

Distr.: General 21 July 1999

Original: English

General Assembly
Fifty-fourth session
Item 101 (b) of the provisional agenda\*
Environment and sustainable development:
International Decade for Natural
Disaster Reduction

Economic and Social Council Substantive session of 1999 Geneva, 5–30 July 1999 Agenda item 13 (h) Economic and environmental questions: International Decade for Natural Disaster Reduction

# Activities of the International Decade for Natural Disaster Reduction

#### Report of the Secretary-General

#### Summary

The present report on achievements in the implementation of the programme of the International Decade for Natural Disaster Reduction is submitted to the Economic and Social Council in pursuance of General Assembly resolutions 44/236, 49/22 A, 50/117 A and 53/185. Together with the reports of the Secretary-General on recommendations on institutional arrangements for disaster reduction activities of the United Nations system after the conclusion of the International Decade for Natural Disaster Reduction (A/54/136–E/1999/89) and on international cooperation to reduce the impact of the El Niño phenomenon (A/54/135–E/1999/88), also requested in Assembly resolution 53/185, the present report is intended to facilitate the Council's deliberations on the arrangements for natural disaster reduction activities within the United Nations system after the conclusion of the International Decade for Natural Disaster Reduction.

<sup>\*</sup> A/54/150.

### Contents

			Paragraphs	Page
I.	Introduction		1-11	3
II.	Mid-term review		12-22	5
	A.	1994 World Conference on Natural Disaster Reduction	12-17	5
	B.	Strategic synergies within the social and economic domains of the United Nations system	18	6
	C.	Early warning capacities of the United Nations system with regard to natural disasters	19–22	7
III.	Disa	aster reduction and United Nations reform	23-24	8
IV.	Towards the twenty-first century		25-63	8
	A.	IDNDR action plan 1998–1999	25-32	8
	B.	Selected activities at the regional level	33-50	9
	C.	Selected activities of United Nations agencies	51-62	12
	D.	IDNDR concluding event	63	14
V.	Conclusions and recommendations		64-82	14
	A.	Summary overview of the outcome of the IDNDR programme forum	64-81	14
	B.	Final declaration adopted by the IDNDR programme forum	82	15

#### I. Introduction

- Faced with an increasing frequency and severity of natural disasters throughout the world in the late 1980s, the General Assembly, in its resolution 42/169 of 11 December 1987, decided to designate the 1990s as a decade in which the international community, under the auspices of the United Nations, would pay special attention to fostering international cooperation in the field of natural disaster reduction. The Assembly also decided, in paragraph 4 of the same resolution, that the overall objective of the decade would be to reduce through concerted international actions, especially in developing countries, loss of life, property damage and the social and economic disruption caused by natural disasters, such as earthquakes, windstorms (cyclones, hurricanes, tornadoes, typhoons), tsunamis, floods, landslides, volcanic eruptions, wildfires and other calamities of natural origin, such as grasshopper and locust infestations.
- 2. In pursuance of that decision by the General Assembly, the Secretary-General appointed an international ad hoc group of experts, composed of representatives of the various scientific and technical disciplines pertaining to disaster prevention and mitigation, to help him to develop a framework and specifically to identify priority areas for application of the then existing knowledge, to identify gaps in that respect, and to provide recommendations concerning matters of implementation. In its report to the Secretary-General, the group of experts stated, *inter alia*,
- (a) That in view of growing vulnerability to natural hazards and the increasing risk of still greater tragedies caused by natural disasters, the issue had to be confronted head-on;
- (b) That most of the world was viewing natural disasters with fatalism, an attitude that was wrong and needed to be changed;
- (c) That societies, communities and individuals, prepared through education, training, policy and legislation, and investment, could be both disaster-resistant and resilient;
- (d) That the proposed Decade was both a moral imperative and an opportunity for the world community, in a spirit of global cooperation, to use existing scientific and technical knowledge to alleviate human suffering and enhance economic security;
- (e) That the historical piecemeal approach to natural disasters needed to be replaced with an integrated approach one that would cut across natural hazards and would include planning, preparedness, prevention, warnings, relief and rehabilitation, and that a broader appreciation of

the positive relationship between disaster reduction and economic and social development goals was required.

- 3. In its resolution 44/236, the General Assembly formally proclaimed the International Decade for Natural Disaster Reduction (IDNDR). The annex to that resolution contained the International Framework of Action for the International Decade for Natural Disaster Reduction. The General Assembly thus established both a clearly structured functional platform and institutional base, as well as a 10-year programme of action, guided by the overall objective as mentioned above, and built around the following main goals:
- (a) To improve the capacity of each country to mitigate the effects of natural disasters expeditiously and effectively, paying special attention to assisting developing countries in the assessment of disaster damage potential and in the establishment of early warning systems and disaster-resistant structures, when and where needed;
- (b) To devise appropriate guidelines and strategies for applying existing scientific and technical knowledge, taking into account the cultural and economic diversity among nations;
- (c) To foster scientific and engineering endeavours aimed at closing critical gaps in knowledge in order to reduce loss of life and property;
- (d) To disseminate existing and new information related to measures for the assessment, prediction and mitigation of natural disasters;
- (e) To develop measures for the assessment, prediction, prevention and mitigation of natural disasters through programmes of technical assistance and technology transfer, demonstration projects, and education and training, tailored to specific disasters and locations, and to evaluate the effectiveness of such programmes.
- 4. In its section B, the International Framework of Action identified, *inter alia*, policy measures to be taken at the national level. These included contributing to concerted international action for the reduction of natural disasters and, as appropriate, the establishment of multisectoral and interdisciplinary national committees with a view to attaining the objective and goals of the Decade. Also at the national level, scientific and technological institutions, financial institutions, including banks and insurance companies, as well as industrial enterprises, foundations and other non-governmental organizations, were encouraged to support and participate fully in the programmes and activities of the Decade.
- 5. In section D of the International Framework of Action, the Secretary-General was requested to establish a Special

High-level Council, composed of a limited number of internationally prominent persons, to promote public awareness and mobilize public and private support for the reduction of disaster vulnerability at all levels. The Secretary-General was also requested to create a Scientific and Technical Committee, of 20 to 25 experts selected in consultation with their Governments, to develop overall programmes to be taken into account in bilateral and multilateral cooperation for the Decade, paying attention to priorities and gaps in technical knowledge identified at the national levels (for an assessment of the work of the Committee, see A/54/132/Add.1–E/1999/80/Add.1).

