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SPECIAL ECONOMIC AND DISASTER RELIEF ASSISTANCE

Office of the United Nations Disaster Relief Co-ordinator

Report of the Secretary-General

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* A/36/50.

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I. INTRODUCTION

1. The present annual report covers the role and activities of the Office of the United Nations Disaster Relief Co-ordinator (UNDRO), as derived from its mandate, for the period ending 31 March 1981. The report contains the information specifically called for in General Assembly resolutions 2816 (XXVI) and 3532 (XXX). In addition, a first attempt has been made to strengthen the analytical content of the report by describing activities undertaken in the course of the year in relation to the over-all objectives set for the Office by the General Assembly. The views of the intergovernmental bodies concerned on how to further improve UNDRO's reporting in the future would be greatly appreciated.

2. In addition to the present report, the Economic and Social Council and the General Assembly will have before them the report prepared by a consultant on international efforts to meet humanitarian needs in emergency situations (E/1981/16), the conclusions of the Administrative Committee on Co-ordination (ACC) concerning action to be taken to respond to exceptional and complex emergencies (see ACC/1981/DEC/1-10, decision 1981/2), the evaluation report by the Joint Inspection Unit (JIU) on UNDRO (A/36/73) and the Secretary-General's comments thereon (A/36/73/Add.1). In so far as the present report looks to the future, it does so within the perspective of the issues and approaches set out in those documents, particularly the Secretary-General's comments on the JIU evaluation report. It is hoped that action on those reports by the Economic and Social Council and the General Assembly will lead to a strengthening of the capacity of the United Nations system in disaster-related activities and to increased effectiveness, within that framework, of UNDRO, as the focal point in the United Nations system for disaster relief matters, in the interest of all those affected by disasters.

II. THE MAIN PROGRAMME RECORD

A. Disaster relief co-ordination

3. In the 12 months under review, the Office of the Co-ordinator was involved in 15 major disasters which seriously affected more than 20 countries. In accordance with its mandate, the involvement of UNDRO required the exercise of several integral components of its functions, namely, (a) the soliciting of information (relying, *inter alia*, on resident co-ordinators/UNDP resident representatives in their capacity as UNDRO representatives in the field) and the immediate dissemination of that information to Governments of Member States as well as to potential donors in the intergovernmental and non-governmental sectors; (b) the organizing and leading of assessment missions jointly with representatives of organizations of the United Nations system and in some cases representatives from voluntary agencies; (c) the issuing of situation reports and general appeals, making direct contact with potential donors, mobilizing relief contributions in cash and kind and ensuring the rapid transport of relief supplies to the disaster-stricken countries at minimum cost; (d) the seconding of relief co-ordination specialists to the offices of resident co-ordinators/UNDP resident representatives in order to assist in the assessment of needs, the co-ordination of relief

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supplies and the monitoring of day-to-day developments during the emergency phase; (e) the maintenance of contact during the post-emergency phase, with a view to advising Governments of affected countries on the inclusion of disaster prevention concepts in their rehabilitation and reconstruction programmes, and on the improvement of disaster preparedness planning generally.

4. Also in the exercise of its mandate, UNDR0 has allocated during 1980 from the emergency fund of \$720,000, appropriated to it for the biennium by the General Assembly, 14 direct grants totalling \$245,600. As in the past, these grants, which are limited to a maximum of \$30,000 for each disaster, have, in spite of their limited value in monetary terms, been most valuable in providing the impetus for the international relief effort, as well as for some vital contingencies like the financing of the transport of life-saving equipment or medicines. The UNDR0 grants, were, as a rule, matched by a similar grant from the United Nations Development Programme.

Disaster assessment

5. The Office has, over the past year, further enhanced its role in the organization of disaster assessment field missions. Disaster assessment is a particularly sensitive area where the international community expects an objective evaluation of (a) the human impact of a disaster as well as the economic effects at the macro and micro levels, and (b) the type and amount of relief required. Because of its intersectoral approach, and not being a funding agency, UNDR0 is well placed to make this kind of objective assessment.

6. The work of UNDR0 in this area is naturally undertaken in close co-operation with interested organizations of the United Nations system. Often, if the assessment is to have any real value, and if it is to place in perspective the effects of the damage suffered, it must go beyond immediate emergency relief, and include, or at least comment upon, the expected requirements for rehabilitation and possible over-all redevelopment needed as a result of the disaster. For instance, it might be necessary to include in the "relief package" seeds and fertilizers, particularly when there is a limited season suitable for planting and/or a short cycle between planting and harvesting in the disaster area. However, the main and most immediate concern is the direct impact of the disaster, whatever its cause may have been, on the people, and the capacity of the Government to supply or deliver appropriate and timely relief to those in need.

7. In the period under review, UNDR0 participated, in association with other United Nations agencies, the League of Red Cross Societies and other leading non-governmental organizations, in some 20 disaster assessment field missions. The most important of these missions took place in Africa (Algeria, Djibouti, Ethiopia, Somalia, Sudan and Uganda), in China and in the Caribbean region. More information about these activities and their results will be found in section III of the present report.

Relief assistance

8. Apart from the grants out of the emergency fund mentioned in paragraph 4,

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more than \$210 million worth of assistance in cash and kind were provided by donors in connexion with the 15 disasters mentioned in paragraph 3. The donors included members of the United Nations system, Governments, intergovernmental organizations and voluntary agencies. Of this amount, \$16 million were given to Caribbean countries affected by hurricane "Allen". The total contributions for Africa amounted to over \$170 million, while assistance in the sum of \$24 million was provided for countries in the Asia and Pacific region. While the part played by UNDRO in the mobilization of this assistance is difficult to quantify, there can be little doubt that UNDRO has served to enhance international awareness of the need for concerted relief assistance by the international community and to help maximize the total value of resources reaching the place of actual need.

The UNDRO Co-ordination Centre

9. The primary function of the UNDRO Co-Ordination Centre is to serve as a world-wide communications centre for the co-ordination of disaster relief. When a disaster emergency is reported, the event is immediately placed on the UNDRO Disaster Alert List until the need for and type of UNDRO action is determined. Requests for detailed damage assessment and an evaluation of whether international assistance is required are initiated from the Co-ordination Centre.

10. During the year covered by the present report, the UNDRO Co-Ordination Centre identified and dealt with 192 such disaster alerts or an average of 16 per month. About 20 of these eventually became major disaster emergencies. The role played by UNDRO in these emergencies through the Co-ordination Centre included the collection, recording in the computer, and dissemination of, information on damage assessment, relief requirements, contributions etc. A total of 92 UNDRO situation reports were transmitted by computer around the world to an average of 120 recipients each.

11. Late in 1980 an interorganization group was formed by UNDRO, with the aim of promoting the interchange of technical data on disasters, preferably in a form ready for computer processing. The group consists of representatives of several United Nations entities, non-governmental organizations and disaster research institutions outside the United Nations system and it is currently engaged in compiling an inventory of information now available within each organization, including computer programmes and systems. The aim of the group is to avoid duplication of information, to consolidate and standardize it where feasible, and to make it readily available to all organizations concerned with disaster relief. The UNDRO Data Base is intended to become the centrepiece of this joint system. It is to comprise the following components to enhance the speed of response in disaster emergencies, and the accuracy of the information available during those periods: suppliers of relief items; stockpiles of relief items; country profile information; government counterparts; consultant register; disaster contributions/requirements; disaster events; disaster histories.

12. Apart from its primary function to serve as a world-wide communications centre for the co-ordination of disaster relief, the Co-ordination Centre serves a number of other purposes; these include press briefings, film viewings, the sending and receiving of telex communications, computer development, the UNDRO Data Bank and the UNDRO map library.

