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**WORLD CONFERENCE ON  
NATURAL DISASTER REDUCTION**

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REPORT OF THE WORLD CONFERENCE ON NATURAL DISASTER REDUCTION\*

(Yokohama, 23-27 May 1994)

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\* The present document is a mimeographed version of the report of the World Conference on Natural Disaster Reduction, which was held at Yokohama from 23 to 27 May 1994. Annex I to the report will be issued as an addendum to the document. It will subsequently be issued in final form as a sales publication of the United Nations.

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\* To be issued as an addendum to the present document.

## Chapter I

### RESOLUTIONS AND DECISION ADOPTED BY THE CONFERENCE

At its 5th plenary meeting, on 27 May 1994, the Conference adopted the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, containing the Principles, the Strategy and the Plan of Action, as well as the Yokohama Message (resolution 1). It also adopted a resolution expressing gratitude to the people and Government of Japan and the City of Yokohama (resolution 2) and a resolution concerning the credentials of representatives to the Conference (resolution 3). The Conference also adopted a decision on accreditation of non-governmental organizations for participation in the Conference.

RESOLUTION 1

Adoption of texts on natural disaster reduction

The World Conference on Natural Disaster Reduction,

Having met at Yokohama from 23 to 27 May 1994,

1. Adopts the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, containing the Principles, the Strategy and the Plan of Action, as well as the Yokohama Message, which are annexed to the present resolution;
2. Recommends to the General Assembly of the United Nations at its forty-ninth session that it endorse the texts referred to in paragraph 1 above.

ANNEX I

Yokohama Strategy for a Safer World

Guidelines for Natural Disaster Prevention,  
Preparedness and Mitigation

Containing the Principles, the Strategy  
and the Plan of Action

The World Conference on Natural Disaster Reduction,

Having met at Yokohama from 23 to 27 May 1994,

Recognizing the rapidly rising world-wide toll on human and economic losses due to natural disasters,

Recalling the decision of the General Assembly in its resolution 44/236 of 22 December 1989 to launch a far-reaching global undertaking for the 1990s to save human lives and reduce the impact of natural disasters,

Recalling also the forward-looking decision of the General Assembly in its resolution 46/182 of 19 December 1991 to adopt an integrated approach for disaster management in all its aspects and to initiate a process towards a global culture of prevention,

Recognizing that sustainable economic growth and sustainable development cannot be achieved in many countries without adequate measures to reduce disaster losses, and that there are close linkages between disaster losses and environmental degradation, as emphasized in Agenda 21 adopted at the United Nations Conference on Environment and Development, 1/

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

Reaffirming the Rio Declaration on Environment and Development, 2/ in particular Principle 18, which stresses the need for the international community to assist States afflicted by natural disasters and other emergencies that are likely to produce sudden harmful effects in the environment of those States,

Reaffirming also the role assigned by the Secretary-General of the United Nations to the Emergency Relief Coordinator, Under-Secretary-General of the Department of Humanitarian Affairs, through the secretariat in charge of the Decade, in promoting and directing activities of the Decade in conformity with General Assembly resolution 46/182,

Emphasizing the need for the United Nations system to pay special attention to the least developed and land-locked countries and small island developing States, and recalling in this regard that the outcomes of the first Global Conference on the Sustainable Development of Small Island Developing States 3/ and the Programme of Action for the Least Developed Countries for the 1990s 4/ call for giving priority attention to small island developing States and least developed countries in the activities of the Decade,

Responding to the request of the General Assembly in its resolution 48/188 of 23 December 1993 to:

- (a) Review the accomplishments of the Decade at national, regional and international levels;
- (b) Chart a programme of action for the future;
- (c) Exchange information on the implementation of Decade programmes and policies;
- (d) Increase awareness of the importance of disaster reduction policies;

1. Appeals to the world, at the time of reaching the mid-point of the International Decade for Natural Disaster Reduction and in the light of increasing human losses and damage caused by disasters and acting in a new spirit of partnership to build a safer world, based on common interest, sovereign equality and shared responsibility to save human lives, protect human and natural resources, the ecosystem and cultural heritage, to reaffirm its commitment to pursuing, through national, regional and international efforts, the transformation of the International Framework of Action for the Decade into a decisive intersectoral Plan of Action;

2. Invites all countries to defend individuals from physical injuries and traumas, protect property and contribute to ensuring progress and stability, generally recognizing that each country bears the primary responsibility for protecting its own people, infrastructure and other national assets from the impact of natural disasters, cyclones and floods, and accepting at the same time that, in the context of increasing global interdependence, concerted

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2/ Ibid., annex I.

3/ See A/CONF.167/9.

4/ See A/CONF.147/8.

international cooperation and an enabling international environment are vital for the success of these national efforts;

3. Adopts the following Principles, Strategy and Plan of Action.

#### I. PRINCIPLES

1. Risk assessment is a required step for the adoption of adequate and successful disaster reduction policies and measures.

2. Disaster prevention and preparedness are of primary importance in reducing the need for disaster relief.

3. Disaster prevention and preparedness should be considered integral aspects of development policy and planning at national, regional, bilateral, multilateral and international levels.

4. The development and strengthening of capacities to prevent, reduce and mitigate disasters is a top priority area to be addressed during the Decade so as to provide a strong basis for follow-up activities to the Decade.

5. Early warnings of impending disasters and their effective dissemination using telecommunications, including broadcast services, are key factors to successful disaster prevention and preparedness.

6. Preventive measures are most effective when they involve participation at all levels, from the local community through the national government to the regional and international level.

7. Vulnerability can be reduced by the application of proper design and patterns of development focused on target groups, by appropriate education and training of the whole community.

8. The international community accepts the need to share the necessary technology to prevent, reduce and mitigate disaster; this should be made freely available and in a timely manner as an integral part of technical cooperation.

9. Environmental protection as a component of sustainable development consistent with poverty alleviation is imperative in the prevention and mitigation of natural disasters.

10. Each country bears the primary responsibility for protecting its people, infrastructure, and other national assets from the impact of natural disasters. The international community should demonstrate strong political determination required to mobilize adequate and make efficient use of existing resources, including financial, scientific and technological means, in the field of natural disaster reduction, bearing in mind the needs of the developing countries, particularly the least developed countries.

#### A. Basis for the Strategy

1. Natural disasters continue to strike and increase in magnitude, complexity, frequency and economic impact. Whilst the natural phenomena causing disasters are in most cases beyond human control, vulnerability is generally a result of human activity. Therefore, society must recognize and strengthen traditional

methods and explore new ways to live with such risk, and take urgent actions to prevent as well as to reduce the effects of such disasters. The capacities to do so are available.

2. In this context the least developed countries, small island developing States and land-locked countries are the most vulnerable countries, as they are the least equipped to mitigate disasters. Developing countries affected by desertification, drought and other types of natural disasters are also equally vulnerable and insufficiently equipped to mitigate natural disasters.

3. In all countries the poor and socially disadvantaged groups suffer most from natural disasters and are least equipped to cope with them. In fact disasters contribute to social, economic, cultural and political disruption in urban and rural contexts, each in its specific way. Large-scale urban concentrations are particularly fragile because of their complexity and the accumulation of population and infrastructures in limited areas.

4. Some patterns of consumption, production and development have the potential for increasing the vulnerability to natural disasters, particularly of the poor and socially disadvantaged groups. However, sustainable development can contribute to reduction of this vulnerability, if planned and managed in a way to ameliorate the social and economic conditions of the affected groups and communities.

5. Vulnerable developing countries should be enabled to revive, apply and share traditional methods to reduce the impact of natural disasters, supplemented and reinforced by access to modern scientific and technical knowledge. The existing knowledge and know-how should be studied and efforts should be made to ameliorate, develop and better apply them today.

6. Global social stability has become more fragile and reduction of natural disasters would contribute to reducing this fragility. In the effort towards effective disaster management, the full continuum from relief through rehabilitation, reconstruction and development to prevention must be the concept guiding actions towards the reduction of human and physical losses which remains the ultimate objective.

7. Notwithstanding the full continuum, disaster prevention is better than disaster response and achieving the goals, objectives and targets of the Decade as adopted by the relevant resolutions of the General Assembly would result in greatly reducing disaster losses. This requires maximum participation at community level which can mobilize considerable potential and traditional expertise in the application of the preventive measures.

B. Assessment of the status of disaster reduction  
midway into the Decade

8. Approaching the mid-point of the International Decade for Natural Disaster Reduction, the World Conference has identified, on the basis of national reports and technical discussions, the following main accomplishments and failures:

(a) Awareness of the potential benefits of disaster reduction is still limited to specialized circles and has not yet been successfully communicated to all sectors of society, in particular policy makers and the general public. This is due to a lack of attention for the issue, insufficient commitment and resources for promotional activities at all levels;

(b) At the same time, however, activities during the first years of the Decade in training, technical applications and research at local, national and international levels and in regional cooperation, have had positive results in some regions in reducing disaster losses;

(c) Equally, the creation of the organizational framework called for by the General Assembly, which includes National Decade Committees and Focal Points and, at the international level, the Special High-Level Council, the Scientific and Technical Committee and the Decade secretariat, has laid the basis for intensified preventive and preparedness efforts in the second half of the Decade;

(d) These new efforts in the field of disaster reduction have not systematically been part of multilateral and bilateral development policies;

(e) Education and training programmes and facilities for people professionally involved and the public at large have not been sufficiently developed with a focus on ways and means to reduce disasters. Also the potential of the information media, industry, scientific community and the private sector at large has not been sufficiently mobilized;

(f) It must be noted that not all entities of the United Nations system have contributed to the Decade's implementation to the extent possible and desired by the General Assembly in adopting its resolution 44/236. In recent years emphasis has again been placed primarily on disaster response both within the United Nations and beyond. This has slowed down the momentum of the Decade's initial phase, based on the consensus of the importance of action before disasters strike;

(g) A number of positive results have been achieved during the first five years of the Decade, although unevenly and not in the concerted and systematic way as envisaged by the General Assembly. Only if these achievements are recognized, consolidated and accelerated, will the Decade be able to reach its goals and objectives and contribute to the development of a global culture of prevention. In particular the existing tools which can yield improvements in disaster response, as part of a comprehensive approach towards disaster management, are not always utilized to the full extent of their potential;

(h) There is a strong need to strengthen the resilience and self-confidence of local communities to cope with natural disasters through recognition and propagation of their traditional knowledge, practices and values as part of development activities;

(i) Experience has demonstrated that, although not a part of the mandate of the Decade, the concept of the disaster reduction should be enlarged to cover natural and other disaster situations including environmental and technological disasters (Na-Techs) and their interrelationship which can have a significant impact on social, economic, cultural and environmental systems, in particular in developing countries.

