

## SUMMARY

1. The third meeting of the Group of Experts for the International Decade for Natural Disaster Reduction (IDNDR) was opened by the Secretary for Foreign Affairs and Cooperation of the Kingdom of Morocco, who welcomed the members of the Group, representatives of U.N. system agencies, and invited guests. The Group was then addressed by its Chairman and by the Coordinator of the United Nations Disaster Relief Organisation.

2. The Group reviewed and approved the minutes of its previous meeting. It was agreed that a meeting of the chairmen of the drafting subgroups would be held on March 7-9, 1989. At the invitation of Ambassador Taniguchi, the fourth meeting of the Group was scheduled for April 10-14, 1989 in Tokyo. The symbolic and political importance of this meeting were noted.

### Status of U.N. Resolution

3. Mr. Taniguchi described the content and adoption of the 1988 General Assembly resolution on the IDNDR, noting that it had a record 144 cosponsors. This resolution asks that locust infestations be included within the scope of the Decade. Mr. Taniguchi and Mr. Ben Moussa offered their assistance in translating the work of the Group into a resolution for the 1989 General Assembly.

### Armenian Earthquake of 1988: Lessons and Implications for IDNDR

4. The Group heard reports on the December 1988 earthquake in Armenia. Mr. Essaafi described the rapid and generous response of the international community but indicated that its chaotic, sometimes inappropriate nature underscored the need for an international protocol for disaster assistance. Mr. Keilis-Borok described the development of an increasingly localized indication of high seismic risk in the region beginning in 1975. He stated his conviction that both improvement of intermediate-term and short-term prediction should be given high priority as they have the potential for significant mitigation of the impact of earthquakes.

5. Mr. Xie reported to the Group on two earthquakes that occurred in West Yunnan, China. The death toll for the two earthquakes reached 730, with 4,015 injuries and 1.5 billion yuan in economic losses. The majority of building failures and deaths occurred in structures built before the implementation of seismic building codes, underscoring the need for special emphasis on retrofitting of existing buildings.

## UNDRO Definition of Disasters

6. The Group agreed to adopt a definition of disasters patterned after that used by UNDRO, but eliminating casualty and economic loss figures. It was felt that this modification would permit greater flexibility in determining what constitutes a disaster at local and national levels.

## Chapter Review: Organizational Criteria

7. The organizational criteria for the Decade were discussed at length. The Group arrived at a consensus on the need for a high-level Board of Trustees that would advise the Secretary-General and enhance public awareness of the Decade. It also agreed that an IDNDR Committee, composed of experts in disaster mitigation, should be created and that a Secretariat should support the work of both the Board of Trustees and the IDNDR Committee. The development of a Trust Fund and an annual meeting of donor nations were also discussed. The Group concluded that the nature and role of national entities, formerly referred to as national committees, should be clarified.

## Telecommunications and Disaster Mitigation: The Role of the Media

8. The Group heard a presentation by Mr. David Webster on the potential of telecommunications developments to aid in disaster mitigation. He described several telecommunications technologies and strategies that could be applied to disaster mitigation and suggested the need for an International Convention on Telecommunications Systems for Disaster in order to fully realize these potentials.

## Chapter Review: Introduction

9. The introductory chapter was reviewed and it was agreed that it should include the 1987 Decade resolution, a definition of natural disasters, a description of the impact of natural disasters, and a framework for action during the Decade. Mr. Giesecke suggested that the social causes and implications of natural disasters should be emphasized.

## Chapter Review: Participants in an IDNDR

10. It was agreed that the nature and composition of national entities would be a particular focus of this chapter. The importance of other participants was also discussed, including that of volunteer organizations, civil protection agencies, industry, and scientific and technological organizations.

#### Chapter Review: Goals for an IDNDR

11. There was considerable discussion of the value and dangers of setting out specific goals in the report. The Group did concur, however, on the need to present a strong moral case for the Decade. During this discussion, Mr. Ben Moussa proposed the establishment of an annual day for natural disasters to increase public awareness.