- 6. At its inaugural session, the Committee adopted three key targets in complement to the Decade's goals and overall objective as reflected above. These were subsequently endorsed by the General Assembly in its resolution 46/149. Thereby, IDNDR's implementation was to ensure that by the year 2000 and as part of their plans to achieve sustainable development, all countries would have in place:
- (a) Comprehensive national assessments of risks from natural disasters integrated into development plans;
- (b) Mitigation plans of practical measures for application at the national and local levels to address long-term disaster prevention, preparedness and community awareness;
- (c) Ready access to global, regional and local early warning systems.
- In line with the proposals for the International Framework of Action, the secretariat of the Decade was established at the United Nations Office at Geneva, in close association with the former Office of the United Nations Disaster Relief Coordinator (UNDRO). The secretariat was charged with a twofold responsibility — (a) to provide substantive and secretarial support to the partners within the International Framework of Action, especially the Special High-level Council and the Scientific and Technical Committee, as well as for other related activities, and (b) to execute the day-to-day coordination of Decade activities. Since 1992 and in the wake of General Assembly resolution 46/182, the implementation of the Decade has been placed under the authority of the Under-Secretary-General for Humanitarian Affairs of the United Nations Secretariat, to whom the Director of the IDNDR secretariat reports directly. Within this humanitarian authority, the secretariat works closely with the Office for the Coordination of Humanitarian Affairs both in New York and at Geneva.
- 8. As it was recommended that extrabudgetary resources be provided by Governments, international organizations and

- other sources to meet the financial requirements of the Decade, a trust fund was established under the administration of the Secretary-General. Since its inception, the IDNDR Trust Fund has received voluntary contributions in the amount of US\$ 20,500,000 overall. To date, the accumulated expenditure, obligations, and commitments amount to US\$ 20,200,000. The five major donors share 81 per cent of overall contributions over time, and represent the pillar of financial partnership and continuity without which the implementation of IDNDR would not have been possible. The Government of Japan alone provided 38.5 per cent of total support, followed by Germany, the United Kingdom, Sweden and Italy. Within the United Nations programme budget, the IDNDR Trust Fund is contained in section 25 (Humanitarian assistance), subprogramme 3 (Natural disaster reduction). In the biennium 1998-1999, IDNDR's proposed budget represents 6.8 per cent of the overall projection for section 25; in the proposed budget for the biennium 2000–2001, this has decreased to a level of 1.9 per cent (see A/54/6 (Sect. 25), table 25.1).
- In order to coordinate the many tasks given to the United Nations system both within the Decade's preparatory process and specifically following the IDNDR founding resolution, a United Nations Steering Committee was established. In view of the crucial role played by intergovernmental organizations and other institutions outside the United Nations system, the original United Nations Steering Committee has meanwhile evolved into the current Inter-Agency Steering Committee for the Decade, with broad multisectoral membership, including intergovernmental mechanisms and organizations in all regions and interregional platforms for cooperation; NGOs from the social and economic domains at the international, regional, national and community levels; and scientific institutions and national committees. In 1994, the inter-agency mechanism was complemented by an informal, open-ended contact group of permanent missions at Geneva to act as a platform for the harmonization of national actions within the context of the Decade, and to provide feedback to the national committees and focal points.
- 10. The Decade was primarily established to promote disaster reduction as a multisectoral and interdisciplinary activity, comprising a wide variety of interrelated fields at the local, national, regional and international levels. Without interfering with the operational tasks of its partner agencies, the Decade's role was to promote the concept of natural disaster reduction as a strategic principle for the reduction of loss of life and property, as well as the social and economic disruption resulting from natural disasters. With the creation of the Decade, the United Nations system introduced disaster

reduction as an ongoing activity within the overall strategic process in support of sustainable development, engaging communities at risk in the conscious management of natural hazards well beyond (and more cost-effectively than) traditional contingency planning and disaster response.

- 11. As part of the Decade's overall programme of action, a wide range of work areas was identified in close consultation with the Special High-level Council, the Scientific and Technical Committee, and the Inter-Agency Steering Committee. During the life of the Decade, disaster reduction principles in these areas have been fruitfully applied under the operational responsibility of national Governments and partner agencies, both inside and outside the United Nations system. Examples of areas covered include:
- (a) Comprehensive research activities for a better understanding of natural hazards and how their effects may be better addressed;
- (b) Application of scientific knowledge and technology for disaster prevention, preparedness and mitigation, including the transfer of experience and greater access to relevant data;
- (c) Structural measures to strengthen disaster resilience of human settlements and public infrastructure, and to contain the potential impacts of natural phenomena on socio-economic systems, based on risk assessment and risk mapping;
- (d) Advocacy and sustained programmes of public information about natural hazards, vulnerabilities and risk, including formal education and professional training;
- (e) Establishing public policy commitment on disaster prevention, preparedness and mitigation, and adopting relevant legislation at both the national and local levels of administration;
- (f) Integration of disaster prevention into national planning, including the establishment of effective risk management capacities, and disaster relief;
- (g) Measures of (land use) planning which are based on hazard awareness, vulnerability analysis and risk assessment, with the participatory involvement of local authorities:
- (h) Measures of decentralization of operational responsibilities and budgetary resources for risk management which will empower local communities to a greater degree of self-reliance, while improving their resilience to natural disasters.

#### II. Mid-term review

### A. 1994 World Conference on Natural Disaster Reduction

- 12. The General Assembly, in its resolution 46/149, endorsed the recommendation of the Scientific and Technical Committee to convene the World Conference on Natural Disaster Reduction in 1994 to serve as a substantive platform for the mid-term review of the Decade, undertaken by the Economic and Social Council at its substantive session of 1994.
- 13. The Government of Japan generously hosted the Conference at Yokohama City from 23 to 27 May 1994. A key element of the Conference was a review of progress achieved towards the targets in disaster reduction to be reached by each country by the year 2000, as listed in section I above. Other objectives were to chart a programme of action for the future; exchange information on the implementation of the Decade programmes and activities; and increase the awareness of the importance of disaster reduction policies.
- The Conference was successful in all respects. It brought together more than 2,000 participants from 149 member States, the United Nations system and all relevant partners within the IDNDR Framework of Action. Many delegations were represented at the ministerial level. Voluntary contributions from a broad spectrum of donors enabled multisectoral representation from most of the developing countries. The Conference produced the following important policy statements: the Yokohama Message and the Yokohama Strategy and Plan of Action for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation. These were submitted to the General Assembly at its forty-ninth session in the report and recommendations of the World Conference on Natural Disaster Reduction (see A/CONF.172/9), together with the Secretary-General's report on the Decade's mid-term review undertaken by the Council (A/49/453). The General Assembly subsequently endorsed both documents in its resolution 49/22 A.
- 15. The Yokohama Conference was a milestone event and a turning point in the IDNDR process, inasmuch as it heralded the introduction of new strategies for the second half of the Decade. These new strategies, as reflected in the wording of the Yokohama Strategy and Plan of Action for a Safer World, were characterized, *inter alia*, by the following:
- (a) Emphasis on social sciences. The international scientific community had spearheaded the initiative for a greater reliance on science and technology in the late 1980s, thus ensuring the scientific underpinning of the Decade from

its earliest beginnings. The Yokohama Conference widened this vision to include a greater emphasis on social sciences in research, policy development and implementation. Economics, the media and information networks and vulnerability reduction featured among the new disaster reduction issues to be further explored in the second half of the Decade;

