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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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## I. INTRODUCTION

1. The present annual report on the activities of the Office of the United Nations Disaster Relief Co-ordinator (UNDRO) covers the period ended 31 March 1980. It contains information about the financing of the Office during the biennium 1980-1981 and recommends an extension of the life of the UNDRO trust fund. It also suggests that in the programme budget for 1982-1983 a further transfer of some of the costs now met from the trust fund should be proposed. The report describes the new arrangements made with the United Nations Development Programme (UNDP) for the Co-ordinator to receive assistance from UNDP resident representatives serving in disaster-prone countries and recommends ways in which Member States can themselves help in this co-operative endeavour.
2. The main discussion concerns the mandate and role of UNDRO and results in specific proposals about the interpretation of existing legislation: it is suggested that a revision of the mandate of UNDRO might have the effect of enabling the Office to serve better the needs of recipient and donor countries alike.
3. The report goes on to address the question of internal evaluation and describes some of the results of the process. Following that line of thought, progress towards the institution of measures to expedite international relief assistance is touched upon.
4. For the information of Member States, brief accounts are given of the several disasters in whose relief the Co-ordinator has been active during the year, and a summary of progress in pre-disaster planning is given. The statistical and financial information in the annexes covers the whole 1978-1979 biennium and is in a different and much fuller form than has been the case in the past.

## II. FINANCING

### A. Core programme

5. With the transfer to the regular budget of seven Professional and two General Service additional posts from the start of the biennium 1980-1981, considerable progress has been made in response to the wishes of the General Assembly that the Office of the Disaster Relief Co-ordinator should possess a sound financial basis. Of the total of 24 Professional and 25 General Service Field Service posts authorized for the Office, 21 and 13, respectively, are now included in the regular budget of the United Nations. It should not, however, be assumed that personnel costs are the only element in the maintenance of the Office. Were such an assumption correct, it might have been expected that the amount required to be found from voluntary contributions to the trust fund would fall quite markedly. In fact, even as early as November 1978, it was estimated that the trust fund in 1980-1981 would still require donations amounting to \$1,544,000 (A/C.5/33/60 and Corr.1, para. 17).

6. Two factors have operated to render that calculation over-optimistic. The need to restrict growth in the regular budget for 1980-1981 lead to marked reductions in the amounts of associated costs which would normally have been transferred from the trust fund in proportion to the total cost of the posts transferred. Large increases have occurred in dollar equivalents for communications costs, most of which are, perforce, paid in Swiss francs. Those increases, inescapable though they are, lead those responsible for the presentation of the 1980-1981 programme budget to strike out altogether, or to drastically reduce, vital items in the budget of the trust fund as well as some in the regular budget itself. In his introductory statement to the Second Committee at the thirty-fourth session of the General Assembly (A/C.2/34/SR.30, para. 3), the Co-ordinator warned Member States of this problem. To provide the necessary facilities during 1980-1981, the trust fund requirement will be \$1,814,700, as opposed to the \$1,458,400 shown in section 22 of the programme budget.

7. It seems uncertain that world economic conditions will, by the beginning of the biennium 1982-1983, have returned to a state in which inflation will no longer affect budgetary calculations. For the same general reasons, it is unlikely that any further transfers of costs to the regular budget which may be made in that biennium will include all the sums now being sought for the trust fund. It would therefore appear prudent now to approve the maintenance of the trust fund for a further period. That action will enable timely financial planning by donors as well as by the Co-ordinator.

8. The Secretary-General hopes that the General Assembly will, at its thirty-fifth session, agree to his including in the proposed programme budget for 1982-1983 proposals for a further adequate transfer of costs from voluntary funding to the regular budget.

#### B. Financing of emergency assistance activities

9. The action taken by the General Assembly at its thirty-fourth session to enable the Co-ordinator to respond to at least 12 requests for emergency assistance each year, with a normal ceiling of \$30,000 per country in the case of any one disaster (in place of 10 requests each for a maximum of \$20,000), has removed a great part of the anxiety which had earlier been felt in this area. Despite repeated calls by the Assembly, Member States had in effect demonstrated their opposition to the concept that the Office of the Co-ordinator should come to be seen as a source of relief assistance on a large scale. They had deliberately decided not to respond in any substantial fashion to requests to provide a source of funds to augment that in the regular budget, even though it had again and again been made clear that all that was proposed was to retain the original value of the amount which had been authorized to provide a symbolic but practical token of international sympathy after a disaster had occurred.

10. It is clear that the subaccount for emergency relief in the UNDR0 trust fund is not, and probably will never be, a real source of supplementary funding. In so saying, it is by no means the Secretary-General's intention to denigrate in any

way the generosity of those Governments that have contributed to the subaccount in the past. That generosity was, and remains, a source of encouragement to both him and the Co-ordinator, since it has also been the means by which some relief has been brought to disaster survivors who would not otherwise have been helped.

### C. Financing of technical assistance activities

11. It was observed in the last annual report (A/34/190) that, for a variety of reasons, neither the General Assembly nor the Economic and Social Council had found it possible to define a funding policy for the technical assistance activities of UNDRO in the areas of disaster preparedness and disaster prevention. The discussions which took place in both bodies in the course of 1979 did not result in any progress towards a policy. An encouraging step in the right direction was made by the Governing Council of the United Nations Development Programme at its twenty-sixth session, when it was decided to give consideration to the inclusion of activities of this kind in national and regional programmes. This decision has already been welcomed by the Assembly in its resolution 34/55.

12. The development of a funding policy for the technical assistance activities of UNDRO depends, in some measure, upon the taking of a decision about its role in that area. This is a question addressed later in the present report. It is however clear that, particularly in disaster preparedness - that is to say, in the establishment of a well-organized and functioning machinery in disaster-prone countries to provide immediate and adequate succour to the survivors of disasters - UNDRO has a unique part to play. This is because there is no other organ in the United Nations system which is mandated to perform this kind of work. For this reason alone there is a need for UNDRO to have access to a source of funds so as to be able to make advice and assistance available to countries which ask for help in this way.

### D. Recommendations

13. The recommendations for action arising from this section of the report are:

(a) The extension of the life of the UNDRO trust fund for a further period;

(b) Inclusion in the resolution on the present report of the agreement of the General Assembly to the submission, in the 1982-1983 programme budget, of proposals for a further adequate transfer of costs from voluntary funding to the regular budget.

## III. CO-ORDINATION

### A. Memoranda of Understanding

14. During the year under review, the Co-ordinator signed a multi-agency agreement between the United Nations Environment Programme (UNEP), the World Food

Programme (WFP), the United Nations Industrial Development Organization (UNIDO), the International Labour Organisation (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the World Meteorological Organization (WMO) and UNDRO. The executive heads of the other participating agencies also signed the agreement, which defines functional responsibilities in many kinds of activities related to disaster prevention, preparedness and relief.

#### B. Other co-operative arrangements

15. Agreement has been reached with the Administrator of UNDP on the new text of the instructions for UNDP resident representatives regarding their duties as representatives, ex officio, of the United Nations Disaster Relief Co-ordinator. The instructions were published in December 1979. They include much new material, particularly in the sections dealing with disaster preparedness and post-disaster relief activities, reflecting the experience gained since the last issue of the guidelines in August 1975. It is noteworthy that, even at that date, the instructions anticipated the kind of tasks and the mode of discharging them which are now set out in the latest decision of the Administrative Committee on Co-ordination on the "arrangements for the exercise of the function of Resident Co-ordinator" - a function called for by the General Assembly in paragraph 34 of the annex to resolution 32/197, and whose modus operandi was described in paragraph 53 of the same resolution.

16. An especially important passage in the guidelines refers to the need for the resident representatives to draw together, in advance of any disaster, a team consisting not only of the staff of United Nations agencies represented in the country, but also (wherever possible) representatives from the diplomatic missions of potential donor countries. Member States could markedly assist the Co-ordinator, the resident representatives and indeed themselves by advising their heads of mission in disaster-prone countries to make contact with the UNDP office so that preparedness could go forward for locally co-ordinated action in the event of a disaster.

17. A short introductory training seminar was held in Swaziland, in January 1980, for UNDP resident representatives serving in the African continent. The seminar, conducted by the Co-ordinator with the assistance of two of his senior staff, took place on the last day of a routine UNDP regional meeting. Financially, therefore, some savings were made, because UNDRO had to meet only the travel costs of its own staff and the additional day's per diem allowances for the attending resident representatives. These reductions in cost were made necessary by the deletion from the UNDRO budget submission for 1980-1981 of the provision in the trust fund (not the regular budget) which would have enabled four full-scale seminars to be held, one in each region of the world. It is hoped that the generosity of donor nations will be sufficient to permit the re-introduction of the seminar programme of UNDRO during the biennium. The importance of the resident representatives in disaster relief has been recalled many times by the General Assembly, particularly in paragraph 7 of resolution 31/173. It is important that UNDRO provide them with the necessary orientation.