### C. Strategy for the Year 2000 and Beyond

9. The World Conference, based on adoption of the Principles and the assessment of the progress accomplished during the first half of the Decade, has formulated a Strategy for Disaster Reduction centred on the objective of saving

human lives and protecting property. The Strategy calls for an accelerated implementation of a Plan of Action to be developed from the following points:

(a) Development of a global culture of prevention as an essential component of an integrated approach to disaster reduction;

(b) Adoption of a policy of self-reliance in each vulnerable country and community comprising capacity-building as well as allocation and efficient use of resources;

(c) Education and training in disaster prevention, preparedness and mitigation;

(d) Development and strengthening of human resources and material capabilities and capacity of research and development institutions for disaster reduction and mitigation;

(e) Identification and networking of existing centres of excellence so as to enhance disaster prevention, reduction and mitigation activities;

(f) Improvement of awareness in vulnerable communities, through a more active and constructive role of the media in respect of disaster reduction;

(g) Involvement and active participation of the people in disaster reduction, prevention and preparedness, leading to improved risk management;

(h) In the second half of the Decade, emphasis should be given to programmes that promote community-based approaches to vulnerability reduction;

(i) Improved risk assessment, broader monitoring and communication of forecasts and warnings;

(j) Adoption of integrated policies for prevention of, preparedness for, and response to, natural disasters and other disaster situations including environmental and technological hazards;

(k) Improved coordination and cooperation among ongoing national, regional and international disaster research activities, at universities, regional and subregional organizations and other technical and scientific institutions, having in mind that links between causes and effects, inherent to all types of disaster, should be investigated through interdisciplinary research;

(l) Effective national legislation and administrative action, higher priority at the political decision-making level;

(m) Placing higher priority on the compilation and exchange of information on natural disaster reduction, especially at regional and subregional levels, through the strengthening of existing mechanisms and improved use of communication techniques;

(n) Promotion of regional and subregional cooperation between countries exposed to the same natural hazards through exchange of information, joint disaster reduction activities and other formal or informal means including the establishment or strengthening of regional and subregional centres;

(o) Making available the existing technology for broader application to disaster reduction;

(p) Integration of the private sector in disaster reduction efforts through promotion of business opportunities;

(q) Promotion of the involvement of non-governmental organizations in natural hazard management, in particular those dealing with environmental and related issues and including indigenous non-governmental organizations;

(r) Strengthening the capacity of the United Nations system to assist in the reduction of losses from natural and related technological disasters, including coordination and evaluation of activities through the Decade and other mechanisms.

## II. PLAN OF ACTION

### A. Recommendations for action

10. Based on the Principles and the Strategy and taking into account information provided to the Conference in the national summary reports presented by a large number of countries and in the scientific and technical presentations, the Conference adopts a Plan of Action for the future, comprising the following specific actions to be implemented at the community and national levels, the subregional and regional levels, and the international level, through bilateral arrangements and international cooperation.

#### 1. Activities at the community and national levels

11. During the remaining part of the Decade all countries are called upon to:

(a) Express the political commitment to reduce their vulnerability, through declaration, legislation, policy decisions and action at the highest level, which would require the progressive implementation of disaster assessment and reduction plans at the national and community levels;

(b) Encourage continued mobilization of domestic resources for disaster reduction activities;

(c) Develop a risk assessment programme and emergency plans focusing efforts on disaster preparedness, response and mitigation, and design projects for subregional, regional and international cooperation, as appropriate;

(d) Develop documented comprehensive national disaster management plans with emphasis on disaster reduction;

(e) As appropriate, establish and/or strengthen National Committees for the Decade or clearly identified bodies charged with the promotion and coordination of disaster reduction actions;

(f) Take measures to upgrade the resistance of important infrastructure and lifelines;

(g) Give due consideration to the role of local authorities in the enforcement of safety standards and rules and strengthen the institutional capacities for natural disaster management at all levels;

(h) Consider making use of support from non-governmental organizations for improved disaster reduction at the local level;

(i) Incorporate disaster reduction prevention or mitigation in socio-economic development planning based on the assessment of the risk;

(j) Consider the possibility of incorporating in their developmental plans the conducting of Environmental Impact Assessments with a view to disaster reduction;

(k) Clearly identify specific disaster prevention needs which could use the knowledge or expertise that may be available from other countries or from the United Nations system, for instance, through training programmes designed to enhance human resources;

(l) Endeavour to document all disasters;

(m) Incorporate cost-effective technologies in reduction programmes, including forecasting and warning systems;

(n) Establish and implement educational and information programmes aimed at generating general public awareness, with special emphasis on policy makers and major groups, in order to ensure support for, and effectiveness of, disaster reduction programmes;

(o) Enrol the media as a contributing sector in awareness raising, education and opinion building in order to increase recognition of the potential of disaster reduction to save human lives and protect property;

(p) Set targets which specify how many distinct disaster scenarios can reasonably be given systematic attention by the end of the Decade;

(q) Stimulate genuine community involvement and empowerment of women and other socially disadvantaged groups at all stages of disaster management programmes in order to facilitate capacity building, which is an essential precondition for reducing vulnerability of communities to natural disasters;

(r) Aim at the application of traditional knowledge, practices and values of local communities for disaster reduction, thereby recognizing these traditional coping mechanisms as a valuable contribution to the empowerment of local communities and the enabling of their spontaneous cooperation in all disaster reduction programmes.

## 2. Activities at the regional and subregional levels

12. Considering the many common aspects of disaster vulnerability among countries of a same region or subregion, cooperation among them should be strengthened by implementing the following actions:

(a) Establishing or strengthening of subregional or regional centres for disaster reduction and prevention which, in cooperation with international organizations and with a view to enhancing national capabilities, would perform one or more of the following functions:

- (i) Collecting and disseminating documentation and information to improve public awareness of natural disasters and the potential to reduce their impact;
  - (ii) Formulating education and training programmes and technical information exchanges aimed at human resource development;
  - (iii) Supporting and strengthening natural disaster reduction mechanisms;
- (b) Given the importance of vulnerability of developing countries, particularly least developed countries, technical, material and financial resources should be made available in support of concerned subregional or regional centres to strengthen regional and national capacities to reduce natural disasters;
- (c) Improving the communications on natural disasters among the countries of the region in the context of preparedness and early warning systems;
- (d) Establishing and/or strengthening early warning mechanisms for disaster reduction;
- (e) Commemorating the International Day for Natural Disaster Reduction;
- (f) Establishing mutual assistance agreements and joint projects for disaster reduction within and between regions;
- (g) Reviewing periodically in regional political forums the progress made on disaster reduction;
- (h) Request and enable regional organizations to play an effective role in the implementation of relevant regional plans and programmes on natural disaster reduction;
- (i) The international community should give highest priority and special support to activities and programmes relating to natural disaster reduction at subregional or regional level in order to promote cooperation between countries exposed to the same risks;
- (j) As decided by the General Assembly, special attention should be given to the least developed countries in support of their activities in the field of natural disaster reduction;
- (k) Regional arrangements should be carried out in close coordination with and should supplement the national programmes for disaster reduction;
- (l) The international community should assist the developing countries in establishing measures to integrate disaster prevention and reduction within the existing machinery and strategies at the national, subregional and regional levels for poverty eradication in order to achieve sustainable development.

3. Activities at the international level, in particular through bilateral arrangements and multilateral cooperation

13. In the context of global interdependence and in the spirit of international cooperation, all activities to reduce disasters, in particular those laid down by the International Decade for Natural Disaster Reduction should be encouraged and supported in the following ways:

(a) It is recommended that extrabudgetary resources be provided for implementation of the Decade and, therefore, that voluntary contributions from Governments, international organizations and other sources, including the private sector, be strongly encouraged. To this end, the Secretary-General is urged to ensure an effective and efficient administration of the Trust Fund for the Decade, established as requested in General Assembly resolution 44/236;

(b) It is recommended that donor countries should increase the priority on disaster prevention, mitigation and preparedness in their assistance programmes and budgets, either on bilateral or multilateral basis, including increasing contributions to and through the Decade Trust Fund, in order to support fully the implementation of the Yokohama Strategy, particularly in developing countries;

(c) Disaster prevention and mitigation should become an integrated component of development projects financed by multilateral financial institutions, including the regional development banks;

(d) Integration of natural disaster reduction into development assistance programmes, through effective means, including as suggested in subparagraph 13 (b) above;

(e) Ensuring the cooperation in the area of research and science and technology development related to natural disaster reduction in order to enhance the capacities of the developing countries to reduce their vulnerability in this respect;

(f) The Trust Fund for the Decade should give priority in financing the establishment and strengthening of the early warning systems of the disaster prone developing countries particularly of the least developed, land-locked and small island developing States;

(g) Ensuring that from the formulation phase development projects be designed in a way to contribute to reducing, and not increasing, vulnerability to disasters;

(h) Improving the exchange of information on disaster reduction policies and technologies;

(i) Encouraging and supporting ongoing efforts aimed at developing appropriate indicators of vulnerability (indices);

(j) Reaffirmation of the roles of the Special High-Level Council and the Scientific and Technical Committee in promoting Decade activities, in particular the awareness of the benefits of disaster reduction;

(k) Enhancing the activities of, and cooperation between, organizations and programmes of the United Nations system, intergovernmental organizations,

non-governmental organizations and the private sector related to disaster reduction, including more efficient use of existing resources;

(l) Supporting efforts of Governments at the national and regional levels in the implementation of the priority areas of the Programme of Action for the Least Developed Countries for the 1990s, and the Programme of Action for the Sustainable Development of Small Island Developing States, related to the management of natural and environmental disasters through measures referred to in paragraph 13 (b) above;

(m) Providing wider support for the existing mechanism for disaster management and reduction of the United Nations system, in order to expand its capacity to give advice and practical assistance, as required, to countries facing natural disasters and other disaster situations including environmental and technological hazards;

(n) Providing adequate support for Decade activities, including those of the secretariat of the Decade, in particular with a view to ensuring the timely implementation of the Yokohama Strategy and Plan of Action. In this regard it is time to consider proposals on ways and means to ensure functional security and continuity of the secretariat of the Decade, to the extent possible through the United Nations regular budget;

(o) Recognition of the need for adequate coordination of international disaster reduction activities and strengthening of the mechanisms established for this purpose. International coordination should relate, in particular, to the formulation of development projects which provide assistance for disaster reduction and their evaluation;

(p) Establishment or improvement, as a priority, of national, regional and international warning systems and more effective dissemination of warnings;

(q) Effective coordination of international disaster management, in particular by the United Nations system, is paramount for an integrated approach to disaster reduction and should, therefore, be strengthened;

(r) Holding of a review conference on natural disaster reduction at the end of the Decade in order to map a strategy for continued disaster reduction activities into the twenty-first century.

#### B. Proposals to the Conference

(see annex I to the present report)

### III. FOLLOW-UP ACTION

14. With the aim of ensuring the early and successful implementation of the Yokohama Strategy, the Conference decides to:

(a) Transmit the report of the World Conference containing the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, through the Economic and Social Council, to the General Assembly at its forty-ninth session;

(b) Request the General Assembly to consider adopting a resolution endorsing the Yokohama Strategy and making an appeal to all countries to continue working towards the objective of a safer world for the twenty-first century;

(c) Transmit the outcome of the World Conference to the mid-term global review conference on the implementation of the Programme of Action for Least Developed Countries, to be held in 1995, as decided by the General Assembly in its resolution 48/171, and to the Commission on Sustainable Development in the initial review of the implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, undertaken by the Commission in 1996, in accordance with the Commission's multi-year programme of work;

(d) Reaffirm the crucial importance of a substantial reduction in the loss of lives and in the physical damage caused by disasters by the year 2000 and of continuing the disaster reduction process beyond the end of this century, as appropriate;

(e) Request the Secretary-General to ensure that the outcome of the Conference be given as wide as possible dissemination, including transmission of the Yokohama Strategy to relevant international and regional organizations, multilateral financial institutions and the regional development banks;

(f) Request the secretariat of the Decade to communicate the outcome of the Conference to national committees and focal points for the Decade, relevant non-governmental organizations, scientific and technical associations and the private sector, and to facilitate the review of the implementation of the Yokohama Strategy and further planning by these institutions at the regional level before the year 2000;

(g) Request the Secretary-General to submit an annual report to the General Assembly, based on information provided by Governments, regional and international organizations, including the multilateral financial institutions and the regional development banks, the United Nations system and the non-governmental organization community, on progress made in the implementation of the Yokohama Strategy;

(h) Recommend the inclusion of a sub-item entitled "Implementation of the outcome of the World Conference on Natural Disaster Reduction" in the provisional agenda of the Assembly under the item entitled "Environment and sustainable development";

(i) Request the United Nations, through the secretariat of the Decade, to provide Governments, upon request, with technical assistance in the preparation and development of disaster management plans and programmes.