#### Chapter Review: Problems and Opportunities

12. It was clarified that the discussion of locust infestation within the scope of the Decade would be included in this chapter. Mr. Lechat also indicated that the inclusion of droughts would be delineated, with care taken to state that these will be considered insofar as they relate to other rapid onset natural disasters and so long as existing programs will not be duplicated.

#### Chapter Review: Regional Capabilities and Needs

13. The Group agreed that this chapter presented a comprehensive overview of regional capabilities and needs. Mr. Krishna requested that the Group provide him with any further information that might not yet be included.

#### Chapter Review: Illustrative Projects

14. The Group engaged in vigorous discussion of the goal of the chapter on illustrative projects. There was some divergence of opinion on whether it should seek to describe examples of possible projects to be undertaken during the Decade or should recommend the rapid implementation of specific projects.

15. Members of the Group suggested several projects in addition to the twenty-five already collected. It was agreed that although it would not be possible to include all these projects in the body of the report, some means should be found to conserve and pass them on.

#### Chapter Review: Implementation: Next Steps

16. Mr. Bensari summarized the chapter, saying that the subcommittee had tried to identify the implicit "plans of action" in the seven preceding chapters and to devise a mechanism whereby these might be implemented.

#### Trieste Meeting

17. The Group agreed that although it would complete its work and disband in April, a subsequent meeting would be useful to maintain the momentum of the Decade. Thus, the offer of the

Regional Government of Friuli and Gorizia to host a meeting in Trieste was viewed as an excellent opportunity. Several possible topics were suggested and a committee was appointed to organize the meeting and prepare a program.

#### Summary of Report Draft

18. The internal structure of the report was discussed and the principal elements of each chapter were reviewed. The Group agreed that the report should be more succinct and that the order of its contents should be reconsidered. At Mr. Pelanda's suggestion it was agreed that the role of social factors in the occurrence and mitigation of disasters should be a recurring theme of the report. It was agreed that the report should be, above all, a simple, eloquent statement that could be understood and used by decision makers with diverse political and disciplinary backgrounds.

#### Review of the Proposed Tokyo Declaration

19. Messrs. Taniguchi and Okabe proposed that at the conclusion of its work in Tokyo, the Group issue a declaration that would communicate the importance of the IDNDR to the world community and encourage active participation in its implementation. This concept was favorably received and a subcommittee was created to review the precise wording of such a declaration.

## CONCLUSIONS

The Group reached consensus on:

20.       o     Adoption of a definition of disasters allowing flexibility at local and national levels in the determination of what constitutes a disaster.
21.       o     Development of a basic organizational structure for the Decade, including:
  - a Board of Trustees,
  - an IDNDR Committee,
  - a Secretariat, and
  - a Trust Fund.
22.       o     The need to convey all proposed illustrative projects to a future programmatic body.
23.       o     The desirability of convening a meeting subsequent to the disbanding of the Group of Experts to maintain the momentum of the Decade.
24.       o     A Tokyo Declaration to be issued at the conclusion of the Group's final meeting, with the intent of communicating to the world community the importance of the IDNDR and active participation in its programs.

## NARRATIVE

25. The Third Meeting of the Group of Experts for the International Decade for Natural Disaster Reduction (IDNDR) was convened at 11:00 am on January 25, 1989 at the Ministry of Foreign Affairs of the Kingdom of Morocco, Rabat. A list of attendees is attached as Appendix A. The functional agenda of this meeting is included as Appendix B.

26. The meeting was opened by the Secretary for Foreign Affairs and Cooperation of the Kingdom of Morocco, Mr. Moulay Ahmed Cherkaoui. In his address (attached as Appendix C), the Secretary reviewed the history of the IDNDR, noting the ongoing support and involvement of the Moroccan government in the initiation of the IDNDR, and stressed the importance of the endeavor to the future of mankind. He noted that the United Nations General Assembly had adopted at its 43rd session a resolution concerning locust infestation and expressed his desire that this resolution be taken into account by the Group. He further noted the gravity of the problem of drought and conveyed the request of the African nations to the Group that particular consideration be given to drought as it relates to other rapid-onset disasters such as wildfires, floods, and locust infestation, while taking care not to duplicate existing U.N. system programs. Finally, he urged the Group to develop conclusions and concrete recommendations for the Decade which might then be translated into national, regional, and international plans of action.