C. Recommendations

18. The recommendations for action arising from this section of the report are as follows:

(a) Member States should advise their missions in disaster-prone countries to take part in disaster preparedness arrangements made by the UNDP resident representative;

(b) In order to give effect to their own wishes regarding the role of UNDP resident representatives after disasters have occurred, Member States should make available the financial means required to conduct the seminars.

IV. MANDATE AND ROLE OF THE OFFICE OF THE UNITED NATIONS  
DISASTER RELIEF CO-ORDINATOR

A. Mandate

19. During the thirty-fourth session of the General Assembly, several Governments questioned the role of UNDRO and sought clarification in order that some evaluation of its performance might be a practicable proposition. Before the role can be clearly stated, it is necessary that the mandate be examined and properly understood.

20. The Office was founded by the General Assembly in its resolution 2816 (XXVI) of 14 December 1971, entitled "Assistance in cases of natural disaster and other disaster situations". It was in recognizing the necessity of ensuring prompt response to a Government's need for assistance at the time of a natural disaster or other disaster situation that the Assembly called upon the Secretary-General to appoint a Disaster Relief Co-ordinator.

21. The accepted meaning of the words "other disaster situations" has in fact never been clearly defined. Even in the 1971 debates in the Economic and Social Council and General Assembly, which led to the adoption of Assembly resolution 2816 (XXVI), it was apparent that the words meant different things to different delegations. The Legal Counsel, in an opinion given on 9 June 1972, appeared to support a suggestion that the question should be decided by the Council, but nothing was done at that time. No further action has been taken since, and the matter still causes some difficulty (A/33/82, paras. 22-24).

22. There are, in general two kinds of "other disaster situations". The first group includes those resulting from a deliberate act of man. The second are those brought about as innocent or accidental results of man's normal, peaceful activities. There is no office or agency in the United Nations system which is invariably engaged whenever international assistance is required following a disaster produced by non-natural causes.

23. The Memorandum of Understanding between UNDRO and the Office of the United Nations High Commissioner for Refugees (UNHCR) contains the following paragraph:

"2. Responsibility for the co-ordination of relief assistance to persons compelled to leave their homes as a result of, or as a precautionary measure against, the effects of natural and other disasters such as earthquakes, volcanic eruptions, droughts, floods, storms, and epidemics and also aviation, maritime, industrial or nuclear radiation accidents shall rest with UNDRO".

24. It will be observed that this agreement does not limit UNDRO activities to a particular country, for people may technically become refugees when fleeing before a disaster of the kind described. It does however provide a useful definition of the Office's area of legal competence; it makes clear the distinction between the deliberately and the innocently caused disaster; and of course it is an agreement reached between the two parties most likely to be concerned. Moreover, UNDRO has also reached agreements with all the technical specialized agencies involved in the kinds of non-natural disaster mentioned (with the exception of the International Civil Aviation Organization (ICAO), with which negotiations have just been instituted).

25. The consensus which has been reached inside the United Nations system may serve to assist Member States in deciding whether - and if so, to what extent - the UNDRO mandate should be made more specific.

#### B. Role

26. Some nations have recently expressed their wish to obtain more - and more frequent - information about conditions and relief requirements in countries which are experiencing creeping or endemic disasters (for example, quasi-permanent drought conditions) or which are in the process of recovering from periods of civil strife. Their concern is to have the necessary information which would enable them to make a considered, reasoned and appropriate response to a particular problem. They have suggested that UNDRO might fulfil this central informational role and, in so doing, make use of the communications facilities available to it.

27. It is, of course, not suggested that the focal point for providing this information should necessarily also be the place from which the action is taken to carry out a relief operation. Part of the UNDRO post-disaster role is to disseminate information regarding relief needs to prospective donors and to serve as a clearing-house for assistance extended or planned by all sources of external aid (see General Assembly resolution 2816 (XXVI), para. 1(e)). If it were desired that UNDRO should undertake this task in respect of these specific categories of disasters, no more staff than at present would be needed by UNDRO at the Geneva level.



28. Neither the Secretary-General nor the Member States who have raised the question in the General Assembly and elsewhere have expected that UNDRO would become, or need to become, an organization using large numbers of field personnel and millions of dollars worth of relief materials.

29. It is generally agreed that relief co-ordination is the primary role of UNDRO, although even here reservations have been expressed by some Governments that prefer to utilize bilateral assistance. This in no way jeopardizes the work or existence of UNDRO. In fact, the great majority of Governments already send the greater part of their assistance through bilateral arrangements. The function of UNDRO is simply to help them to be as sure as possible that the aid they are sending is what is required at that particular time. There is not now, and never has been, any intention of persuading donors against their will or better judgement to send help through UNDRO or through any other United Nations channel. What is asked - indeed, what is essential if UNDRO is to act in the best interests of all concerned - is that donors advise UNDRO of their actions and better still, of their plans. This request has been reiterated by the General Assembly in the past two years (see resolutions 33/22, para. 3 and 34/55, para. 5).

30. In considering the role of UNDRO in the areas of disaster preparedness and disaster prevention, some widely divergent views have in the past been expressed. Some Governments have wished more emphasis to be given to these functions; others less. Some have wished UNDRO to become a project-executing agency, with perhaps quite substantial funds of its own; others have felt that the role of UNDRO should be no more than that of a catalyst, identifying a need but leaving others to fill it as best they might. The Secretary-General believes that in order to resolve these differences of opinion, it may be helpful to put forward some proposals in an attempt to obtain consensus. Indeed, such a consensus is vital if any meaningful attempt at evaluation of the work of UNDRO is ever to be made.

31. It may be useful first to define "preparedness" and "prevention", for in the past it has seemed as though some have thought these terms could be used interchangeably. They can not. Disaster preparedness is defined as action designed to minimize loss of life and damage and to organize and facilitate timely and effective rescue, relief and rehabilitation in case of disaster. It is supported by the necessary legislation and means a readiness to cope with disaster situations or similar emergencies which cannot be avoided. It is concerned with forecasting and warning, the education and training of the population, organization for and management of disaster situations, including preparation of operational plans, training of relief groups, the stockpiling of supplies and the earmarking of the necessary funds.

32. Disaster prevention may be described as measures designed to prevent natural phenomena from causing or resulting in disaster or other related emergency situations. It concerns the formulation and implementation of long-range policies and programmes to prevent or eliminate the occurrence of disasters. On the basis of vulnerability analyses of all risks, prevention includes both legislation and regulatory measures, principally in the fields of physical and urban planning, public works and building.

33. In regard to preparedness, the Co-ordinator is authorized to assist in providing advice to Governments on pre-disaster planning and to acquire and disseminate information relevant to planning and co-ordinating relief for disasters. Potential recipient Governments also have an important and complementary role to play (see General Assembly resolution 2816 (XXVI), para. 8).

34. Disaster preparedness is an activity sui generis, not normally engaged in in all its aspects by any other element in the United Nations system. The presence of adequate and efficient preparedness arrangements is vital to the execution of actual relief operations by Governments, both recipient and donor. It follows therefore that the Co-ordinator should have resources under his own control to enable him to carry out this part of his mandate. Those resources, apart from his own staff, consist of the funds available in the technical assistance subaccount of the UNDRO trust fund. Staff resources may be supplemented where required by the skills available elsewhere in the United Nations system, although the costs involved in detaching personnel temporarily from other agencies may have to be met by UNDRO.

35. Stated briefly, and in approximate chronological order for any given case, the Co-ordinator's activities are intended:

(a) To encourage the UNDP resident representative to ascertain and report upon the state of disaster preparedness in the country, to prepare a UNDP-led organization to work with the national authorities, and to persuade the Government to seek any necessary external assistance in establishing the necessary organization and the taking of legal, administrative and financial measures to enable its national organization to function;

(b) To investigate, by the use of his own staff on short-term missions, the precise requirements of a Government in any and all fields of disaster preparedness;

(c) To provide to the Government, in the persons and through the reports of appropriately qualified experts, the necessary oral and written advice on the ameliorative actions to be taken;

(d) To encourage the Government, again by means of the Co-ordinator's own staff on follow-up missions, to adopt the recommendations of the expert's (or experts') report.

These are the irreducible minimum of activities which must be carried out if the Co-ordinator's mandate is to be discharged. They are, however, usually only the foundation stones upon which a solid preparedness organization can be built. That building requires money.

