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SPECIAL ECONOMIC, **HUMANITARIAN**  
AND DISASTER RELIEF  
ASSISTANCE

**Office of the United Nations Disaster Relief Co-ordinator**

**Report of the Secretary-General**

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## I. SUMMARY AND CONCLUSIONS

1. The **present report** on the work and activities of the Office of the United Nations Disaster Relief Co-ordinator (UNDRO) covers the biennium 1988-1989. It is **presented** to the General Assembly in **accordance** with Assembly resolutions **39/217** of 18 December 1984 and **40/436** of 17 December 1985, and **decision** 431447 of 20 December 1988, by which the Assembly endorsed Economic and Social Council resolution 1988151 of 26 July 1988.

2. UNDRO is the **specialised office** of the Secretary-General of the United Nations for all disaster-related matters. It must therefore act and be seen to act **on behalf** of the Secretary-General. According to its **founding** resolution, **UNDRO** is **also the focal point** in the United Nations system for disaster management. Its mandate **cover8** all aspects of disaster relief and disaster mitigation (prevention and preparedness).

3. **Sevgral** major developments affected the Office as a whole during the biennium. Firstly, UNDRO was heavily involved in the preparatory work for the proclamation of the **International Decade for Natural Disaster Reduction** for the years **1990-2000**. That activity will have a significant impact **on** the future work of UNDRO. The Decade is based on the premise **that** the human, economic and social consequences of natural hazards can be significantly reduced provided that appropriate **prevention** and preparedness measures are taken. As a result, disaster mitigation, **an** important and essential part of the **Office's** mandate since its inception, will undoubtedly **receive new** impetus in its activities. **Secondly**, there was a **significant strengthening** of the collaborative relationship **between** UNDRO and the United Nations Development Programme (UNDP), following the 1988 report of the joint **UNDP/UNDRO task force** to improve co-operation for disaster management. Several important **activities** were undertaken at the **headquarter8** level. In the field UNDRO further strengthened **its** relationship with the **UNDP** resident **representative**, who also has the mandate to **represent** UNDRO. Thirdly, as a result of recommendation6 made by the **Management Advisory Service** of the **United Nations**, **UNDRO's organizational** structure was adjusted to reflect new requirements. Further attention needs to be given **in** the near future, **however**, to the ever-growing needs of **UNDRO's** information system. In that **context**, the traditional division between natural and man-made disasters has increasingly **lost** relevance. Generally, and also for UNDRO in particular, the distinction between sudden disasters and slow onset emergencies has been gaining in **significance**.

4. During 1988-1989 the limited resources of the **Office** for disaster relief co-ordination were placed under great strain. Owing to the **increased** vulnerability of communities to natural hazards and other emergencies, the **number** of disasters **grew**, as well as the magnitude of their human, **economic** and social impact. During the biennium, chiefly as a result of the ever-expanding world-wide **communications** network, public interest in disasters and emergencies, as well **as in** the management of relief operations also increased significantly. These two factors constituted serious challenges to **UNDRO**; they were compounded in some cases by the intertwining of natural and man-made disasters. To respond with efficiency and **effectiveness** to those challenges, UNDRO developed **considerably** its emergency transport and

warehousing facility at Pisa, Italy; it also mounted large airlift and air-drop operations for **emergency** relief in Ethiopia and Mozambique: it strengthened its capacity to provide equipment and staffing for **emergency** relief units to be set up to assist the resident co-ordinators in Angola, Liberia, Mauritania, Mozambique and Senegal; it relied increasingly on its local project staff in Asia, Latin America and Africa for immediate relief activities; and it organized the third meeting of officials in charge of national emergency relief services. Together with URDP, UNDRO **undertook** an evaluation of its activities in selected countries, which showed the **sizeable** tasks lying ahead for strengthening co-ordination **of** the international response to disasters.

5. Activities related to disaster preparedness and prevention **continued** to grow **by** comparison to the previous biennium. There was growing evidence of the recognition by Governments of the benefits of mitigation activities, which should be integrated into development planning. The number **of** requests received **from** developing countries to strengthen their national emergency services is increasing steadily. Based on its experience UNDRO tries to limit discrete activities and stresses the need for projects of longer duration requiring sustained attention at the national or regional level to disaster mitigation issues. This is a laborious process, which weighs heavily on the limited resources of the Office for disaster mitigation. Much **more** needs to be done, especially in the context of the International Decade for Natural Disaster **Reduction**, and with additional resources.

6. The need for the specialized services **of** donor Governments, intergovernmental, non-governmental and United Nations organizations to receive immediately reliable and specific information from UNDRO for decision-making in emergencies was felt to be **more** compelling than ever before. **UNDRO's** capacity to manage data and its communication facilities had to be further improved during the biennium to allow the Office to fulfil its vital information role. Situation reports, which **may** reach 400 addressees around the world simultaneously, have been rationalized. **UNDRO's** information network, the United Nations International Emergency Network, completed its pilot phase at the end **of** the biennium. UNDRO planned an international **conference** on disaster telecommunications for early 1990. It also received valuable assistance **from** the United Nations Amateur Radio Club, especially for disasters **in** the Caribbean.

7. With regard to administration and finance, 40 per cent of UNDRO established posts (excluding project staff located in the field) are now financed by extrabudgetary funds. It is a source of satisfaction to the Office that it has been able to gain the confidence and the support of an increasing number of donor countries. The continuation of that support will be indispensable, in particular as UNDRO lost 6 **of** its 37 posts in the regular budget at the end of 1989. During the biennium, UNDRO received extrabudgetary contributions of about \$47 million, **most** of which was pledged for disaster relief assistance. The corresponding figure **for** the previous biennium was about \$22 million. There **may** be a need to review the amounts for emergency grants.