27. Chairman Press thanked the Secretary for his greeting and for his government's important role in the founding of the Decade. He expressed his hope that, as the Decade ends and a new millenium begins in the year 2000, human society may begin to define and experience security in new terms, based on progress against the great afflictions of mankind--hunger, disease, and natural disasters.

28. The Group was then addressed by the Coordinator of the United Nations Disaster Relief Organisation (UNDRO), Mr. M'Hammed Essaafi, who thanked Morocco for its support for the Decade from the time the idea was first introduced to the Secretary-General. He also noted with gratitude the efforts of the Government of Japan, as well as its financial contribution to the endeavor. He stated the importance of the establishment of national disaster reduction committees and noted that Morocco has such a committee. He expressed his hope that the third meeting would be a decisive one, resulting in a report that could be endorsed by the General Assembly of the United Nations.

29. Ambassador Taniguchi expressed gratitude to the government of Morocco for its hospitality and its cooperation with Japan in the effort to establish a successful Decade. He

noted that the Rabat meeting was crucial to this endeavor and extended an invitation to the Group to convene its final meeting in Tokyo on April 10-14, 1989.

30. The Group reviewed the minutes of its second meeting and approved them as submitted.

#### Future Meetings

31. The Chairman called for a meeting of the chairmen of the drafting subcommittees to be held in Geneva on March 7-9, 1989, which the World Meteorological Association offered to host. (This meeting was subsequently rescheduled to Berlin, Federal Republic of Germany, and was graciously hosted by the German Foundation for International Development.) It was noted that the fourth and final meeting of the Group was scheduled for April 10-14, 1989 in Tokyo. Finally, plans were discussed for a meeting to be held in Trieste, Italy, in June of 1989. While such a meeting would not be an official function of the Group, it was felt that it might serve to further prepare for the launching of the Decade.

#### Status of UN Resolution

32. Mr. Taniguchi reported to the Group that the Decade resolution (attached as Appendix D) presented to the General Assembly in 1988 differed from the 1987 resolution principally in the inclusion of locust infestation within its scope. There was no opposition to the 1988 resolution and a number of potential donor nations spoke in its favor. The adoption of this resolution marks one of the rare occasions in which the Group of 77 wholeheartedly supported a proposal of the industrialized nations and the 144 cosponsors, of a total of 150, represented a historic record. Mr. Taniguchi noted that although this indicates an encouraging receptivity within the General Assembly, a strong effort would be required to translate the results of the work of the Group into a U.N. resolution at the 1989 General Assembly. He encouraged the Group to introduce ideas outside the traditional scope of the U.N. into its report but to be aware of the need to create a climate of support among member nations. He suggested that an emphasis on technology transfer would be important within this context. These views were seconded by Mr. Ben Moussa who offered his assistance to the Group in its efforts.

#### Armenian Earthquake of 1988: Lessons and Implications for IDNDR

33. Mr. Essaafi reported that UNDR0 had received and accepted offers for aid to Armenia within 24 hours of the earthquake. Although the extent of this aid was gratifying, international assistance proved to be chaotic in nature,

creating additional complications for the stricken area. Although UNDRO issued daily bulletins regarding such issues as relief and financial assistance requirements, the area was flooded with donations of items and services that could not be used under the prevailing conditions, e.g., summer tents and clothing and general practice physicians inexperienced in disaster medicine. This experience points up the need for an international protocol for disaster assistance.

34. Mr. Keilis-Borok told the Group that in 1975 a complete statistical distribution of the probability of significant earthquakes of varying intensities was available for the entire Georgian region and these statistics were made available for use in the development of building codes. In 1981, Mr. Keilis-Borok alerted the Armenian government to greater seismic risk than had previously been recognized. At that time he urged the government to mobilize civil protection resources, but no action was taken. In 1986 a prediction of high probability of occurrence was issued for nearly all the Caucasus region. By 1987 the prediction had been narrowed down to one area, where the earthquake did in fact occur. Mr. Keilis-Borok said that a high percentage of the losses could have been prevented through public education, emergency preparedness, and building inspection. He stated his conviction that the Armenian experience demonstrates the potential importance of both long-term and short-term prediction in mitigating the impact of earthquakes and should thus be given high priority. He further asserted that the data necessary for refinement of prediction techniques are available but have not been processed nor incorporated into models. Also critical is real-time seismic monitoring to enable the prediction of subsequent earthquakes in cities already damaged by a great earthquake. A summary of data on the earthquake, prepared by Mr. Keilis-Borok, is attached as Appendix E.