36. Projects required to improve the effectiveness of eventual relief operations may be divided into four broad groups:

(a) Those for pure preparedness, with virtually no other benefit: for instance, an operations room; a Red Cross or Civil Defence warehouse; staff training;

(b) Those with an operational bias towards preparedness but which can be used to bring about improvements in conditions during non-emergency periods: for example, a police communications network; the provision of specialized land, air-borne or water-borne vehicles; weather radar;

(c) Those with chiefly economic developmental benefits but which will be invaluable for the actual conduct of operations: for example, an improved railway or road network; stronger road bridges. Beyond those categories, projects move into the area of disaster prevention - that is to say:

(d) Those which have clear economic benefits but which may also operate to reduce or remove an existing hazard: for example, a dam which controls a water supply enables widespread irrigation and eliminates a previous flood hazard; removal of a squatter settlement in a high risk and unhealthy area to properly constructed homes on a safe and healthy site reduces the risk of structural damage and helps to prevent the occurrence of diseases such as malaria.

37. It is the opinion of the Secretary-General that the Co-ordinator should be able to provide for projects alluded to in paragraph 36 (a) above out of the technical assistance subaccount (supplemented as necessary by earmarked contributions from particular donors, who would be approached on the basis of their known interests in particular recipient countries or types of projects), and that for those projects UNDR0 should act as the executing agency.

38. For projects referred to in paragraph 36 (b) above, the Co-ordinator should be empowered to receive funds on behalf of the Secretary-General (as he is at present empowered to do for relief operations (see General Assembly resolution 2816 (XXVI), para. 1 (d))), but project execution should be in the hands of the appropriate specialized agency or UNDP.

39. For projects referred to in paragraph 36 (c) and (d), the Co-ordinator's functions would be limited to those of transmitting the relevant recommendations to the Government and of trying to persuade the Government to give a sufficient priority to them in the formulation of the country's development plans.

40. To remove any possibility of misunderstanding, it should be added that the projects referred to above need not necessarily arise from expert reports alone; they may be the direct request of a Government to the Co-ordinator. Mutatis mutandis, the groupings would apply also to regional projects.

41. It has been convenient to mention projects which have the nature of disaster prevention activities, but to present a more complete picture of the role of UNDRO, disaster prevention must be considered further. The Co-ordinator's mandate in this area is laid down in paragraphs 1 (f) and 1 (i) of General Assembly resolution 2816 (XXVI). The latter part of the mandate is relevant because it is in the reconstruction stage that disaster prevention elements, particularly vulnerability analyses and land-use planning, can often be introduced.

42. The effects of a disaster are, of course, felt primarily by human beings. People are killed, injured or lose members of their families. The economic effects follow: the means of livelihood of an individual - farmer, fisherman, or owner of a factory - may disappear. Homes may be destroyed or damaged, as may schools, hospitals, and other public buildings. Irreparable damage may be caused to cultural and historic monuments. Contemplation of these simple facts shows that the effects of disasters are not solely felt by human beings or solely economic; there is a demonstrable connexion between disasters and development. In this context, it draws attention to the economic benefits to be derived if disastrous effects of natural and other phenomena can indeed be prevented, controlled or predicted.

43. It is perhaps because this connexion exists that some Member States are less than clear about the UNDRO role in disaster prevention. It is true that many projects which have disaster prevention qualities are often described in terms which give greater emphasis to their economic benefits. This is not necessarily a bad thing. Obtaining funding, either bilaterally or by means of indicative planning figures (IPFs) is often easier in these circumstances. But disaster prevention is not achieved only by means of actual physical developments.

44. The Secretary-General recalls that in his report to the Economic and Social Council and the General Assembly in 1971, he said that the permanent office (which became UNDRO) would be concerned with every aspect of the proposals, including "the promotion of scientific and technological studies" (E/4994, para. 85). It appeared to the Legal Counsel that the words of General Assembly resolution 2816 (XXVI) meant that this promotion etc., would be necessary only if, after examination of such activities then under way, it became apparent that there was some gap or omission, for example, in exploring some promising scientific development or in providing services in some region of the world.

45. The shift from the concept of promoting studies, as originally contemplated, to providing services continued with the General Assembly's reaffirmation of the vital importance of assistance to disaster-prone countries in preventive measures, disaster contingency planning and preparedness, in order to lessen the impact of disasters, (resolution 2959 (XXVII)), and the decision to establish a subaccount of the UNDRO trust fund for programme costs of technical assistance in disaster prevention and pre-disaster planning assistance to Governments (resolution 3532 (XXX)).

46. Although some Member States have wanted UNDRO to perform more than the role of a catalyst or prompter in regard to prevention, the General Assembly noted with satisfaction the Co-ordinator's decision to allot only 10 per cent of his resources to that activity (resolution 31/173; see also A/C.2/31/SR.47, para. 6).

### C. Recommendations

47. The recommendations arising from this part of the present report respond to the need, which has been suggested, to clarify the mandate and the role of UNDRO so that a proper evaluation can be made of the performance required by Member States. They are as follows:

(a) The General Assembly might find it helpful to make use of the terms of the relevant paragraph from the UNDRO/UNHCR Memorandum of Understanding in providing a definition of "other disaster situations" falling within the legal competence of UNDRO;

(b) Even when UNDRO is not playing a mobilizing, directing or co-ordinating role in a disaster situation, it should, within the spirit of existing memoranda of understanding with other agencies, offer to those agencies its services and facilities for the rapid dissemination of relevant information regarding those emergencies;

(c) UNDRO should be authorized to conduct its activities on the basis of the definitions of disaster preparedness and disaster prevention given in paragraphs 31 and 32 above.

48. It should be noted, however, that UNDRO is at present undergoing an evaluation of its role and activities by the Joint Inspection Unit, and it may be advisable to await the outcome of the Unit's deliberations before considering any changes in the actual mandate of the Office.

## V. INTERNAL EVALUATION

### A. Joint Inspection Unit

49. In its report entitled "Initial guidelines for internal evaluation systems of United Nations organizations" (A/34/271 (JIU/REP/79/2)), the Joint Inspection Unit recommended that each organization should report to its governing body on 12 items relating to evaluation activities. The Administrative Committee on Co-ordination, in its comments (A/34/271/Add.1, para. 17), noted that initial reports might not fully comprehend all the 12 items.

50. The first three items, concerning the purposes and present status of internal evaluation, how it is integrated with planning and how it is used to improve strategy and for policy, can be dealt with reasonably easily. (Paragraph references in the remainder of this subsection refer to A/34/271.)

51. The activities of UNDRO are primarily concerned with the co-ordination of international disaster relief assistance. In that area, new lessons are very frequently learned, and immediate action is necessary to apply them. Where appropriate, procedures are altered accordingly. This in essence addresses the need to inform users, that is, the staff of UNDRO. Case and evaluation reports

provide the corresponding information vehicle to donor and recipient Governments. General requirements to improve efficiency, such as the project "Measures to expedite international relief assistance", referred to in Economic and Social Council resolution 2102 (LXIII), of 3 August 1977, grow out of the whole learning process. Evaluation of this part of the work of UNDRO is therefore continuous, is integrated with operations (as suggested in para. 14) and has a much wider impact than simple monitoring, as distinguished in para. 10.

52. In the areas of disaster preparedness and disaster prevention, some of the basic questions listed in paragraph 11 can not be answered until recipient Governments act upon or respond to reports of technical co-operation missions arranged by UNDRO. Appraisal, monitoring and inspection (as defined in para. 10) are naturally essential elements, but there is an inevitable time lag before evaluation becomes possible. Here it is debatable how far evaluation can become integrated into the decision-making process. Although the aim (para. 11 (a)) is common to all pre-disaster planning, the factors affecting its attainment vary considerably from country to country. For example, a preparedness problem may be organizational, financial, legal or technical (medical, transport and so on). A prevention problem may require such action as more appropriate building regulations, land-use legislation or major construction works such as a dam. The degree of success achieved in each instance can of course be evaluated, but it is unlikely that precisely the same problem will be associated with precisely the same set of constraints in a second or third country. The type of lessons to be learned and applied generally can only be extremely broad.

53. For these reasons the development of a programme strategy (para.26, and distinguished from a subprogramme, programme element or individual project) is not necessarily dependent upon evaluation of the kind so far considered. As has been noted elsewhere, it will be necessary to clarify and possibly to redefine the mandate of UNDRO before the strategy can be fully developed and an appropriate mode of evaluation adopted. It would appear, however, that programme - rather than project - evaluation (para. 34) would probably be the best way of proceeding.