## ANNEX II

### Yokohama Message

We, the States Members of the United Nations and other States, having met at the World Conference on Natural Disaster Reduction, in the city of Yokohama, Japan, from 23 May to 27 May 1994, in partnership with non-governmental organizations, and with the participation of international organizations, the scientific community, business, industry and the media, deliberating within the

framework of the International Decade for Natural Disaster Reduction, expressing our deep concern for the continuing human suffering and disruption of development caused by natural disasters, and inspired by the Yokohama Strategy for a Safer World,

Affirm that:

1. The impact of natural disasters in terms of human and economic losses has risen in recent years, and society in general has become more vulnerable to natural disasters. Those usually most affected by natural and other disasters are the poor and socially disadvantaged groups in developing countries as they are least equipped to cope with them.

2. Disaster prevention, mitigation, preparedness and relief are four elements which contribute to and gain from the implementation of sustainable development policies. These elements, along with environmental protection and sustainable development, are closely interrelated. Therefore, nations should incorporate them in their development plans and ensure efficient follow-up measures at the community, national, subregional, regional and international levels.

3. Disaster prevention, mitigation and preparedness are better than disaster response in achieving the goals and objectives of the Decade. Disaster response alone is not sufficient, as it yields only temporary results at a very high cost. We have followed this limited approach for too long. This has been further demonstrated by the recent focus on response to complex emergencies which, although compelling, should not divert from pursuing a comprehensive approach. Prevention contributes to lasting improvement in safety and is essential to integrated disaster management.

4. The world is increasingly interdependent. All countries shall act in a new spirit of partnership to build a safer world based on common interests and shared responsibility to save human lives, since natural disasters do not respect borders. Regional and international cooperation will significantly enhance our ability to achieve real progress in mitigating disasters through the transfer of technology and the sharing of information and joint disaster prevention and mitigation activities. Bilateral and multilateral assistance and financial resources should be mobilized to support these efforts.

5. The information, knowledge and some of the technology necessary to reduce the effects of natural disasters can be available in many cases at low cost and should be applied. Appropriate technology and data, with the corresponding training, should be made available to all freely and in a timely manner, particularly to developing countries.

6. Community involvement and their active participation should be encouraged in order to gain greater insight into the individual and collective perception of development and risk, and to have a clear understanding of the cultural and organizational characteristics of each society as well as of its behaviour and interactions with the physical and natural environment. This knowledge is of the utmost importance to determine those things which favour and hinder prevention and mitigation or encourage or limit the preservation of the environment for the development of future generations, and in order to find effective and efficient means to reduce the impact of disasters.

7. The adopted Yokohama Strategy and related Plan of Action for the rest of the Decade and beyond:

(a) Will note that each country has the sovereign responsibility to protect its citizens from natural disasters;

(b) Will give priority attention to the developing countries, in particular the least developed, land-locked countries and the small island developing States;

(c) Will develop and strengthen national capacities and capabilities and, where appropriate, national legislation for natural and other disaster prevention, mitigation and preparedness, including the mobilization of non-governmental organizations and participation of local communities;

(d) Will promote and strengthen subregional, regional and international cooperation in activities to prevent, reduce and mitigate natural and other disasters, with particular emphasis on:

(i) Human and institutional capacity-building and strengthening;

(ii) Technology sharing, the collection, the dissemination and the utilization of information;

(iii) Mobilization of resources.

8. The framework of action of the International Decade for Natural Disaster Reduction provides all vulnerable countries, in particular the developing countries, with the opportunity to achieve a safer world by the end of this century and beyond. In this regard, the international community and the United Nations system in particular must provide adequate support to the International Decade for Natural Disaster Reduction, and its mechanisms, especially the secretariat of the Decade to enable them to carry out their mandate.

9. The Yokohama Conference is at a crossroad in human progress. In one direction lie 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 can change the course of events by reducing the suffering from natural disasters. Action is urgently needed.

10. Nations should view the Yokohama Strategy for a Safer World as a call to action, individually and in concert with other nations, to implement policies and goals reaffirmed in Yokohama, and to use the International Decade for Natural Disaster Reduction as a catalyst for change.

## RESOLUTION 2

### Expression of gratitude to the people and Government of Japan and the City of Yokohama

#### The World Conference on Natural Disaster Reduction,

Having met in the City of Yokohama at the invitation of the Government of Japan from 23 to 27 May 1994,

1. Extends its deep appreciation to His Excellency Mr. Nobutoshi Akao, Ambassador for Global Environmental Affairs and International Trade of Japan,

for his outstanding contribution as President of the World Conference on Natural Disaster Reduction to the successful outcome of the Conference;

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

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

#### RESOLUTION 3

##### Credentials of representatives to the World Conference on Natural Disaster Reduction

The World Conference on Natural Disaster Reduction,

Having considered the report of the Credentials Committee 5/ and the recommendation contained therein,

Approves the report of the Credentials Committee.

#### DECISION

##### Accreditation of non-governmental organizations for participation in the World Conference on Natural Disaster Reduction

At its 5th plenary meeting, on 27 May 1994, the World Conference on Natural Disaster Reduction decided to approve the non-governmental organizations listed in document A/CONF.172/14 and Add.1 for participation in the Conference.

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5/ A/CONF.172/15.

## Chapter II

### ATTENDANCE AND ORGANIZATION OF WORK

#### A. Date and place of the Conference

1. The World Conference on Natural Disaster Reduction was held at Yokohama, Japan, from 23 to 27 May 1994, in conformity with General Assembly resolution 48/188 of 21 December 1993. During that period the Conference held five plenary meetings.

#### B. Attendance

2. The following States were represented at the Conference:

Afghanistan	Egypt
Algeria	El Salvador
Angola	Ethiopia
Antigua and Barbuda	Fiji
Argentina	Finland
Armenia	France
Australia	Gabon
Austria	Gambia
Azerbaijan	Georgia
Bahamas	Germany
Bangladesh	Ghana
Barbados	Greece
Belarus	Grenada
Belgium	Guatemala
Benin	Guinea
Bhutan	Guinea-Bissau
Bolivia	Holy See
Botswana	Honduras
Brazil	Hungary
Bulgaria	India
Burkina Faso	Indonesia
Burundi	Iran (Islamic Republic of)
Cambodia	Ireland
Cameroon	Italy
Canada	Jamaica
Central African Republic	Japan
Chile	Kazakhstan
China	Kenya
Colombia	Kyrgyzstan
Congo	Lebanon
Cook Islands	Lesotho
Costa Rica	Liberia
Côte d'Ivoire	Luxembourg
Croatia	Madagascar
Cuba	Malawi
Czech Republic	Malaysia
Denmark	Maldives
Djibouti	Marshall Islands
Dominica	Mauritius
Ecuador	Mexico

Micronesia (Federated States of)	Slovenia
Monaco	Solomon Islands
Mongolia	South Africa
Morocco	Spain
Mozambique	Sri Lanka
Myanmar	Sudan
Namibia	Swaziland
Nepal	Sweden
Netherlands	Switzerland
New Zealand	Syrian Arab Republic
Nicaragua	Thailand
Niger	The former Yugoslav Republic of Macedonia
Nigeria	Togo
Norway	Tonga
Pakistan	Trinidad and Tobago
Panama	Tunisia
Papua New Guinea	Turkey
Paraguay	Turkmenistan
Peru	Tuvalu
Philippines	Uganda
Poland	Ukraine
Portugal	United Arab Emirates
Republic of Korea	United Kingdom of Great Britain and Northern Ireland
Republic of Moldova	United Republic of Tanzania
Romania	United States of America
Russian Federation	Uruguay
Rwanda	Uzbekistan
Saint Kitts and Nevis	Vanuatu
Saint Lucia	Venezuela
Saint Vincent and the Grenadines	Viet Nam
Samoa	Zaire
Saudi Arabia	Zambia
Senegal	Zimbabwe
Seychelles	
Sierra Leone	
Slovakia	

3. The following associate members of the regional commissions were represented by observers:

British Virgin Islands  
Niue  
Palau

4. The secretariats of the Economic and Social Commission for Western Asia and the Economic and Social Commission for Asia and the Pacific were represented.

5. The following United Nations bodies and programmes were represented:

United Nations Children's Fund  
United Nations Development Programme  
United Nations Environment Programme  
United Nations Centre for Human Settlements (Habitat)  
Office of the United Nations High Commissioner for Refugees  
United Nations Population Fund

United Nations Relief and Works Agency for Palestine Refugees in the  
Near East  
United Nations University  
United Nations Institute for Training and Research  
United Nations Volunteers

6. The following United Nations specialized agencies and related organizations were represented:

Food and Agriculture Organization of the United Nations  
United Nations Educational, Scientific and Cultural Organization  
World Health Organization  
World Bank  
World Meteorological Organization  
International Fund for Agricultural Development  
United Nations Industrial Development Organization

7. The following intergovernmental organizations were represented by observers:

African Ministerial Conference on the Environment  
Asian-African Legal Consultative Committee  
Asian Development Bank  
Asian Disaster Preparedness Centre  
Caribbean Disaster Emergency Response Agency  
Central American Parliament  
Council of Europe  
European Community  
Inter-American Defense Board  
Inter-American Development Bank  
Intergovernmental Authority on Drought and Development  
Intergovernmental Oceanographic Commission of UNESCO  
International Civil Defence Organization  
International Maritime Satellite Organization  
International Organization for Migration  
League of Arab States  
Organization of African Unity  
Organisation for Economic Cooperation and Development  
Organization of American States  
Pan American Health Organization  
South Asian Association for Regional Cooperation  
South African Development Community

8. The following other organization was represented:

National Academy of Sciences of the United States of America

9. A list of non-governmental organizations that participated in the Conference is included in annex III to the present report.

### C. Opening of the Conference

10. The Conference was declared open by the representative of the Secretary-General of the United Nations, the Under-Secretary-General for Humanitarian Affairs.

11. The Conference heard a video presentation by the Secretary-General of the United Nations.

12. The Conference heard an address by His Imperial Highness Crown Prince Naruhito of Japan.

13. The Conference also heard addresses by His Excellency Mr. Yoneo Hirata, Parliamentary Vice-Minister for the Ministry of Foreign Affairs of Japan, on behalf of His Excellency Mr. Tsutomu Hata, Prime Minister of Japan, and by His Excellency Dr. Hidenobu Takahide, Mayor of the City of Yokohama.