8. For the biennium 1990-1991, UNDRO intends to use its limited **financial and** human resources in the **most** efficient manner possible. It intends to strengthen

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further its relationship with UNDP, in particular in order to ensure that disaster management is adequately covered at the field level in disaster-prone countries. In that connection, it expects to make increasing use of emergency co-ordination units, which are immediately available to the resident co-ordinator, upon request. UNDRO also intends to develop further its information systems, its immediate response capacity for sudden disasters and its disaster mitigation activities. Special care will be given to co-operative relationships with non-governmental organizations, with aid agencies of donor Governments, as well as with United Nations specialized agencies such as the World Meteorological Organisation (WMO), the United Nations Educational, Scientific and Cultural Organisation (UNESCO) or the World Health Organisation (WHO)/Pan American Health Organisation (PAHO). At headquarters, the existing close working relationship with the Director-general for Development and International Economic Co-operation and with the Unit for Special Emergency Programmes will be strengthened further. It is unlikely that all the above activities can be met without an increase in the present level of available resources.

## II. MAJOR DEVELOPMENTS CONCERNING THE OFFICE AS A WHOLE

9. The biennium 1988-1989 saw a number of developments that are expected to have a significant impact on UNDRO work and performance in the years to come. These relate, *inter alia*, to co-operation between the Office and UNDP, an adjustment of UNDRO's organisational structure and, most importantly, the proclamation of the International Decade for Natural Disaster Reduction by the general Assembly in its resolution 44/236 of 22 December 1989. In addition UNDRO undertook new efforts to strengthen its co-operation with non-governmental organisations, scientific groups and universities and to improve its information management and office support systems.

### Co-operation with UNDP

10. New efforts to foster the collaborative relationship between UNDRO and UNDP are based on the final report of the joint UNDP/UNDRO task force to improve co-operation for disaster response, mitigation and rehabilitation (A/43/731). During the remainder of the biennium a sustained effort was made to implement key recommendations of that report. Activities were undertaken jointly in a spirit of co-operation and mutual support. In a letter to all resident representatives, the Administrator of UNDP requested field offices to give adequate attention to and participate fully in the important endeavour of joint UNDP/UNDRO activities in disaster management. UNDRO participated actively and made presentations at regional meetings of UNDP resident representatives.

11. As a result of the above initiatives, a number of resident co-ordinators have already established disaster management teams (previously referred to as emergency operations groups), which will play an important role in both disaster response and mitigation. At the headquarters level, work on an UNDRO/UNDP disaster management manual already started and should be ready for field testing in the course of 1990. The development of an ambitious joint training programme in disaster

management, with **UNDP** field offices as primary targets, also began. Subject to availability of funding, implementation will commence in 1990. During 1989 a joint evaluation of mitigation projects and disaster response in six countries was undertaken and the final report is already available. **1/** The ground was laid for a systematic **exchange** of staff between UNDR0 and UNDP, which will begin in 1990. Continued attention was given to UNDR0 briefings of resident representatives and to the training of UNDR0 staff in UNDP procedures.

#### Organizational adjustment of the Office

12. As a result of recommendations made by the Advisory Management Service in February 1989, the organizational structure of the Office was adjusted to reflect new requirements, identified by the Secretary-General in his report of 15 October 1987 (A/42/657) and endorsed by the General Assembly in its decision **42/433** of 11 December 1987. That adjustment regrouped UNDR0 activities relating to public information, communications and electronic data-processing support, and registry and reference library functions into the information and disaster data systems management. It relieved the two substantive branches, now renamed the Relief Co-ordination Branch and the Disaster Mitigation Branch, of general office support functions and enabled them to focus on their specific mandates.

13. However, the growing attention **of** the media and the general public for disaster information are posing new burdens on UNDR0, which is increasingly called upon to provide objective, reliable and immediate information on disasters. This calls for further development of UNDR0 information systems, which will have to address the different requirements for information of the general public, the disaster management community and government officials. During the biennium, it also became evident that one specific area of UNDR0 expertise within the United **Nations system** resided in its capacity for quick immediate response to all sorts **of** sudden emergencies, whether man-made or resulting from natural causes. Increasing use was made of emergency co-ordination units dispatched by UNDR0 to the field in a **matter** of hours or days after the occurrence of an emergency. In many cases, the provision of emergency relief items, through airlifts from the warehouse at **Pisa**, Italy, completed the Office's immediate response, demonstrating the trends in disaster relief that should orient UNDR0 activities and staffing in future years. As described in chapter VI, **UNDR0** had to expand its project staff in the field to cope with those developments.

#### International Decade for Natural Disaster Reduction

14. With its added emphasis on disaster mitigation, an essential part of **UNDR0's** mandate since its inception, the Decade is expected to have a profound **effect** on the work of the Office. **As** early as the preparatory **phase**, UNDR0 played a **major** role, as shown by its important substantive contribution and a number of organizational arrangements. The latter included the hosting of the temporary secretariat of the Decade by UNDR0 and the appointment of the Disaster Relief Co-ordinator as Vice-Chairman of the United Nations Steering Committee of the Decade and of the UNDR0 Director as Chairman of the Inter-Agency Working Group,

15, The General Assembly, in **its** proclamation **of the** Decade, **recognized** "the specific responsibilities and functions in the field **of** disaster prevention and preparedness" entrusted to UNDR0 (resolution **44/236**, preamble), and requested the Secretary-General **"to ensure** that adequate **means** are made available to the **Off**ice **of the** United Nations Disaster Relief Co-ordinator so that it may **diligently** discharge its specific role and responsibilities in the field **of** disaster mitigation and **response** in **conformity** with its mandate, **as contained in General Assembly resolution 2816 (XXVI) of 14 December 1971" (ibid., annex, para. 5).** It provided **kor** the establishment **of a** Decade secretariat **"in close association with"** UNDR0 . **As a result,** mitigation **activities,** following **the trend of recent years,** will have to be further expanded. UNDR0 will provide the secretariat **of the** Decade with **its** expertise, assisting, **inter alia,** in the identification **or** evaluation **of** projects **for** possible inclusion **in the programme** of the Decade. As appropriate, **UNDR0** will **execute projects and assist in fund-raising.** The secretariat will be **provided** with data base and library **services,** administrative **services,** including communications, data **processing** and registry **services,** as well as public information support.