Transport of relief supplies

13. New initiatives have been taken to expand the capacity of UNDRO to obtain low-cost or free transport of relief supplies by air, marine or road transport. First priority was given to the implementation of IATA resolution 788 dealing with air freight concessions in the case of a disaster emergency. To this end contacts were expanded with IATA and individual airlines as well as with the Intergovernmental Committee for Migration (ICM), which has special arrangements with charter airlines for the transport of refugees, and the League of Red Cross Societies.

14. The ultimate aim is to ensure rapid transport of emergency supplies by establishing, with the help of the computer, the most appropriate routing and airline contacts.

15. These new developments should benefit not only UNDRO but all members of the interorganization group.

B. Pre-disaster planning and related activities

16. The mandate of UNDRO requires the Co-ordinator to assist Governments in pre-disaster planning. More generally, the mandate also calls for the promotion of the study, prevention, control and prediction of natural disasters and the collection and dissemination of information in this area.

17. Action taken to discharge this part of the mandate is divided into five main categories, namely, (a) investigation and/or advisory visits by UNDRO staff members to assess the state of a country's disaster preparedness organization or to examine a particular threat faced by the country; (b) the provision of technical assistance in the form of assignment of experts for a longer period (between three and six months is common) so that, for example, help can be given in the preparation of national or regional relief plans, or in the solving of specific problems such as the best means of flood control; (c) the mobilization of funds to execute actual projects recommended in the reports of the experts, and/or requested by Governments either from multilateral sources such as UNDP or from bilateral sources; (d) organization of, or participation in, interagency meetings, seminars, technical conferences and the like concerned with disaster matters in order to contribute specialist knowledge and increase public awareness of these matters; (e) the organization of or contribution to training and briefing seminars and workshops for local officials in disaster-prone countries; (f) the collection and dissemination of relevant information, including the publication of technical manuals and other documents of interest to specialists and the general reader.

18. The United Nations resources directly available to UNDRO for these purposes, apart from its staff resources and some travel under the regular budget, consist of (a) the technical assistance subaccount of the UNDRO trust fund; (b) occasional allocations from country indicative planning figures (IPFs) to meet the costs of missions by experts; (c) funds from the United Nations Environment Programme

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(UNEP), specifically for certain publications. In addition (d) the United Nations Capital Development Fund has made a contribution towards the cost of preparedness projects

19. In recognition of the importance of assistance in this area, the Governing Council of UNDP has called upon its Administrator to continue his efforts to help Governments requesting technical assistance in disaster preparedness and prevention at the national and regional levels. 1/

20. It should also be noted that, quite apart from technical assistance projects developed specifically by UNDRO with the aim of disaster prevention and preparedness, an increasing number of development programmes have recently, directly or indirectly, incorporated disaster prevention elements or effects.

Missions

21. During the year under review, six countries, at their request, were visited by senior UNDRO staff members to provide specialized advice, seven other countries and three regional programmes received interagency missions in which UNDRO staff took part, and seven countries and one regional project benefited from technical assistance of specialists in disaster planning and preparedness selected and financed by UNDRO. In a number of these instances funds were provided from national IPFs, and in other cases the costs of the assistance projects were shared with other agencies. Details of these activities are to be found in later sections of the present report.

Meetings and seminars

22. The Office organized or contributed to several meetings and seminars dealing with regional aspects of pre-disaster planning (Latin America, the Balkans, the south-west Indian Ocean area, and the areas grouping States members of the WMO/ESCAP Typhoon Committee, and the Panel on Tropical Cyclones). Other meetings in which UNDRO played a role were concerned with global problems and involved the participation of several United Nations agencies, Governments and institutes of science and learning. Mention should also be made in this connexion of the Ninth World Civil Defence Conference, which was organized by the International Civil Defence Organization (ICDO) and held at Rabat from 5 to 10 November 1980. The theme of the meeting was "Protection of man against natural and technical disasters". In addition to messages from the Secretary-General of the United Nations and the United Nations Disaster Relief Co-ordinator, two substantive papers, on the principles and practical applications of disaster planning and prevention and land-use and building regulation in disaster prevention, were presented by UNDRO as a basis for discussion.

1/ See Official Records of the Economic and Social Council, 1979, Supplement No. 10 (E/1979/40), chap. XXI, sect. D, decision 79/17.

Briefings

23. As in the past, resident co-ordinators/UNDP resident representatives, who act also as representatives of UNDRO in the countries in which they are stationed, are systematically briefed on the nature of their continuing responsibilities. An important part of their function is to be aware of the status of a country's preparedness to meet emergency situations and to advise UNDRO if assessment or advisory missions are needed. Apart from the opportunity offered by regional meetings, resident representatives visiting Geneva come to UNDRO to meet the Co-ordinator and his staff and to review country specific information; 14 such briefing sessions were arranged during the period under review.

Technical publications

24. The chief item in the technical publications programme is the UNDRO/UNEP Compendium on Disaster Prevention and Mitigation. This Compendium, undertaken with financial assistance from UNEP, will, when complete, consist of a series of 13 monographs, designed to guide a broad range of officials, particularly in developing countries, in the identification of existing knowledge and expertise on the causes and effects of various types of natural disasters, and in the formulation of policies designed to ensure their prevention and mitigation. Initial distribution is made to a total of about 4,000 institutions and individuals.

25. During the period under review, two further monographs, on legal aspects and on public information aspects, were published in three languages, bringing the total number of published volumes to eight. The text of an additional monograph, on structural engineering aspects, has been completed.

International strategy for disaster prevention

26. By virtue of paragraph 5 of General Assembly resolution 3440 (XXX), UNDRO is mandated to work with others and formulate an international strategy for disaster prevention. It is noteworthy in this connexion that the Governing Council of the United Nations Environment Programme, at its eighth session, laid emphasis on the significant role played by human activities in increasing the severity of natural disasters. The Governing Council endorsed earlier decisions and recommendations touching this matter, and stressed the need for national and international strategies to prevent natural disasters. The risk of natural disasters is inherent in the physical environment of many countries, and international action is necessary to enhance awareness of the implications of uncontrolled human activities.

27. When UNDRO initiated work on the project, it was expected that two major inputs, namely the "Compendium on the state of the art in disaster prevention and mitigation", and the "World survey of disaster damage", would together form the basis for the formulation of the strategy itself. As has been noted elsewhere, the "World survey" was discontinued when it was realized that it

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would be difficult - if not impossible - to obtain accurate figures, calculated on similar bases, from all the countries involved. Publications in the "State of the art" series, as recorded in another section of the present report, are continuing to appear but the work is as yet incomplete.

28. A main component of future work in this area will be the formulation of methodologies for disaster damage assessment which would provide common criteria and enable comparable calculations of the economic impact of disasters. The "State of the art" will continue to provide the main basis for this work.

C. Public information

29. In addition to the technical publications programme mentioned above, which is aimed at those with professional interests in the field, UNDRO also maintains a programme of press briefings, and publishes a newsletter for the benefit of the general reader. Press representatives in Geneva and New York are given current information on new disasters as well as on the progress of relief operations. Whenever particularly important relief operations are in progress, special briefings are held in the UNDRO Co-ordination Centre.

30. Cost-saving arrangements introduced in the second quarter of 1980 have made it possible to double the frequency of the UNDRO public information letter, UNDRO News, which now appears six times each year with a run of over 5,500 copies. UNDRO News reviews recent disaster situations and the assistance provided by the United Nations system, carries background articles on various aspects of disaster management, and provides current information on the activities of the Office of the Co-ordinator. Maximum advantage is taken of the services available at the United Nations Office at Geneva for printing and distribution.

D. Enhancing operational efficiency

31. With regard to the activities mentioned so far, and particularly in relief co-ordination operations, there are a number of elements which have a bearing on the efficiency and rapidity in the execution of operations. These elements have been identified and are being kept under constant review. Some of the practical matters included in these factors have been described in earlier annual reports (A/32/64, annex II; A/33/82, paras. 25-27; A/34/190, paras. 37-45; A/35/228, paras. 65-68).