- (b) Focus on public policy. After the Yokohama Conference, many countries adopted new legislation and national strategies for disaster reduction;
- (c) Development of regional and subregional approaches. As countries conducted a national review process for Yokohama and shared the review process with neighbouring countries, regional approaches emerged as a significant outcome. Regional networking for information exchange and technical cooperation has since then become a priority concern amongst the Decade's partner organizations;
- (d) Shift from emergency preparedness to the reduction of vulnerability and risk. During the early part of the Decade, emphasis in disaster reduction was still placed to a large extent on emergency preparedness. From different policy and operational perspectives, the Yokohama Conference strongly underscored the links between disaster reduction and sustainable development. Reinforced by the mid-term review, natural disaster reduction has since become part of the United Nations system strategy in support of sustainable development, natural resource protection and sound environmental management. Disaster reduction remains an indispensable component of humanitarian assistance, response and rehabilitation;
- (e) Emphasis on concrete application of science and technology to disaster reduction. Both the process leading up to the Yokohama Conference as well as the discussions at the Conference itself generated awareness and commitment to the intensification of the application of natural disaster reduction approaches within the national development planning process. Particular emphasis was placed on the interface between science and technology on the one hand and plan implementation on the other. The involvement of local communities was identified as a crucial factor.
- 16. At the same time, the World Conference on Natural Disaster Reduction recognized some distinct gaps in the implementation of IDNDR, notwithstanding achievements in the domains of training, technical applications and research at the local, national and international levels and in regional cooperation. In its assessment of the status of disaster reduction midway into the Decade, the Yokohama Strategy for a Safer World noted, *inter alia*, that:

- (a) Awareness of the potential benefits of disaster reduction was still limited to specialized circles and had not yet been successfully communicated to all sectors of society;
- (b) A number of positive results had been achieved only unevenly and not in the concerted and systematic way envisaged by the General Assembly;
- (c) Not all entities of the United Nations system had contributed to the Decade's implementation to the extent possible, and during the first half of the 1990s emphasis had again been placed primarily on disaster response, which had slowed down the momentum of IDNDR's initial phase.

In the words of the Yokohama Message, as adopted by the World Conference, the Yokohama Conference was at a crossroads in human progress. In one direction lay the meagre results of an extraordinary opportunity given to the United Nations and its Member States. In the other direction, the United Nations and the world community could change the course of events by reducing the suffering from natural disasters. Action was urgently needed.

17. The IDNDR secretariat and its key partners within the International Framework of Action accepted this challenge and engaged in a structured and concerted approach towards the Yokohama follow-up, taking in the evolved strategic orientation described in paragraph 15 above and striving towards further improved interface with all relevant United Nations system sectors, as described below.

# B. Strategic synergies within the social and economic domains of the United Nations system

- 18. As part of the follow-up to the Yokohama Conference, the Decade secretariat established a number of new, visible, synergies between its internationally recognized approach to disaster reduction and several other global strategies of the United Nations system in the social and economic fields. Examples of such synergies include the following:
- (a) The *United Nations Conference on Human Settlements (Habitat II)* (Istanbul, 3–14 June, 1996) included distinct references to IDNDR and a chapter on disaster prevention, mitigation and preparedness, and post-disaster rehabilitation capabilities in the Habitat Agenda;
- (b) The World Food Summit (Food and Agriculture Organization of the United Nations (FAO), Rome, 13–17 November 1996) included distinct references to natural disaster reduction in both the Rome Declaration on World Food Security and in the World Food Summit Plan of Action.

The latter dedicated its fifth commitment to the prevention and preparedness for natural disasters and man-made emergencies;

- at its fourth session considered natural disaster reduction and IDNDR within the context of implementing the Programme of Action for the Sustainable Development of Small Island Developing States, adopted at Bridgetown, Barbados, in 1992. In the same vein, disaster reduction is an integral component of the preparations for the special session of the General Assembly on the review of the implementation of that Programme of Action to be held in fall 1999;
- (d) The Declaration on the Occasion of the Fiftieth Anniversary of the United Nations (General Assembly resolution 50/6) refers, inter alia, to the need for intensified cooperation on natural disaster reduction in order to foster sustained economic growth, social development, environmental protection and social justice;
- (e) The Programme for the Further Implementation of Agenda 21, as adopted at the nineteenth special session of the General Assembly (New York, 23–27 June 1997), included specific reference to natural disaster reduction and the Yokohama World Conference;
- (f) At its first regular session of 1998, the *Administrative Committee on Coordination (ACC)* recognized disaster reduction as an issue of global concern and of strategic importance for the United Nations system in the twenty-first century (see ACC/1998/4);
- (g) At the high-level segment of the Substantive session of 1995 of the Economic and Social Council, dedicated to the development of Africa, it was recognized that Africa is one of the continents prone to natural disasters which adversely affect development efforts, and that programmes for disaster preparedness, prevention and mitigation, in accordance with the Yokohama Strategy for a Safer World and its Programme of Action, should be instituted to assist Africa to cope with the effects of natural disasters (see E/1995/117).

#### C. Early warning capacities of the United Nations system with regard to natural disasters

19. In recognition of early warning being one of IDNDR's three programme targets (see para. 6 above), a specific technical committee session was devoted to the subject at the Yokohama World Conference on Natural Disaster Reduction. The primary outcome of the Conference re-emphasized the

importance of applied scientific knowledge and the public's awareness of hazard risks as essential components for more effective early warning practices.