#### **Other important activities**

16. In **response** to various **General Assembly** resolutions, **UNDR0** undertook effort<sup>6</sup> to strengthen **its** co-operation with non-governmental **organizations** while maintaining its good relations with other **organizations** of the United Nations **system** and with **donor** Governments. For example, in October 1989 **UNDR0** convened a third meeting **of officials in charge** of national emergency relief services to explore ways **of** further strengthening **international co-operation in responding to the needs of** disaster victims (see para.33). Early in 1990, UNDR0 scheduled a meeting **of non-governmental organizations** to discuss, **among other things,** the importance **of** increasing co-operation between non-governmental **organisations** and the Office in order to better achieve **their** common humanitarian objectives, **especially** in the field **of disaster** relief **and** mitigation. In **March** 1990, UNDR0 called an international **conference** on disaster communications au a **forum** for international dialogue on the **use of new** telecommunications technology **for disaster** mitigation. Representatives **of** concerned government agencies, international non-governmental **organizations working** in disaster management and **organizations** providing **new** technology and related services participated in the meeting, which also examined the role **of** amateur radios during emergencies. Reports are available on all three **meetings.**

17. **Close** co-operation was pursued with academic institutions. including the **Hazard** Reduction and Recovery **Centre,** College **of** Architecture, Texas A and M University (United States **of America**). **Some of the activities** are closely related to the goals **of** the International Decade for Natural Disaster Reduction. During the biennium, UNDR0 co-sponsored or participated actively in a **number of** international meetings and **conferences** on disaster relief **or disaster** mitigation, including the World **Bank's** Colloquium on Disasters, Sustainability and Development, held **at** Washington, D.C., in June 1989; **the** International **Wildland Fire** Conference, held at **Boston** in July 1989; the International Conference on **Emergency Health** Care Development, held at Washington, D.C., in August 1989; and the International Meeting on Catastrophes **and** Society, held **at** Madrid in October 1989.

### III. DISASTER RELIEF CO-ORDINATION

18. Disasters occasion an immediate outpouring of sympathy and assistance. The total flow of international **emergency assistance**, both in cash and in kind, as reported to and recorded by the Co-ordinator's Office during the biennium, amounted to almost \$1.6 billion, as against \$1.42 billion during the preceding biennium.

19. As a result, both donors and recipients of **emergency** assistance traditionally pay the greatest attention to international disaster relief co-ordination, which represents the **most** visible part of UNDR0 activities. Contributions channelled directly through DNDRO for disaster relief reached **\$40** million during 1988-1989, as compared to \$22 million for the preceding biennium.

20. The disaster situations in which DNDRO was involved in 1988 and 1989 ranged, as usual, from those of short duration to those requiring sustained attention over a longer period of time. They covered man-made as well as natural disasters. **Some** of **them were** of a sudden, immediate nature while others were slow-moving. Their total number amounted to 117 and they **were** addressed in **403 UNDR0** information/situation reports. Thus, on average, the Office was called upon to deal with a new emergency situation every week and, within the same period, it issued a minimum of four information/situation reports. In a large number of cases, the DNDRO representative in the field, who **is** also the **UNDP** resident representative, could provide the necessary assistance to the Government of the afflicted country without having to resort to staff support from **UNDR0**. In a number of cases, however, an UNDR0 delegate was called upon to assist the resident representative (**in** Ethiopia, Haiti, Jamaica, Nepal, Nicaragua and other countries). In some cases, DNDRO established emergency co-ordination units to assist the resident co-ordinator (Mauritania, Senegal and, more recently, Liberia).

21. The following examples show the variety of sudden, natural disasters covered by the Office: floods in the Sudan and Bangladesh and Paraguay; Hurricanes Gilbert, Joan and Hugo in the Caribbean and Latin America; Typhoon Ruby in the Philippines; earthquakes in Soviet Armenia, Algeria and Nepal; floods in Zambia, Democratic Yemen and Djibouti; the meningitis epidemic in Ethiopia; floods/landslides in China; floods in Brazil and Tunisia. Other **emergency** situations, whether slow-onset or man-made, included drought in Ethiopia; returnees in Mauritania and Senegal, displaced persons in Mali and Niger, and civil strife in Angola, Romania, Lebanon and Moxambique. Annex V to the present report contains summaries of **UNDR0's** major relief operations during the period under review.

22. The co-ordinated approach to disaster situations rested, as applicable, on the four basic DNDRO work elements: independent assessment of damage and needs, joint inter-agency **missions**, mobilization of disaster response and delivery of concerted **relief** programmes. The Office's main categories of partners in this effort continued to be the organizations of the United Nations system, **intergovernmental** organizations, Governments and non-governmental organizations.

23. **UNDR0's** foremost partner in the field is the **UNDP/UNDR0** resident representative. Especially in relation to disaster-prone countries" a

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supplementary **effort** was **made** during the biennium to maintain and strengthen the working relationship with the resident representative. His information provides the basic input for UNDRO information **and** situation reports, while his role in local consultative mechanisms **is** crucial. In this respect, it is important to **note** that, **in a number of** disaster-prone countries, **disaster** management teams **were** constituted under the chairmanship of the resident **co-ordinator** and **composed of** all United Nations organisations in the country. UNDRO usually works **very** closely with the United Nations Children's **Fund** (UNICEF) and the World Food **Programme** (WFP) in all disaster situations; **it** also has a close relationship with the Food and Agriculture **Organization** of the United Nations (FAO), **WHO** and the United Nations **High** Commissioner for Refugees (**UNHCR**), which also play an important role in emergencies. In the Caribbean region, the Pan-Caribbean Disaster Preparedness and Prevention Project did much to **raise** public **awareness and** preparedness for disasters. A great number **of** seminars and **workshops were organized for very different audiences;** they resulted **in improvements** for **contingency arrangements** for disasters. The Project also contributed significantly to relief co-ordination in the region.