54. It follows that no useful report can be made at this stage on the fifth, sixth, seventh and eighth items identified by the Joint Inspection Unit. Without in any way wishing to anticipate the results of their consideration of those items, it does appear that because of the specialized nature of the Office's tasks and because of the small number of staff, evaluation methods of the kind described in paragraphs 65 and 66 would be most suitable. The "unit" referred to in paragraph 72 can only be the Director of the Relief Co-ordination, Preparedness and Prevention Division.

55. To be of real value, evaluation reports on the work of the Office would be written for categories described in paragraph 75 (b) and (c). The annual Secretary-General's report on UNDRO will serve the more generalized needs of intergovernmental bodies.

B. Some practical aspects of evaluation

56. It may be helpful to remark upon some of the factors which have caused performance to have been less effective than might have been hoped, particularly during relief operations.

57. Probably the most serious was the virtual impossibility of obtaining any information at all about the findings of disaster area survey teams sent to Dominica after hurricanes David and Frederic in mid-1979. Those military units had their own systems of communication. They were based not at the capital but at the airport, many miles away. This may explain why they did not share their information with the Dominican authorities, the diplomatic representatives from the teams' own Governments or the UNDRO officer present in Dominica. This failure - whatever its cause - definitely hampered UNDRO in its attempt to give the donor community a true picture of the quantified needs. (However, with almost the whole island devastated, it was in fact unlikely that any serious over-supply would have occurred.) Difficulties were experienced also because of widely varying estimates of stated food requirements. Problems of distribution would have been more readily solved had there been a sufficiently organized water-borne service, at least on the western (Caribbean) coast where, until comparatively recent years, no road existed and communities had to be reached by sea.

58. The importance of sea communication was re-emphasized after the earthquake in the Azores when even damage assessment and casualty evacuation could only be effected by that means. Probably more attention needs to be given to the efficiency of water-borne search-and-rescue services, and the capabilities of those services to assist in other than aviation/marine disasters should be more widely appreciated.

59. There have been occasions during the year under review (and earlier) when for one reason or another the Government or the UNDP resident representative in a disaster-stricken country has refused to accept the assistance of an UNDRO representative in the usual tasks of assessment of damage and international relief requirements and local co-ordination of donor activity. Sometimes a corresponding refusal has hindered the desire of the League of Red Cross Societies to send delegates, with the intention of later making an appeal to member Societies for additional help to the national Society of the afflicted country.

60. The attitude of mind that leads to a rejection of an offer of professional assistance may be the result, among other things, of a lack of appreciation of the kind of help that can be given, a feeling that it would appear that a country's staff could not do whatever was necessary, or the misconception that an UNDRO staff presence would inevitably lead to international appeals being made. Paragraph 1 (b) of General Assembly resolution 2816 (XXVI) specifies that the Co-ordinator should

"mobilize, direct and co-ordinate the relief activities of the various organizations of the United Nations system in response to a request for disaster assistance from a stricken State".

Paragraph 1 (e) requests the Co-ordinator to

"assist the Government of the stricken country to assess its relief and other needs and to evaluate the priority of those needs, to disseminate that information to prospective donors and others concerned, and to serve as a clearing-house for assistance extended or planned by all sources of external aid".

61. In his opinion dated 9 June 1972, the Legal Counsel commented on paragraph 1 (b) as follows:

"35. The question arises whether the Co-ordinator can act if the State concerned has not specifically asked him to do so. In the resolution, the phrase 'in response to a request for disaster assistance from a stricken State' grammatically modifies 'the relief activities of the various organizations of the United Nations system'. It therefore does not mean that the Co-ordinator must himself be asked by the stricken State to intervene; he may have a role to perform when 'the various organizations of the United Nations system' are involved, even when requests for assistance have been made directly to those organizations rather than to the Co-ordinator. Naturally, the United Nations and its related organizations can undertake relief activities only if the stricken State so requests. If there is no such request, then such activities might well amount to interference in that State's internal affairs."

And on paragraph 1 (e), he wrote:

"Like all forms of United Nations assistance, this kind depends upon a request by the Government of the stricken country. If the Co-ordinator receives no such request, it may be because the Government concerned considers itself competent to assess its own needs and evaluate its own priorities. If there is such a request, it may nevertheless appear that the local representatives of the United Nations system, co-ordinated by the local UNDP resident representative, are able to give all necessary assistance in this regard; or it may be that the Co-ordinator can usefully send someone to assist the UNDP representative; or there may be reasons why the Co-ordinator should send someone to the spot to offer the Government his services directly. The course to be followed will be a matter of judgement, in the light of all available information about the local situation."

62. It seems therefore that, if the refusal or reluctance of a State to accept the presence of an UNDRO representative is based upon any misunderstanding or misconception of the Co-ordinator's role and the tasks and capabilities of his Office and staff, the Co-ordinator should try to remove those obstacles by dispatching a mission to the country concerned for that sole purpose. Missions of this kind would not be an attempt to interfere in a State's internal affairs. The preamble to General Assembly resolution 2816 (XXVI) began with these words:



"The General Assembly,

"Bearing in mind that throughout history natural disasters and emergency situations have inflicted heavy loss of life and property, affecting every people and every country,

"Aware of and concerned about the suffering caused by natural disasters and the serious economic and social consequences for all, especially the developing countries,"

It is in that spirit that UNDRO seeks to remove, reduce or relieve human suffering and economic losses, and since the Office was established at the behest of Member States, it is to be hoped that they will, whenever necessary, accept its services in the spirit in which they are offered.

63. Associated with this issue is the state of affairs which occurs when a Government, after a disaster, informs the Co-ordinator that "any assistance will be welcomed, but no international appeal should be made". Even spontaneous offers of help ought to be made in the knowledge of what is required. Unless this information is made known to UNDRO or can be acquired by it, the Office cannot discharge the duty placed upon it by the latter part of paragraph 1 (e) of the founding resolution.

64. In the area of pre-disaster planning and, particularly, disaster prevention, UNDRO does experience some difficulties in obtaining information about national and bilateral programmes. As has been observed elsewhere, many ordinary development projects have direct effects upon disaster prevention, but they are controlled and executed by departments of government different from those to which UNDRO usually relates. This is not a problem which can necessarily be solved by further reliance upon UNDP resident representatives. Bilateral development assistance projects are no direct concern of theirs, although ideally they should know about such projects if only to enable them to harmonize United Nations and other programmes. The best way of approaching a solution would be for the donor countries concerned (who will in all likelihood be the same countries as those active in relief after a disaster) to ensure that the "country team" mentioned in paragraph 16 above is kept regularly informed of projects in this category.

#### VI. MEASURES TO EXPEDITE INTERNATIONAL RELIEF ASSISTANCE

65. The Co-ordinator has continued his efforts to obtain from Member States information about their laws, regulations and practices concerning the dispatch and receipt of international relief assistance after major natural disasters. The initiative resulted from Economic and Social Council resolution 2102 (LXIII), of 3 August 1977, which followed from investigations and recommendations recorded in the report of the Secretary-General on UNDRO for 1976-1977 (A/32/64, annex II). It will be recalled that, despite the overwhelming support in the Council for this inquiry and for the results to be expected from it, information was very slow to arrive, and even now only 42 States have completed the simple questionnaire issued by the Co-ordinator. Of those 42 States, 16 may be

classified as regular donors and 26 as potential recipients of disaster and relief assistance.

66. Of the potential recipient States, 76 per cent have designated a national authority to co-ordinate relief activities; 73 per cent lift all normal restrictions on food imports for essential items sent as disaster relief; 42 per cent offer free or concessional rates for the transport of supplies from abroad by their national airlines; 73 per cent are prepared to allow relief personnel to board flights which would not normally have traffic rights at the national airport in question; and 88 per cent will allow overflight or transit landing rights to non-scheduled aircraft carrying relief supplies. Forty-two per cent will provide priority access by relief personnel to international communication facilities. These results are encouraging, if not yet entirely satisfactory.

67. On the other hand, 50 per cent of potential recipients still require normal commercial documentation for relief consignments (that is, consular certificates of origin, consular invoices, import licences and fumigation certificates). Fifty-seven per cent require entry visas for United Nations personnel coming to assist in relief work, and 65 per cent require them for other relief workers. About half of these countries will, however, issue such visas at the port of entry. Too many countries, including some potential donors, actually require exit visas for United Nations and other personnel who may urgently need to travel to a disaster-stricken country. As might be expected, there are widespread reservations about the use of military aircraft in relief operations.