#### D. Election of the President

14. At the 1st plenary meeting, on 23 May 1994, the Conference elected, by acclamation, as President of the Conference, His Excellency Mr. Nobutoshi Akao, Ambassador for Global Environmental Affairs and International Trade of Japan.

#### E. Adoption of the rules of procedure

15. At the 1st plenary meeting, on 23 May, the Conference adopted the provisional rules of procedure (A/CONF.172/2 and Corr.1) as recommended by the Preparatory Committee in its decision 2 of 18 March 1994.

#### F. Adoption of the agenda

16. At the 1st plenary meeting, on 23 May, the Conference adopted as its agenda the provisional agenda (A/CONF.172/1) as recommended by the Preparatory Committee in its decision 4. The agenda as adopted was as follows:

1. Opening of the Conference.
2. Election of the President.
3. Adoption of the rules of procedure.
4. Adoption of the agenda.
5. Election of officers other than the President.
6. Organization of work, including the establishment of committees.
7. Credentials of representatives to the Conference:
  - (a) Appointment of the members of the Credentials Committee;
  - (b) Report of the Credentials Committee.
8. Activities for natural disaster reduction.
9. Programmes and policies of the International Decade for Natural Disaster Reduction:
  - (a) Regional reports;

- (b) Public- and private-sector interface.
10. Natural disaster reduction:
    - (a) Vulnerable communities;
    - (b) Hazard-resistant structures;
    - (c) Effects of disasters on modern societies;
    - (d) Interrelationships between technological and natural hazards;
    - (e) Economic aspects of disaster reduction for sustainable development;
    - (f) Warning systems;
    - (g) Drought management.
  11. Outcome of the Conference, including a plan of action for natural disaster reduction.
  12. Adoption of the Report of the Conference.

G. Election of officers other than the President

17. At the 1st plenary meeting, on 23 May, the Conference elected, by acclamation, Vice-Presidents from the following regional groups:

Asian States: Bangladesh, China, India, Nepal and Philippines;

Eastern European States: Kazakhstan, Russian Federation and Slovakia;

Latin American and Caribbean States: Colombia, Jamaica, Mexico, Panama and Trinidad and Tobago;

Western European and other States: Australia, Finland, Germany, Italy and United States of America.

18. At the same meeting, the Conference elected, by acclamation, the following ex officio Vice-Presidents: the Chairman of the Special High-level Council, the Chairman of the Scientific and Technical Committee of the International Decade for Natural Disaster Reduction, the Chairman of the Preparatory Group of the Scientific and Technical Committee for the Conference and "the Father" of the Decade, Mr. Frank Press.

19. Also at the same meeting, the Conference decided that His Excellency, Mr. Klaus E. P. Holderbaum of Germany, who had been elected Vice-President of the Conference, would also serve as Rapporteur-General of the Conference.

20. At the 2nd plenary meeting, on 23 May, the Conference elected, by acclamation, Burundi, Morocco, Nigeria, Senegal, Uganda, the United Republic of Tanzania and Zimbabwe, Vice-Presidents of the Conference, from the African States.

21. At the same meeting, the Conference elected, by acclamation, Mr. Omar Dario Cardona, National Director for Risk Mitigation and Disaster Preparedness of Colombia, Chairman of the Main Committee.

H. Organization of work, including the establishment of committees

22. At the 1st plenary meeting, on 23 May, the Conference approved its organization of work as contained in document A/CONF.172/3.

23. At the same meeting, the Conference took note of the recommendation contained in paragraph 19 of A/CONF.172/3 regarding the designation of one person from each regional group to serve as friends of the Rapporteur-General to assist that official in preparing the draft report of the Conference. The Conference also took note of the recommendations concerning the report of the Conference as indicated in paragraphs 18 and 19 of document A/CONF.172/3.

24. Also at the same meeting, the Conference established an open-ended drafting group of the Main Committee. It was agreed that H.E. Mr. Daniel D. C. Don Nanjira (Kenya) would serve as Chairman of the drafting group.

25. At the 5th plenary meeting, on 27 May, the Conference approved the list of non-governmental organizations recommended by the Secretariat for accreditation as contained in document A/CONF.172/14 and Add.1.

I. Appointment of members of the Credentials Committee

26. At the 1st plenary meeting, on 23 May, in conformity with rule 4 of the rules of procedure of the Conference, the Conference decided to establish a Credentials Committee composed of Austria, Bahamas, China, Côte d'Ivoire, Ecuador, Mauritius, the Russian Federation, Thailand and the United States of America.

### Chapter III

#### GENERAL DEBATE

1. The general debate, which took place at the 1st to 4th plenary meetings, from 23 to 25 May 1994, covered the activities for natural disaster reduction considered by the Conference (agenda item 8). All speakers expressed their appreciation of the efforts made by the host Government and by the Secretariat in preparing for the Conference.
2. The Conference was addressed by representatives of States, specialized agencies, United Nations bodies, programmes and offices, intergovernmental organizations and non-governmental organizations.
3. At the 1st plenary meeting, on 23 May, the Secretary-General of the Conference made an introductory statement.
4. At the 2nd plenary meeting, on 23 May, the Conference heard statements made by the representatives of Algeria (on behalf of the Group of 77), Greece (on behalf of the European Union), Sri Lanka, Italy, Germany, Iran (Islamic Republic of), the United Kingdom of Great Britain and Northern Ireland, Egypt, China, Japan, Finland (also on behalf of Denmark, Iceland, Norway and Sweden), the United States of America and France.
5. At the 3rd plenary meeting, on 24 May, statements were made by the representatives of Tonga (on behalf of the Pacific small island developing States), Mongolia, Austria, Nigeria, Bulgaria, Cuba, Mexico, Afghanistan, Guinea-Bissau, Botswana, Nepal, Malawi, Burundi, Thailand, Kazakhstan, Poland, Slovenia, Bangladesh, the Holy See and Turkey.
6. At the same meeting, the representatives of the European Commission, the Central American Parliament and the International Civil Defence Organizations, intergovernmental organizations, made statements. The representatives of the World Meteorological Organization, the World Health Organization, the Food and Agriculture Organization of the United Nations and the United Nations Educational, Scientific and Cultural Organization, as well as the United Nations Environment Programme/United Nations Centre for Human Settlements and the United Nations Children's Fund, made statements. The Secretary-General of the International Federation of Red Cross and Red Crescent Societies, a non-governmental organization, also made a statement.
7. At the 4th plenary meeting, on 25 May, statements were made by the representatives of Kenya, Sierra Leone, Australia, India, Spain, the United Republic of Tanzania, Peru, Jamaica, South Africa, Colombia, Nicaragua, Monaco, Swaziland, Ghana, Romania, Dominica, Saint Lucia, Chile, Croatia, Tunisia, Gambia, the Sudan, Venezuela, Cameroon, Grenada, the Russian Federation, Viet Nam, Armenia, Georgia, Rwanda and Greece.
8. At the same meeting, statements were also made by the Chairman of the African Ministerial Conference on the Environment and the representative of the Organization of American States, intergovernmental organizations. The representatives of the United Nations Development Programme, the Interim secretariat of the United Nations Framework Convention on Climate Change and the United Nations Volunteers made statements. The representative of the Colombian Confederation of Non-Governmental Organizations made a statement.

## Chapter IV

### REPORT OF THE MAIN COMMITTEE AND ACTION TAKEN BY THE CONFERENCE

#### A. Report of the Main Committee

1. At its 1st plenary meeting, on 23 May 1994, the Conference approved its organization of work as set out in document A/CONF.172/3 and decided to allocate agenda item 9 (a) and (b) entitled "Programmes and policies of the International Decade for Natural Disaster Reduction: (a) Regional reports; (b) Public- and private-sector interface" to the Main Committee.
2. The Main Committee was chaired by Mr. Omar Dario Cardona (Colombia).
3. The Committee elected Egypt, Nepal, the Russian Federation and the United States of America as Vice-Chairmen, and decided that Nepal would also serve as Rapporteur.

#### 1. Regional reports

(Agenda item 9 (a))

4. The Main Committee considered agenda item 9 (a) at its 2nd and 3rd meetings, on 25 and 26 May 1994, and had before it a document entitled "Reports of regional interest" (A/CONF.172/13 and Corr.1 and Add.1 and 2).
5. At its 2nd meeting, on 25 May, the Committee heard an introductory statement by the Chief for Emergency Preparedness and Disaster Relief Coordination of the Pan American Health Organization.
6. The moderator for the panel on the African region, H.E. Mr. Anatole G. Tiendrebeogo, Minister for Environment and Tourism (Burkina Faso), made an introductory statement.
7. Presentations were made by the following panellists:  
Professor I. O. Nyambok, President, International Commission for Earth Sciences in Africa (Kenya); Mr. M. S. Boulahya, Director-General, African Centre for Meteorological Applications for Development (Algeria);  
Professor El Sayed El Bashir, Programme Leader, Locust Research Programme, African Association of Insect Scientists (Kenya); and Dr. Wawa Leba, Director, Department of Economic, Social and Cultural Affairs, Organization of African Unity.
8. The moderator for the panel on the Asian region, Professor Kenzo Toki of the University of Kyoto, President of the Japan Society for Natural Disaster Reduction, made an introductory statement.
9. Presentations were then made by the following panellists:  
Mr. Cengiz Ertuna, Chief, Water Resources Section, Economic and Social Commission for Asia and the Pacific; Ms. Corazon Alma G. de Leon, Secretary of the Department of Social Welfare and Development (Philippines);  
Mr. Shri K. B. Saxena, Additional Secretary and Central Relief Commissioner, Ministry of Agriculture (India); and Ms. Jlang Li, Deputy Director of the Office

of China National Committee for the International Decade for Natural Disaster Reduction (China).

10. The Honourable Tuilaepa Sailele Malielegaoi, Deputy Prime Minister and Minister for Finance of Western Samoa and Chairman of the National Disaster Council, and Mr. Jeremy Collymore, Director, Caribbean Disaster Emergency Response Agency, made presentations on the special problems of the small island States of the South Pacific and Caribbean subregions.

11. Mr. Ichiro Ichikawa, Administrative Vice-Minister for the National Land Agency, Japan, made a special presentation on Japanese collaborative projects in Asian countries.

12. At its 3rd meeting, on 26 May, the Committee heard an introductory statement by the moderator for the panel on the European and Mediterranean region, Mr. Edgar Thielmann, Head of Unit, European Community Humanitarian Office.

13. Presentations were then made by the following panellists: Mr. Sergei Shoigu, Minister for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (Russian Federation); Mr. Jean-Pierre Massue, Executive Secretary, EUR-OPA Major Hazards Agreements, European Council, with Mr. M. Raimondi of Centro Telerilevamento Mediterraneo Telespazio (CTM), (Italy); and Mr. Juan Pedro Lahore Lacoste-Pedelaborde, Technical Counsellor for International Relations, General Directorate, Civil Protection (Spain), with Mr. Alessandro Barisich, Civil Protection, European Commission.

14. A joint presentation was made by Mr. Harvey C. Ryland, Senior Policy Adviser to the Director of the Federal Emergency Management Agency (United States of America), and by Mr. Raul Garcia Leal, General Director of the National System of Civil Protection (Mexico).