35. Mr. Rouhban, of the United Nations Educational, Scientific and Cultural Organization (UNESCO), indicated that his organization would be holding an international symposium, in cooperation with the USSR, to analyze the data obtained by the Armenian earthquake study teams. He invited all interested members of the Group to participate in this symposium. He said, further, that UNESCO and the U.S. Geological Survey will issue a joint memorandum on post-disaster cooperation.

36. Mr. Xie reported to the Group on two earthquakes which occurred in West Yunnan, China, on November 6, 1988 but did not receive wide international publicity (attached as Appendix F). The two earthquakes measured 7.6 and 7.2 on the Richter scale, with over 200 aftershocks recorded. Three of these measured 6.9 and five measured 5.9. The death toll for the two earthquakes reached 730, with 4,015 injuries and 1.5 billion yen in economic losses. Over 400,000 homes, hospitals and schools collapsed and communications to the stricken area



were interrupted. He indicated that the State Seismological Institute had predicted that the earthquake hazard level for the area was high and had, in fact, issued a local warning approximately one minute before the earthquake struck. The majority of the building failures and resultant deaths occurred in structures built before the implementation of seismic building codes. He stated that this underscores the need for special emphasis on retrofitting of existing buildings during the Decade.

#### Incorporating an Integrated Hazard Management Approach and Human Perspective into the IDNDR

37. Mr. Dooge reminded the Group of its conclusion that an integrated hazard management approach would be required to meet the objective and goals of the Decade. He suggested that reference to this integrated approach be incorporated in all chapters of the Group's report, with an example supplied in the chapter on "Problems and Opportunities". Mr. Elo, of the World Health Organization (WHO), expressed his satisfaction with the incorporation of the integrated hazard management approach and human perspective into the report.

#### UNDRO Definition of Disasters

38. The Group agreed that while the UNDRO definition of disasters (attached as Appendix G) was a good and useful one, it contained elements that were specific to operational goals of the organization. Thus, the Group agreed to alter that definition to eliminate specification of casualty and economic loss figures and to allow for more flexibility at the local and national levels in determining what constitutes a disaster. Chairman Press asked that this modified definition be adopted for the Group's report and suggested that a footnote be used to note and explain the difference between this definition and that used by UNDRO.

#### Review of Chapter: Organizational Criteria

39. The details of the organizational criteria for the Decade were presented by the chapter chairman, Mr. Hallgren, after which they were discussed at length. Several participants expressed specific concerns: Mr. Ben Moussa about making the best use of existing U.N. system agencies; Mr. Karnik about the role of the proposed Board of Trustees; Mr. Keilis-Borok about monitoring the quality of programs carried out under the auspices of the Decade; Mr. Morgenstern about ensuring a program that emanates primarily from the local, national, and regional level; Mr. Pelanda about the linkages to interested nations and national entities (previously referred to as national committees); and Ambassador Taniguchi about the role and responsibility of the Secretary-General.

40. The Group arrived at a consensus on the need for a high-level, distinguished Board of Trustees appointed by the Secretary-General, with a clearly defined role that would include advising the Secretary-General on the goals and objectives for the Decade, enhancing public awareness of the Decade, encouraging the involvement of a multiplicity of participants, and developing a Trust Fund. There was further agreement on the establishment of an IDNDR Committee, composed of experts who would be chosen to represent a broad cross-section of disciplines and nationalities and who would prepare an annual report to the Board of Trustees for ultimate transmittal to the Secretary-General. It was agreed that there was a need to further clarify the nature, role, and institutional connection to national entities. In his summarization of the discussion, Chairman Press also stressed the need for an annual meeting of donor nations.