68. If this pattern of response should prove to be typical of conditions and practices throughout the world, then there would appear to be some hope of achieving at least a limited accord on the main points identified in the original investigation and recommendations. Clearly much more encouragement should be given to the liberalization of visa requirements and the unrestricted entry of relief supplies not accompanied by commercial documentation. There is little virtue in granting free overflight and landing rights if the aircraft's passengers and cargo will not be allowed off the airport at their destination.

#### VII. RELIEF CO-ORDINATION, PREPAREDNESS AND PREVENTION

69. In this section of the report, accounts of disaster emergencies are given only for those events in which UNDRO was engaged in the mobilization and co-ordination of relief, and/or sent an officer to the scene and/or made a grant from its own emergency funds. In order to shorten the text, statistical information about assistance given is shown in summarized form in annex IV.

A. Latin America

1. Disaster emergencies

Paraguay

70. From mid March 1979, floods affected northern areas of Paraguay, following similar inundations in the Mato Grosso area of Brazil. Because of continued heavy rainfall, parts of the capital, Asunción, were flooded to a depth of eight metres, the greatest ever recorded. An estimated 120,000 people were made homeless; 70,000 found shelter in relatives' and friends' houses, but about 50,000 had to move to emergency camps.

71. The situation became more critical after the beginning of the cool season in June. Large sectors of the country's industry had to close, obliging workers to depend on relief assistance. It was not until September that the water receded. Damage to crops was extensive.

Argentina

72. During May 1979, following widespread flooding in northern Argentina, mainly in the provinces of Formosa and Misiones, the Government asked the UNDP office in Buenos Aires to provide 7,500 evacuees with powdered milk, corrugated iron sheets for housing, and blankets. Contributions made by UNDRO and UNDP covered most of the help needed.

Saint Vincent

73. The first of a series of eruptions of Mt. Soufrière, a volcano standing in the northern part of the island of Saint Vincent, occurred early in the morning of 13 April 1979. Approximately 20,000 people were evacuated from the area. More eruptions followed, and the volcano remained unstable and potentially dangerous until mid May. Sixty evacuation centres were set up and remained in use for a considerable time thereafter.

74. The purchase of food-stuffs and the maintenance of adequate health conditions were the main problems confronting the Government of St. Vincent. Financial assistance was sought and given to meet those requirements and to conduct epidemiological surveillance over an extended period.

Jamaica

75. In April 1979, Jamaica suffered from heavy rains, which caused widespread flood damage in the north-west of the country. The Government activated its emergency machinery and received a limited amount of international aid. From then until early in June, UNDRO maintained contact with the resident representative of the United Nations Development Programme in Kingston.

76. From 12 to 13 June, very heavy rains again fell on western Jamaica, where the earth was already saturated. In an area of 2,525 square kilometres, 40 people lost their lives and nearly 40,000 persons, or approximately a quarter of the population of the area, were made homeless. Buildings, surface communications, power distribution systems and other facilities were damaged or destroyed. On 14 June the resident representative reported to UNDRO that the Government was seeking international assistance. An UNDRO staff member was sent to Jamaica and worked with the Emergency Operations Centre in the assessment of damage and relief requirements and in local co-ordination. He remained there until 12 July.

77. During the first few days, local relief supplies were distributed by the Jamaica Defence Force. Later, a relief depot was established at Montego Bay airport, where much of the international relief was received, and a relief centre was set up in the town of Savanna la Mar. Help in organizing a full distribution system was given by the representatives of the League of Red Cross Societies and UNDRO.

78. Relief operations continued into July, but by then rehabilitation and reconstruction programmes had been started by the Government. The estimate of the cost of the damage, including the value of agricultural exports, was approximately \$US 82 million.

79. At its second regular session, in July 1979, the Economic and Social Council, in resolution 1979/60, called upon the international community to intensify efforts and co-operation in support of the rehabilitation and reconstruction measures instituted by the Government of Jamaica. The United Nations Development Programme approved a grant of \$1 million for rehabilitation and reconstruction.

Dominica and Dominican Republic (Hurricanes "David" and "Frederic")

80. Hurricanes "David" and "Frederic" ravaged the Caribbean region with a force probably unequalled in this century. Hurricane "David", carrying winds up to 240 kph and heavy rainfall, first reached the islands of Martinique, Dominica and Guadeloupe on 28 August 1979 and then continued towards the Dominican Republic, where it made landfall in the afternoon of 31 August. A few days later hurricane "Frederic" followed a somewhat similar path, aggravating what had already become an emergency situation and disrupting rescue and relief operations which were just getting under way. Both hurricanes then moved on towards the coastal region of the United States of America.

81. In Dominica, the whole population of about 80,000 people was affected to some degree. Forty persons perished, most of them either children or the elderly, and approximately 4,500 were injured. In Roseau, the capital, and in the communities throughout southern Dominica, practically no structure was spared damage. Almost two thirds of the population were without shelter, and virtually all the country's agriculture was wiped out. Roads and bridges were washed away or blocked, power and telephone lines were brought down; damage to industry was estimated at a minimum of 5.8 million East Caribbean dollars. Of the 637 fishing boats on the island, 629 were lost.

82. In the Dominican Republic, the two hurricanes affected nearly 2 million people out of a total population of about 5 million. Approximately 2,000 persons were killed, over 4,000 injured and 125,000 families left homeless. The storms caused extensive damage to buildings and infrastructure of all kinds. In the central southern areas, entire villages were flattened and trees and crops destroyed. After hurricane Frederic, extensive floods occurred and damaged dams, irrigation networks and drinking water supply systems.

83. Hydroelectric and crude oil plants were not restored to service for several weeks. Damage in the agricultural sector seriously affected the country's economy. The total losses due to hurricanes David and Frederic in the Dominican Republic were estimated at over \$US 830 million.

84. The staff members of UNDRO were sent to Dominica and Martinique, which served as a supply and communications base, and to the Dominican Republic. They worked with representatives of the Governments and other United Nations agencies, and were able to establish initial lists of priorities in the areas of medical services, supply of drinking water and food, and other immediate requirements. A series of reports sent by UNDRO from Geneva gave this and other relevant information to donors. Altogether, assistance valued at almost \$US 15 million was reported as having been sent to Dominica and the Dominican Republic.

85. The United Nations General Assembly, in resolution 34/18, called on all Member States to assist in the work of rehabilitation and reconstruction. Meanwhile plans are being made to improve regional disaster preparedness arrangements throughout the area.

#### Honduras

86. During November 1979, heavy rains and strong winds caused widespread flooding in the northern parts of the country. Ten deaths were reported, with 13,000 persons in need of relief assistance. Preliminary assessments indicated material damage amounting to several million dollars. Relief efforts were undertaken jointly by the Government, the Honduran Red Cross and Caritas Honduras, with help from a number of overseas donors.

#### Colombia

87. One hundred and eighty-two people were killed in heavy floods in north-eastern Colombia during the second half of October 1979. Another 34 were killed and 453 injured as a result of an earthquake, which occurred on 23 November. Although the national authorities had the situation well in hand, the needs following both disasters were such that the Government decided to seek help from the international community.

88. On 12 December, a major earthquake devastated the south-west portion of Colombia. Official estimates put the number of deaths at 454 with 125 people missing, 1,042 injured, and over 6,000 families affected. At least 3,540 houses were destroyed and 2,500 damaged. An UNDRO representative was sent to the country

to work with the authorities on assessing the needs for external assistance. The office used contributions received from two Governments as well as an additional allotment from its own emergency funds to meet emergency needs for halazone tablets, water pipes, hand pumps, water test units and water containers.

#### Nicaragua

89. Approximately 30,000 people were affected by flooding, which started in north-eastern Nicaragua on 7 December 1979. No casualties were reported, but many were made homeless and plantations were wiped out. The Government sent doctors to the area, and a list of necessary medical and other supplies was drawn up by the UNDP resident representative with assistance from the Pan-American Health Organization (PAHO), WHO and UNDRO. Thanks to the speedy responses of two Governments, who channelled cash through UNDRO, a large part of the items required were procured by the joint efforts of UNDRO and UNICEF.

### 2. Pre-disaster planning

#### Haiti

90. At the request of the Government, a technical co-operation mission, undertaken jointly by UNDRO and the United States Agency for International Development in April 1979, studied disaster preparedness in Haiti, and made recommendations for the establishment within the Planning Ministry of a national Disaster Planning and Preparedness Office. It is expected that additional assistance will be needed for the actual setting up of the Office.