24. Inter-agency **missions have** continued to be a most valuable tool for **preparing a joint** approach towards the **assessment** of multisectoral **and** large-scale emergency **needs** and their presentation to the international **donor** community. UNDRO organiaed or participated in **nine such** missions, mostly in collaboration with the following organisations: UNDP, **UNHCR**, UNICEF, **WFP**, **FAO**, **WHO**, the United Nations **Assistance** for the Reconstruction **and** Development of Lebanon (**UNARDOL**) and the United Nations Interim Force in Lebanon (UNIFIL). For example, the UNDRO Co-ordinator **was** designated the secretary-General's Special Representative when large-scale flooding occurred in Bangladesh in September 1988. UNICEF, UNDP, **WFP**, **FAO** and **WHO** co-operated **with UNDRO in the preparation of** a comprehensive **report** on both emergency and rehabilitation **needs;** these **were** presented at a **special** donor meeting organized by UNDRO at United Nations Headquarters in New York in November 1988. UNDRO, together with UNICEF, WFP, **PAO**, **WHO** and **UNARDOL** and **with UNRCR and UNIFIL** as observers, formulated **recommendations to the Secretary-General** for meeting the needs **of** the populations **moat** affected by the conflict in Lebanon. With **WHO** and the League of Red Cross and **Red** Crescent Societies, **an evaluation of international relief assistance was undertaken** in the Soviet **Socialist** Republic **of** Armenia (January 1989). The evaluation examined the types **of** response and quantities **of** aid provided to the **victims** of the earthquake **of** December 1988, pointed to a **number of** lessons to be learned and reviewed **current** needs and future plans with relief organizations and the authorities.

25. A valuable forum **for** presenting to the international donor community the emergency appeals **of** countries in **need of** assistance is the donor meetings. UNDRO organiaed or participated in such meetings **for Mozambique** (Maputo, April 1988), Angola (Geneva, May 1988), Bangladesh (United Nations Headquarters, November 1988), **Mozambique** (United Nations Headquarters, April 1989) and again Angola (**Luanda**, September 1989). In addition to these donor meetings, **UNDRO's** regular information meetings were used for the purpose **of** offering representatives **of** Governments, **intergovernmental and** non-governmental organisations providing **emergency** assistance

the opportunity to gather and **exchange** information on **specific** disaster situations and on their **financing**. Cases in point are provided by the meeting on Lebanon (Geneva, July 1988) or Hurricane Hugo (New York, October 1989).

26. The capacity of **UNDRO** to co-operate in an expeditious manner with its partners in the United Nations system to meet a **specific** need for emergency assistance **immediately** and without administrative delay was exemplified by **UNDRO's** appealing for and obtaining within 12 hours the funds required to respond to the **Government of Malawi's request to WHO for drugs to combat a meningitis outbreak in October 1989**. Whenever required, **UNDRO** delegates continued to leave by the first available flight for disaster-stricken areas, where they reinforced local emergency management through their expertise in assessment, project formulation and contribution recording. Thirty-eight such missions were undertaken during the biennium.

27. Similar flexibility and operational expediency governed **UNDRO's** air transport operations, whether undertaken from Pisa or in-country, for example in Ethiopia and Mozambique. From the **UNDRO depot at Pisa** 68 shipments carrying a total relief cargo of 1,334.9 metric tons were dispatched in 1988 and 674.3 metric tons in 1989 to disaster victims in 19 countries in 1988 and 15 countries in 1989. These supplies consisted mostly of shelter material, survival items, electric generators, emergency rations, medical supplies and water purification and sanitation equipment.

28. During the biennium the **UNDRO warehouse at Pisa** grew in importance thanks to the addition of relief goods donated by the Government of Japan. The donations of four Governments (Finland, Italy, Japan and Norway) permitted **UNDRO** to respond more frequently to a disaster-stricken country's appeal for basic relief supplies, especially in situations where an urgent need could not be met as quickly by another United Nations agency, an intergovernmental or governmental service, or a non-governmental organization. Emergency equipment from the Soviet Union will also be warehoused at Pisa in the near future. Thus the **UNDRO warehouse** fills precise, limited gaps in the provision of assistance in the very first phase of various types of emergencies. The call upon this service increased to such a degree that the extension of **UNDRO's** warehousing capacity had to be envisaged and the Office received an offer from the Government of Italy for the construction of a second facility at Rome.

29. In addition to airborne transport of relief supplies from its warehouse at Pisa, **UNDRO organized** a large-scale airlift operation in Ethiopia, which lasted more than a year, employed up to 40 aircraft at extremely competitive cost and was financed by 15 Governments and organizations. Some 115,000 metric tons of emergency food and other relief items were transported to the regions of Tigre and Eritrea (see annex V). This airlift also helped **UNHCR** in providing assistance to large numbers of Somali and Sudanese refugees.

30. Throughout the biennium and whenever requested by donors to do so, the Office continued to handle extrabudgetary cash contributions entrusted to it, to purchase (usually locally) emergency relief supplies or services, to establish or reinforce

**disaster-management-related** structures in the recipient country and to organize transport and distribution of relief goods to their beneficiaries. During the biennium, such contributions reached their highest level ever, rising to a **total** Of \$38 million, mostly for URDRO programmes in Ethiopia, Lebanon and Mozambique. UNDR0 programme support costs are charged to those contributions at a reduced rate of only 3 per cent.

31. For each year of the biennium UNDR0 had at its disposal \$360,000 to provide **small** but immediate **emergency cash grants** in cases of sudden disasters. It is important to envisage an increase in the total amount allotted in the budget for such activities. URDRO could **meet** only 36 of the 47 requests made by Governments of afflicted countries. As a **matter** of principle, they were granted only to countries whose Governments asked URDRO to launch an appeal for international **emergency** assistance (see annex IV). As in the past, grants were in **most cases channelled** through the **UNDP/UNDR0** resident representatives to enable them, in the very first days of the **emergency**, to satisfy **directly some** of the **most urgent** needs of clearly defined groups of beneficiaries or to facilitate the development of concerted relief programmes by using them as "seed **money**".

32. Such a course of action is best illustrated by the concerted relief **programme** undertaken following the earthquake that occurred in eastern Nepal on 21 August 1988. The very day **the** Government requested international assistance, the Resident Representative used an **UNDR0** emergency grant to set in motion a search-and-rescue operation by air and asked the Co-ordinator to launch an international appeal for contributions in cash only. The appeal was fully subscribed in **a matter** of days. Funds exceeding \$1 million **were** used by UNDR0 to finance helicopter services to evacuate **many** wounded **from** inaccessible mountainous areas and to purchase plastic sheeting and rice. The Resident Representative's highly important co-ordinating and catalytic functions, together with the assessment and monitoring support services provided by local United Nations and non-governmental organization representatives, unquestionably reinforced the Government's successful handling of the emergency.

