

## PREAMBLE

1. In 1992, at the United Nations Conference on Environment and Development (UNCED), the world community adopted Agenda 21. 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 fulfillment 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 programme of action should be looked to as a whole.

3. The Rio Declaration on Environment and Development identifies human beings as being at the center of concerns for sustainable development. Development initiatives in small island developing States should be seen in relation to 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, their 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 which derive from small size. These are magnified by the fact that many island States are not only small but are themselves made up of a number of small islands. 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 peoples, and placing a high 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 thus 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 undue burden on training facilities but forces small island developing States to import high-cost foreign expertise.

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 these 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. Analysis of the economic performance of small island developing States, however, suggests that current incomes are often facilitated by migrant remittances, preferential market access for some major exports and assistance from the international community. These sources are neither endogenous nor secure. Furthermore, incomes of small island developing States 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 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 and Agenda 21, into the development of social and economic development policies in international, regional, sub-regional 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 nor cause any permanent harm to their people or to the 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 their marine and coastal resources, including meeting essential human needs, maintaining biodiversity and improving the quality of life for island people;

(b) Adopt measures which will enable small island developing States to cope effectively, creatively and sustainably with environmental change and to mitigate impacts 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 Principal 7 of the Rio Declaration. 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 17G 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 following programme of action addresses the special challenges and constraints facing small island developing States. Because sustainable development is a process, 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 UNCED. The programme of action contains a synopsis of actions and policies that should be implemented over the short, medium and long term. The reports of the regional technical meetings, held in preparation for this 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. Elements for inclusion in the medium- and long-term sustainable development plans of small island developing States are recommended, along with the necessary measures 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 access to adequate, predictable, new and additional financial resources and optimal use of existing resources and mechanisms in accordance with chapter 33

of Agenda 21, and measures for endogenous capacity-building, in particular for developing human resources and promoting access by 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 with specific actions necessary to address the special challenges faced by small island developing States. In fulfilling those actions several cross-sectorial 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 most populations, agricultural lands and infrastructures of small island developing States exist in the coastal zone, any rise in sealevel will have significant and profound effects on the economies and on the living conditions of the population of those countries. The very survival of certain low-lying countries would be threatened by sealevel rise. 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 may affect both subsistence and commercial fisheries production. Further, it may impact on vegetation and saline intrusion may adversely affect freshwater resources. The increased frequency and intensity of 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. All of the necessary information is required concerning all these aspects of climate change as it may affect small island developing States to enable appropriate response strategies to be developed and implemented.

19. The process established by the Framework Convention on Climate Change 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 the adverse consequences. It is becoming clear that the commitments contained in Article 4.2 (a) and (b), 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 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 or accession to the Framework Convention on Climate Change, the Montreal Protocol 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 preparation for, the facilitation of and the 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 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 these resources.
- (ix) Increase participation in bilateral, regional and global research, assessment, monitoring and mapping of climate impacts, including 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 between small island developing States, and to promote technology transfer and training in small island developing States in response to climate change, including preparedness response.
- (iii) Provide technical assistance for ratification or accession to the Framework Convention on Climate Change and assist those Parties which have ratified the Convention to assume 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 the development of adaptive response measures to the impacts of climate change and sealevel rise.
- (iii) Provide improved access to financial and technical resources for monitoring climate variability and change and sealevel rise, for assessment of the impacts of climate change, and for the timely development and implementation of response adaptation strategies, 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 conserve 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 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. These natural disasters are of special concern to small island developing States because of their small size, dependence on agriculture and tourism which are particularly vulnerable to natural and environmental disasters, narrow resource base and the pervasive impact of such events on their people, environment and economies, including loss of insurance coverage. For those affected by these natural disasters, these particular characteristics mean that the economic, social and environmental consequences are long-lasting and the costs of

rehabilitation are high as a percentage of gross national product. 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, 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 atolls in the country and 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 (IDNDR).
- (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, between 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 International Decade for Natural Disaster Reduction 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 to establish and/or strengthen national and regional institutional mechanisms and policies to reduce the impacts of natural disasters, improve disaster preparedness and integrate natural disaster considerations in development planning, including through 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 United Nations Department of Humanitarian Affairs, World Meteorological Organization, United Nations Development Programme, United Nations Environment Programme, International Maritime Organization, International Telecommunications 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 in pre-disaster planning, preparedness (including early-warning), response and recovery, and facilitate exchange of cooperation between regions.