15. An introductory statement was made by the moderator for the panel on Latin America, Mr. Stephen Bender, Chief, Natural Hazards Project, Organization of American States.

16. Presentations were then made by the following panellists: Dr. Luis Busco, Chief, Disaster Programme, Ministry of Health (Chile); the Honourable Fernando Guerrero, Deputy to the National Congress (Ecuador); Ms. Norma Zepeda, Director of Training, National Civil Defence (Nicaragua); Dr. Ciro Ugarte, General Director, Office of Disaster Preparedness, Ministry of Health (Peru); Mr. Luis Diego Morales, Executive Secretary, Centre for Coordination for Natural Disaster Prevention in Central America; and Mr. Juan Manuel Uribe, National Directorate of Risk Mitigation and Disaster Preparedness (Colombia).

17. After the presentations, statements were made by the representatives of Saudi Arabia, China, Afghanistan, Kuwait, Armenia and Bolivia.

18. The Chief for Emergency Preparedness and Disaster Relief Coordination of the Pan American Health Organization then outlined points made in the various presentations.

## 2. Public- and private-sector interface

(Agenda item 9 (b))

19. The Main Committee considered agenda item 9 (b) at its 1st meeting, on 25 May 1994, and had before it a document entitled "From disaster management to sustainable development: how the public sector, private sector and voluntary organizations can work together" (A/CONF.172/12 and Add.1).

20. An introductory statement was made by the Director, Division of Emergency and Humanitarian Action, World Health Organization.

21. Presentations were then made by the following panellists:

Professor Mohammed M. Mahfouz, Chairman, Public Services Committee of the Shoura (Senate) Assembly and former Minister of Health (Egypt); Mr. Carlo Presenti, Head, National Department for Technical Services, Presidency of the Council of Ministers (Italy); Ms. Julia Taft, President and Chief Executive Officer, Interaction USA; Mr. Albert Tevoedjre, President, Centre Africain de Prospectives Sociales; Ms. Marcia Feria-Miranda, Specialist, Social Marketing and Partnership Development for Disaster Management; Dr. Gerhard Berz, Head, Geoscience Research Group, Munich Reinsurance Company; and Mr. R. Natarajan, President, Union Carbide Office for Asia.

22. A presentation was also made by the commentator of the session, Mr. Kevin Lyonette, Director, Conservation Policy, World Wide Fund for Nature (WWF International).

23. After the presentations, questions were posed by the representatives of India, Samoa, Canada, the Central African Republic, Afghanistan and Saudi Arabia.

24. The observer for the Civil Protection Voluntary Service-Caserta (Youth Voluntary Service of Italy), a non-governmental organization, also posed questions.

25. An expert from the Asian Disaster Preparedness Centre and an expert from the European University Centre for Cultural Heritage (Ravello Centre) also posed questions.

## 3. Outcome of the Conference, including a plan of action for natural disaster reduction

(Agenda item 11)

26. The Main Committee considered item 11 at its 4th meeting, on 26 May 1994, which was chaired by Mr. Frank Press, ex officio Vice-President of the Conference.

27. At the same meeting, the Main Committee heard a report by H.E. Mr. Daniel D. C. Don Nanjira (Kenya), Chairman of the open-ended drafting group of the Main Committee, in which he introduced the draft Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation (A/CONF.172/L.2 and Corr.1) and the draft Yokohama Message (A/CONF.172/L.7).

28. Also at the same meeting, the Main Committee decided to transmit the draft Yokohama Strategy for a Safer World and the draft Yokohama Message to the Plenary of the Conference for its consideration and adoption.

29. The report of the Main Committee was issued in documents A/CONF.172/16 and 17.

#### B. Action taken by the Conference

30. At the 5th plenary meeting, on 27 May, the Conference had before it a draft resolution (A/CONF.172/L.9) entitled "Adoption of texts on natural disaster reduction", sponsored by Algeria, on behalf of the States Members of the United Nations that are members of the Group of 77, and China. Annexed to that draft resolution were the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, containing the Principles, the Strategy and the Plan of Action as well as the Yokohama Message.

31. The Conference agreed to the suggestion of the Bureau of the Conference to request the Secretariat to prepare a compendium of proposals for action which would consist of verbatim abstracts from the national statements in the plenary of proposals put forward by States. The compendium will be submitted as an addendum to the present report.

32. The Conference then adopted the draft resolution. For the final text, see chapter I of the present report, resolution 1.

33. Before the draft resolution was adopted, the representatives of Bangladesh, Morocco, Kenya, Egypt and France made statements.

34. The Under-Secretary-General for Humanitarian Affairs made a statement of clarification.

35. After the adoption of the draft resolution, the President of the Conference made a statement.

## Chapter V

### REPORTS OF THE TECHNICAL COMMITTEES

#### A. Natural disaster reduction: vulnerable communities

##### Report of Technical Committee A

1. At its 1st plenary meeting, on 23 May 1994, the Conference approved the organization of its work as set out in document A/CONF.172/3 and decided to allocate agenda item 10 (Natural disaster reduction) to the Technical Committees. Technical Committee A was organized by the International Federation of Red Cross and Red Crescent Societies and the United Nations Children's Fund (UNICEF) and considered agenda item 10 (a) on 23 May.

2. Technical Committee A had before it documents A/CONF.172/7 and Add.1-5, which included the programme of the technical session and summaries of the presentations.

3. The Committee was chaired by Mr. Omar Dario Cardona (Colombia).

4. The Committee heard five speakers representing non-governmental organizations, the International Federation of Red Cross and Red Crescent Societies and UNICEF. Other speakers came from Latin America, Asia and Africa, the most disaster-prone continents.

5. A number of common themes emerged in all the addresses and interventions.

6. It is clear that investment to address hazards, whether through prevention, early warning or mitigation strategies, is a necessary condition to reducing the impact of disasters but is not in itself sufficient. Disasters need vulnerable conditions as well as hazards to happen, and it is those causes of vulnerability which must now receive focus. As importantly, focus must be given to disaster preparedness strategies that use people's knowledge and their involvement and that ultimately empower them to have more control over their own lives.

7. More specifically, the following points of agreement came out of the session:

(a) The present documentation and approach to disaster preparedness only pays lip service to the reality that it is women who do most in the family and the community to prepare for disaster, and who bear the greatest cost when disaster strikes. Disaster preparedness strategies and national plans for risk mitigation must evolve to more fully meet women's needs and to more fully involve women's groups in their formulation and implementation;

(b) A greater effort must be made to build disaster response and mitigation upon the real needs of the communities affected. This can only be done by working with and through them, by involving local and international non-governmental organizations, the Red Cross and Red Crescent, and other community-based groups, as well as by ensuring that bilateral and multilateral donors as well as United Nations agencies take active steps to build partnerships with such community organizations;

(c) The importance of local knowledge and wisdom must be recognized, and ways must be found to ally it with scientific knowledge to produce more

realistic, locally appropriate and ultimately more effective preparedness and mitigation actions;

(d) When speaking about vulnerability, one must not be naive; it is not a simple subject. Local communities are very heterogeneous; vulnerability varies with social conditions, physical location, time and many other factors. Preparedness planning and mitigation measures need to take this heterogeneity into account;

(e) It is not only people who are vulnerable, but institutions. The vulnerability of the institutions and structures that poor people rely upon for survival is of major concern. The fragility of health, transport and marketing systems in many countries inevitably renders those dependent upon them more vulnerable. Disaster mitigation strategies must look to strengthen these basic service provision institutions as well as the people they serve.

8. In looking at the geographical spread of disasters, if one group of countries is to be singled out where good disaster preparedness plans and action are most needed, it is in those disaster-prone countries which are also classed as least developed countries. It should be of great concern that all too often the countries facing the greatest potential disasters have the least national capacity to address them.

9. In this connection, it is also a reality that within our lifetime we will see a world where most people live in an urban setting. The problems of mega-cities have attracted much attention. But the concern should be less with size and more with growth rate, for it is in the fast growing towns and cities, regardless of size, that community support structures break down, local knowledge is lost and poverty is most prevalent. Particular attention needs to be paid to such environments in planning.

10. Finally, another reality, the condition of conflict, should be of concern to all people. The effects of many of today's "natural" disasters are greatly amplified by the conflict situations within which they often happen. There are few drought-induced famines today which do not also involve civil wars or civil unrest. It would be irresponsible to ignore this reality. The issue was alluded to in the opening addresses to the Conference, but the analysis must be much more open and include the reality of civil strife in preparedness and response planning.

11. In conclusion, the Decade is at its mid-point. In the first half of the decade the focus has been upon the hazards of disaster and the scientific and technical endeavours to reduce the effects of those hazards. In the second half, the focus must shift to people and their vulnerability and to the endeavours needed to identify and address the causes of human vulnerability.

12. The Technical Committee made the following recommendations for the Decade:

(a) In the second half of the Decade the emphasis should shift to people, the causes of their vulnerability and the endeavours needed to identify and address those causes;

(b) The disproportionately high burden carried by women in disasters and their capacities to manage and implement appropriate and effective disaster preparedness and mitigation strategies must be recognized and addressed in all country and local disaster preparedness planning;

(c) The need to involve non-governmental organizations, the Red Cross and Red Crescent, and other community-based groups more fully in the second half of the Decade must be addressed;

(d) Disaster preparedness planning must take into account the amplifying effect that conflict has upon the suffering triggered by natural hazards;

(e) People moving to and living in the rapidly expanding towns and cities of the world are particularly vulnerable to the risks posed by natural hazards. Country preparedness plans and mitigation actions must be revised to ensure they address this growing class of vulnerable people.

## B. Natural disaster reduction: hazard-resistant structures

### Report of Technical Committee B

13. Technical Committee B was organized by the International Council for Scientific Unions (ICSU) Special Committee for the International Decade for Natural Disaster Reduction, representing both ICSU and the World Federation of Engineering Organizations (WFEO)/Union of International Technical Associations (UITA) and considered agenda item 10 (b) on 23 May.

14. Technical Committee B had before it documents A/CONF.172/8 and Add.1-7, which included the programme of the technical session and summaries of the presentations.

15. The Chairman of Technical Committee B was Mr. Driss Bensari (Morocco). The moderator of the session was Sir James Lighthill, Chairman of the ICSU Special Committee.

16. The following speakers made presentations:

(a) Sir James Lighthill, on behalf of ICSU, who spoke on "What science and technology can do for natural disaster reduction";

(b) Professor Jamilur R. Choudhury, who spoke on "Cyclone shelters in areas prone to storm surge";

(c) Professor Alan G. Davenport, who spoke on "The reduction of structural vulnerability to natural disasters";

(d) Mr. Stuart Mustow and Mr. Scott Steedman, on behalf of WFEO/UATI, who spoke on "Design and construction of buildings to withstand natural disasters";

(e) Professor Anand S. Arya, who spoke on "Protection of non-engineered housing from natural hazards";

(f) Professor Alberto Giesecke, who spoke on "Reconditioning of existing adobe housing to mitigate the effects of earthquakes";

(g) Mr. Ong Eng Long, Malaysian Rubber Producers Research Association, who spoke on "Development of light weight natural rubber-based bearings for earthquake protection of small buildings".