33. The third meeting of heads of national **emergency** relief services was organized in October 1989. **Some** 18 governmental emergency services from donor countries as well as **the** European Community (**EEC**) and appropriate United Nations organizations participated in a biennial review of **UNDR0's modus operandi** and ways and means of further improving humanitarian relief operations. They, in particular, examined the findings included in the UNDR0 case report on international relief assistance after the earthquake of 7 December **1988** in the Soviet **Socialist** Republic of Armenia. The **following** specific **recommendations** are highlighted as they call for particular action to be taken by **UNDR0**, subject to the **availability** of resources:

(a) **Importance of unified appeal and concerted relief programmes**

In view of the large **number** of appeals launched by the United Nations and **other** organizations, the **importance** of unified appeals and concerted relief programmes, as laid down in General Assembly resolution **36/225 of** 17 December 1981, was reiterated.

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**(b) Co-operation with non-governmental organisations**

Given the important role of indigenous as well as foreign non-governmental organisations in disaster areas, UNDR0 should be provided with governmental advice on their operational skills in order to facilitate its co-ordinating task. At headquarters level, UNDR0 co-operation with non-governmental organizations should be pursued (see para. 25).

**(c) Improvement of communications facilities at UNDR0 headquarters and of communications equipment for UNDR0 field teams**

In response to this recommendation an international conference on telecommunications for disaster management was held in March 1990 at UNDR0 headquarters (see para. 25). Studies were undertaken to improve UNDR0's own communication facilities. Their implementation will depend on the availability of funding.

**(d) Close monitoring of emergency needs for dissemination of the latest data through UNDR0 situation reports**

The meeting confirmed that donor relief services continued to consider UNDR0's situation reports as an essential source of information on relief needs and response. The Office was encouraged to strengthen further both the content and timely transmission of the reports by preparing a publication on criteria for the assessment of damage and relief needs, by exploring new and more economical ways of transmission and by including clearer indications of when notified needs have been fully met or, conversely, have increased.

**(e) After-the-event evaluations of the impact of emergency assistance**

The various evaluations of disaster relief operations and mitigation projects that were undertaken during the biennium were taken note of, including those undertaken with the assistance of UNDP. Provided they were undertaken as quickly as possible after the event, the need for their continuation was underlined as their results constituted valuable inputs for future operations.

**IV. DISASTER MITIGATION (PREVENTION AND PREPAREDNESS)**

34. Disaster mitigation comprises all those activities taken prior to the occurrence of a potential disaster in order to reduce its impact. Activities fall into two broad categories. Firstly, there are those of a technical and preventive nature, involving the scientific and engineering aspects of disaster reduction and related legislation. This includes the estimation of the frequency and magnitude of future hazards, the delineation of high-risk areas, the identification of restrictions that should be placed on land use and urban development in such areas and the reinforcement of structures to resist the largest hazard that can reasonably be expected. The second category is that of logistical planning or preparedness activities, involving the preparation of plans for alert and

evacuation in the face of imminent danger, as well as for post-disaster rescue and the provision **of** food and shelter for the victims. Related aspects of operational planning include establishing the criteria for taking the decisions to implement the various elements of the plan, the training **of** local officials and education of the population in high-risk areas.

35. The role of UNDRO is to help identify the most probable future disaster scenarios, to advise on the actions necessary to establish the precise nature of hazards and **risks**, to assist in identifying the national authorities capable of contributing to disaster mitigation activities, to determine **those** activities for which external assistance is required, to establish a suitable work programme, to prepare the corresponding project proposal, submit requests for funding assistance **and** assist with project implementation. Disaster mitigation techniques **have** in recent years become better defined, more comprehensive and therefore more widely applicable. DNDRO has contributed to the development and refinement of those techniques as well **as** to increasing awareness **of** them by **preparing** manuals, **organizing** training seminars **and** through technical co-operation projects, both regional and national.

36. Comprehensive disaster mitigation programmes, as recommended by **UNDRO** and implemented with UNDRO assistance in a number of countries, involve a five-step sequence **of** activities, namely:

(a) To determine the hazards (what types and magnitudes of disaster-causing natural phenomena can be expected, where and at what intervals in the future);

(b) To assess the vulnerability **of** people and property to such hazards:

**(c)** To identify and implement the most cost-effective measures for reducing vulnerability;

(d) To develop logistical plans for responding to imminent threats of disaster and providing post-disaster assistance:

(e) To ensure that those plans are properly understood by local officials and the population in general in the most disaster-prone areas.

The cost of such activities **is** very modest in relation to the losses that occur in disasters and the systematic **application** of disaster mitigation measures can typically reduce life loss **by** 50 per cent and property losses by **10-20** per cent. **UNDRO's** concern **is** to ensure that developing countries are fully aware of disaster risks and take advantage of the most effective techniques for disaster mitigation.

37. Since the biennium 1988-1989 coincided with the preparation phase for the International Decade for Natural Disaster Reduction, the period was one of considerably increased world-wide awareness of the benefits of disaster preparedness and prevention. The **number** and magnitude of requests for assistance addressed to UNDRO increased accordingly. It has long been recognized by UNDRO that **in** order to develop the Office **to its full capacity for disaster mitigation a**

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long-term **commitment** is required. Particular attention **is** also being paid to **the numerous linkages** between disaster mitigation and the overall development **process**. This **has found its expression in** the co-operation developed with **UNDP**, which **has** **Wrongly supported** this concept (see chap. II). **As a matter of policy**, **UNDRO** **has** therefore encouraged long-duration national engagements and these have been achieved through five regional and **numerous** national projects, in which a sequence of technical co-operation activities **was** maintained throughout the greater part of the biennium. A **review** of the main activities during the biennium is **provided in paragraphs 39 and 40 and annex VI**.

38. **UNDRO intends to** develop further **its** mitigation **activities** along the lines **described** above. Particular attention will **be** devoted to the **strengthening of existing relations with the disaster management** community and **the** United Nations bodies such **as** **WMO**, **UNESCO** or **WHO/PAHO** in order to maintain a truly multisectoral approach to disaster mitigation.