The consent of the Government

32. In accordance with present practice, United Nations organizations can intervene only after an official request for assistance is received from the Government of the country affected by a disaster. As a result, agencies with the function of providing humanitarian assistance are sometimes unable to respond immediately and are thus exposed to criticism for delays in taking action.

33. In the specific case of UNDRO, it is the Co-ordinator's understanding that he can act provided a request has been made to any United Nations organization, in so far as mobilization and co-ordination of United Nations relief activities are concerned. Moreover, he can also send a representative to offer the services of UNDRO to the Government, in advance of an official request for assistance, to help the Government in assessing the needs, to disseminate information about them, and act as a clearing-house for assistance from external sources. It has been found that such informal offers of "good offices" are generally welcomed and accepted.

Assessment of needs and the initial input

34. If the emergency organization within a country needs assistance to assess the needs accurately, or if individual governmental organizations concerned do not wish to rely on their own expert assessments, the most practical action on the part of the United Nations is the sending of an interagency mission to examine the need for outside help. The basic supplies required in any disaster situation may nevertheless be immediately dispatched, but a proper assessment is essential if there is to be a saving of time, effort and expense at a later stage. In cases of sudden disaster, the joint assessment mission can be formed by agency representatives already in the country. Whether the team needs reinforcing from Headquarters and, if so, how this is to be done with the necessary speed, are questions which the Co-ordinator has raised with the executive heads of the agencies during the year under review. The Office has long encouraged the formation of teams of this kind, and the association with them of representatives of bilateral donors. Guidance on these matters is contained in the instructions given to UNDP resident representatives.

35. Although United Nations agencies in general can very rapidly make the necessary decisions to respond to a disaster, the arrival of relief itself, apart from cash assistance for local purchases, tends to be slower than relief sent by

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bilateral donors. There are many reasons for this, and many of them are inherent in the sheer size and quantities of aid ultimately provided. Tendering and contractual procedures have to be followed if stocks are insufficient; and the stocks in the control of organizations of the United Nations system are, in general, modest. International and in-country transport has to be arranged, and this is not always available just when it is needed. As a consequence, delays in the distribution of needed supplies to the stricken areas occur.

36. Assessment in any meaningful form inevitably takes time to complete, and when arrangements for the bulk of the supplies are consequently postponed these run the risk of arriving too late. The length of time during which relief is necessary tends to be in proportion to the time over which the disastrous situation has developed. A post-earthquake emergency phase may be over in, say, two weeks, but a drought emergency relief programme may have to continue for months, if not years. According to the Director of the International Centre for Disaster Epidemiology:

"The crucial question here is: how to balance informed decision with speed of intervention. In other words, should assistance be rushed with the risk that action will be partly irrelevant, or should action be delayed with the risk that relief will come too late? Field data collected over the last decade suggest that the over-all effectiveness of relief would indeed be improved if speed was traded off for better information." 2/

37. There should be no doubt that the ability of the United Nations to respond to emergencies of all kinds is now better than it was 10 years ago. If in general the first responses are national, the second bilateral, and the third multilateral, this should not give rise to undue concern, although of course UNDR0 should seek ways of improving the multilateral response, in particular work towards bettering the methodology of disaster assessment.

Removal of legal obstacles to the delivery of international relief

38. International attention was most recently drawn to these and related problems at the Congress on International Solidarity and Humanitarian Actions, held by the International Institute of Humanitarian Law at San Remo, Italy, in September 1980. At this Congress, UNDR0 presented a discussion paper which reviewed the efforts of both national and international lawyers to deal with the legal issues affecting the delivery of disaster relief, including the implications resulting from the application of modern technology, particularly remote sensing, to disaster work.

39. The conclusions of the Congress underlined the fundamental importance of international solidarity in disaster relief action and reaffirmed the continuing validity of the pragmatic approaches being followed by international and non-governmental organizations in mobilizing and extending assistance to countries affected by disasters. The Congress added that, while pursuing these approaches,

2/ M. Lechat, "Medical care in natural disasters", UNDR0 News, September 1980.

it would, at the same time, be desirable to explore the feasibility of strengthening international legal instruments and to further develop relevant principles of international humanitarian law governing the obligations of the international community, the receipt by the affected countries of international assistance, and facilitation of relief efforts.

40. The Office will bear these conclusions in mind in its efforts to draw up the text of an international agreement on the provision of disaster relief. Work on this project is pursued jointly with the United Nations Institute for Training and Research (UNITAR) as well as with the League of Red Cross Societies, the Henri Dunant Institute and the International Law Association.

E. Interagency co-operation

Memoranda of understanding

41. During the year under review, the Co-ordinator signed memoranda of understanding with the Director-General of the United Nations Educational, Scientific and Cultural Organization, and the Executive Director of the United Nations Centre for Human Settlements (Habitat). At the request of UNDRO, discussions were held with the International Civil Aviation Organization (ICAO), resulting in a revision and up-dating of ICAO instructions to regional and country staff regarding co-operation with UNDRO and assistance to be rendered in disaster preparedness and disaster relief. It should be noted that not only aviation disasters are dealt with in these instructions but also, for example, catastrophes of other kinds requiring exceptional arrangements for the air delivery of relief in places which may well not normally enjoy the facilities of a fully-equipped airport in the local area.

42. With the conclusion of these memoranda, the Co-ordinator has complied with the request made to him by the Economic and Social Council in its decision 253 (LXIII) and its resolution 1978/41 to continue his efforts, with a view to the rapid conclusion of co-operative agreements with appropriate organizations of the United Nations system in order to achieve greater cohesion in the matter. Taken together, these memoranda, concluded between UNDRO and concerned agencies of the United Nations system, provide useful ground rules for the co-ordination of functions and activities of individual agencies so as to ensure an effective allocation of responsibility for a prompt, concerted response in meeting emergencies arising from disaster situations.

Joint activities

43. Many of the fruits of the working relationships established with agencies and organizations of the United Nations system are, of course, to be found in the co-ordination of relief operations at the country level. Other joint activities with agencies such as the World Meteorological Organization (WMO) have largely a regional application. Yet other activities have a global character and include in some cases organizations outside the United Nations system. The paragraphs which follow provide a few illustrations of the kind of joint activities in which UNDRO participates.

UNESCO/UNDRO International Advisory Committee on Earthquake Risk

44. In accordance with the memorandum of understanding, UNDRO is co-operating with the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the area of earthquake risk evaluation and mitigation. The third session of the Committee was held at Geneva in April 1980.

45. Recommendations of the Committee included action necessary to promote earthquake prediction research and its application; regional seismic hazard studies; promotion of earthquake risk assessment and reduction measures; and popularization of knowledge.

46. Some of the actions taken in compliance with, or bearing upon, these recommendations, have been described elsewhere in the present report. As part of the preparatory work for a proposed seminar on earthquake prediction case histories, UNDRO approached authorities in a number of countries requesting published and unpublished material on prediction case histories or on the occurrence of abnormal, i.e., possible precursory, seismic activity. New information has been collected from China, Greece, Mexico, New Zealand, Nicaragua and Peru.

47. As regards the popularization of knowledge, UNDRO staff held round tables with government and/or United Nations field officials, and have taken part in press conferences while on mission, e.g., in Argentina, Ecuador, Mexico, Peru and Venezuela, with the objective of improving the general perception of earthquakes and other risks and methods available for their mitigation. The Office has also collected a considerable quantity of printed material, such as instruction leaflets on earthquake preparedness and prevention.

48. One of the most important elements in public information is to encourage locally or regionally acknowledged experts to devote part of their time to preparing locally relevant material - i.e., citing regional, historical experience - for presentation in television programmes, public lectures and newspaper articles. UNDRO staff on mission have taken every opportunity to emphasize the need for such activities.

Meeting of experts on volcanic emergencies

49. The Office also co-operates actively with UNESCO in the area of volcanic emergency preparedness. In May 1980, a meeting including disaster management authorities as well as scientists was held in Paris.