Telecommunications and Disaster Mitigation: The Role of the Media

41. The Group was addressed by David Webster, of the Annenberg/Washington Program on the potential of developments in telecommunications to aid in disaster mitigation (please see Appendix H). Mr. Webster stated that while few, if any, telecommunications systems would be dedicated solely to disaster mitigation, this could often be added as an adjunct to a commercial system's primary function. For example, a satellite location system being developed to track spare parts for industry and goods being trucked across the United States could be useful in locating disaster relief equipment and supplies.

42. Among the telecommunications strategies that could be useful in disaster mitigation, Mr. Webster mentioned small portable satellite uplinks to quickly restore communications after a disaster; coordinated remote satellite imaging, using commercial systems such as Landsat and Spot; and use of toll-free telephone numbers to deliver disaster information.

43. Mr. Webster recommended a number of actions to ensure realization of the full potential of telecommunications for disaster mitigation. An International Convention on Telecommunications Systems for Disaster, proposed by an Annenberg group studying this problem, aims to guarantee the swift and unhampered deployment of relief equipment and personnel across borders after a disaster has occurred. He indicated that a reexamination of the cloak of security which lies over the use of remote imaging systems should take place so that this resource can be made available for mitigation efforts. Broadcasters, who are often well known and trusted by the general populace, should be educated so that they can assume a constructive role in informing the public. In

closing, he proposed an immediate study of new communications developments and how they might be institutionally, financially and technically adapted to the task of disaster mitigation.

#### Review of Chapter: Organizational Criteria

44. The Group returned to its examination of the chapter on organizational criteria. It was clarified that the IDNDR Committee and the Decade Secretariat could include seconded participants from appropriate U.N. system agencies as well as from non-U.N. sources, and that care would be taken to work closely with U.N. agencies and professional organizations in order to complement rather than duplicate their activities. Klaus Zehentner, of the Federal Republic of Germany, stated the imperative of developing a leadership and funding structure that would involve all parties. The Board of Trustees, he felt, would be critical to this endeavor. Mr. Benblidia asked that explicit mention of the importance of regional activities be made in this chapter, with some formal status being given to these activities.

45. Mr. Pelanda suggested the need for an international disaster research laboratory that would integrate all the disciplines involved in disaster mitigation and might be incorporated into the Decade structure. He envisioned that such an institution would have an important role in training disaster personnel and in formulating disaster policy, as well as in basic scientific and engineering research.

#### Chapter Review: Introduction

46. Mr. Cheney presented an overview of the introductory chapter, noting that it would include the following points:

- a) presentation of the 1987 Decade resolution;
- b) a description of the impact of natural disasters, (The difficulty of arriving at an equitable statistical representation of the impact of natural disasters in industrialized and developing nations was discussed.);
- c) a functional definition of natural disasters for the purposes of the Decade; and
- d) a framework for action during the Decade.

Mr. Giesecke suggested that the social causes and implications of natural disasters should also be emphasized in this chapter.

47. Further discussion centered on the need to develop recommendations for an international program of action to further the growing momentum of the Decade. It was agreed that

such a program of action should be developed after the publication of the Group's report and that development of this program could be the focus of an early summer meeting in Trieste, Italy.

#### Chapter Review: Participants in an IDNDR

48. Mr. Odhiambo began his review of the chapter by thanking Mr. Okabe for chairing this subcommittee in his absence. Mr. Odhiambo stated that the chapter focussed primarily on national committees, with the goal of developing a flexible system that would accomodate political, cultural and experiential diversity but would ensure the level of national authority necessary to operate effectively. The Chairman expressed his concern that it might be possible for a national committee consisting of non-experts in the field of disaster mitigation to be created. Mr. Davenport said that in some cases national committees would of necessity be evolutionary in their nature, initiating within an organization such as a nation's Academy of Sciences and then progressing on to have official governmental status. He stressed the need for a committee framework that would accomodate such an evolution. Mr. Odhiambo agreed that these points should be included in the profile of a national committee and expressed his hope that they might also be included in the next letter on this topic from the Director-General for Development and International Economic Cooperation to member nations.