#### Central America

91. An UNDRO/UNDP preparatory mission visited Guatemala, El Salvador, Costa Rica and Honduras in September-October 1979 with a view to studying the possibility of reviving a regional project in disaster prevention and preparedness, covering Central America, Panama and Mexico. The project had initially been formulated in 1975 but could not then be implemented because of the financial crises of UNDP. A new, smaller, regional project has now been proposed and has received the strong support of the countries concerned. The project, which would have a duration of 18 months and be open to the participation of Nicaragua, Panama and Mexico, would aim at promoting both prevention and preparedness measures and mutual assistance agreements in case of disaster. No decisions on funding have yet been made; the total cost to UNDP would be \$US 457,700.

#### Argentina

92. In October 1979, responding to a request of the Government, an UNDRO officer was sent to Argentina. He visited four disaster-prone provinces of the country. Apart from specific recommendations for the improvement of disaster preparedness in those provinces, the highly disaster-prone areas of San Juan and Mendoza

received particular attention. The Government expressed a wish to receive UNDR0 assistance in carrying out composite vulnerability analyses of those two areas, under a fund-in-trust arrangement to be made by the Government.

#### Jamaica

93. Following the lessons learned during the floods of June 1979, the Government requested advice and assistance from UNDR0 and the United States Agency for International Development concerning the improvement of disaster preparedness arrangements. A joint mission accordingly visited Jamaica in November 1979 and made detailed recommendations for the establishment of a permanent Office of Disaster Preparedness and Emergency Relief Co-ordination.

#### Caribbean region

94. In June 1979, UNDR0 participated, along with other organizations such as PAHO/WHO and the League of Red Cross Societies, in a Caribbean Disaster Preparedness Seminar organized by the United States Agency for International Development and the Office of Foreign Disaster Assistance. Some of the Seminar's recommendations are already being put into effect. In July 1979, a meeting of health ministers of the Caribbean Community (CARICOM) also considered disaster preparedness and prevention matters and called on the Secretary-General of CARICOM to "seek technical co-operation from UNDR0 ... in arriving at his conclusions about the future role of the Secretariat in this programme area".

95. A resolution adopted by the Committee of the Whole of the Economic Commission for Latin America, at its thirteenth special session, called especially on UNDR0 to "study ways and means of setting up specific machinery to cope with the natural disasters that periodically occur in the Caribbean basin and [to] report on the matter to the General Assembly". That resolution was endorsed by the General Assembly, in resolution 34/18, of 9 November 1979.

96. Early in 1980, an UNDR0 officer visited both the CARICOM secretariat and the staff of the Project on Environmental Management in the Wider Caribbean Area jointly covered by UNEP and the Economic Commission for Latin America (ECLA). These two bodies are responsible for the formulation of the Draft Action Plan for the Caribbean Environment Programme, in which natural disasters are included. The Wider Caribbean Area is, however, too large to be covered in one single regional effort. The Office has already started subregional activities in Central America and national activities in the Dominican Republic, Haiti and Jamaica. The islands of the Lesser Antilles have specific problems since they are very disaster-prone and have only small populations. For this subregion UNDR0, the CARICOM secretariat and the UNDP resident representative in Guyana (whose responsibilities cover some of the Eastern Caribbean islands) have discussed a regional project which, in addition to promoting disaster preparedness and mutual assistance agreement in case of disaster, would also consider the question of establishing the permanent regional machinery referred to in the ECLA resolution referred to in paragraph 95 above.

Trinidad and Tobago

97. The Office has proposed, for implementation within the UNDP country programme, a draft project aiming at strengthening the country's disaster preparedness and relief system.

B. Africa, the Middle East and Europe

1. Disaster emergencies

Yugoslavia

98. On 15 April 1979, an earthquake, more powerful than the one which destroyed the town of Skopje in 1963, occurred in the Republic of Montenegro. Nearly 100 people were killed, about 1,000 injured and at least 80,000 made homeless. The Government of Yugoslavia and the Red Cross organized a national relief operation and later requested limited international assistance. This was provided by UNDRO, UNDP and some donor Governments and national Red Cross Societies.

99. A second earthquake struck the same region on 24 May 1979, causing further deaths and damage to property, but no request was made for international assistance.

100. In November 1979, heavy rains affected the Republics of Serbia, Montenegro and Macedonia. The resultant floods were reported to have caused 22 deaths and left 12,000 people homeless. Three thousand houses were damaged or destroyed and wide areas of land inundated. The authorities of Montenegro invited an UNDRO representative to visit the flood-stricken areas. It was subsequently agreed that an international appeal for relief assistance would not be necessary, since the Yugoslav operations had been so effective.

Egypt

101. During the week of 22 October 1979, unexpected heavy rains caused floods in four Governorates of Upper Egypt, and 43 persons died. Many houses collapsed and 65,000 people were made homeless; 25,000 acres of agricultural land were flooded.

102. This emergency led, in February 1980, to a mission jointly sponsored by UNDRO and the United Nations Centre for Human Settlements (Habitat) to study the consequences of the floods. The mission recommended that comprehensive plans for reconstruction and flood prevention in pilot settlements be prepared by Habitat in co-operation with UNDRO. In accordance with that recommendation, UNDRO agreed to finance a further three work-months of service by a consultant hydrologist.

Mauritius

103. Tropical cyclone "Claudette" struck Mauritius on 22 December 1979. Five people were killed, 257 injured and 5,000 made homeless. Agricultural losses were



widespread. An emergency grant was made by UNDRO to purchase relief items and situation reports were transmitted to potential donors, giving the requirements for external help.

#### Azores

104. On 1 January 1980, an earthquake measuring 7 on the Richter Scale struck the islands of Terciera, Sao Jorge and Graciosa. Fifty people lost their lives, 400 were injured and 15,000 were left without shelter. At the request of the Government of Portugal, UNDRO appealed to the international community for tents. A total of 2,420 were supplied, 915 of which came from Red Cross sources in response to a parallel appeal by the League of Red Cross Societies.

## 2. Pre-disaster planning

### Senegal and Zaire

105. Following UNDRO exploratory missions to Senegal and Zaire in September 1979, the Governments of both countries officially requested technical advisory services in disaster preparedness. Consultants will accordingly advise those Governments on the reinforcement of their relief organizations, plans and operations.

### Lesotho, Malawi and Rwanda

106. During September and October 1979, UNDRO missions visited Lesotho, Malawi and Rwanda to review with Governments their technical assistance needs in pre-disaster planning and preparedness.

107. All three Governments are studying how best to utilize technical assistance to alleviate emergencies and to mitigate their over-all effects.

### Mozambique

108. In October 1979, a representative of UNDRO visited Mozambique in order to evaluate the present stage of disaster preparedness and to discuss future technical assistance with the Government. An official request was later received and, at the time the present report was prepared, the Government's acceptance of a consultant was awaited.

### Yugoslavia: new methods of assessing risks, vulnerability and hazard on physical planning and building

109. The Office was invited by UNDP, UNESCO and the United Nations Centre for Human Settlements (Habitat) to co-ordinate the assistance required in carrying out the risk analyses required for the reconstruction of Montenegro. The widespread destruction of thousands of buildings emphasized the priority that earthquake risk reduction techniques must have in the reconstruction of Montenegro. Such techniques will be applied to three principal areas: land-use planning; building codes and regulations; and community preparedness.

110. The United Nations Educational, Scientific and Cultural Organization is expected to undertake a scientific project in seismology and earthquake engineering, which will formulate new techniques and criteria for earthquake risk reduction. The United Nations Centre for Human Settlements (Habitat) has been asked to execute a post-disaster physical planning project in Montenegro, and UNDRO will act as a bridge between the two projects. In this way, the scientific results of the UNESCO project will be used as inputs to the physical planning project in Montenegro. Each will last for two to three years.

### 3. Meetings

#### International Conference of Experts on the Protection of Society from Natural Disasters in the Mediterranean Basin

111. An UNDRO representative attended the Conference, which was organized in October 1979 by the Government of San Marino. Its purpose was to encourage better contacts between countries in the field of protection from disasters. The Conference established a solid basis for further studies, and for co-operation between the countries, on the scientific, social and human problems posed by disasters.

#### Fourth Session of the Tropical Cyclone Committee for the South-West Indian Ocean

112. Two UNDRO representatives took part in this meeting, which was held at Maputo, Mozambique, from 15 to 22 October 1979. The meeting considered measures needed to improve the monitoring, forecasting and warning of dangerous storms in that area.

#### Meeting for UNDP resident representatives

113. A one-day meeting with UNDP resident representatives from the African and Middle Eastern regions was conducted by UNDRO in Swaziland in January 1980.