50. The agenda included the review and analysis of recent volcanic emergencies in order to examine and compare:

- (a) How the hazards and risks had been evaluated;
- (b) What criteria had been adopted for the implementation of protective measures, including the calling, and the ending, of an evacuation;
- (c) What procedures had been followed for informing the public, and maintaining a balanced perception, of future risks.

51. The meeting reviewed the text of a source book on the above subjects. This is intended for use as a guide by government authorities as well as scientists in establishing preparedness plans for the management of future volcanic emergencies.

52. The representative of UNDRO at the meeting acted as Rapporteur and undertook to finalize the text of the handbook by the end of 1981.

International Year of Disabled Persons

53. The main concern of the International Year of Disabled Persons is the prevention of disability; secondary concerns are the improvement of the conditions of and for the disabled - care, treatment, employment etc. The tasks of UNDRO vis-à-vis those disabled now are:

(a) To establish the particular needs of various kinds of disabled persons when an emergency situation occurs;

(b) To promulgate those needs so that those responsible for disaster preparedness and relief operations can take adequate and appropriate action;

(c) To reduce the possibility that the already disabled may suffer additional disability as a result of a disaster.

54. As far as the prevention of disablement for those now fully able is concerned, the action necessary falls into the ordinary sphere of disaster preparedness and prevention - proper buildings, adequate medical facilities, trained first aid staff, and so on. These considerations must also be drawn to the attention of those who are now caring for the already disabled. To ensure that the disaster prevention advice given is in fact relevant, it will be necessary to establish the actual incidence of disablement following disasters of various kinds in different parts of the world.

55. There is a great deal of synthesizing, if not co-ordinating, work to be done to bring together the views and knowledge already existing concerning disasters and the disabled. The United Nations Children's Fund (UNICEF), the World Health Organization (WHO) and the International Labour Organisation (ILO) have their special interests and mandates; the Division of Human Rights, the Division for Economic and Social Information, UNESCO and the Office of the United Nations High Commissioner for Refugees have important contributions to make. UNDRO has started a comparative research project with disabled victims of natural disasters and with medical personnel who have worked at the site of disasters. Urban and rural samples are included in four countries: Algeria and Guatemala (earthquakes); the Dominican Republic and Haiti (hurricanes).

56. The data of this research project will throw light on aspects of disaster preparedness, relief activities, and follow-up procedures and their efficiency. Furthermore, the results should show whether, and if so to what extent, permanent disabilities could have been prevented, in order to establish future guidelines regarding disability prevention in disasters. The study also examines

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whether those victims who were already disabled when the disaster struck had the necessary special assistance; information which should serve to establish special procedures in the community to help those disabled in times of crisis.

57. The survey ascertains the need for physical and vocational rehabilitation of those who have become disabled, as well as their present status of welfare and care. The questions directed to the medical personnel are an evaluation of the effectiveness in terms of time and availability of first-aid equipment, of the medical care at the time of the disaster.

58. As a result of this project, UNDRO will publish, in practical form and terms, advice to the disabled, to those who care for them and to those responsible for disaster prevention, preparedness and relief operations generally about the action which should be taken to protect the disabled from the effects of disasters and to prevent disabilities caused by disasters.

F. Financial aspects

Regular budget

59. The revised budgetary appropriation for UNDRO for the biennium 1980-1981 approved by the General Assembly at its thirty-fifth session is \$4,830,100, namely \$67,900 higher than the original appropriation approved by the Assembly at its thirty-fourth session. The small increase is attributable partly to the additional requirements arising from the implementation of Economic and Social Council resolution 1980/8 (see para. 90 below) and partly to the first performance report on the programme budget for 1980-1981.

60. A breakdown of the appropriation by object of expenditure is given in annex I.

Trust fund

61. The General Assembly, in operative paragraph 4 of its resolution 35/107, decided to maintain the UNDRO trust fund for a further two-year period as from 1 January 1982. The Secretary-General will continue to seek further rationalization of the components of the trust fund, together with a closer definition of its objectives.

Strengthening of the Office

62. The account for strengthening the Office now supports 3 Professional, 11 General Service and 1 Field Service posts. In addition, important proportions of the costs of operation - especially of communications, including those connected with the issuing of disaster situation reports - are met from this account, as is also a certain amount of travel to disaster areas, for relief co-ordination purposes, and to disaster-prone countries in connexion with disaster preparedness activities. A summary of the expenditures incurred in 1980 under this subaccount of the trust fund is provided in annex II.

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Emergency assistance

63. The regular budgetary provision is \$360,000 per annum, with a maximum grant of \$30,000 per country and per disaster. Details of the grants made are shown in annex IV; it will be noted that several grants were for less than the maximum amount and that the number of grants was slightly lower than the average for the preceding two years. The trust fund subaccount was not used to supplement regular budgetary provisions.

64. In accordance with the views expressed in the report on international efforts to meet humanitarian needs in emergency situations (E/1981/16) about the value of a general purpose fund for "unearmarked" disaster relief, the Secretary-General hopes that UNDRO will continue to receive voluntary contributions for "unearmarked" disaster relief purposes.

Technical co-operation

65. The Governing Council of the United Nations Development Programme decided to give consideration to the inclusion of activities in the areas of disaster preparedness and prevention in national and regional programmes. Two advisory missions on disaster preparedness, carried out by UNDRO consultants, have indeed in the period under review been funded from country IPFs.

66. The Secretary-General believes that in the further elaboration of technical co-operation policies in disaster preparedness and prevention, and of the role in this context of the UNDRO trust fund, account should be taken, inter alia, of the requirements set out in General Assembly resolutions concerning assistance to Governments for the elaboration of national plans for natural disaster prevention and preparedness (resolution 3440 (XXX), para. 1 (b)) and the meeting of programme costs of technical assistance in disaster prevention and pre-disaster planning assistance (resolution 3532 (XXX), para. 1 (b)).

G. Future Perspectives

Exceptional and complex emergencies

67. The Administrative Committee on Co-ordination considered the general subject of strengthening the capacity of the United Nations system to respond to emergencies and reached conclusions identifying the modalities of operation in the case of major compound emergencies (decision 1981/2).

68. While recognizing that organizations of the United Nations system had generally responded effectively to emergencies in accordance with their mandates and in fruitful collaboration with one another, ACC recognized the need for special ad hoc arrangements in exceptional situations to be determined through full consultations at the initiative of the Secretary-General or the executive head of an organization, based on information and assessments to be provided inter alia by the United Nations Disaster Relief Co-ordinator.

69. To meet this requirement, as well as the repeatedly stated needs of other donors for more ample and frequent information, the Co-ordinator will, as already indicated in document A/35/228, further enhance the ability of UNDRO to provide data on conditions and requirements in countries which are likely to be subject to disaster situations, and in so doing make full use of the communication facilities at his command. To this effect co-operation and communication links will be intensified with the concerned organizations of the United Nations system, both at Headquarters and in the field, and more particularly with those operating early-warning systems within their areas of competence.

III. DESCRIPTIONS OF RELIEF OPERATIONS AND OTHER ACTIVITIES,
1980-1981

A. Latin America

1. Disaster emergencies

The Caribbean

70. The major disaster of the year in this region was that caused by hurricane "Allen", one of the largest on record, which passed through the Caribbean and the Gulf of Mexico between 4 and 8 August 1980. It affected 11 island States. About 250 people were killed. Four weeks after the event some 230,000 people remained without permanent shelter and over 500,000 without subsistence. Total damage was estimated at \$530 million, about 90 per cent of which consisted of losses to agriculture. Wind speeds in the mid-Caribbean reached a maximum of 270 km per hour, the highest ever recorded in the region. With this force, and with a swirl of clouds 900 km in diameter, it was surprising and fortunate that far greater losses did not result. There were two reasons: first, the hurricane did not reach maximum strength until it had passed the Lesser Antilles, and it did not make a direct landfall in the Greater Antilles; second, considerable efforts by the Governments concerned - which had received active encouragement from UNDR0 and other agencies during the previous two years - had produced significantly improved ability to identify and implement effective disaster preparedness. National emergency plans had been revised, permitting the timely protection of essential services, and large-scale evacuation of threatened communities in coastal areas of Cuba, Jamaica and Mexico.