49. The importance of other participants in the Decade was also discussed: Mr. Giesecke said that a clear distinction should be made between volunteer organizations such as the Red Cross and Red Crescent Societies and civil protection agencies; Mr. Davenport stressed the importance of the involvement of industry in the Decade; and Julia Marton-Lefevre, Executive Secretary-designate of the International Council of Scientific Unions (ICSU), stressed the importance of the active participation of scientific organizations, suggesting that ICSU would be pleased to serve as a focal point for coordinating this activity.

50. A question arose as to the placement of the chapter on Participants in an IDNDR. The Group agreed that there was a need for a more logical progression of ideas within the report structure and it was agreed that the precise order of chapters could be decided during the editorial process.

#### Chapter Review: Goals for an IDNDR

51. Mr. Dooge presented an overview of the draft chapter on goals for an IDNDR. This presentation prompted considerable discussion, particularly of the danger of setting out overly specific and ambitious goals in the report. Members of the Group expressed the concern that these could be both

politically objectionable and unrealistic. Both the Chairman and Mr. Pelanda, however, stressed the need to forcefully present a moral case for the Decade in this chapter.

52. In reference to the section on the Icelandic civil protection program, Mr. Oyebande suggested that it include a statement of the positive impact it has had on the nation. He also suggested that the benefits of disaster mitigation in terms of long-term development be explicitly mentioned.

53. The Group agreed that the section on the social science aspects of disaster mitigation should be simple and concise and that it might possibly be incorporated into another chapter.

54. Alcira Kreimer, of the World Bank, stated her conviction that a strong presentation of the economic and social benefits of the Decade would be helpful in convincing potential donors of the desirability of providing funding. She indicated that a more positive review of the Water and Sanitation Decade than that presented in the original draft was possible. Mr. Elo, of the World Health Organization, said that his organization would be happy to provide the most recent data on this Decade.

55. Regarding the section of the chapter that refers to the International Decade for Drinking Water and Sanitation, it was agreed that a more positive assessment of its progress than that presented in the original draft would be possible. Mrs. Kreimer and Mr. Elo offered to provide information in this regard.

56. During the course of the discussion of this chapter, Mr. Ben Moussa stated that Morocco would like to propose the establishment of an annual day for natural disasters. The purpose of such a day would be to increase public awareness and should therefore be well publicized and occur during the regular school year. Mr. Ben Moussa also suggested that a natural disaster convention should be convened within the context of the Decade.

#### Chapter Review: Problems and Opportunities

57. Mr. Lechat stated that the order of the sections in the original draft would be altered and suggested that some of the material might be more effectively incorporated in the chapter on illustrative projects. It was clarified that inclusion of locusts would be specifically mentioned, as would droughts, as these relate to other rapid onset natural disasters. The duplication of existing programs was to be avoided. It was further clarified that technical disasters are outside the scope of the Decade and would thus not be included in the report.

#### Chapter Review: Regional Capabilities and Needs

58. Mr. Krishna requested that members of the Group provide him with any information regarding regional capabilities and needs that might not be included in the draft of the chapter.

59. Cengiz Ertuna, of ESCAP, stated that his organization has been working in the field of natural disaster mitigation for forty years and asked that its multidisciplinary approach and expertise be mentioned in the report. He said that ESCAP is anxious to participate in the Decade and offered to provide a full report on the organization (attached as Appendix I), as well as other publications upon request.

60. Mr. Giesecke stated his conviction that the problem of massive fatalities due to the failure of existing buildings must be recognized if the Decade is to dramatically reduce loss of life.

#### Chapter Review: Illustrative Projects

61. The discussion of the chapter on illustrative projects was vigorous, particularly as to whether it should be regarded as a means for presenting guidelines on the type of projects that would be appropriate within the scope of the Decade, or as a forum for recommending specific projects for action. Mr. Rosenblueth stated that he felt the chapter should stress the nature of projects that might be implemented rather than providing a list of specific projects. This was generally accepted, although Mr. Keilis-Borok said that among the projects that had been collected were several which presented excellent opportunities for rapid implementation, such as an early warning system. He expressed his desire that the Group encourage ICSU or some similar body to begin work immediately on these projects.