### C. Asia and the Pacific

#### 1. Disaster emergencies

##### Indonesia

114. Central and western areas of Lombok Island were hit by several earthquakes in the second half of May 1979, the worst occurring on 30 May with a magnitude of 7.6 on the Richter Scale. Thirty-four persons were killed and 48 injured; 3,600 houses and public buildings were destroyed or damaged, and some 18,000 people were rendered homeless. The total damage was estimated at \$US 4.15 million.

115. The Indonesian Government provided immediate assistance to supplement that given by the provincial administrator. On 18 June, a request was made for

external assistance for rehousing in 12 villages. The Office launched an appeal to a limited number of potential donors for contributions towards that project.

116. Lombok Island, east of Flores in the Lesser Sunda Islands (Nusa Tenggara Timur), was struck by tidal waves on 18 July 1979. The most likely cause of the waves was thought to be a large landslide into the sea from a nearby volcano. Four coastal villages were completely devastated, and 150 people were reported killed. At the request of the Government of Indonesia, UNDR0 gave assistance from its emergency funds for the local purchase of food, tents and medicines.

#### Iran

117. On 14 November 1979, an earthquake of magnitude 6.7 on the Richter Scale occurred in north-eastern Iran and caused extensive damage to many villages in the area. More than 350 people were officially reported killed or missing. The Iranian Red Lion and Sun Society, charged by the Government with responsibility for relief operations, made all necessary disposition of its resources, but the number of homeless people exceeded the quantity of tents and other temporary shelter available. At the request of the Government, UNDR0 arranged for the immediate supply of some tents, and appealed for and obtained funds to purchase more.

118. In early February 1980, the province of Khuzistan suffered heavy flooding, a total of 800,000 people being affected and about 150,000 rendered homeless.

119. The Government once more appealed to UNDR0. On this occasion, 5,000 tents were needed. Cash contributions from UNDR0, UNDP, the United Nations Children's Fund (UNICEF), and several Governments made possible the purchase of more than half of the total requirements. The efforts of UNDR0 to field a staff member to Iran to assist the resident representative in his relief activities did not meet with success.

#### India

120. Early in November 1979, UNDR0 was advised of the urgent need of the Government of India for well-drilling rigs in order to combat the severe lack of drinking water in many parts of India: 190 million people were estimated to be affected, and 160 districts out of India's total of 399 were hit. Subsequently, with the consent of the Government, an UNDR0 staff officer (a hydro-geologist) visited India to investigate certain technical matters with government and state officials and to visit existing drilling operations in the drought areas. The office was asked to try to expedite the delivery of rigs, which could be paid for by the Government, and at the same time to try to obtain donations of rigs or of cash to make further purchases. The Indian authorities also received supplies of dried skimmed milk from the United Nations/FAO World Food Programme.

Niue

121. Late in December 1979, hurricane "Ofa" struck the South Pacific island of Niue causing great damage to citrus trees, vines and port facilities. Huge waves generated by the hurricane destroyed 20 out of the 27 small fishing boats on which the island depends for its fresh fish supply.

122. The Government requested two catamaran-type fishing boats as a relief measure designed to maintain food supplies. Contacts made by UNDRO with UNDP on Western Samoa revealed the availability of such boats in Apia. The Office provided the necessary funds, and the first boat was delivered to Niue in January 1980. After trials conducted by the FAO regional fisheries adviser, a second boat was ordered for immediate delivery.

2. Pre-disaster planning

Afghanistan

123. During a mission to Afghanistan in May 1979, an UNDRO representative visited flood-prone areas of the country and reviewed with government officials the state of disaster preparedness and prevention. Projects were later formulated for the provision of storage facilities and transport, but it has not proved possible to finance or implement them.

Nepal

124. Early in July 1979, the Kosi River in the eastern Tarai region of Nepal rose and overflowed along part of its length. There was a probability of serious flooding and, at the request of the Government, a representative of UNDRO visited Nepal later that month to advise on contingency planning. Fortunately, the heavy rains which had been expected did not fall and the threat in the Kosi River Valley was averted.

125. As a result of that mission, UNDRO was asked to arrange a consultancy in preparedness organization and planning, and an expert arrived in Nepal in December for a four-month mission. The Kosi flood offered an opportunity for expert observations to be made as a basis for future advice on possible flood control and flood damage mitigation. The observations were made by a hydrologist-engineer who was already working in the country for the World Meteorological Organization.

126. A second development was the formation, at the initiative of the UNDP resident representative, of an interagency Disaster Preparedness Working Team. The Team includes representatives of UNDP, UNICEF, FAO, WHO, WMO and the World Food Programme. Regular meetings are held for the exchange of information on disasters in Nepal, and a contingency plan is being formulated, in order to enable the Team to respond efficiently to disasters when they occur.

Fiji

127. Government and Red Cross officials from Australia, Fiji, Kiribati, New Zealand, Papua New Guinea, the Solomon Islands, Tonga and Western Samoa met in Suva, Fiji, for one week in November 1979 to discuss the effectiveness of existing pre-disaster planning measures, the efficient utilization of resources in the region, and the improvement of relief co-ordination in the South Pacific region.

128. The Seminar was sponsored by the South Pacific Bureau for Economic Co-operation (SPEC), the League of Red Cross Societies and UNDRO.

129. Participants agreed that measures should be taken to:

- (a) Promote the formulation of national disaster plans;
- (b) Provide reliable communications;
- (c) Upgrade and expand existing weather reporting situations;

(d) Study the possibility of establishing a regional warehouse for the storage of relief supplies.

Disaster Preparedness Seminar

130. From 27 January to 2 February 1980, UNDRO took part in the Disaster Preparedness Seminar of the Association of South-East Asian Nations, organized at Manila by the United States Agency for International Development through the Office of Foreign Disaster Assistance. The main purpose of the Seminar was to define the disaster problems faced by the countries in question and to identify regional approaches to their solution. Emphasis was placed on assisting the countries in drawing up their national disaster plans. The Seminar examined the successive stages of the "disaster continuum" - vulnerability analysis, prevention, prediction and warning, preparedness, relief, rehabilitation and reconstruction.

India

131. Senior government officials from seven States of India and representatives from international organizations and voluntary agencies met at Hyderabad to discuss disaster management problems in India. The meeting was arranged by the Appropriate Reconstruction Training and Information Centre (ARTIC) and the Administrative Staff College of India (ASCI), and took place from 16 to 18 February 1980.

132. Among the papers presented at the meeting were those concerned with measures to deal with the effects of cyclones in individual States, emergency feeding programmes, medical and health problems, shelter provisions and cyclone warning system. Particular emphasis was given to the creation of community preparedness and response to natural disasters. A representative of UNDRO delivered a paper on the regional and international aspects of disaster management.

D. Activities without specific regional application

1. Meetings

International Conference on Disaster Medicine, Monaco, April 1979

133. The Co-ordinator delivered an address to the Conference. It was organized by the International Civil Defence Organization, the International Society on Disaster Medicine and the Club of Mainz for the purpose of promoting the application of life-saving methods and the improvement of emergency and critical medical care in the aftermath of disasters caused by water.

UNESCO/UNEP Panel of Experts on Aspects of Earthquake Prediction, Paris, April 1979

134. A representative of UNDRO attended this meeting on the scientific, social and economic aspects of earthquake prediction. The Panel reviewed the proceedings of the International Symposium on Earthquake Prediction, sponsored by UNESCO in April, and suggested that UNESCO, in co-operation with UNDRO and UNEP, should establish an international programme on earthquake prediction, drawing attention to the role of the UNESCO/UNDRO International Advisory Committee on Earthquake Risk in this work. The Panel also formulated a series of recommendations concerning research, the collection of field data, prediction evaluation, education, earthquake warnings, a working group on earthquake preparedness and public policy, and long-term regional co-operation on earthquake prediction programmes.

Expert Group on Vulnerability Analysis, Geneva, July 1979

135. Fourteen experts, together with representatives of UNDRO, the United Nations specialized agencies and other organizations concerned with natural disasters, met at Geneva from 9 to 12 July 1979. The meeting was convened by the Co-ordinator for the purposes of examining and clarifying the techniques of assessing vulnerability to natural hazards with a view to their wider application, particularly in disaster-prone developing countries.

136. The Expert Group recommended that studies on vulnerability analyses should be continued, preferably in the form of pilot projects, and that UNDRO should do the following:

(a) Organize a project for the development of a methodology on damage assessment and collaborate in programmes to expand the data available on natural hazards, vulnerability and risk relating to all types of natural disasters;

(b) Support earthquake survey missions, particularly those organized by UNESCO;

(c) Plan a comprehensive publication on vulnerability analysis;

(d) Make greater use of specialist advice in the formulation of projects on risk and vulnerability analyses and expand its co-operation with United Nations specialized agencies;

(e) Organize courses in developing countries on damage assessment, vulnerability analysis and risk assessment and also should undertake periodic reviews of problems in those areas in order to ensure the development of appropriate planning techniques.