- 20. Subsequently, at its forty-ninth session, the General Assembly called for improvements and better coordination of early warning capacities within the United Nations system with regard to natural disasters and similar disasters with an adverse effect on the environment. The General Assembly, in its resolution 49/22 B, placed this initiative distinctly within the concerted efforts of implementing the Yokohama Strategy and Plan of Action, and thus within the framework of IDNDR. The IDNDR secretariat was requested to coordinate a review of the existing early warning programmes and to suggest means by which global practices could become better coordinated and made more effective.
- 21. In pursuance of Assembly resolution 49/22 B, the Secretary-General presented two reports to the General Assembly (A/50/526 and A/52/561), which contained, *inter alia*, the findings of six international expert working groups convened by the IDNDR secretariat to study different aspects of the early warning process: geological hazards; hydrometeorological hazards, including drought, fire and other environmental hazards; technological hazards; the use and transfer of related modern technologies; and national and local capabilities pertinent to the effective use of early warning.
- 22. All aspects of early warning for natural and similar disasters were discussed by an international conference on early warning systems for the reduction of natural disasters held at Potsdam, Germany, in September 1998. This technical and scientific conference focused on the application of successful warning practices, and was sponsored by the Government of Germany with the collaboration of United Nations agencies and international scientific organizations. As a major topical event of the IDNDR closing process and the consolidation of global views, the conference identified those accomplishments and local experiences which can best improve organizational relationships and practical effectiveness for early warning into the twenty-first century. A primary output of the follow-up to the Potsdam conference will be a specific action plan and guidelines towards an integrated process approach, interdisciplinary and multisectoral, thereby comprising sociological, economical, political, organizational, scientific and technological components.

### III. Disaster reduction and United Nations reform

- 23. The preventive concept as embodied in IDNDR has received a considerable boost through the United Nations reform, one of the main reform messages being the shift towards a multilateral platform which would enable the international community to deal with the challenges of the future and the risks of the future in a proactive and effective manner. With regard to natural disaster reduction, the Secretary-General's reform proposals and the subsequent decisions of the General Assembly have confirmed:
- (a) The uniqueness of the United Nations system as policy and coordination platform for issues of universal character, as well as its capacity to serve as an honest broker for all relevant interests and its fundamental commitment to creating equal opportunities in all domains;
- (b) The positive impulses for pursuing cross-cutting issues of universal character, such as natural disaster reduction, created on the one hand by a division of labour between non-operational responsibilities for system-wide policy development, advocacy and coordination, and on the other hand, by distinct operational responsibilities for all relevant mandate bearers inside and outside the United Nations, in particular in the field of development.
- 24. Consequently, in its resolution 52/12 B, the General Assembly decided to transfer to the United Nations Development Programme (UNDP) the responsibility for the coordination of operational activities for natural disaster mitigation, prevention and preparedness. At the same time, activities relating to the implementation of IDNDR remained the responsibility of the Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator (see A/52/303, sect. 25.6).

### IV. Towards the twenty-first century

#### A. IDNDR action plan 1998–1999

- 25. A summary of the achievements of the Decade is contained in the final report of its Scientific and Technical Committee (A/54/132/Add.1–E/1999/80/Add.1). In the present section attention is drawn to information not specifically covered in that report.
- 26. In order to evaluate progress in disaster reduction made by the Decade, identify trends in natural hazards likely to project related risks into the twenty-first century, and shape future directions for sustained international and interdisciplinary commitment to disaster reduction, IDNDR launched a 1998–1999 plan of action at the end of 1997.

Based on programme areas defined by the Scientific and Technical Committee and implemented through thematic and regional meetings, the plan of action was focused on concrete goals in the fields of (a) continued advocacy, (b) development of policies, and (c) coordination of institutional capacities. The action plan thus formed a strategic framework for follow-up to the Yokohama World Conference on Natural Disaster Reduction, and the development of a vision for the future of disaster reduction.

#### 1. Advocacy

- 27. In order to ensure the necessary awareness-building for disaster reduction as well as to work towards building a culture of prevention, in the IDNDR founding resolution in 1989, an annual "World Disaster Reduction Day" was designated, to be observed by the whole United Nations system on the second Wednesday of October. With financial support from the United Kingdom since 1992, the Day has grown into an important recurrent platform for massive thematic information exchange and programme guidance for all IDNDR partner agencies and the disaster reduction stakeholder community outside the United Nations System. An annual six-monthly campaign, orchestrated at the global level but implemented in almost 100 countries, is based on the selection of a broad theme. For example, in 1998 it was "Natural disaster prevention and the media: prevention begins with information". Part of this campaign since 1996, the IDNDR Internet conference in 1999 attracted 700 participants from 60 countries.
- 28. STOP Disasters, a quarterly magazine devoted to disaster prevention started by the IDNDR secretariat, is published by the international institute Stop Disasters at Naples, Italy, with a readership of 11,000 subscribers in 205 countries and territories. The IDNDR secretariat also produces IDNDR Informs, a newsletter for Latin America and the Caribbean. The latest IDNDR innovation in advocacy is the IDNDR Web site launched in the early part of 1999 (http://www.idndr.org), which provides information on the Decade to a growing number of visitors and contains links to agencies in the wider disaster reduction constituency. Monthly highlights are posted on this site.

#### 2. Policy development

29. A major aspect of IDNDR's functions in policy development in the plan of action 1998–1999 was to coordinate the Inter-Agency Task Force on El Niño, as called for by the General Assembly in its resolution 52/200. This Task Force presented a multidisciplinary platform for concerted action among partner agencies within the United

Nations system, in particular for the linking of science and technology concerns (i.e., those manifest in the programmes of the World Meteorological Organization (WMO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and its Intergovernmental Oceanographic Commission (IOC), etc.) with the operational concerns (i.e., as present in such bodies as UNDP, the United Nations Environment Programme (UNEP), the World Food Programme (WFP), FAO, the World Health Organization (WHO)/the Pan American Health Organization (PAHO), the Economic Commission for Latin America and the Caribbean (ECLAC), the Office for the Coordination of Humanitarian Affairs, etc.). Immediate "products" included the first intergovernmental meeting of experts on El Niño (Guayaquil, Ecuador, November 1998) and the Declaration of Guayaquil, a WMO scientific and technical retrospective of the 1997–1998 El Niño Southern Oscillation (ENSO) event, a WMO feasibility study on a centre for the study of the El Niño phenomenon as proposed by the Government of Ecuador, and a newly initiated multi-country UNEP case study on data management and national responses to the 1997-1998 ENSO event, finance by the United Nations International Partnership Trust Fund (UNFIP) and other funding sources (currently encompassing 16 countries).

- 30. Another IDNDR policy focus of great importance was early warning, a field of growing importance thanks to rapid technological progress in related areas. Two General Assembly resolutions and a thorough inter-agency process of consultation led to an international conference on early warning systems for the reduction of natural disasters, held at Potsdam, Germany, in September 1998 (for more information on the Potsdam conference, see para. 22 above).
- 31. As an example of the remaining policy development issues addressed by the 1998–1999 plan of action, the IDNDR secretariat embarked on an activity to define policy guidelines for seismic damage reduction in urban centres, through case studies in nine cities within the framework of the risk assessment tools for diagnosis of urban areas against seismic disasters (RADIUS) initiative. Working through three regional advisory committees, the cities were able to bring public officials together with scientists in order to establish specific damage scenarios and define remedial actions for these accordingly. A total of 93 associated cities are participating in the programme, which should help to take protective measures against the damage caused by earthquakes.