17. The Committee made recommendations in the form of the following two messages.

## 1. Message for entire communities

18. Communities in disaster-threatened areas need to be given this vital preparedness message: that the community as a whole can work together to achieve, and to benefit from, hazard-resistant structures:

(a) With the community as a whole contributing to the planning of multi-purpose cyclone shelters in coastal areas subject to storm surge - and winning the fullest possible use of them for community purposes;

(b) With key design features (e.g. hip-roof constructions, accompanied by adequate anchorage and bracing) that give protection against extreme winds being insisted upon by communities under threat;

(c) With the community itself taking action to reinforce existing masonry buildings against earthquake hazards by well-tried measures that include e.g. horizontal bands, vertical splints, corner bracing (or wire-mesh reinforcement for adobe buildings).

19. Community leaders and teachers have special responsibilities to ensure that this preparedness message (among others) is spread widely among threatened communities.

## 2. Message for Governments

20. Additional responsibilities (primarily in relation to engineered structures) are shared among national, regional and local governments - along with other bodies, including the insurance industry and some international agencies:

(a) To acknowledge the key role of those sectors of the economy which influence the construction of buildings and of infrastructure facilities;

(b) To recognize that well-established engineering methods for achieving enormous increases in hazard resistance at just a marginal increase in cost exist and are incorporated in all modern building codes;

(c) To create the educational and training environment needed to ensure that such methods can be implemented in practice (and in detail).

21. Above all, they need to create policy frameworks that give the industry clear incentives to employ such methods.

### C. Natural disaster reduction: effects of disasters on modern societies

#### Report of Technical Committee C

22. Technical Committee C was organized by the United Nations Centre for Regional Development and considered agenda item 10 (c) entitled "Effects of disasters on modern societies" on 24 May.

23. Technical Committee C had before it documents A/CONF.172/11 and Add.1-8, which included the programme of the technical session and summaries of the presentations.

24. The Committee had the following officers: Chairman, Mr. Clem Littleton (Australia); Moderator, Dr. Atsushi Takeda (National Research Institute for Earth Science and Disaster Prevention, Japan); Rapporteur, Dr. Tsuneo Katayama (International Association of Earthquake Engineering, Japan); and Technical Secretary, Mr. James Goater (United Nations Centre for Regional Development, Japan).

25. The following speakers made presentations: First part:

(a) Mr. Shinjiro Mizutani of Nagoya University spoke on "Disaster management in metropolitan areas"; (b) Mr. Mohan Munasinghe, Chief, Environmental Policy Division, World Bank, spoke on "Urban environmental degradation and vulnerability to disasters"; (c) Mr. Philippe Masure, International Association of Engineering Geology, spoke on "Risk management and preventive planning in mega-cities: scientific approach for action"; (d) Mr. Yoshikazu Kitagawa, Director, International Institute of Seismology and Earthquake Engineering, spoke on "Coordination and integration of international projects on risk assessment in mega-cities"; (e) Mr. Ibrahim Attwa, Vice-Governor, Cairo Governorate (Commentator); and (f) Mr. Xu Jilin, Chief Engineer of Beijing Municipal Administrative Commission (Commentator). Second part:

(a) Mr. Stuart Mustow, President, Institution of Civil Engineers/World Federation of Engineering Organizations, spoke on "Policies for natural disaster reduction in modern societies"; (b) Mr. Niek Rengers, International Astronautical Federation/International Institute for Aerospace Survey and Earth Sciences, spoke on "The application of satellite remote sensing for natural disaster reduction in developing countries"; (c) Mr. Eugene Staffa, Manager, International Mobile Satellite Organization (INMARSAT), spoke on "The use of mobile satellite communications in natural disaster preparedness and emergency response"; (d) Mr. Takashi Onoda, Chairman of the Marine and Fire Insurance Association of Japan, spoke on "The role of non-life-insurance in disaster management systems"; (e) Mr. M. Hanif, Mayor, Dhaka City Corporation (Commentator); and (f) Mr. Bernardo Grau, Director, Office of Disaster Prevention and Emergency Planning, Bogotá (Commentator).

26. For the purpose of the session, the concept of "modern society" is understood to vary according to different contexts and can include mega-cities, metropolitan regions, and even small- or medium-sized cities in developed or developing nations. Here the twenty-first century populations will further concentrate, thereby increasing their vulnerability to natural disasters. The session recognized that natural disasters lead to extremely complex emergencies in which population growth, environmental degradation, and socio-political upheaval aggravate the effects of natural disasters and result in greatly increased damage. Urbanized areas are extremely prone due to their concentration of population, resources, and activities, as well as land-use patterns which greatly increase vulnerability. Particularly in developing countries, the urban poor in fragile or high-risk areas should receive increased attention in development planning.

27. The Committee made the following recommendations:

(a) Recommendation 1: Risk assessment has to be incorporated into planning with an emphasis on sustainable development. Developing countries need to be assisted in their efforts to carry out risk assessment utilizing appropriate technology. Mega-cities need special attention taking into account

the built-up areas and the urban fringe where future unplanned development may cause major disasters. Risk assessment should also include an evaluation of (a) the geo-ecological capacity of cities and their surroundings and (b) the differential vulnerability of various urban socio-economic groups to disasters, with an emphasis on the urban poor.

(b) Recommendation 2: The results of applied risk assessment to specific urban areas and regions must be used within the planning and educational processes. They should be applied to heighten the awareness of various sectors of society: firstly, politicians and decision makers, who should exercise political will manifested through disaster mitigation and preparedness measures; and secondly, communities, which should participate in drafting and implementing disaster plans with enhanced knowledge and information, as well as the capability to sustain necessary non-structural measures.

(c) Recommendation 3: International cooperation in risk assessment and disaster mitigation needs to be enhanced through: (a) establishment of a global institution for technology transfer in the fields of risk assessment and disaster mitigation; (b) establishment of global or regional data banks on disasters and implementation of ways to ensure the exchange of disaster information; (c) establishment of catastrophic loss reserve systems in order to stabilize reinsurance markets in case of devastating natural disasters; and (d) removal of all barriers to free movement of mobile satellite communication devices.

(d) Recommendation 4: Disaster mitigation issues should be prioritized according to their relative importance and urgency. Based on this, recommended programmes and project proposals should be implemented. Initially, emphasis should be on good illustrative case-studies on practical and effective disaster mitigation in high-risk disaster-prone developing countries. Case-studies should be selected recognizing that prevention is more important than response.

D. Natural disaster reduction: interrelationships between technological and natural hazards

Report of Technical Committee D

28. Technical Committee D was organized by the Centre for Urgent Environmental Assistance, United Nations Environment Programme (UNEP), and considered agenda item 10 (d) on 25 May.

29. Technical Committee D had before it documents A/CONF.172/6 and Add.1-8, which included the programme of the technical session and summaries of the presentations.

30. The Committee had the following officers: Chairman: Mr. Ye Ruqiu, Deputy Administrator of the National Environmental Protection Agency, China; Rapporteur: Mr. A. Barisich, Head of Civil Protection Unit, European Commission; and Technical Secretary: Mr. A. Clerc, Coordinator, Centre for Urgent Environmental Assistance, UNEP.

31. The following speakers made presentations: (a) Mr. Jim Makris, Emergency Coordinator, United States Environmental Protection Agency, United States of America; (b) Dr. Evgenii Dmitriev, Director, Institute of Applied Ecology, Ministry of the Environment and Natural Resources Protection, Russian Federation; (c) Mr. Hideaki Oda, Ministry of Construction, Japan;

(d) Dr. Channaronk Chandrachoti, National Economic and Social Development Board, Thailand; (e) Mr. Alain Clerc, Coordinator, Centre for Urgent Environmental Assistance, UNEP; (f) Dr. Claudio Margottini, Ente per le Nuove Tecnologie, l'Energia e l'Ambiente (ENEA), Italy; (g) Professor Julio Kuroiwa, National University of Engineering, Peru; and (h) Professor Enrico Quarantelli, Disaster Research Center, University of Delaware, United States of America.

32. The Committee made the following recommendations:

(a) The concept of "Na-techs" (natural and technological disasters) should be fully recognized;

(b) The use of an integrated approach should be developed for the management of natural and technological hazards;

(c) The integrated approach of "Na-techs" should be fully included in environmental aspects of disasters;

(d) In this respect, an important role should be given to cooperation between the private and the public sector;

(e) Planning and environmental impact assessment and the use of advanced models should be promoted both at national and international level;

(f) Decision makers should be made aware of the importance of the prevention of "Na-techs";

(g) Better cooperation between cities in the management of "Na-techs" should be encouraged;

(h) The use of relevant existing international framework and programmes such as the Awareness and Preparedness for Emergencies at the Local Level (APELL) programme and the Centre for Urgent Environmental Assistance of UNEP, the International Decade for Natural Disaster Reduction and the Organization for Economic Cooperation and Development should be developed and better supported;

(i) The vulnerability to "Na-tech" disasters of the developing countries in particular should be recognized;

(j) In this respect, considerations by the international community should be given to the transfer of technology and financial support to the developing countries.

E. Natural disaster reduction: economic aspects of disaster reduction for sustainable development

Report of Technical Committee E

33. Technical Committee E was organized by the United States National Academy of Sciences and the World Bank and considered agenda item 10 (e), entitled "Economic aspects of disaster reduction for sustainable development", on 25 May.

34. Technical Committee E had before it documents A/CONF.172/9 and Add.1, which included the programme of the technical session and summaries of the presentations.

35. The Committee had the following officers: Mr. Victor Osipov (Russian Federation) as Chairman; Ms. Caroline Clarke Guarnizo (United States National Academy of Sciences) and Mr. Mohan Munasinghe (World Bank) as Technical Secretaries.

36. The following speakers made presentations:

(a) Messrs. Romulo Caballeros and Ricardo Zapata-Marti, Economic Commission for Latin America and the Caribbean (Mexico), who spoke on "The impacts of natural disasters on national economies and the implications for the international development and disaster communities";

(b) Mr. Atiq Rahman, Bangladesh Centre for Advanced Studies (Bangladesh), who spoke on "The context of disasters and sustainable development: the case of a growing city in a developing country";

(c) Ms. Mary Anderson, Collaborative for Development Action (United States), whose paper was on "Disaster vulnerability and sustainable development: a general framework for assessing vulnerability";

(d) Mr. Randall Kramer, School of the Environment, Duke University (United States), who spoke on "Advantages and limitations of benefit-cost analysis for evaluating investments in mitigation";

(e) Mr. Gunter Hecker, Asian Development Bank (Philippines), who spoke on "Disaster-related activities of the Asian Development Bank: an economic perspective";

(f) Mr. Walter Lynn, United States National Committee for the International Decade for Natural Disaster Reduction, who presented the paper by Mr. Howard Kunreuther, Risk Management and Decision Processing Center, University of Pennsylvania (United States) entitled "The role of insurance in reducing losses from natural disasters";

(g) Mr. Gianfranco de Giusti, Unione Italiana de Riassicurazione (Italy), who spoke on "The Italian Insurance Market Project";

(h) Mr. Wang Fushan, People's Insurance Company of China (China), who spoke on "Insurance industry in the economy on natural disaster in China".