62. The subcommittee had compiled approximately twenty-five projects and the Chairman asked that the members of the Group review these for technical inaccuracies. In this regard, Mr. Giesecke agreed to provide the results of recent CERESIS research on the Nevado del Ruiz disaster. In addition, Messrs. Oyebande and Odhiambo both expressed their conviction that the project on locust infestation should include mention of the urgent need to seek alternatives to chemical means of control.

63. Several other projects were suggested by the members of the Group:

- o Mr. Cheney agreed to provide a summary of a wildfire project.

- Mr. Benblidia suggested projects on identification of the human and economic factors affecting land-use and urban planning, as well as on the training of experts and technical supervisors for building construction.
- Mr. Arya proposed a project on the training of trainers.
- Mr. Lechat suggested the need for an interdisciplinary project on the analysis of failure points in houses and their relationship to fatalities, which would involve engineers, designers, and health professionals.
- Mr. Rodda said there was a need for a project on technology transfer systems.
- Mr. Kintanar proposed a project on determining the most effective ways to issue warnings to affected populations. (Mr. Petersen cautioned that warnings are of little use if public education campaigns have not preceded them, and that distinctions must be made among prediction, warning authorities, and warning the general public.)

There was consensus that although the report would clearly have to include a very limited number of projects because of editorial constraints, the Group wished to in some way conserve and pass on all projects collected.

#### Chapter Review: Implementation: Next Steps

64. Mr. Bensari summarized the chapter, saying that the subcommittee had tried to identify the implicit "plans of action" in the seven preceding chapters and to devise a mechanism whereby these might be implemented. Mr. Kintanar requested that this chapter and others include reference to the "pervasive belief that natural disasters are God-given and therefore not amenable to change" and stress that positive action is in fact possible. It was suggested by Mr. Cheney that a philosophy of planning for the worst possible case be embodied in the chapter as it is his belief that the use of probability statistics tends to lead planners to reduce their efforts. Mr. Petersen clarified that volunteer groups and civil protection agencies are distinct types of entities and asked that this difference be taken into account in the report.

65. Franco Maranzana, Director of the Mediterranean Project, provided the Group with a description of his program and suggested that it might serve as a useful model for other projects during the course of the Decade.

### Trieste Meeting

66. The Group reconvened at 9:00 am on Friday, January 27, 1989. Mr. Pelanda again extended the offer of the Regional Government of Friuli and Gorizia to host a meeting of the Group in Trieste. It was agreed that while the Group would be completing its work and disbanding in April, a subsequent meeting would be useful in order to maintain the momentum of the Decade. Several suggestions for topics to be covered were advanced by Group members, including:

- o planning,
- o ongoing UN agency projects and the role of UN system agencies in the Decade,
- o national and regional progress in hazard mitigation,
- o early warning,
- o instability of megacities,
- o Italian seismic predictions,
- o socio-economic issues surrounding earthquakes, and
- o the role of civil protection personnel in civil preparedness.

The Chairman appointed a committee to organize the meeting and prepare a program, chaired by Mr. Pelanda and including Messrs. Bensari, Keilis-Borok, Krishna, and Davenport.

### Summary of Report Draft

67. The Group reviewed some general considerations for the report as a whole. It was agreed that there would likely be some need for reordering of materials within and among chapters, and that this should take place during the editing process. In particular, it was decided that the chapter entitled "Problems and Opportunities" should become Chapter II, rather than Chapter IV. Mr. Pelanda stressed the importance of emphasizing the social structures and actions that contribute to the occurrence of disasters, as well as the potential for mitigation through modification of these social elements. The Chairman supported this idea and it was agreed that it should be incorporated throughout the report, but particularly in Chapter I. Mr. Morgenstern suggested that it would be important to justify the use of the mechanism of a Decade and there was consensus that this might be included in a letter of transmittal for the report. The Chairman noted that several



subcommittees had recommended the creation of appendices that would not be included in the report. He noted in particular that the publication in December 1989 of more specific guidelines for national entities might be well timed. Finally, the Group agreed that the report should make a simple, eloquent statement that could be understood and used by decision makers with diverse political and disciplinary backgrounds.