71. The countries which suffered most were Haiti, Saint Lucia and Jamaica. Losses in Haiti were quantitatively the greatest, with about 220 deaths and 200,000 homeless, even though only one fifth of the country experienced the worst effects of the storm.

72. In proportion to its size and population, Saint Lucia was the island worst affected by the hurricane. Agricultural crops, especially bananas, were devastated throughout the island, and total losses were estimated to be more than the annual gross domestic product.

73. In Jamaica, serious damage was caused to the north coast, especially the fishing and poultry industries established there, as well as to the banana crops in many parts of the island. Dominica, Martinique, Saint Vincent and the Grenadines, Grenada, the southern Dominican Republic, and Cuba were similarly affected to varying degrees. In Barbados and the Cayman Islands losses were mainly confined to buildings and utilities.

74. The Office sent one staff member to Saint Lucia and Barbados and one to Jamaica and Haiti to assist with the co-ordination of international relief and with the collection of information on day-to-day emergency needs. These needs were brought to the attention of donors in a series of 11 UNDR0 situation reports issued during the four weeks following the disaster. As recorded by UNDR0, more than

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80 contributions and pledges were made by 21 different countries or agencies, representing a reported total value of \$15.9 million.

2. Pre-disaster planning

Chile

75. At the request of the UNDP office and national authorities in Santiago, an UNDRO mission was sent to Chile in October 1980 to help in formulating a disaster preparedness project. After scientific and technical discussions, specific objectives were identified. They included preparedness for dam failure and tsunami, the improvement of radio communication and earthquake and volcano monitoring networks and of the capacity to convert observations rapidly into hazard estimates which could be used for decision making by administrative authorities.

Ecuador

76. The Office participated in a multiagency mission to Ecuador in January and February 1981 to determine the country's needs for international assistance in disaster prevention and preparedness. Potential activities which have been identified cover risk analysis, training, water supply in case of disaster, emergency planning and procedures, and the establishment of a seismic monitoring network.

Jamaica

77. Following the passage of hurricane "Allen" in August 1980, the Government requested technical co-operation from UNDRO to assist in the strengthening and planning of activities for the newly-created Office of Disaster Preparedness and Emergency Relief Co-ordination (ODIPERC). This Office had been set up with UNDRO assistance subsequent to disastrous floods in 1979. In a second, joint mission in January 1981, priorities were set for the activities of ODIPERC, and some of this mission's recommendations have already been implemented, particularly those concerning the organizational placing of ODIPERC in the Prime Minister's office and the provision of suitable premises.

Mexico

78. In response to a request from the Mexican Government, UNDRO sent one of its staff on a joint mission with a Habitat consultant in January and February 1981 to advise the Secretariat of Human Settlements and Public Works (SAHOP) on the establishment of an operational programme in disaster preparedness and prevention. This mission drew up an appropriate work programme for SAHOP and identified possible joint activities between SAHOP and the Secretariat of Defence, which is primarily responsible for relief operations.

Nicaragua

79. In Nicaragua, the Ministry of Health has taken the responsibility for managing recent, moderate-scale disasters. Experience in events like the floods of

December 1979 - in which UNDRO provided assistance - led to the realization that a central authority should be set up, responsible for involving and co-ordinating all government and voluntary services capable of contributing to disaster prevention or relief. In January 1981, UNDRO sent a staff member on joint mission with a WHO/PAHO consultant to help the Government of Nicaragua to formulate the structure and work programme of a national civil defence office.

Panama

80. In response to a request from the Government for help in establishing a national emergency office, a senior staff member of UNDRO was made available in January 1981 to discuss the appropriate functions of such an office and advise on its structure and work programme.

Peru

81. In October 1980 an UNDRO mission was sent to Peru to help the national Civil Defence Office review priorities and initiate projects aimed at improving preparedness, especially for earthquakes and tsunamis. Much publicity had been given to a very specific prediction, by two foreign scientists, of an earthquake of devastating size, which it was feared would occur in August 1981. Meetings were held with the civil defence and other authorities, and six projects were identified as meriting priority attention.

82. In January 1981, UNDRO took part in a multiagency mission aimed at formulating a comprehensive national disaster preparedness and prevention programme. Several long-term and short-term projects for joint or individual action by the agencies concerned were identified. As a first step, UNDRO decided to finance a study to assess tsunami risk in Callao, the port for Lima, which has been devastated by tsunamis several times in its history. In the 1746 earthquake, all but 200 of the 5,000 inhabitants of Callao were killed, mostly by the tsunami. Over 250,000 people are now living in the same, highly vulnerable area. Other projects, for example the evacuation of central Lima following an imminent earthquake prediction, and the provision of drinking-water supplies following a major earthquake, will undoubtedly lead to further technical co-operation activities.

Venezuela

83. An UNDRO mission was sent to Venezuela in February 1981 to discuss technical assistance needs, as well as the possible involvement of Venezuela in joint disaster preparedness activities in the Caribbean. A number of technical co-operation projects, including a composite risk study of the metropolitan area of Caracas and the provision of advisory services to the civil defence in the fields of general preparedness as well as flood prevention and forest fire control, were identified. In addition, arrangements were made for a closer involvement of Venezuela in international disaster relief operations.

Caribbean region

84. It will be recalled that the General Assembly, in its resolution 34/18,

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endorsed a resolution, adopted by the Committee of the Whole of the Economic Commission for Latin America, calling for the establishment of specific machinery to cope with disasters in the Caribbean. The initial steps taken to comply with this resolution were described in document A/35/228, paragraphs 94-96.

85. Since that time, UNDRO has continued to participate in meetings of the Caribbean Disaster Preparedness Planning Group, along with representatives of the other agencies concerned. A Disaster Preparedness Project Conference co-sponsored by UNDRO was held in the Dominican Republic in May 1980.

86. Plans for a Pan-Caribbean Disaster Preparedness and Prevention Project have now evolved, stemming mainly from an earlier project envisaged by UNDRO for the eastern Caribbean countries. The long-range objective of the project is to develop the individual as well as the collective capacity of the participating countries to prevent or mitigate the effects of potentially disastrous situations and to cope with disasters which occur. In this way they will contribute to their own development by reducing losses due to disasters.

87. The project is scheduled to run for at least two years, and the first phase of implementation is due to begin in summer 1981.

3. Meetings and seminars

88. A regional seminar on earthquake prediction and hazard assessment took place in October 1980 at San Juan, Argentina, organized by the National Institute for Seismic Prevention and the Regional Seismological Centre for South America, with financial support from and active participation by UNDRO. This meeting served as a forum for discussing the merits and applicability of the various techniques available not only for earthquake prediction and risk assessment but also for the management of the wide range of problems faced by scientists, engineers and government authorities responsible for implementing prevention and preparedness measures.

B. Africa, Middle East and Europe

1. Disaster emergencies

Ethiopia

(a) Emergency relief assistance to drought-stricken areas

89. At the request of the Government, UNDRO led an interagency and multidonor mission to Ethiopia from 27 May to 7 June 1980 in order to examine the problems caused by recurring drought, assess the relief efforts of the Government, and estimate the external resources required to deal with both immediate relief requirements and longer-term rehabilitation needs. The mission recommended that emergency international assistance should be provided in a number of key sectors, namely, food, transport, health, water, shelter and clothing. The Co-ordinator launched an appeal early in June 1980.