### **Regional projects**

39. Regional projects have included the following:

(a) **The Asian Disaster Preparedness Centre**. The Centre was established in 1986 at the Asian Institute of Technology at Bangkok, in response to requests from Asian-Pacific countries for international assistance in **strengthening their disaster** mitigation **activities**. It **offers** regular training **courses and workshops in general disaster management, cyclone preparedness, seismic disaster** mitigation and information and computer application **services** covering the whole **spectrum of disaster** reduction and management. Its **courses are in** strong demand and **UNDRO** continued to **encourage and sponsor** participants from a wide range of **Asian and Pacific** countries. **Four courses on disaster management, each of six weeks' duration, and one on cyclone warning response were given during the biennium. A total of 240 participants from 22 countries attended. In addition, support to national programmes was provided to Bangladesh, Indonesia, Nepal, the Philippines, Sri Lanka and Viet Nam.**

(b) **The Caribbean**. The **UNDRO Pan-Caribbean Disaster Preparedness and Prevention Project** is based in Antigua and **serves** 29 participating **States** and territories. It is implemented in collaboration with the Pan-American Health **Organization (WHO/PAHO)** and the League of **Red Cross** and Red Crescent Societies. The Project **has strengthened its ties** with institutions active in emergency and disaster-related areas. **Visits were** made to most of the participating States/territories and regular contact was maintained with all the national **disaster** co-ordinators. Technical **assistance** provided by the Project to a number of **States** facilitated improvements in the national disaster **plans** and led to the **allocation of increased resources to the national emergency system**. In Trinidad, the National **Emergency Management Agency** became functional and in the **British Virgin Islands and Bermuda** the territorial Government **established** full-time national **disaster** co-ordinators. The management of the emergency caused by Hurricane Hugo (September 1989) benefited from this **earlier strengthening of the local emergency system**. The Project continued its collaboration with **other**

agencies executing complementary programmes relating to disaster and emergency management, including the International Maritime Organization (IMO), the United Nations Environment Programme (UNEP), the Caribbean Council of Engineering Organizations and the University of the West Indies. Furthermore, close liaison was maintained with the Caribbean Community Secretariat, with the Organisation of Eastern Caribbean States, and with UNDP and other United Nations bodies.

(0) Latin America. A project for disaster mitigation in Ecuador and neighbouring countries addressed the subject of hazard mapping, risk assessment, emergency planning and public information, including simulation exercises for volcanic eruption and tsunamis, and also earthquake hazard assessment and the upgrading of emergency telecommunications. Workshops were held to demonstrate new methods for volcanic hazard mapping, for the identification of active earthquake source zones, the evaluation of mudflow hazards and the preparation of tsunami hazard maps and emergency plans. Each of these workshops was attended by participants from numerous other Andean and Central American countries confronted by these kinds of disaster. The workshops provided a good opportunity for exchange of experiences and updating of disaster mitigation techniques.

(d) The Mediterranean. The co-operative project for seismic risk reduction in the Mediterranean region is intended to address the problems of earthquake disaster management from a user's point of view. The project contains three broad themes: earthquake hazard assessment, vulnerability analysis and reducing losses caused by earthquakes in the future. The project emphasizes land use planning, basic engineering issues, and disaster preparedness. Sixteen countries of the Mediterranean Basin are participating actively in the project, which is expected to last two years. The first expert group meeting was held to review project objectives and strategy.

(e) The South Pacific. Initial funding was received and plans made to carry out in-country need identification surveys in order to develop a work programme for disaster mitigation in the south-west Pacific countries, with special attention to cyclones.

(f) Africa. Within the framework of an UNDR0/UNDP disaster mitigation programme for the Southern African region, a workshop was organized in Zimbabwe from 20 to 25 February 1989. Officials from various ministries, with the assistance of UNDR0, United Nations organizations and non-governmental organizations, formulated recommendations for the establishment of a national disaster preparedness and relief committee, considered the drafting of a national plan, and identified training needs at various levels. Similar seminars were held in Malawi in October 1988 and the United Republic of Tanzania in April 1989. UNDR0 ensured the follow-up to the meetings by sending consultants to assist in the implementation of their recommendations.

As part of a programme of co-operation with the Organization of African Unity (OAU), UNDR0 provided material for incorporation in a set of guidelines for a plan of action to mitigate disasters in Africa, including extensive comments on the document and participation in an inter-agency meeting in October 1989 at which the plan was discussed.

### **National projects**

**40.** In addition to the regional activities listed above UNDR0 co-ordinated **numerous single-country activities**. Details of UNDR0 projects undertaken during the biennium are given in annex VI for the following 15 countries: **Algeria, Bangladesh, Colombia, Djibouti, Egypt, Haiti, Indonesia, Madagascar, Maldives, Mauritius, Nepal, Philippines, Saudi Arabia, the Union of Soviet Socialist Republics and Zimbabwe**. The programme for Colombia provides an illustration of the type of activities **promoted and supported by UNDR0**. In that country, a broad-spectrum disaster mitigation programme was initiated in 1966 and has included an integrated sequence of pilot activities in different high-risk locations, one each for earthquakes, **eruptions, floods, landslides, technological hazards and tsunamis**. The programme is managed by the National Disaster Office and activities are designed to **stimulate the fullest possible participation of local technical and administrative services**. The main emphasis was put on **hazard evaluation and mapping, design of monitoring and alert systems, study of vulnerability of buildings, industrial plants and public utilities, revision of emergency plans and training activities**. UNDR0 assisted national authorities in coping with an eruption of Galeras Volcano.

### **Seminars**

**41.** During the biennium, UNDR0 **organized or contributed to various single or multi-country disaster mitigation seminars and training activities**.

**42.** In addition to the workshops and seminars for the Latin American and African regions already described in paragraphs 6 (c) and 6 (f), two international training seminars have been held in the Soviet Union, the first on engineering aspects of **earthquake mitigation (Dushanbe, October 1988)**, and the second on **lessons learned from management of recent earthquakes with consequential landslides and mudflows (Moscow, October 1989)**. Each seminar was **organized for 25 participants from disaster-prone countries**. **Presentations were made by 11 international experts and by 10 lecturers from the Soviet Academy of Sciences, the Civil Defence and the State Committee on Construction**.