37. Mr. Omar Dario Cardona, National Office for Prevention and Attention to Disasters (Colombia); Mr. Stephen Bender, Organization of American States; and Mr. Harry Jayasingha, Asian Disaster Preparedness Center (Thailand), served as moderators for the Technical Committee.

38. The Committee made the following findings and recommendations:

(a) Disaster prevention and mitigation are essential components of the three main elements of sustainable development, namely economic, social, and environmental;

(b) Reducing vulnerability, especially of the poor, is a key element of disaster prevention strategy;

(c) Multi-disciplinary analysis is essential. In particular, social vulnerability analysis should receive as thorough a treatment as economic and technical analyses;

(d) There is a need for better data and monitoring, especially for indicators of vulnerability in relation to the economic, social, and environmental aspects;

(e) Economic valuation of disaster impacts should be improved further. Where valuation fails, benefit-cost analysis should be used in conjunction with multi-criteria analysis (integrating economic, social, and environmental aspects in a balanced way) in decision-making to reduce vulnerability and increase sustainability. Valuation can help set priorities among those types of impacts which should be addressed and identify which are the most cost-effective measures;

(f) Addressing risk issues should have high priority. This includes risk estimates (uncertainty and ambiguity), coverage (access and multiple hazards), enforcement (legislation and regulation), and sharing (private and public sectors);

(g) In market economies, formal insurance mechanisms are well developed for dealing with all kinds of hazards; however, some insurance elements for natural disasters can be further developed to improve risk reduction. Greater emphasis should be given to applying differential rates in order to encourage adoption of mitigation measures, for example;

(h) Many insurance techniques should be adapted more systematically in the developing world. However, because of the large number of poor and the absence of well-functioning markets, non-formal insurance mechanisms should also be strengthened, drawing upon knowledge based on ways in which societies have traditionally coped with risk;

(i) Developing countries face special challenges in the adoption of disaster mitigation in the process of sustainable development because: they have many poor who are also the most affected by natural disasters; their institutional capacity is weak; resources are inadequate; and markets are lacking;

(j) A high degree of self-reliance is important at the community and the national level to improve resiliency to natural disasters. The international community can do more to assist developing countries to ensure sustainable development. In particular, the development banks should pay greater attention to disaster prevention and mitigation. International assistance dedicated for disaster prevention and mitigation, which has never been great, should be increased because the return on investment can be substantial. Disaster reduction strategies should also be integrated into the full range of sustainable development projects and policies, especially macroeconomic policies which are the most important;

(k) To address the need for capacity-building, training, and resource mobilization for disaster prevention and mitigation in the context of sustainable development, regional centres should be developed, strengthened, and their ties improved.

F. Natural hazard reduction: warning systems

Report of Technical Committee F

39. Technical Committee F was organized by the World Meteorological Organization (WMO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), and considered agenda item 10 (f) on 26 May 1994.

40. Technical Committee F had before it documents A/CONF.172/5 and Add.1-7, which included the programme of the technical session and full papers on which the presentations in session were based.

41. The Committee had the following officers: Chairman, Mr. Fortunato Dejoras (Philippines); Moderator for presentation of papers, Professor G. O. P. Obasi (WMO) and Rapporteur, Mr. B. Rouhban (UNESCO); Moderator for panel discussion, Dr. J. C. Rodda (WMO) and Rapporteur, Mr. T. Jeggle (Asian Institute for Technology).

42. The following speakers made presentations: (a) Professor J. C. R. Hunt (United Kingdom); (b) Professor E. Plate (Germany); (c) Dr. R. C. Sheets (United States of America); (d) Dr. M. Spreafico (Switzerland); (e) Dr. E. Lorca (Chile); (f) Dr. R. S. Punongbayan (Philippines); and (g) Mr. T. Ono (Japan). The following experts composed a discussion panel: Dr. D. Ben Sari (Morocco), Professor Qiu Guo Qing (China), and Mr. C. Candanedo (Panama).

43. The video "Natural disaster reduction: how meteorological and hydrological services can help" was screened, and a panel entertained and responded to questions from the floor.

44. The presentation highlighted the critical relevance of comprehensive warning and response systems to effective natural disaster reduction. The presentations and the ensuing discussion provided a clear demonstration of the essential collaboration necessary between scientific analysis and application for effective warning preparation, together with the informed, responsive capabilities vested in designated official authorities and the public on the other. Examples of warning and response requirements were drawn in the various presentations and successive comment from specific geo-physical\* hazards, while the effectiveness of warnings and response were demonstrably composed of essential component activities common to all primary and secondary hazards.

45. Presentations emphasized the critical and comprehensive importance that must be given in terms of policy formulation, and in the timely and accurate implementation of pre-determined activities in which both technical personnel and official authorities share responsibilities. While no single warning or forecasting system is appropriate to all environments or hazard characteristics, each shares the following components: risk assessment and management, hazard monitoring and forecasting, warning formulation, transmission and dissemination of warnings, and response mechanisms to warnings, particularly at the most immediately threatened level of society.

46. The Committee came to the following conclusions and recommendations:

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\* These encompass hazards of meteorological, hydrological, volcanic and seismic origin and include also avalanches, landslides, wildfires and grasshopper and locust infestations, with account being taken of the potential impact of climate change.

(a) Whether natural geophysical events lead to disaster depends fundamentally on the extent of preparedness and the abilities of resistance of the affected communities. Such resistance must be developed by the combination of professional technical knowledge and public education. As risks from natural hazards cannot be completely eliminated, they must be managed;

(b) The relative effectiveness of warning and response systems is a direct consequence of the methodical scientific determination of relative risk or risks posed by specific hazards to conditions of human vulnerability. These risks must then be assessed, and reduction measures considered in conjunction with the social, economic and political limitations evident;

(c) Requisite technical knowledge and institutional abilities must be established on a prior, ongoing basis through a combined programme of the latest scientific knowledge, public information, skills training and comprehensive practice in all related collaborating activities;

(d) The refinement of warning and forecasting abilities is a continuous technical aspiration that can only proceed to the extent that data access and communication can be improved and that the generators of warnings remain informed of the physical determinants of effective action and response;

(e) The ability of warning responders (whether official or individual) is directly influenced by their knowledge and understanding of hazardous events, the timeliness and accuracy of warnings received by them, and the skills of effecting requisite actions implied by warning information received;

(f) The process of effective warning and response is based on the confidence of the affected people in the technical and civil protection information that they are given. The veracity of the information is enhanced to the extent that structured technical and operational relationships are working in close, and timely, collaboration at the national, regional, and international levels;

(g) The means of data generation and analysis are critical to timely and accurate communication of credible warnings, but those warnings are only as relevant as the perception of understanding of the people to whom they are directed;

(h) Targets should be defined in respect of warning, forecasting and response achievement for the remainder of the Decade, citing particular reference to baseline information; those targets should be included in national development plans.

## G. Drought management

### Report of Technical Committee G

47. Technical Committee G was organized by the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD) in collaboration with the World Food Programme (WFP) and considered item 10 (g), entitled "Drought management", on 26 May.

48. Technical Committee G had before it documents A/CONF.172/10 and Add.1-5, which included the programme of the technical session and summaries of the presentations.

49. The Committee had the following officers: Chairman, Mr. K. B. Saxena (India); Vice-Chairman, Mr. L. Fuchs (South Africa); Moderator, Professor H.-G. Bohle (University of Freiburg, Germany); Technical Secretary, Mr. T. J. Aldington (FAO); Rapporteur, Dr. T. E. Downing (University of Oxford, United Kingdom).

50. The following speakers made presentations:

(a) Mr. Saxena introduced the session;

(b) Professor Bohle, on behalf of the International Geographical Union Commission on Famine and Vulnerable Food Systems, spoke on "A framework for effective drought management";

(c) Mr. Aldington, on behalf of FAO and in collaboration with WFP spoke on "Managing drought: preparedness, emergency relief and drought-proofing strategies";

(d) Dr. G. Howe, on behalf of IFAD, spoke on "Development and the vulnerability of rural households to drought: issues and lessons from sub-Saharan Africa";

(e) Mr. R. Mugwara, on behalf of the Southern Africa Development Community (SADC) spoke on "The 1991/1992 drought emergency in southern Africa";

(f) Mr. R. C. A. Jain (India) spoke on "Managing drought: the Indian experience";

(g) Mr. P. Sutton (Australia) spoke on "The Australian national drought policy".

51. Mr. Fuchs initiated the panel discussion and questions from the audience.

52. Professor Bohle summarized the session. The Committee made the following conclusions and recommendations:

(a) Drought is often viewed as an extreme event - an anomaly in the weather and environment. However, it needs to be viewed as the interaction of weather events (the drought hazard) and social, economic, and political vulnerability. This vulnerability was rooted in the ecology of agricultural production systems, exchange entitlement and access to markets, and the empowerment of people to participate in early warning, preparedness planning, mitigation, emergency relief, and recovery from disasters;

(b) The greatest improvement in coping with drought was likely to come from efforts to reduce vulnerability. The goal of the International Conference on Nutrition, to end famine by the year 2000, was strongly supported by the Technical Committee. Achieving this goal would require a focus on people as the subject of drought (including women, children, the elderly and disadvantaged groups) and a focus on drought as a socio-economic process. It was felt that research was required on how to understand vulnerability from the bottom up and to link the individual and community scale to national and international processes;

(c) The disaster-development interface must be strengthened. Development planning and project evaluation should seek to drought-proof vulnerable areas,

strengthen coping strategies, foster effective local, national and international institutions, and adopt sound macroeconomic policies;

(d) Forecasting and monitoring the drought hazard - its climatology and impacts on vegetation, agriculture and hydrology - were rapidly improving. Further research needed to be supported and practical applications developed;

(e) Efforts to monitor vulnerability needed to complement forecasting and monitoring of the drought hazard itself;

(f) Monitoring systems needed to trigger timely responses, scaled to the level of need, and appropriate to support and expand entitlements. Activities to mitigate the impact of an impending drought should include a wide range of effective responses adopted well before the drought threatened loss of assets and decreased consumption;

(g) Capacity needed to be developed in drought-prone countries to forecast and monitor drought, understand and monitor vulnerability, evaluate effective responses, disseminate information to decision makers, and train community workers, voluntary agencies, researchers and all users of drought management information.

53. In his concluding remarks, the Chairman stressed the following points:

(a) The strategies of drought management should aim at enhancing the capability of communities and on using low-cost technologies, with special focus on mechanisms to empower the very poor and socially disadvantaged groups within them who suffer most;

(b) The emphasis on agricultural research should shift from better off farmers and irrigated areas to small farmers and dry land areas. Development programmes should also concentrate efforts on improving the economic conditions of smaller and marginal farmers;

(c) While forecasting and warning mechanisms could be effectively used to increase manoeuvrability of farmers to cope with drought, the success of this effort would depend upon dissemination of needed information to them;

(d) Long-term development efforts should build drought-proofing measures into various programmes, which should also be supplemented by regulatory measures for judicious use of water resources in fighting drought;

(e) Food security and generation of employment were key to the empowerment of the extremely poor among vulnerable communities. Management of the food supply should also incorporate measures against hoarding of grains and unfair trade practices, apart from ensuring efficient distribution of essential commodities;

(f) Policy commitment at the highest level was the key element in the success of government intervention as this alone could ensure allocation of resources - financial, technical and manpower - and give priority to drought-proofing strategy. This should be supplemented by efforts of non-governmental organizations which could mobilize people to demand drought-proofing programmes. Government efforts, accompanied by people's mobilization, can ensure sustained political commitment in this regard.