(b) Emergency assistance to displaced persons

90. Pursuant to the Economic and Social Council resolution 1980/8, the Co-ordinator was requested by the Secretary-General to lead a second mission to Ethiopia to assess the need for humanitarian assistance specifically for the displaced persons. This interagency mission visited Ethiopia from 6 to 15 July 1980, concentrating its attention on the provinces of Sidamo, Bale and Hararghe, where the displaced population is estimated at about 2.4 million. More than half of this population is grouped in temporary camps or around food distribution points. The mission identified the minimum emergency requirements and rehabilitation needs to be sought from the international community. The Co-ordinator presented the findings of the mission to the Economic and Social Council at its second regular session of 1980 and to the General Assembly (A/35/360 and Corr.1-3).

Assistance to the drought-stricken areas of Djibouti, Somalia, the Sudan and Uganda

91. In response to Economic and Social Council resolution 1980/70 on assistance to the drought-stricken areas in Djibouti, Somalia, the Sudan and Uganda, the Secretary-General designated the United Nations Disaster Relief Co-ordinator to lead a multiagency mission, which visited the four countries in question between 31 August and 14 October 1980, to assess the effects of the drought and other natural disasters and the magnitude of the assistance required.

92. The reports on the conditions in each country, and the action needed to relieve them, were contained in documents A/35/559 (Djibouti); A/35/560 (Somalia); A/35/561 (Sudan); and A/35/562 (Uganda). After considering these reports, the General Assembly adopted resolution 35/90, in which it endorsed the recommendations of the mission, appealed to donors for assistance, and asked the Secretary-General to mobilize international relief as well as to arrange for the assessment of medium-term and long-term needs. Notably, the Assembly also recommended the establishment by the Governments of the four countries concerned of an intergovernmental body to co-ordinate and support national efforts to combat the effects of drought and other natural disasters, and to deal with the longer-term problems of recovery and rehabilitation.

Algeria

93. Two major earth tremors struck the city of El Asnam and its surrounding areas during the afternoon of Friday, 10 October 1980. The tremors, registering 7.3 and 6.4 on the Richter scale, killed nearly 3,000 persons, injured another 3,500 and completely destroyed more than half of the city of El Asnam as well as damaging surrounding villages. The Algerian Government immediately appealed for international emergency assistance, and the response by the international community was both prompt and generous. An UNDRO representative was dispatched to Algeria to assist in the assessment of needs and the co-ordination of disaster relief. Daily UNDRO situation reports kept the international community informed of local developments and requirements throughout the period of the emergency. In close co-operation with the Government and other United Nations agencies, UNDRO has since been studying the needs for reconstruction assistance in El Asnam, with particular reference to disaster preparedness and prevention for the future.

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Italy

94. On 23 November 1980 a major earthquake measuring 6.8 on the Richter scale devastated a wide area of southern Italy. There were some 3,100 persons killed, 1,575 missing, about 8,000 injured and 334,000 homeless. The epicentre of the earthquake was located in the region of Potenza. The cities of Naples, Salerno, Avellino, and Eboli were extensively damaged. Snow, fog and subzero temperatures severely hampered rescue operations. While international assistance poured into the earthquake zone, UNDRO issued situation reports on developments, relief needs, and contributions. The Director-General of the United Nations Office at Geneva, accompanied by the Director of UNDRO, visited the affected areas and held consultations with the Italian authorities at Rome and Naples in order to offer and review the assistance of the United Nations system.

Greece

95. An earthquake of magnitude 6.6 on the Richter scale affected the regions of Athens and Corinth on 24 February 1981. Considerable material damage was caused, and aggravated by a number of severe aftershocks. Twenty-two people were killed, and some 80,000 were rendered temporarily homeless. Initial assistance was provided by the Greek Government and Army, but following a request from the Government, UNDRO issued a series of situation reports in which further help was sought: most of the stated needs were subsequently covered from various international donor sources.

2. Pre-disaster planning

United Republic of Tanzania

96. At the request of the Government, an UNDRO consultant visited the United Republic of Tanzania from September to December 1980 to examine the effects of natural hazards and to make recommendations for the improvement of disaster preparedness and prevention at the national, regional and local levels. The consultant assisted the Government in identifying priorities for immediate action, and in preparing guidelines for pre-disaster planning in the country.

Somalia

97. The Office provided expert advice to assist the Government of Somali in revising and updating its national disaster preparedness plan. This work was undertaken during December 1980 and January 1981 and the resulting report submitted to UNDP and the Government for implementation.

Egypt

98. The Office continued to co-operate with the United Nations Centre for Human Settlements (Habitat) in providing planning and disaster prevention assistance for the reconstruction of 31 villages and towns of Upper Egypt damaged by floods late in 1979. This assistance was completed in December 1980. On the request of the Government, a project evaluation and follow-up mission visited Egypt in mid-March 1981.

Mozambique

99. During the latter half of 1980 UNDRO provided expert advice to the Government of Mozambique to reinforce and systematize its national emergency relief organization. An important part of the project consisted in training national relief personnel. Recommendations towards broader follow-up assistance to be carried down to the provincial and local levels are currently being studied by UNDP (for possible funding out of the Country Programme), UNDRO and the Government.

Senegal

100. Consultant services are currently being provided to the Government of Senegal with a view to establishing a unified disaster preparedness system arising out of the ad hoc arrangements that were established at the height of the Sahelian drought. The assistance was still in progress when this report was written.

Yugoslavia and the Balkan region

101. The Office continued to co-operate with the United Nations Centre for Human Settlements (Habitat) in providing physical planning assistance for reconstruction in Montenegro, and in liaising between this project and the UNESCO project for seismic risk reduction in the Balkan region, with which UNDRO is also associated. Both projects are ongoing activities for 1981 and 1982.

South-west Indian Ocean

102. Joint WMO/LRCS/UNDRO missions visited, during February 1981, Seychelles, Mozambique, Madagascar, Reunion, Mauritius, the Comoros and the United Republic of Tanzania. These missions result from a recommendation of the WMO Tropical Cyclone Committee for the south-west Indian Ocean to review the national preparedness arrangements among member countries with a view ultimately to improving and reinforcing these where necessary, with the assistance of one or more of the participating agencies. Country reports have been submitted and a general report and recommendations are being prepared for submission to the Committee.

C. Asia and the Pacific

1. Disaster emergencies

Afghanistan

103. In late March 1980 floods in three provinces destroyed or damaged over 45,000 homes, caused the deaths of 14 persons and extensive losses in livestock and agriculture. The latter amounted to 68,000 metric tons of wheat and 25,000 fruit trees. Nearly 100,000 persons were affected.

104. In early April the Government asked UNDRO to send a representative to help assess the situation and the need for international assistance. On the basis of

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this assessment, UNDRO appealed for emergency shelter material, clothing and basic food-stuffs, and recommended certain long-term flood prevention measures to the Government.

Bangladesh

105. In Bangladesh, the monsoon arrived earlier than usual in 1980. Regular reports were made to UNDRO throughout the season by the United Nations Interagency Working Group in Dacca. In September heavy rains in the Ganges catchment area created problems in Bajshari-Kushtia, Pabna, Faridpur and parts of Jessore. The Government took the necessary relief action, hoping initially to be able to deal with the situation within its own resources. The medical requirements however proved to be too great and the Government asked UNDRO for assistance. In response to UNDRO appeals, several Governments and voluntary agencies, including the Red Cross, immediately provided the necessary medicines.

Nepal

106. On 29 July 1980 an earthquake of magnitude 6.5 on the Richter scale struck the far western region. Ninety-nine persons were killed and 155 injured; over 26,000 houses and public buildings were destroyed or seriously damaged, and more than 30,000 persons were made homeless.

107. Bad weather and mountainous terrain hampered assessment and relief efforts by both the Governments and the Red Cross. Emergency food needs were met by borrowing from an existing WFP project. The principal requirement was for shelter materials. To assist in providing this need, UNDRO arranged international transport for a donation of 470 tents. Final delivery of some of the tents, and of other supplies, could however only be made by the use of porters.