### III. MANAGEMENT OF WASTES

#### Basis for action

21. The limited land areas and resources for safe disposal, growing populations and increasing 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 small island developing 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 safely disposing of solid and liquid wastes, particularly as a result of urbanization, resulting in contamination of groundwater and lagoon areas. Point source pollution from industrial wastes and sewage, inappropriately sited and poorly managed garbage dumps and disposal of toxic chemicals are significant contributors to marine pollution and coastal degradation. Limited land areas 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 disposal of ash containing potentially hazardous substances in high concentrations. Pressure on forests to provide fuelwood and to expand agricultural development together with a high 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 for the development and enhancement of emergency response capacities necessary to protect the marine and coastal environments from accidents and incidents relating to marine transport. Emergency response capabilities and damage compensation arrangements must not impose an unreasonable burden to 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 wastes 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 and for the safe and efficient management of toxic, hazardous and solid wastes, including sewage, herbicides, pesticides and industrial and hospital effluent, together with 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 and the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention of 1972), and 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, the value of reuse and recycling, of appropriate packaging, and of the possibilities of 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).

- (viii) In conformity with the Basel Convention and relevant decisions taken by the Parties to that Convention, the small island developing States should formulate and enforce national laws and/or regulations that ban the importation from OECD countries 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, involving 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, and on processes and technology to address 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 waste, 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 and recycling, of appropriate packaging, and of the possibilities to convert wastes to resources in culturally appropriate ways.
- (vii) Establish, where appropriate, regional centres for training and transfer of cleaner production technologies and 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 for the prevention of pollution and in 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 negotiation, for follow-up and for 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 the implementation of monitoring and pollution prevention programmes and the establishment of port reception facilities for the collection of waste 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 to assess the impact of land-based sources of marine pollution and to develop mechanisms to eliminate or minimize the pollution source.
- (ix) Provide improved access to resources for national and regional efforts to formulate and implement public awareness and education campaigns designed to gain local recognition of the need to control wastes at the source, the value of reuse and recycling and of appropriate packaging, and of the possibilities for converting wastes to resources in culturally appropriate ways.
- (x) Ensure that the Basel Convention experts group 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 training and transfer of cleaner production technologies and management of hazardous wastes, and for the development of inventories of 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. Their small land area means that these 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 high dependence on coastal and marine resources emphasizes the need for appropriate and effective management.

26. The development and management of programmes designed to achieve 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. This is increasingly resulting in coastal habitats being degraded through pollution, natural resources being over-exploited and growing conflicts between competing resource uses. Development patterns have also had an adverse impact on traditional management systems. In many cases these impacts have been 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 the development of integrated coastal zone management plans and strategies for coastal watersheds and exclusive economic zones and their implementation, including integration within national development plans.
- (ii) Design comprehensive monitoring programmes for coastal and marine resources, including wetlands, to determine shoreline and ecosystem stability, and document and apply traditional knowledge and management practices which are ecologically sound and include the participation of local communities, as a basis for integrated coastal zone planning and decision-making.
- (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 protection of coastal and marine resources and combat unsustainable fishing and related practices.

B. Regional action

- 1) Develop and/or strengthen the capacity of regional organizations to undertake activities in coastal and marine areas, including to research commercial and non-commercial fisheries with a view to sustainable harvesting and utilization, and surveys on reef, estuary, wetland and lagoon resources; and monitor and promote innovative ways to sustainably develop territorial waters and exclusive economic zones, including support for aquaculture, mariculture, coral reef and mangrove programmes.
- (ii) Develop 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 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 between 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 these 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 effective surveillance and monitoring of activities within their exclusive economic zones, in the setting up of regional and other joint-venture fishing enterprises, in developing inventories of marine resources and regional approaches to the sustainable management of their exclusive economic zones and in the strengthening of regional marine research centres.
- (v) Use the relevant results of the World Coast Conference of November 1993 as well as of the ongoing work within the UNEP's 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) Furthermore, the expected results of the June 1994 Meeting of Experts on the Control of Pollution from Land-Based Sources to be held in Montreal as well as the November 1995 intergovernmental conference on the protection of the environment from land-based activities to be held in Washington, D.C., could be useful to assist small island developing States in this area.
- (vii) Means of building capacity for ICZM planning and implementation should include, inter alia, the strengthening of 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.