Governing Council of the United Nations Development Programme, New York, June 1979

137. The Co-ordinator addressed the Governing Council on the relationship between disasters and development and the work of UNDRO to reduce the impact of natural phenomena on disaster-prone countries. The Council, having also considered a note by the UNDP Administrator describing disaster preparedness and prevention activities being carried out by UNDP, called upon the Administrator to continue efforts to help Governments requesting technical assistance in disaster preparedness and prevention at the regional and national levels.

Preparatory Committee for New International Development Strategy, New York, June 1979

138. The Co-ordinator made a statement to the Preparatory Committee stressing that the reduction of damage probability through disaster prevention and mitigation measures was essential for all development projects in disaster-prone areas. He cited several examples of inexpensive measures which could be adopted to that end.

2. Publications

139. In the series of monographs being prepared on the state of the art in disaster prevention and mitigation, volumes have been issued on the economic legal and public information aspects.

140. A new publication, entitled UNDRO News, which will appear six times a year, was issued for the first time on 1 March 1980. It replaces the previous publications entitled UNDRO Monthly and UNDRO Newsletter, which had been published three times each year.

## ANNEX I

## Summary of accounts for the biennium 1978-1979

(United States dollars)

Object of expenditure	Regular budget			Trust fund for strengthening of UNDR0		
	Allotment received	Expenditure	Savings	Allotment received	Expenditure	Savings
Established posts	2 075 500.00	1 898 500.31	176 999.69	1 350 300.00	975 134.26	375 165.74
General temporary assistance	64 500.00	43 318.54	21 181.46	129 600.00	103 600.00	26 000.00
Consultants	11 000.00	2 050.00	8 050.00	-	-	-
Overtime and night differential	24 300.00	7 711.62	16 588.38	-	-	-
Ad hoc expert groups	13 200.00	6 218.87	6 981.13	61 800.00	36 295.88	25 504.12
Common staff costs	539 800.00	435 115.30	104 684.70	400 500.00	304 568.06	95 931.94
Representation allowances	9 200.00	8 975.00	225.00	-	-	-
Travel on official business	160 700.00	159 660.51	1 039.49	130 600.00	83 238.55	47 361.45
External printing and binding	7 500.00	7 760.48	(260.48)	10 000.00	11 136.82	(1 136.82)
General operating expenses	22 300.00	15 055.62	7 244.38	-	-	-
Communications	-	-	-	114 100.00	114 100.00	-
Hospitality	700.00	700.00	-	-	-	-
Miscellaneous supplies	-	-	-	6 600.00	6 525.13	74.87
Grants and contributions	400 000.00	400 000.00	-	-	-	-
Total	3 328 700.00	2 985 066.25	343 633.75	2 203 500.00	1 634 598.70	568 901.30



ANNEX II

Trust fund subaccount for technical assistance  
for the biennium 1978-1979

(United States dollars)

<u>Cash balance available on 1 January 1978</u>		392 440
<u>Income</u>		
Government contributions for general purposes	122 308	
Government contributions earmarked for Bangladesh	191 779	
Public donations	2 020	
Savings from earlier years	10 934	
Interest earned	96 987	
		<u>424 028</u>
		816 468
<u>LESS</u>		
<u>Expenditure and unliquidated obligations</u>		
Technical assistance projects	121 607	
Seminars	33 577	
Special projects	272 500	
Fellowships	41 211	
Associated expenditures	5 781	
		<u>474 676</u>
<u>Cash balance available on 31 December 1979</u>		<u><u>341,792</u></u>

ANNEX III

Trust fund subaccount for emergency assistance  
for the biennium 1978-1979

(United States dollars)

<u>Cash balance available on 1 January 1978</u>	5 393
<u>Income</u>	
Contributions from Governments	<u>12 275</u>
	17 668
<u>LESS</u>	
<u>Expenditure</u>	
Emergency grants	<u>16 545</u>
<u>Cash balance available on 31 December 1979</u>	<u>1 123</u>

## ANNEX IV

## Summary of international assistance provided for relief and other operations in which UNDRO was involved, 1978-1979

(United States dollars)

Month and year	Country	Event	UNDRO allotment	Donations through UNDRO	Donations reported to UNDRO			
					United Nations system	Governments	Inter-governmental organizations	Other
July 1978	Afghanistan	Floods	20 000		69 000	6 925 674		4 411
May 1979	Argentina	Floods	7 500		20 000			
1978	Bangladesh	Building of 200 rescue boats		285 461	1 376 000	50 000 a/		
April 1978	Benin	Fire	10 000		10 591	110 109		56 015
January 1979	Bolivia	Floods	15 000		5 206	2 731 191		53 631
Oct.- Nov. 1979	Colombia	Floods and earthquake	10 000		25 000	118 091		8 547
December 1979	Colombia	Earthquake	10 000			346 094		8 000
September 1979	Dominica	Hurricanes	10 000	42 096	43 500	413 536	1 415 000	642 582
September 1979	Dominican Republic	Hurricanes	10 000	19 959	352 700	5 622 638	1 000 000	5 363 242
October 1979	Egypt	Floods	5 000	5 000	574 450	52 969		395 994
1978	Ethiopia	Purchase of trucks for food transport			656 000	5 414 000	3 215 000	198 400
August 1979	Ethiopia	Floods	8 500					
March 1979	Fiji	Cyclone	10 000			643 342	12 005	106 093
August 1978	Gambia	Power failure	20 000		714 400	70 000		
October 1978	Guinea-Bissau	Locust plague	10 000		45 000			
September 1978	Honduras	Hurricane	20 000			260 000		
November 1979	Honduras	Floods	10 000					
June 1978	India	Floods	10 000		8 212 730	7 295 180	52 000	8 247 483
July 1979	Indonesia	Tidal wave	10 000					
February 1979	Indonesia	Floods and landslides	8 000		2 342 000 b/	25 000		5 000
February 1979	Indonesia	Volcanic eruption	10 000					
May 1979	Indonesia	Earthquake				11 111		
November 1979	Iran	Earthquake	20 000	126 421 c/				
June 1979	Jamaica	Floods	10 000	363 675	65 000	609 048	465 300	761 748
August 1978	Lao People's Democratic Republic	Floods	20 000	10 000	1 349 000	2 368 154		651 563
April 1978	Lebanon	Displaced persons	20 000					
May 1979	Malawi	Floods			20 000			
April 1978	Mozambique	Floods	20 000		6 212 000	3 172 231	420 000	445 773
January 1979	Mozambique	Cyclone	20 000		20 000	2 860 000	100 000	
July 1979	Nepal	Floods	1 462					
August 1978	Nepal	Floods	10 350					
1978	Nepal	Technical assistance in disaster prevention				30 000 d/		

ANNEX IV (continued)

Month and year	Country	Event	UNDRO allotment	Donations through UNDRO	Donations reported to UNDRO			
					United Nations system	Governments	Inter-governmental organizations	Other
December 1979	Nicaragua	Floods	2 400	22 156	19 295	448 649		20 000
March 1979	Paraguay	Floods	10 000		31 000	75 000		140 166
April 1978	Peru	Floods	20 000					
April 1979	Saint Vincent	Volcanic eruption	10 000		26 000	200 000		1 039 458
January 1979	Senegal	Floods	10 000					
February 1979	Solomon Islands	Cyclone	10 000		5 000	12 000		27 570
November 1978	Sri Lanka	Cyclone	20 000		3 500 946	2 260 893	32 000	2 045 559
July 1978	Sudan	Floods	20 000		2 478 800	21 342 127	686 100	2 470 665
August 1978	Thailand	Floods	20 000		706 000	394 910		244 470
February 1978	Tonga	Cyclone	10 000					
March 1979	Tunisia	Floods				41 765		
1978-1979	Turkey	Anti-malaria campaign					1 250 000	
September 1978	Viet Nam	Floods	20 000	267 910	285 984	2 286 522		750
November 1979	Yugoslavia	Floods	10 000		5 855 000	17 706 672	200 000	10 397 363
April 1979	Yugoslavia	Earthquake	20 000		1 519 000	8 065 644	390 000	3 178 719

Notes:

- a/ 200 boat engines were also provided by a donor Government.
- b/ WFP assistance for two simultaneous disasters.
- c/ Includes United Nations agency and government contributions.
- d/ Bilateral programme arranged by UNDRO; costs estimated.

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