## **v. DISASTER INFORMATION**

**43.** The overall objective of UNDR0 activities in disaster information is to increase the effectiveness and efficiency of disaster management world wide by **identifying, acquiring and disseminating information that is useful to disaster managers, to policy and decision makers and, to a limited extent, to the general public**. With respect to relief co-ordination, this means **ensuring that the available information on a disaster situation, on the extent of damage and on the related response can be analysed, collated and exchanged internationally and sufficiently rapidly to reduce to a minimum waste and duplication and encourage adequate response to unmet needs**. With respect to disaster mitigation, the availability of information on hazards world wide, respective national levels of disaster vulnerabilities and risk, and capacities to plan, prepare for and respond to disasters is essential for effective programmes of technical co-operation.

Information **on** disaster management policies, techniques, **practices** and technical **support** tools is the basis **for** the fruitful transfer of knowledge and technology. The importance **of** disaster information was highlighted **during** the preparations for the International Decade **on** Natural Disaster Reduction.

44. During the period under review, emphasis was put on overall improvement **of** **UNDRO's** electronic management **of** information at a time when **increases in staff** were not possible **and** **UNDRO was called on to expand its activity**. Sustained attention was given to equipment **procurement and** installation, system development **and** staff training aimed **at extending the Office's capacity to** benefit **from computer-based** facilities in routine functions (**e.g.** correspondence, reports, telex **and** **electronic** mail communications, **data** management, information **networking, desktop** publishing, etc.). Financial and human constraints have imposed **a gradual** implementation of **the system**. **However**, the obviously increased productivity, both in quantity and quality, **demonstrates that** progress has been made and this encourages further **efforts** in this respect.

45. **UNDRO's** multiple distribution telex **system was** used regularly to disseminate disaster-related information and situation reports **world-wide as shown in table 1**. **In order to produce** the necessary information, UNDRO works in close **association** with other United Nations **agencies**; the role **of** the UNDP resident representative **at the field level** is of primary importance. During the **biennium** there was a 100 per cent **increase in the number of correspondents receiving the UNDRO situation reports**, which are now simultaneously and **electronically** dispatched at the time they **are** issued to **over** 400 disaster managers from **Governments, United Nations** organizations and non-governmental **organisations** all **around the world, as well as to the press**. UNDRO is **looking forward to further enhancing its capacity to** disseminate information **"at the earliest"**, a time concept that has tremendously **changed** in recent years, with the widespread use of new technologies such as facsimile or electronic mail. A study has been initiated to determine the most economical and practical means **of** transmission.

Table 1. **Statistics on telecommunications**

	Biennium 1966-1987	Biennium 1988-1989	1988	1989
Number of telex messages transmitted	72 378	96 251	48 529	47 722
<b>Costs</b> (United States dollars)	312 166	304 608	189 227	115 381
Transmission <b>time</b> (hours)	9 625	12 585	8 310	4 275
Costs per hour (United States dollars)	32.43	24.20	22.77	26.99

46. **UNDRO's** electronic information network, previously called UNDRONET, was renamed in 1988 the United Nations International Emergency Network (UNIENET) in order to reflect the collaborative effort in the United Nations system. This collaborative effort is characterized by contributions and exchange **of** information between its members, who are represented on a UNIENET advisory board, which meets periodically at Geneva to ensure that the system attains its objectives. UNIENET serves to increase the capacity of organizations and individuals globally concerned with disaster management, to obtain an exchange of information of common interest, rapidly, reliably and economically. In addition it should stimulate the development **of** relationships between individuals and organizations involved in disaster management and facilitate co-ordination in areas of common activities. The potential of UNIENET is particularly relevant to efforts at fostering international co-operation on exchange in disaster mitigation as foreseen in the strategies **for** the International Decade for Natural Disaster Reduction.

47. During the reporting period, UNIENET was operated as a pilot project. Some 150 users subscribed to the system, representing 10 United Nations organizations and 60 other entities (governmental and non-governmental organizations, universities and research centres, private voluntary agencies and individuals) in 30 countries. At the end of the pilot development phase **of** this new technology-based information tool, most users were found to be from Europe and North America. Asia, Africa, Central and South America are also represented, however, and efforts will be pursued to ensure a broader geographical coverage by offering special assistance to developing countries.

48. The UNDRO reference library is a fully computerized and constantly growing bibliographic data base comprising, at the end of 1989, a collection of 3,500 specialized publications. It continued to provide services to governmental and non-governmental disaster management organizations and inside and outside researchers and specialists; a bibliographic list of the library's new acquisitions was made available regularly in hard copy as well as through UNIENET. During the biennium the reference library received 140 largely specialized newsletters, journals, bulletins, magazines and reviews on a regular basis, and these are circulated to UNDRO staff members and experts in accordance with their fields of interest and needs.

49. The demand for UNDRO publications has continued steadily even though several disaster mitigation volumes are now offered as sales publications. They are being used extensively in specialized training courses and seminars for disaster managers, notably in Asia (through the Asian Disaster Preparedness Centre of the Asian Institute **of** Technology) and in Latin America and the Caribbean. Several reports on specific disaster situations were also widely disseminated, notably on the 1988 earthquake in Armenia and the 1989 Hurricane **Huq** in the Caribbean. The production of the bimonthly UNDRO News was greatly enhanced with the acquisition **of** cast-effective desktop publishing facilities. Within the framework **of** the close association between **UNDRO** and the secretariat of the International Decade for Natural Disaster Reduction, UNDRO News devoted a special section to news of the Decade, starting in September 1989.

50. In the course of 1989, the second edition of the bilingual (English and French) directory of training institutions for **disaster management was published in two volumes**. Volume I includes more than a hundred national, regional and **international institutions**, while volume II provides information on training activities **in the field of disaster management organized** in the framework of the United Nations system, the League of Red Cross and Red Crescent Societies and **borne intergovernmental bodies**. The list of national officials responsible for the management of disasters, emergency plans and disaster legislations, compiled for the first time in 1987, was updated and published as a directory in 1988 and 1989. The directory of non-governmental organizations active in **the field of disaster relief and rehabilitation in Mozambique** compiled in 1987 was revised and published in 1988 and 1989.

51. In 1989 work was completed on two **important** substantive volumes, entitled **Mitigating Natural Disasters** and **The Mitigation of Mudflows**. **w i l l b e** published in 1990 and will be added to the **existing** list of **technical** publications of UNDRO.

