programme of Action into account in the fulfilment of their respective functions.

134. Each of the relevant regional commissions of the United Nations should be enabled to support regional activities to coordinate the implementation of Conference outcomes at the regional level, including providing the necessary autonomy and adequate resources to their subregional offices and operational centres, taking into account the ongoing process of decentralization. That would involve:

- (a) Assisting regional and subregional organizations and mechanisms involved in the promotion of sustainable development, as appropriate;
- (b) Acting as a point of liaison between United Nations agencies and the Department for Policy Coordination and Sustainable Development of the United Nations Secretariat in New York, and among United Nations agencies at the regional and subregional levels.

135. The Secretary-General, in his report to be submitted to the General Assembly at its forty-ninth session, as requested in paragraph 128 above, is also requested to report on progress made in the implementation of the above recommendations and to include a section on the action taken by regional commissions to implement the Programme of Action, particularly at the subregional level.

#### Notes

1/ Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.

2/ Ibid., annex I.

3/ A/AC.237/18 (Part II) and Add.1 and Add.1/Corr.1.

4/ International Legal Materials, vol. 26, No. 6 (November 1987), p. 1550.

5/ UNEP/190/4 (forthcoming United Nations Treaty Series publication).

6/ United Nations, Treaty Series, vol. 1046, No. 15749, p. 120.

7/ See Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships (United Nations, Treaty Series, vol. 1340, No. 22484), p. 263.

8/ Report of the Interregional Conference of Small Island Countries on Sustainable Development and Environment in Agriculture, Forestry and Fisheries, Christ Church, Barbados, 7-10 April 1992 (Rome, Food and Agriculture Organization of the United Nations, 1993), Part III.

9/ Ibid., Part II.

10/ See United Nations Environment Programme, Convention on Biological Diversity (Environmental Law and Institutions Programme Activity Centre), June 1992.

11/ United Nations, Treaty Series, vol. 993, No. 14537, p. 243.

12/ United Nations, Treaty Series, vol. 520, No. 7515, p. 151.

13/ Ibid., vol. 976, No. 14151, p. 3.

14/ See also Single Convention on Narcotic Drugs, 1961, as amended by the Protocol amending the Single Convention on Narcotic Drugs, 1961 (1975) (United Nations, Treaty Series, vol. 976, No. 14152), p. 105.

15/ United Nations, Treaty Series, vol. 1019, No. 14956, p. 175.

16/ E/CONF.82/15 and Corr.1 and Corr.2.

17/ United Nations publication, Sales No. E.83.V.5

18/ International Legal Materials, vol. 30, No. 3 (May 1991), p. 775 and vol. 31, No. 1 (January 1992), p. 164.

19/ Ibid., vol. 26, No. 1 (January 1987), p. 38.

20/ United Nations, Treaty Series, vol. 996, No. 14583, p. 245.

## Resolution 2

### Expression of gratitude to the people and Government of Barbados

#### The Global Conference on the Sustainable Development of Small Island Developing States,

Having met in Bridgetown, Barbados at the invitation of the Government of Barbados from 25 April to 6 May 1994,

1. Extends its deep appreciation to His Excellency the Prime Minister of Barbados, the Right Honourable L. Erskine Sandiford, for his outstanding contribution as President of the Global Conference on the Sustainable Development of Small Island Developing States to the successful outcome of the Conference;

2. Expresses its profound gratitude to the Government of Barbados for having made it possible for the Conference to be held in Bridgetown and for the excellent facilities, staff and services so graciously placed at its disposal;

3. Requests the Government of Barbados to convey to the people of Barbados the gratitude of the Conference for the hospitality and warm welcome extended to the participants.

### Resolution 3

#### Credentials of representatives to the Global Conference on the Sustainable Development of Small Island Developing States

The Global Conference on the Sustainable Development of Small Island  
Developing States,

Having considered the report of the Credentials Committee and the recommendation contained therein,

Approves the report of the Credentials Committee.

### Resolution 4

#### Elections in South Africa

The Global Conference on the Sustainable Development of Small Island  
Developing States,

Noting with joy the successful conclusion of the historic elections in South Africa,

1. Expresses its great satisfaction at the exercise of their democratic franchise by the people of South Africa in the most dignified manner;

2. Looks forward to the assumption of office by the first President of South Africa elected in that process;

3. Also looks forward to the early participation of a democratic and non-racial Government of South Africa in the work of the United Nations.