#### 3. Coordination

32. As part of 1998-1999 plan of action, IDNDR held 21 thematic and 10 regional conferences and other events, which focused on a wide variety of disaster reduction issues common to groups of stakeholders or groups of countries. All of these meetings in Africa, Asia, Latin America, Commonwealth of Independent States (CIS) countries and elsewhere, were very well attended by stakeholders at different levels. Key problems were identified at the regional or subregional levels and recommendations for future actions made. The meetings produced a wealth of evidence in support of disaster reduction as an integral part of disaster management. They also provided extensive information on country-level experience. All these activities culminated in a high-level event at Geneva in July 1999, comprising the IDNDR programme forum (see paras. 63–90 below) and the substantive session of 1999 of the Economic and Social Council, to which the present report is submitted.

#### B. Selected activities at the regional level

As the Decade proceeded, its objectives gained increasing recognition at the regional and national levels, as witnessed, inter alia, by the steadily growing numbers of Member States with IDNDR national committees or focal points (currently 141; for a listing, please visit the IDNDR Web site at http://www.idndr.org), and the gradual policy shift from response and recovery to reduction and preparedness in the disaster management plans of most of these countries. In order to allow the preparation of the present section of the report, the Secretary-General sent a note verbale to all Governments on 15 March 1999, requesting country-level reports on achievements in the implementation of the IDNDR programme. A timely response was received from Bangladesh, Brazil, China, Ecuador, France, Germany, Norway, Qatar, the Russian Federation, Singapore, Slovakia, South Africa and Venezuela. Fortunately, additional information made available to the IDNDR secretariat by over 80 countries was varied in terms of geographic coverage as well as depth of detail. For the benefit of the Council, a typical cross-section, derived from all this material, is presented below. These limited examples are provided without prejudice to the numerous other developments that have also highlighted the Decade.

#### 1. Africa

34. The African continent is subject to a wide range of natural hazards, and suffers constantly from natural and other disasters, which have serious adverse effects on societies and

national economies as well as on scarce human and material resources. Strong political support for disaster reduction was demonstrated by the Organization of African Unity (OAU) Council of Ministers, which formally adopted the Yokohama Strategy and Plan of Action in July 1994 as the common basis to guide progress towards disaster reduction on the continent.

- 35. Because of lack of available resources, the translation of this political will into effective action is progressing more slowly than desired by most national agencies responsible. In this connection, the declaration adopted by an IDNDR/UNEP regional meeting for Africa, held at Nairobi in May 1999, recommended that cooperation among African countries in the domain of disaster prevention and risk reduction be strengthened by adopting national and regional mechanisms to improve the exchange of information, sharing of experience and knowledge, and technology transfer.
- 36. During the Decade, three subregional workshops were held in Africa in order to start the process of transforming the conclusions of the Yokohama Strategy and Plan of Action into practice at the country level at Gaborone in November–December 1994; at Ouagadougou in May 1995 and at Nairobi in June 1995. Advanced disaster reduction structures and/or legislation have now been put in place in a number of countries, including Burkina Faso, Ethiopia, Federal Republic of Nigeria, Ghana, Kenya, Madagascar, Malawi, Mozambique, Senegal, South Africa, Swaziland, Zambia and Zimbabwe. A large number of national IDNDR committees has also been put in place. Considering their advanced stage of preparations, quite a number of additional countries in Africa may be expected to have such instruments in place in the near future.

#### 2. Europe

- 37. The European region is subject to potentially dangerous natural hazards, such as earthquakes, volcanic eruptions, flash floods, landslides, avalanches and forest fires. Technological and human-induced ecological hazards, such as accidental releases of chemicals in surface water catchments, dumping of toxic and radioactive materials in coastal zones or on the high seas, and hydrological and climatic problems created by excessive withdrawals from large water bodies etc. add to or complicate problems related to natural hazards, particularly in CIS countries in Eastern Europe and Central Asia. An IDNDR/CIS regional meeting held in Armenia in September 1998 addressed issues of particular relevance to CIS countries.
- 38. Support for the principles of disaster reduction is evidenced by the number of European countries with IDNDR national committees or focal points. Among these, France was

one of the first Member States to establish an IDNDR national committee by official ministerial decree (in 1990), and the Swiss IDNDR national committee has been mandated to continue beyond the conclusion of IDNDR at the end of 1999 as the Swiss national platform on natural hazards. An IDNDR-sponsored international conference on mountain natural hazards was held at Grenoble, France, in April 1999, and an IDNDR regional meeting for the Mediterranean area at Valencia, Spain, in May 1999. A major IDNDR meeting on land-use planning and disasters was hosted at Paris in June 1999.

#### 3. Asia and Oceania

- 39. Natural hazards in Asia include floods, droughts, storm surges, tsunamis, earthquakes, landslides and volcanic eruptions. In recent years, the occurrence and severity of some natural disasters in Asia and Oceania has become more clearly associated with the ENSO phenomenon. Several regional activities in Asia and Oceania manifested a strong focus on disaster prevention. In fact, collaboration in the area of ENSO monitoring between Australia, China, Japan and other countries in the region, with inputs from major partner countries on the Eastern Pacific rim, has greatly enhanced the understanding of the phenomenon and improved skills for El Niño predictions over the past 10 years.
- 40. Seven annual South Pacific IDNDR disaster management meetings have been held during the Decade to strengthen collaboration and harmonize data collection on natural hazards. Held at Bangkok in February 1999 and organized in close collaboration with the Economic Commission for Asia and the Pacific (ESCAP), an IDNDR regional conference for Asia enabled a massive exchange of experiences and ideas.
- 41. In China, for example, the IDNDR national committee is set up as an inter-ministerial working group, responsible for the formulation of national policy and action plans for IDNDR activities in China. In April 1998, the Chinese national disaster reduction plan (1998–2010) was approved by the State Council and made an integral part of the overall national economic and social development plan. The importance attached to disaster reduction by China is well illustrated in an excerpt from a recent speech by President Jiang Zemin (see box).
- 42. In Japan, the disaster prevention bureau of the national land agency coordinates the activities of Government, the ministries, agencies and institutions in order to ensure that the Japanese Government is able to carry out disaster reduction activities in an integrated and coherent manner.