68. The Group then reviewed the key conclusions of the preceding day for each chapter. Among the conclusions were:

- o Chapter I: Introduction
  - Mention should be made of the social component of natural disasters and their mitigation potential.
  - The increasing magnitude and severity of natural disasters should be discussed.
- o Chapter II: Problems and Opportunities
  - Mention of the need for coordination of legislation should be included.
  - The section on disasters not envisioned by the Decade should include environmental and technological disasters.
  - The inclusion of drought should be written up to make clear that it is included as it relates to other rapid onset natural disasters and does not duplicate the work of existing programs.
- o Chapter III: Goals for an IDNDR
  - The chapter will have a five section format:
    - a) introduction
    - b) successful mitigation examples
    - c) Icelandic case study
    - d) matrix of tasks
    - e) proposed method of transfer from program to plan of action
- o Chapter IV: Participants in an IDNDR
  - The private sector should be brought into focus, with mention of all relevant industries
  - A section on the role of the media should be included.
  - A flexible profile for national entities should be discussed.
  - The section on UN system agency participation should be strengthened.
- o Chapter V: Regional Capabilities and Needs
  - Any additional information provided by members of the Group should be included.
  - It should be clarified through the use of a footnote that division of the world into seven

regional groupings is a convenience for the chapter and not intended to be adopted for the entire Decade.

- o Chapter VI: Illustrative Projects
  - A select number of projects will be included in the report, with the first being a public awareness project.
  - All projects will be compiled into an annex that will be provided to the proposed IDNDR Committee.
- o Chapter VII: Organizational Criteria
  - The basic structure will include:
    - a) a Board of Trustees
    - b) an IDNDR Committee
    - c) a Secretariat
  - A brief discussion of the proposed Trust Fund.
  - Mention of the interaction of national entities, regional organizations, and other participants in the Decade.

#### Review of the Proposed Tokyo Declaration

69. A proposed Tokyo Declaration was presented to the Group by Ambassador Taniguchi and Mr. Okabe. The Ambassador stated that the purpose of the declaration would be to communicate to the world community the importance of an IDNDR and to encourage active participation in its implementation at all levels. He said that the declaration should be issued immediately after the presentation of the Group's report and should be done in such a manner as to attract considerable media attention. The Chairman supported the issuance of such a declaration and indicated his belief that it should be an eloquent statement to the world. The suggestions of members of the Group, government representatives, and UN system agencies were requested, and a subcommittee (Mr. Okabe, chair, and Messrs. Morgenstern, Dooge, and Odhiambo) was appointed to review the precise wording.

#### Tokyo Agenda

70. Ambassador Taniguchi invited the Group to hold its fourth and final meeting April 10-14, 1989 in Tokyo. He noted that the city is particularly lovely at this time of year, with the cherry blossoms in full bloom. He presented a tentative agenda:

April 10-11	Finalization of the report
April 12	Closing ceremonies and media workshop

April 13	Yokohama symposium
April 14	Visit to disaster prevention facilities

The Ambassador noted that the meeting will have a very important symbolic and political function and stated his intention to invite many important governmental and scientific representatives.

#### Interim Drafting Meeting in Geneva

71. The Group agreed to hold a meeting of all chapter subcommittee chairmen or their delegates in Geneva from March 7 through March 9, 1989. (The location and dates were later changed to Berlin, March 6-10, 1989.)

#### Concluding Remarks

72. The Group was again addressed by the Foreign Minister of the Kingdom of Morocco, who congratulated its members on working so effectively. He said that while Morocco had had the privilege to be involved in the introduction of the concept of the Decade, it had no wish to monopolize the concept, but rather would like to see it endorsed by all member states of the UN. He expressed his nation's desire that the Decade should be a truly innovative and successful program, characterized by successful action. Finally he wished all members of the Group good luck and said that he hoped all would retain pleasant memories of Morocco.

73. The meeting was adjourned at 12:00 noon.