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54. At its 5th plenary meeting, on 27 May, the Conference took note of the reports of the Technical Committees.

## Chapter VI

### REPORT OF THE CREDENTIALS COMMITTEE

1. At its 1st plenary meeting, on 23 May 1994, the World Conference on Natural Disaster Reduction, in accordance with rule 4 of the rules of procedure of the Conference, appointed a Credentials Committee based on that of the Credentials Committee of the General Assembly at its forty-eighth session, consisting of the following nine members: Austria, Bahamas, China, Côte d'Ivoire, Ecuador, Mauritius, Russian Federation, Thailand and United States of America.

2. The Credentials Committee held one meeting, on 26 May 1994.

3. Mr. Pitchayaphant Charnbhumidol (Thailand) was unanimously elected Chairman of the Committee.

4. The Committee had before it a memorandum by the Secretary-General dated 25 May 1994, on the status of credentials of representatives participating in the Conference. Additional information on credentials received by the Secretary-General after the issuance of the memorandum was provided to the Committee by its Secretary.

5. As noted in paragraph 1 of the memorandum of the Secretary-General, as updated by the additional information received, formal credentials issued by the head of State or Government or by the Minister for Foreign Affairs, as provided for in rule 3 of the rules of procedure, had been received by the Secretary-General for the representatives of the following 47 States participating in the Conference: Algeria, Armenia, Austria, Bolivia, Botswana, Bulgaria, Cameroon, China, Colombia, Cuba, Czech Republic, Ecuador, Gabon, Ghana, Greece, Guinea, Holy See, Honduras, Indonesia, Kazakhstan, Malawi, Maldives, Micronesia (Federated States of), Monaco, Morocco, Nepal, New Zealand, Nicaragua, Peru, Philippines, Poland, Portugal, Romania, Samoa, Saudi Arabia, Senegal, Slovenia, South Africa, Spain, Swaziland, Thailand, Tonga, Ukraine, United Arab Emirates, United Republic of Tanzania, Viet Nam and Zambia.

6. As noted in paragraph 2 of the memorandum, as updated by the additional information received, information concerning the appointment of representatives participating in the Conference had been communicated by means of facsimile or in the form of letters or notes verbale from ministries, embassies, permanent missions to the United Nations or other government offices or authorities, or through local United Nations offices, by the following 100 States participating in the Conference: Afghanistan, Antigua and Barbuda, Argentina, Australia, Azerbaijan, Bahamas, Bangladesh, Barbados, Belarus, Belgium, Benin, Bhutan, Brazil, Burkina Faso, Burundi, Cambodia, Canada, Central African Republic, Chile, Cook Islands, Congo, Costa Rica, Côte d'Ivoire, Croatia, Denmark, Djibouti, Dominica, Egypt, El Salvador, Ethiopia, Fiji, Finland, France, Gambia, Georgia, Germany, Grenada, Guatemala, Guinea-Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Italy, Jamaica, Japan, Kenya, Kyrgyzstan, Lebanon, Lesotho, Liberia, Luxembourg, Madagascar, Malaysia, Marshall Islands, Mauritius, Mexico, Mongolia, Mozambique, Myanmar, Namibia, Netherlands, Niger, Nigeria, Norway, Panama, Papua New Guinea, Paraguay, Republic of Korea, Republic of Moldova, Russian Federation, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Slovakia, Solomon Islands, Sri Lanka, Sudan, Sweden, Switzerland, Syrian Arab Republic, the former Yugoslav Republic of Macedonia, Togo, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, United Kingdom of Great Britain and Northern

Ireland, United States of America, Uruguay, Uzbekistan, Vanuatu, Venezuela, Zaire and Zimbabwe.

7. The Chairman proposed that the Committee should accept the credentials of all the representatives mentioned in the memorandum of the Secretary-General, on the understanding that formal credentials for representatives referred to in paragraph 2 of the Secretary-General's memorandum would be communicated to the Secretary-General as soon as possible. The following draft resolution was proposed by the Chairman for adoption by the Committee:

"The Credentials Committee,

"Having examined the credentials of the representatives to the World Conference on Natural Disaster Reduction referred to in paragraphs 1 and 2 of the memorandum of the Secretary-General dated 25 May 1994,

"Accepts the credentials of the representatives concerned."

8. Before adopting the draft resolution, the representative of China sought clarification on several points concerning the credentials, which was provided by the Secretary of the Committee.

9. The draft resolution was then adopted by the Committee without a vote.

10. Subsequently, the Chairman proposed that the Committee should recommend to the Conference the adoption of a draft resolution (para. 11 below). This proposal was adopted by the Committee without a vote.

#### Recommendation of the Credentials Committee

11. The Credentials Committee recommends to the Conference the adoption of the following draft resolution:

"Credentials of representatives to the World  
Conference on Natural Disaster Reduction

"The World Conference on Natural Disaster Reduction,

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

"Approves the report of the Credentials Committee."

#### Action taken by the Conference

12. At the 5th plenary meeting, on 27 May 1994, the Conference considered the report of the Credentials Committee (A/CONF.172/15).

13. The Conference adopted the draft resolution recommended by the Committee. For the final text see chapter I, resolution 3.

## Chapter VII

### ADOPTION OF THE REPORT OF THE CONFERENCE

1. The Rapporteur-General introduced the report of the Conference (A/CONF.172/L.1) at the 5th plenary meeting, on 27 May 1994.
2. At the same meeting, the Conference adopted the draft report and authorized the Rapporteur-General to complete the report, in conformity with the practice of the United Nations, with a view to its submission to the General Assembly at its forty-ninth session.
3. Also at the same meeting, the representative of Algeria, on behalf of the States Members of the United Nations that are members of the Group of 77 and China, introduced a draft resolution (A/CONF.172/L.8) expressing the Conference's gratitude to the host country.
4. The Conference then adopted the draft resolution. For the final text, see chapter I, resolution 2.

### Closure of the Conference

5. At the 5th plenary meeting, statements were made by the representatives of the United Republic of Tanzania (on behalf of the African States), Nepal (on behalf of the Asian States), Colombia (on behalf of the Latin American and Caribbean States), Belgium (on behalf of the Western European and other States), Greece (on behalf of the European Union) and Croatia.
6. After statements had been made by the Secretary-General of the Conference and the Under-Secretary-General for Humanitarian Affairs, the President of the Conference made a concluding statement and declared the Conference closed.

Annex II

LIST OF DOCUMENTS

<u>Document symbol</u>	<u>Title or description</u>
A/CONF.172/1	Annotated provisional agenda
A/CONF.172/2 and Corr.1	Provisional rules of procedure
A/CONF.172/3	Note by the Secretariat on the organization of work, including the establishment of the Main Committee of the Conference
A/CONF.172/4 and Add.1 and 2 and Add.2/Corr.1 and Add.3	International Decade for Natural Disaster Reduction: report of the Secretary-General of the Conference
A/CONF.172/5 and Add.1-7	Technical Committee on warning systems: programme and summaries of presentations
A/CONF.172/6 and Add.1-8	Technical Committee on interrelationships between technological and natural hazards: programme and summaries of presentations
A/CONF.172/7 and Add.1-5	Technical Committee on vulnerable communities: programme and summaries of presentations
A/CONF.172/8 and Add.1-7	Technical Committee on hazard resistant structures: programme and summaries of presentations
A/CONF.172/9 and Add.1	Technical Committee on the economic aspects of disaster reduction for sustainable development: programme and summaries of presentations
A/CONF.172/10 and Add.1-7	Technical Committee on drought management: programme and summaries of presentations
A/CONF.172/11 and Add.1-8	Technical Committee on the effect of disasters on modern societies: programme and summaries of presentations
A/CONF.172/12 and Add.1	From disaster management to sustainable development: how the public sector, private sector and voluntary organizations can work together: programme and summaries of presentations
A/CONF.172/13 and Corr.1 and Add.1 and 2	Reports of regional interest: summaries of presentations
A/CONF.172/14 and Add.1	Note by the Secretariat on accreditation of non-governmental organizations for participation in the Conference
A/CONF.172/15	Report of the Credentials Committee

<u>Document symbol</u>	<u>Title or description</u>
A/CONF.172/16 and 17	Report of the Main Committee
A/CONF.172/L.1	Draft report of the Conference
A/CONF.172/L.2 and Corr.1	Draft Yokohama Statement for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, containing the Principles, the Strategy and the Plan of Action: submitted by the Chairman of the Open-ended Drafting Group of the Main Committee
A/CONF.172/L.3	Report of Technical Committee A
A/CONF.172/L.4	Report of Technical Committee B
A/CONF.172/L.5	Report of Technical Committee D
A/CONF.172/L.6	Report of Technical Committee C
A/CONF.172/L.7	Draft Yokohama Message submitted by the Chairman of the Open-Ended Drafting Group of the Main Committee
A/CONF.172/L.8	Expression of gratitude to the people and Government of Japan and the City of Yokohama: draft resolution submitted by Algeria (on behalf of the States Members of the United Nations that are members of the Group of 77) and China
A/CONF.172/L.9	Adoption of texts on natural disaster reduction: draft resolution submitted by Algeria (on behalf of the States Members of the United Nations that are members of the Group of 77) and China
A/CONF.172/L.10	Report of Technical Committee E
A/CONF.172/INF.1	Information for participants
A/CONF.172/INF.2	List of documents
A/CONF.172/INF.3 and Add.1 and 2	Documents circulated for information
A/CONF.172/INF.4	Provisional list of participants
A/CONF.172/PC/3 and Corr.2 and 3	Report of the Preparatory Committee for the World Conference on Natural Disaster Reduction on its session

Annex III

LIST OF PARTICIPATING NON-GOVERNMENTAL ORGANIZATIONS

Aide du Sahel  
Asociación Nacional de Centros de Investigación y Promoción del Desarrollo  
Association for Disaster Prevention Research  
Association of Icelandic Rescue Teams  
Association of Non-Governmental Organizations (India)  
Bangladesh Nari Progati Sangha, Bangladesh  
Botswana Christian Council  
Caritas Internationalis  
Centro de Estudios y Prevención de Desastres  
Children's Television Network  
China Association of Disaster Prevention  
Citizens' Disaster Response Center  
Confederación Colombiana de Asociaciones no Gubernamentales  
Egyptian Society for Earthquake Engineering  
Environmental Development Action in the Third World  
Environmental Monitoring Society  
Foundation for Public Interest  
Friends of the Earth  
INTERACTION - American Council for Voluntary International Action  
INTER-ASSIST - Foundation for International Assistance  
International Astronautical Federation  
International Council of Scientific Unions  
International Federation of Red Cross and Red Crescent Societies  
International Islamic Charitable Foundation  
International Union of Geodesy and Geophysics  
Joint Assistance Center  
Jordan Red Crescent  
Mediterranean Burns Club  
Permanent International Association of Road Congresses  
Red Cross Society of China  
Red Cross Society of Japan  
Servizio Volontariato Protezione Civile  
Volunteers in Technical Assistance  
World Federation of Engineering Organizations  
World Federation of United Nations Associations  
World Wide Fund for Nature

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