- 43. Viet Nam, a country exposed to recurring floods and typhoons, has strongly supported the goals of IDNDR. In 1992, the Ministry of Water Resources and the Viet Nam national committee for IDNDR organized an international workshop on flood mitigation, emergency preparedness and flood disaster management at Hanoi. The workshop resulted, in 1994, in the adoption of a comprehensive national strategy and action plan for mitigating water disasters in Viet Nam.
- 44. In another example from the region, the Government of the Islamic Republic of Iran, as early as 1991, approved the formation of an IDNDR national committee, headed by several ministers from key government sectors, in addition to the Iran Institute of Geophysics and the Red Crescent Society of Iran. It has been specifically decreed that the activities under the national committee will extend beyond the closure of the Decade at the end of 1999.
- 45. Information is available on progress made in disaster reduction in most other Asian countries, including such disaster-prone countries as Bangladesh, India and Nepal.

#### 4. The Americas

- 46. In the Pacific rim countries of South America, El Niño-related impacts are traditionally among the most severe worldwide. The Southeastern United States, the Caribbean island States and adjacent countries in Central America are regularly frequented by forceful hurricanes originating in the Western Atlantic (hurricanes George and Mitch are recent examples). Seismic activity along most of the Pacific rim is responsible for a high earthquake risk, affecting populations concentrated in high-density urban areas and infrastructures alike.
- 47. Some of the major intergovernmental organizations in the hemisphere, such as PAHO, the Organization of American States (OAS) and ECLAC, as well as many bilateral agencies and NGOs, have promoted disaster management policies and practices, and have provided information and training programmes and other services for disaster reduction as part of development assistance. The shift from response and rehabilitation to prevention and preparedness has been well received, and support for the goals and objectives has been widespread in the region as a whole. Witness to this observation is the current groundswell of interest in improved early warning systems for ENSO events and the growing political support for investments towards this goal in most of the affected countries.
- 48. The First Hemispheric Congress on Disaster Reduction and Sustainable Development was held at Miami in 1996. The Congress built upon the plan of action adopted by the Summit of the Americas in 1994, the recommendations of the 1994

- Cartagena Inter-American Conference on Natural Disaster Reduction and the 1994 IDNDR Yokohama Strategy and Plan of Action for a Safer World. The Congress focused attention on the relationship between disaster reduction and economic development.
- 49. An IDNDR hemispheric meeting was held at San José from 31 May to 5 June 1999. It brought together government representatives from all the countries of the hemisphere, international agencies and NGOs. In the Declaration of San José, the Meeting noted that qualitative improvements in the region had been achieved through an increased awareness of IDNDR goals and objectives, but that a significant reduction in natural disaster impacts had not yet been achieved in the hemisphere.
- 50. Active IDNDR national committees or focal points have been established in Antigua and Barbuda, Argentina, the Bahamas, Barbados, Belize, Bolivia, Brazil, the British Virgin Islands, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Trinidad and Tobago, the Turks and Caicos Islands, the United States of America, Uruguay and Venezuela.

#### Disaster reduction in China

The Chinese Government will continue to stick to the policy of giving priority to prevention, while combining disaster prevention with combating and relief. China will pool and rationally allocate all the resources, and properly handle the relationship among disaster reduction, population, resources and environment. We will step up the national management of natural disasters and enhance our comprehensive ability to reduce disaster. Reducing natural disaster is a long-term task facing all the countries in the world. The launching of the International Decade for Natural Disaster Reduction has given a boost to the global disaster reduction effort. The Chinese Government has attached great importance and rendered assistance to the International Decade for National Disaster Reduction. China stands ready to intensify international exchange and cooperation in a bid to enhance its ability to manage natural disasters and make its contribution to the international disaster reduction effort.

Jiang Zemin President of China Beijing, 10 June 1999

### C. Selected activities of United Nations agencies

51. As stated in paragraphs 1 to 5 above, in the IDNDR founding resolution, agencies within the United Nations system were urged to accord priority to IDNDR goals. The Inter-Agency Steering Committee has proven crucial in promoting collaboration and developing consensus views, initially among United Nations agencies and other participating agencies which joined the Committee at a later stage. The activities of some of the major United Nations agencies are highlighted below. Inputs from the World Bank, however, were not received in time for inclusion in the present report.

#### 1. FAO

- 52. FAO has always recognized the importance of disaster reduction, and the Rome Declaration on World Food Safety specifically stated that FAO would endeavour to prevent and be prepared for disasters and other emergencies, focusing on food production requirements and rehabilitation activities. In 1994, FAO established a special programme for food security, aiming to address the need of better disaster reduction through, *inter alia*, water control and the diversification of production.
- 53. FAO also promotes disaster reduction in its disaster response activities. In particular, in the event of natural disasters affecting agriculture, FAO's Service for Special Relief Operations conducts assessments of relief and

short-term rehabilitation requirements. FAO ensures, *inter alia*, that its relief projects incorporate elements of disaster reduction at both the community and national levels. As part of these activities, FAO provides advice and technical assistance to the countries concerned, and encourages the development of indicators of vulnerability.

54. FAO's Global Information and Early Warning Service (GIEWS) continuously monitors crops and food supply conditions worldwide, and provides warning of impending food shortages to the international community. In this connection, the Service conducts, often jointly with WFP, crop and food supply assessment missions in countries facing food emergencies caused by disasters and needing international assistance. GIEWS has extensively monitored the impact of El Niño on the crop and food supply situation in affected countries. In 1998, FAO regularly reported to the IDNDR secretariat on the impact of the El Niño and La Niña phenomena on food and the agricultural sector. FAO also participated in the international IDNDR conference on early warning for the reduction of disasters, held at Potsdam, Germany, from 7 to 11 September 1998.

#### 2. ITU

55. Through its mandate in telecommunications, the International Telecommunication Union (ITU) has played a major role throughout the Decade in promoting and guiding the further growth and spread of cheap and convenient telecommunication systems worldwide. Along with the spectacular development of the World Wide Web, this has helped to make telecommunications more accessible, more

versatile and more valuable for disaster reduction, especially in communications for purposes of early warning. ITU played a major role in the adoption of the Tampere Convention in 1998, concerning the provision of telecommunication resources for disaster mitigation and relief operations. Also in 1998, the ITU Plenipotentiary Conference adopted resolution COM5/18 on the need to address the issue of how to make better use of telecommunications technology for the safety of humanitarian personnel.