108. Other assistance mobilized by UNDRO came from four United Nations agencies, eight Governments and six voluntary agencies, and was valued at more than \$1 million.

Viet Nam

109. In 1980, Viet Nam was hit by a series of typhoons and floods; typhoon No. 4 (Joe) with heavy rainfall in July caused much damage in seven provinces in the Red River Delta, and typhoon No. 6 (Ruth) in September seriously affected Than Hoa province and two neighbouring provinces. This typhoon was also followed by torrential rain and extensive floods in the northern part of central Viet Nam. Later consecutive tropical depressions, each bringing heavy rain, aggravated the situation and finally, in November, a deep depression over three provinces in central Viet Nam caused serious flooding in the region.

110. In all, more than 450 people lost their lives. Property damage was very extensive, with an estimated 133,000 houses and buildings destroyed. In the agricultural sector plantings of 534,000 hectares of rice were completely washed away: the result was the loss of 2 million tons of food.

111. At the outset of this series of disasters the Government of Viet Nam requested UNDRO to mobilize and co-ordinate assistance from the international community. In the course of the relief operations, UNDRO representatives were sent to Viet Nam on three occasions.

112. Six United Nations agencies, nine Governments and 11 voluntary agencies reported assistance valued in total at more than \$30 million.

China

113. China experiences each year the disastrous effects of many natural phenomena such as floods, droughts, typhoons and earthquakes. In 1980, unusual climatic conditions caused the worst flooding for 26 years in Hubei Province and the worst drought in 37 years in Hebei Province. Other provinces were also affected, although to a lesser degree, by the same unfavourable weather. The cumulative effects made it necessary for the Government to provide considerable quantities of relief assistance, in particular to the people of Hubei and Hebei. In addition, the Government, for the first time, requested the services of UNDRO to assess the extent of the damage in these two provinces and the requirements for international assistance and, on that basis, to seek the help of the United Nations system and the international community. Representatives from United Nations organizations accordingly carried out an UNDRO-led assessment mission from 12 to 31 January 1981. The two disaster areas are larger than most developing countries for which relief programmes were so far carried out. Hubei has a population of 46.33 million, and 51 million people live in Hebei.

114. The floods and drought are not localized events; they have affected a further 130 million people in five other provinces and the autonomous region of Inner Mongolia. Losses in national grain production have been estimated to be as much as 15 million tons. In monetary terms these losses, together with the cost of relief provided by the Government, represent about 3 to 4 per cent of GNP, while at the same time the population increase was of the order of about 11 million for 1980.

115. Agricultural losses for both provinces have been officially estimated at the equivalent of \$1.6 billion. Seven-hundred people died and 6,000 were injured. In all the other affected provinces 5,500 people lost their lives and 21,000 were injured.

116. Although the Government's relief programme has, to some extent, alleviated the immediate consequences of the disasters, the economic effects will be more lasting. External assistance is needed also to restore agricultural production capacity and so improve food supplies in the third quarter of 1981.

117. The mission's discussions with representatives of the Government also partly considered rehabilitation and reconstruction. Indeed, some of the relief items required might be considered as being in the phase of rehabilitation - for example, seeds, fertilizer and pesticides. Their inclusion was felt to be justified in view of longer-term preventive benefits: in both provinces, the soil requires a high proportion of nutrients to offset the effects of the floods and drought. The mission's report was circulated to probable donor sources during March 1981.

118. The report also included outline suggestions for disaster prevention projects, such as the reinforcement of a 180-kilometre dyke system for flood control along the Yangtze, located in the Jingzhou Prefecture. A UNDP-assisted project, funded from its Programme Reserve, is envisaged to permit the construction of a model drainage station and to increase the efficiency of others to be built. The assistance of UNDP is also sought to extend to the Yangtze River the activities of the already approved UNDP/WMO Project (PR/80/019) on flood forecasting. The principal objective of this project is to establish an automatic forecasting system for the middle reaches of the Yellow River.

119. While the interagency mission was in China, an earthquake of magnitude 6.9 on the Richter scale struck the town of Daofu in Sichuan on 24 January 1981. After consulting with the Government, UNDR0 made a grant of \$30,000 towards the needs of the 25,000 victims; two thirds of this sum were used to provide temporary shelter, and the remainder for medical needs. No other request for international assistance was made by the Government.

Indonesia

120. Several districts in central Java experienced serious flooding after the passage of a typhoon in early January 1981. Very shortly afterwards, on 22 January 1981, an earthquake of magnitude 6.8 on the Richter scale occurred in Irian Jaya, destroying or damaging about 16 villages.

121. The Government asked UNDR0 for limited and specific help in both these events, and grants of \$5,000 and \$10,000 were made accordingly.

2. Pre-disaster planning

Indonesia

122. In the context of his responsibilities for the better protection of mothers and children during disaster emergencies, the UNICEF representative in Indonesia, working with the Department of Social Affairs (the government agency responsible for relief and preparedness) developed a project relating to several aspects of pre-disaster planning at the provincial level. To this programme UNDR0 contributed expert advice. Earlier in the reporting period, at the invitation of the League of Red Cross Societies, UNDR0 took part in an evaluation and review of a plan for disaster preparedness of the Indonesian Red Cross - a project which has been partly financed by the Swedish International Development Agency.

Solomon Islands

123. In 1979 the Government of the Solomon Islands asked for United Nations assistance in preparing a national and provincial disaster plan. UNDR0 provided a consultant, the cost of whose services was borne from the country's IPF funds. The consultant worked for two months with the Government of the Solomon Islands to develop a disaster plan which subsequently was formally adopted by the Government.

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Niue

124. After the effects of hurricane "Ofa" in December 1979 had been fully realized, the Government of Niue asked UNDRO to send a consultant to the island to advise on disaster prevention, preparedness and relief, and to prepare a manual on these subjects for the Government's use. The mission was carried out during October 1980 and its findings and recommendations submitted to the Government for implementation.

Co-operation with WMO and ESCAP

125. Two intergovernmental groups are active in countering the effects of tropical storms in the Asia and Pacific region. The first, the WMO/ESCAP Panel on Tropical Cyclones, regularly brings together the Governments of Bangladesh, Burma, India, Pakistan, Sri Lanka and Thailand. The Panel is assisted by a Technical Support Unit, at present based at New Delhi and headed by a Chief Technical Adviser seconded by the Government of Australia. Within the framework of the Panel's Work Programme, in accordance with a request made at the Panel's eighth session, held at Colombo in February 1981, UNDRO and the League of Red Cross Societies are providing a consultant to work with the Technical Support Unit. The consultant's function is to strengthen disaster prevention and preparedness programmes, in particular through increased interaction between meteorologists, hydrologists and authorities responsible for pre-disaster planning and disaster relief. The League of Red Cross Societies shares with UNDRO the responsibility for the disaster preparedness and prevention aspects of the Panel's work.

126. Similar co-ordinated and shared responsibilities apply in respect of the second intergovernmental group, the WMO/ESCAP Typhoon Committee. The thirteenth session of the Committee was held at Bangkok in December 1980, with the active participation of UNDRO, which was also represented at the second meeting of the Management Board of the Typhoon Operational Experiment held at Bangkok in the same month. This major undertaking has three components, of which that concerned with community preparedness, the dissemination of and response to warnings, and the exchange of operational information falls directly within the fields of competence of UNDRO and the League of Red Cross Societies. Governments taking part in TOPEX (China, Democratic Kampuchea, Hong Kong, Japan, Lao People's Democratic Republic, Malaysia, Philippines, Republic of Korea, Thailand and Viet Nam) have been recommended to make a number of institutional arrangements, such as establishing co-ordination committees and emergency operation centres, where these do not already exist. With WMO and the League of Red Cross Societies, UNDRO is participating in an advisory capacity to help in preparedness planning and in evaluating the effectiveness of warnings.