#### 3. UNESCO

- 56. The purposes of UNESCO in the field of natural disaster reduction are to promote a better scientific understanding of the distribution in time and space of natural hazards and their intensity, to help set up reliable observatory and early warning networks and systems, to encourage the establishment of rational land use plans, to promote the adoption of suitable building designs, to contribute to the protection of educational buildings and cultural monuments, to strengthen environmental protection for the prevention of natural disasters, to enhance preparedness and public awareness through information and education, and to conduct post-disaster investigations.
- 57. The Decade has had a profound impact on each area of UNESCO competence: education, natural and social sciences, culture and communication. The programmes of UNESCO and its IOC in environmental sciences and environmental education have been significantly reoriented in order to address Decade priorities and to enhance integrated approaches to solving disaster issues, in accordance with the Yokohama Plan of Action and Strategy.
- 58. UNESCO strongly endorses the ACC statement on the strategic importance of disaster reduction for the role of the United Nations system in the twenty-first century, and continues to view the strengthening of capacity-building for vulnerability reduction and disaster prevention as fundamental to the principles of sustainable development. UNESCO believes, therefore, that the success of the follow-up to the Decade will depend on an identifiable and stable secretariat, capable of continuing the synergies, coordination and concentration among all IDNDR stakeholders, including those in the United Nations system.

#### 4. UNIDO

59. The United Nations Industrial Development Organization (UNIDO) contributes to the goals of IDNDR through the technical assistance it provides to the construction sector. This assistance relates to improved structural design, promotion of disaster-resistant building shapes and the use

of improved materials and fixing methods. It also includes efforts to change attitudes to disaster reduction and raise awareness of the importance of regular inspections of building designs and on-site practices.

60. UNIDO also contributes to disaster reduction in coastal areas through the promotion of risk assessment methods in its coastal zone management and tools for environmental risk assessment programme. The methods of estimating risks associated with future events in coastal zones cover both the prediction of environmental impacts and the calculation of the risks of damages involved. This UNIDO programme is focused on coastlines, estuaries and deltas, which are typically vulnerable to impacts from El Niño.

#### 5. WHO

61. WHO has collaborated in IDNDR initiatives from the inception of the Decade. According to WHO, disaster prevention in public health calls for the handling of prevention, preparedness, response and rehabilitation in an integrated manner. WHO approaches to disaster reduction concentrate on the reduction of disaster vulnerabilities of populations and public health systems and infrastructures. In order to preserve the gains made in the past 10 years, WHO supports the view expressed by ACC that a United Nations system-wide focus must be maintained beyond the conclusion of the Decade.

#### 6. WMO

WMO figures as the technical agency par excellence in the support of disaster reduction activities undertaken by the United Nations system. In cooperation with UNESCO and its IOC, and the International Council of Scientific Unions (ICSU), WMO has been the scientific and technical driving force for IDNDR activities on climate-related disasters. The Decade coincided with an increased interest in global climate modelling, forecasting and monitoring and the early stages development of the WMO/UNEP-administered Intergovernmental Panel on Climate Change and the secretariat of the United Nations Framework Convention on Climate Change. WMO has been the driving force behind the creation of the inter-agency "climate agenda" (adopted in 1996) and the establishment of the Inter-Agency Committee on the Climate Agenda. With deep-rooted traditions in the Tropical Ocean and Global Atmosphere Study and the Climate Vulnerability and Predictability Research programmes, WMO's world climate programme has been a steady partner of IDNDR in the execution of technical tasks, especially of the Inter-Agency Task Force on El Niño.

#### D. IDNDR concluding event

The International Decade for Natural Disaster Reduction comes to its conclusion in 1999. Based on the model of the Decade's mid-term review, as described in section II above, the international community will undertake a final evaluation of how the concept of disaster reduction has evolved over time, and more importantly whether the concept has been successfully implemented with concrete results. The General Assembly has decided on a two-tier closing event, consisting of a legislative platform provided by the substantive session of 1999 of the Council and a complementary substantive platform, the IDNDR programme forum, which was organized at Geneva from 5 to 9 July 1999. Within the forum, all partners of the IDNDR Framework have exchanged information on 10 years of achievements, as well as emerging trends and challenges for the future, and have exchanged views on how best to tackle these challenges through a concerted programme of action towards a safer world in the twenty-first century. The complementarity, at Geneva, between Council discussions and the IDNDR programme forum will enable dialogue and interaction between Governments, the United Nations system and those manifold organizations and individuals worldwide that have made disaster reduction, as embodied in IDNDR, into a working reality. The outcome of the Council deliberations will enable the Member States community to make a sound judgement on what the Decade has generated, what remains to be done, and how this would best be achieved in the future.

#### V. Conclusions and recommendations

# A. Summary overview on the outcome of the IDNDR programme forum

- 64. The conclusions emanating from the implementation of IDNDR's 10-year programme of disaster reduction are best reflected by the summary presentation of key results of the variety of thematic sessions organized within the IDNDR programme forum. They were presented by the Rapporteur General of the forum at the event's concluding session, and are set out below.
- 65. **Poverty.**The people that are most vulnerable to natural disasters are the poor, who have very limited resources for avoiding losses. Environmental degradation resulting from poverty exacerbates disaster impacts. Without greater attention from policy makers and more support from donor agencies for disaster prevention action, many developing countries, particularly in Africa, will not be able to escape

from this situation. Innovative approaches are needed; emphasis should be given to programmes to promote community-based approaches.

- 66. **Megacities and urban areas.** Concentrations of population in major urban centres (megacities), many of which are located in hazard-prone areas in developing countries, are highly vulnerable to natural and technological hazards due to dependence on complex infrastructures and the occupation of marginal land. Greater attention should be given to developing resilient and redundant infrastructures and to overall vulnerability reduction through regional and land-use planning.
- 67. **Communities.**Most disaster prevention and mitigation action requires community acceptance and initiative, which must be based on a credible assessment of risks and realistic estimates of costs and benefits. Communities are often generally knowledgeable about their own environments and coping mechanisms, and of ways to reduce vulnerabilities. Community leadership also enhances independence and self-reliance. National, regional and international efforts towards disaster prevention and mitigation are essential, but should be seen as supportive of community-based actions.
- 68. **Awareness.** Public awareness of natural hazards and risks, the driving force for prevention action, should be solidly grounded in the best scientific and technological information and methodology. IDNDR has promoted this goal and is seen as a key factor in increasing political sensitivities towards the need for disaster reduction measures and policies.
- 69. **Warnings.** Warnings for some types of hazards have saved many lives and are steadily improving, which is a major achievement during recent years. This has been made possible by improvements in monitoring, analytical, and communications systems. Nevertheless, further advances are possible and should be pursued. Warnings can be used to avoid disasters rather than just respond to them. Special attention should be given to delivering the right message to the right people at the right time.
- 70. **Information.**Advances in information technology in recent years now provide enormous resources for decision makers. However, efforts are needed to distill this information into products that are tailored for the specific needs and delivered in a timely manner. Advances in communications technology make possible integration of real-time and archival data for emergency situations.
- 71. **Education and training.** Education and training for disaster reduction is a key, cross-cutting issue that must be an integral part of all programmes. Creative use of films and videos, as well as of modern dissemination means, can be

especially effective. Information must be seen as authoritative and credible, which can be achieved by linking experts with community leaders. Education resources provided by regional and international organizations, including NGOs, can be particularly helpful.