127. UNDRO is also participating in the review by Typhoon Committee members of the progress in implementing recommendations for disaster prevention and preparedness made by previous ESCAP/WMO/LRCS/UNDRO missions.

128. Other activities undertaken by UNDRO at the request of the Panel on Tropical Cyclones have included the arranging of technical assistance for the organization of a training seminar in disaster preparedness for officials at the subdivisional level. In this connexion, UNDRO assisted the Governments of Bangladesh and Burma to prepare and hold seminars in their countries.

129. The Office also funded three disaster preparedness fellowships requested by Bangladesh, India and Pakistan. These fellows attended the Seminar on Technology for Disaster Prevention organized by the Japanese Government from 2 October to 16 December 1980.

Regional disaster preparedness seminar

130. Between 15 and 28 March 1981 a regional disaster preparedness seminar was held at the Australian Counter Disaster College, Macedon, Victoria. Funding was provided by the Government of Australia for 27 delegates. Representatives came from New Zealand, UNDRO and WMO.

131. The course was designed with long-term goals in view. Although the immediate aim was to consider the regional natural hazards with a view to determining training requirements, the long-term goal was to decide what should be done to satisfy those requirements.

132. While training needs naturally varied between country and country, according to the state of disaster preparedness organization and the facilities present, some common needs were identified and, in fact, accorded a very similar degree of priority. Several representatives expressed the wish for more attention to be given to preparedness for accidental disasters, and for major urban disasters, however caused. UNDRO is now considering action to meet this desire.

ANNEX I

Breakdown by object of expenditure of the 1980-1981 revised
appropriation for UNDR0 under the regular budget

(In thousands of United States dollars)

<u>Objects of expenditure</u>	<u>1980-1981 appropriations</u>
Salaries:	
Established posts	2 853.7
General temporary assistance	134.6
Consultants	13.4
Overtime	11.5
<u>Ad hoc expert groups</u>	20.4
Common staff costs:	
Representation allowances	9.2
Other common staff costs	755.0
Travel of staff	234.7
External printing and binding	9.1
General operating expenses	67.8
Hospitality	0.7
Grants	720.0
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Total	4 830.1
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ANNEX II

Trust fund for disaster relief assistance: statement of assets, liabilities and unencumbered fund balance, income and expenditure as at 31 December 1980

(United States dollars)

	Subaccount for strengthening of UNDRO	Subaccount for emergency relief assistance	Subaccount for disaster pre- vention and pre-disaster planning	Total
I. Assets				
Cash at banks, on hand and in transit	-	-	-	-
Interest bearing bank deposit	1 050 394	-	808 062	1 858 456
Accrued interest receivable	16 038	-	6 436	22 474
Accounts receivable	-	-	2 838	2 838
Deferred charges	-	-	-	-
Due from United Nations general fund	-	5 607	-	5 607
Total assets	1 066 432	5 607	817 336	1 889 375
Liabilities and reserve				
Accounts payable	2 308	-	301 710	304 018
Unliquidated obligations	33 246	-	97 269	130 515
Due to United Nations general fund	58 428	-	24 835	83 263
Total liabilities and reserve	93 982	-	423 814	517 796
Unencumbered fund balance				
Balance available at 1 January 1980	817 118	1 123	341 792	1 160 033
Adjustments to opening balance	-	-	-	-
Excess of income over expenditure	155 332	4 484	51 730	211 546
BALANCE available at 31 December 1980	972 450	5 607	393 522	1 371 579
Total liabilities and unencumbered fund balance	1 066 432	5 607	817 336	1 889 375
II. Statement of income and expenditure income				
Contributions from Governments	550 937	4 484	46 820	602 241
Public donations	-	-	-	-
Subventions from United Nations agencies	-	-	-	-
Bank interests	112 294	-	100 023	212 317
Refund from Pension Fund	-	-	-	-
Miscellaneous income	-	-	-	-
Savings in the liquid. of prior year's obligations	4 317	-	95 125	99 442
Total income	667 548	4 484	241 968	914 000
Expenditure				
Personnel services/salaries	382 743	-	114 959	497 702
Travel	50 056	-	23 178	73 239
Contractual services	6 071	-	-	6 071
Training, fellowships, grants and others	-	-	52 101	52 101
Equipment, supplies and acquisitions	15 500	-	-	15 500
Other operating expenses	57 846	-	-	57 846
Total expenditure	512 216	-	190 238	702 454
Excess of income over expenditure	155 332	4 484	51 730	211 546

ANNEX III

Trust fund for disaster relief assistance:
status of pledges as at 31 December 1980
 (United States dollars)

	Unpaid pledges as at 1 January 1980	Pledges for 1980 and adjustments future years	Collections during 1980	Unpaid pledges as at 31 December 1980
<u>Trust fund for disaster relief assistance:</u>				
<u>Subaccount for disaster prevention and pre-disaster planning</u>				
MADAGASCAR	-	6 726	6 726	-
NETHERLANDS	-	12 000	12 000	-
NEW ZEALAND	-	9 637	9 637	-
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	-	18 457	18 457	-
Subtotal	-	46 820	46 820	-
<u>Subaccount for emergency relief assistance</u>				
MADAGASCAR	-	4 484	4 484	-
Subtotal	-	4 484	4 484	-
<u>Subaccount for strengthening of UNDRR</u>				
AUSTRALIA	-	108 625	108 625	-
BELGIUM	-	70 663	70 663	-
BENIN	-	2 012	2 012	-
JAPAN	-	50 000	50 000	-
SWITZERLAND	-	61 350	61 350	-
TURKEY	-	8 287	8 287	-
UNITED STATES OF AMERICA	-	250 000	250 000	-
SUBTOTAL	-	550 937	550 937	-
GRAND TOTAL	-	602 241	602 241	-

ANNEX IV

Summary of international assistance provided for relief and other operations in which UNDRO was involved, 1 January-31 December 1980

(United States dollars)

Country	Event	UNDRO allotment	Donations through UNDRO	Donations reported to			UNDRO a/ b/
				United Nations system	Governments	Inter-governmental organizations	
Afghanistan	Floods	10 000	10 000	20 000			
Algeria	Earthquake		25 303	4 449 000	27 323 652	1 400 000	23 917 321
Bangladesh	Floods	5 600	23 699	90 000	110 314		291 264
Cuba	Hurricane		9 572				
Djibouti	Drought			2 337 800	104 005		340 294
Dominica	Hurricane		4 900	50 000	24 390		
Dominican Republic	Hurricane		3 970				
Ethiopia	Drought		18 104	9 076 513	15 453 586	5 660 000	8 789 516
Fiji	Cyclone	10 000	11 976	45 000	898 010	11 700	20 700
Haiti	Hurricane	20 000	108 127	90 000	9 332 794	634 000	1 631 826
Iran	Floods	30 000	231 793		351 250		
Italy	Earthquake	30 000		115 000	11 640 109	1 987 500	8 839 782
Jamaica	Hurricane	20 000	52 808		591 770		50 000
Mauritius	Cyclone	20 000					
Nepal	Earthquake	20 000	147 701	545 200	130 000	216 000	9 250
Nicaragua	Floods		21 082				
Niue	Hurricane	10 000					
Portugal (Azores)	Earthquake		144 121		441 140		10 000
Somalia	Drought		18 104	14 827 000	13 500 000	4 000 000	8 592 000
Saint Lucia	Hurricane	20 000	78 232	989 300	705 084	1 400 000	102 034
Saint Vincent and the Grenadines	Hurricane		11 470		37 150		
Turkey	Malaria			343 649			
Viet Nam c/	Typhoon	50 000	150 582	9 058 600	21 979 506	-	1 310 044

a/ Many contributions were also reported without any monetary value being ascribed to them.

b/ Assistance for China in respect of disasters mentioned in paras. 113-119 will be reported in the 1981 exercise.

c/ Contributions aggregated for two disasters.