- 72. **Partnerships.** Partnerships involving public and private organizations can be particularly effective in linking stakeholders and implementing plans. The private sector may be able to promote mitigation by providing incentives, for example by ensuring compliance to building codes that would reduce insurance premiums as a condition for coverage.
- 73. **Risk management.** Risk management should be better integrated into overall developmental and environmental planning. Cost-effectiveness of proposed action is an essential consideration. Post-disaster recovery and reconstruction provide an opportunity and resources to implement prevention and mitigation as an essential element of sustainable development. Improvements have been made in recent years in risk assessment and loss estimation methodology.
- 74. **Health.** Natural disasters require close collaboration between scientists and decision makers to assure that authoritative information on potential or actual health problems is communicated and is incorporated into preventive and preparedness policies and strategies for minimizing the health consequences of natural disasters. It is often difficult to achieve this goal in the face of uncertain and/or sustained situations. The effects of climate variability on health are of growing interest.
- 75. **Climate variability.** The successful prediction of the El Niño phenomena during 1997/98 signalled an improving capability for forecasting climate variability. As climate variation affects the occurrence of natural hazards, such as drought, heavy rainfall with floods and landslides, and tropical cyclones, this development carries great implications for natural disaster reduction. In advance of El Niño, some communities took preventive action that significantly reduced potential impacts.
- 76. **Environment and ecosystems.** Natural hazards impact the environment and environmental degradation can exacerbate disasters. Small island States and mountain communities can be especially vulnerable. Hazard and risk assessments should be improved to guide prevention and mitigation measures for protecting the environment.
- 77. **Research.** Substantial progress has been achieved in understanding the cause and effects of natural hazards. Nevertheless, further efforts are needed, especially with respect to risk assessment and warnings. Multidisciplinary

efforts are needed for many problems, especially to better integrate physical and social sciences.

- 78. **Land-use planning.** Hazard assessments, including the likelihood and potential severity of an event, provide the basis for avoiding hazards by siting structures out of harm's way. This information should be incorporated in land-use plans to avoid development in vulnerable flood plains, coastal and fault zones, and other hazardous areas.
- 79. **Building codes and practices.** In many cases, rather simple modifications to current building practices could greatly improve performance under hazard-induced stress. Retrofitting existing structures, however, poses a challenge due to cost. Emphasis is now being given to overall building performance, moving beyond the previous focus on life safety. Methods have been advanced for better housing construction using local materials, which should be more broadly communicated.
- 80. **Loss data.** Reliable data on natural disaster losses, other than human casualties, are very limited. Standard methods should be employed for collecting such data. National statistics on losses could be used to measure progress on disaster reduction.
- 81. **Framework.**The international and regional framework provided by IDNDR has been of great assistance to many nations in focusing attention on the threat posed by natural hazards and the means for mitigating their impacts, and through IDNDR many high-level decision makers have become aware of the vulnerabilities and the opportunities to reduce them. It is of the utmost importance that such a framework continue to be provided in the future beyond the Decade.

## **B.** Final declaration adopted by the IDNDR programme forum

82. The substantive recommendations of the International Framework of Action for IDNDR, as assembled at the IDNDR programme forum, are contained in the event's final declaration, as follows:

We, participants in the IDNDR International Programme Forum: Towards Partnerships for Disaster Reduction in the Twenty-first Century, recognize that the world is increasingly being threatened by large-scale disasters triggered by hazards, which will have long-term negative social, economic, and environmental consequences on our societies and hamper our capacity to ensure sustainable development and investment, particularly in developing countries.

We have to act decisively now to guarantee a safer world for future generations. We must build on progress achieved during IDNDR so that risk management and disaster reduction become essential elements of government policies. The Yokohama Strategy (1994) and the strategy "A safer world in the twenty-first century: risk and disaster reduction" (1999) chart the course. Political will is essential to ensure that appropriate policies and institutional arrangements foster a culture of prevention at all levels of our societies.

We shall adopt and implement policy measures at the international, regional, subregional, national and local levels aimed at reducing the vulnerability of our societies to both natural and technological hazards through proactive rather than reactive approaches. These measures shall have as main objectives the establishment of hazard-resilient communities and the protection of people from the threat of disasters. They shall also contribute to safeguarding our natural and economic resources, and our social well-being and livelihoods.

Furthermore, scientific, social and economic research, and technological and planning applications will be required at all levels and from a wide range of disciplines in order to support risk management and effective reduction of our vulnerabilities. In this connection, there is a need for increased information exchange, improved early warning capacities, technology transfer and technical cooperation among all countries, paying particular attention to the most vulnerable and affected.

These last 10 years have shown the multisectoral, interdisciplinary and cross-cutting nature of broad risk management and its contribution to disaster reduction. Continued interaction and cooperation on the above basis, among all disciplines and institutions concerned, are considered essential to accomplish commonly agreed objectives and priorities. This interaction should be based on the strengthening of cooperation and partnerships engendered by the IDNDR programme.

We stress the importance of developing and strengthening regional approaches dedicated to disaster reduction in order to take account of local specificity and needs. We emphasize, in this respect, the need to support institutional initiatives and mechanisms for strengthening regional, subregional, national and local capabilities, coordination and applied research. We recognize the particular need for establishing an

institutional arrangement to coordinate disaster reduction in Africa, and in this regard invite existing and evolving mechanisms for interregional cooperation to accord priority to these concerns.

Appropriate financial resources will be needed to ensure the development and implementation of prevention and mitigation policies and programmes in all countries, particularly developing countries. Innovative approaches should be explored, including the funding of international initiatives. However, full use should be made of existing regional and national financial mechanisms involving those communities most directly exposed to risks. All bilateral and multilateral development assistance should include disaster reduction components.

We recommend to the international community and the United Nations that based on the proven success of the functional responsibilities and organizational arrangements during IDNDR, the international cooperative framework for disaster reduction be maintained and strengthened. This framework should ensure partnership and synergy among all elements of risk management and disaster reduction, and should promote a shift from a mentality of reaction to a culture of prevention. The growing threat of political, social and economic disruption caused by natural and technological disasters calls for bold action from Member States of the United Nations in this regard.

16