52. Mention must also be made of the increasing use by UNDRO during disasters of the services of the **Amateur Radio Club of the United Nations Staff Recreation Council**. **Essential** information was provided by the Radio Club on the **emergency** situation following **Hurricanes Gilbert, Joan and Hugo**, which **struck** the Caribbean and Central America. The role of amateur radios during disasters was reviewed at the **recent** International **Conference on Disaster Communications**, **organized** by UNDRO in March 1990.

## VI. ADMINISTRATION AND FINANCE

53. The **organizational** structure of UNDRO was adjusted in **accordance** with the recommendations made by the Management Advisory Service in February 1989. The **changes** will be reflected in a Secretary-General's Bulletin, which is being **finalized**.

54. The staffing table of UNDRO for 1988-1989 appears in annex II to the present report. At the beginning of 1988, a total of 36 established posts were **financed from the** regular budget and 20 established posts were financed from the **UNDRO trust fund for the strengthening of the Office and from programme support funds**. Pursuant to resolution 42/213 of 21 December 1987, by which the General Assembly decided upon **the reduction of posts funded from the United Nations regular budget**, the regular budget **staffing table of** UNDRO was reduced from 36 to 31 as at 1 January 1990. In addition one **non-recurrent** temporary P-5 post in the regular budget was **not** extended beyond 31 December 1989. Owing to the **need** to make appropriate administrative arrangements, these **cuts** already had an effect during the biennium 1988-1989.

55. To respond with efficiency to requests from Member States for specific **assistance**, and to discharge its mandated responsibilities, UNDRO made great use during the biennium of flexible arrangements **that enabled it** to have, in addition to **established** posts, both project staff in the field, **as** well as consultants on

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specific missions. During the biennium, UNDRO had 9 Professional and 40 General Service project staff in Antigua (where the Pan-Caribbean Disaster Preparedness and Prevention Project is located), Ethiopia, Indonesia, Italy (Pisa **warehouse**), Lebanon, Moaambique and Nepal. UNDRO also contracted 88 consultancies **for** specific missions either in the relief co-ordination field or in the disaster mitigation area. In addition, **more** than 30 experts were recruited at the field level. It should also be noted that UNDRO has stand-by arrangements with a number **of** Governments, including those of Switzerland and the United Kingdom, whereby these countries provide in **a matter of hours** after a disaster the necessary expert for a field mission of UNDRO, should such a mission be required.

56. As a result **of** the flexible policy described in paragraph 55, UNDRO was able to respond to the **most** pressing needs of Member States. However, the growing disproportion between its headquarters staff and its temporary staff in the field is a cause for concern, since backstopping of projects and operations cannot be performed in the best conditions. In this connection, the Committee for Programme and Co-ordination noted at its twenty-ninth session "recent decisions of the General Assembly confirming that the mandate, identity and location of **UNDRO** would be maintained, and recommended that, in future, efforts should be made to avoid any imbalance between mandated activities and the availability of **resources** for their implementation\*". **2/**

57. **For** the biennium 1988-1989, the General Assembly appropriated an amount of **\$7,283,600** for UNDRO. Annex I to the present report shows the regular budgets **for** the three bienniums 1984-1985, 1986-1987 and 1988-1989, together with the evolution **of** appropriations and corresponding expenditures. The growth rate from 1986-1987 to 1988-1989 was minus 0.1 per cent taking into account the normal revaluation and inflation rates. Figures are also provided in annex III for extrabudgetary contributions to URDRO during the corresponding period.

58. The appropriation from the United Nations regular budget for UNDRO is used to cover approximately two thirds of **UNDRO's** total requirements. Approximately 80 per cent of the appropriation is normally devoted to personnel costs. This provides **for** about 60 per cent of **UNDRO's** regular staff, the balance being funded **from** extrabudgetary resources. The other appropriations in the budget, such as the provision for consultants or non-recurrent resources **for** furniture and equipment, cover only a small part of the Office's requirements in those areas. The remaining needs have to be **met** from extrabudgetary funds. The provision under "emergency grants" puts funds from the regular budget at the disposal of the United Nations Disaster Relief Co-ordinator for immediate allocation to a disaster-stricken country for emergency relief activities.

59. In so far as extrabudgetary resources are concerned, all voluntary contributions to UNDRO are credited to one of the accounts below. It is worth mentioning, in that respect, that in-kind contributions received by UNDRO are not included in the figures.

**Table 2. Trust fund for the strengthening of UNDRO a/**

Biennium	Income	Expenditure
(In United States dollars)		
1984-1985	1 729 019	1 505 412
1986-1987	2 316 462	2 188 308
1988-1989	2 348 576	1 588 740

a/ Established by the General Assembly in its resolution 3243 (XXIX) of 29 November 1974.

**Table 3. Trust fund for disaster relief a/**

(i) Sub-account for earmarked disaster relief assistance: b/

Biennium	Income	Expenditure
(In United States dollars)		
1984-1985	15 993 065	14 773 093
1986-1987	15 331 671	14 804 631
1988-1989	40 710 360	36 203 067 g/

(ii) Sub-account for unearmarked disaster relief assistance:

Biennium	Income	Expenditure
(In United States dollars)		
1984-1985	282 823	95 096
1986-1987	130 171	369 700
1988-1989	1 790 671	198 709 d/

a/ Established by the General Assembly in its resolution 2816 (XXVI) of 14 December 1971.

b/ Barmarked contributions channelled through UNDRO.

g/ Effective 1 January 1988, the UNDRO Pisa activities and accounts have been transferred from the technical co-operation trust fund to the trust fund sub-account for earmarked disaster relief assistance.

d/ Effective 1 January 1988, the interest earned on the funds of the sub-account for earmarked disaster relief assistance is credited to the sub-account for unearmarked disaster relief assistance.

**Table 4. Trust fund for UNDRO technical co-operation activities a/**

Biennium	Income	Expenditure
(In United States dollars)		
1984-1985	1 617 693	1 826 368
1986-1987	9 987 984	6 024 010
1988-1989	3 835 156	2 961 326 b/

a/ Established by the General Assembly in its resolution 3532 (XXX) of 17 December 1975.

b/ See footnote g/ to table 3.

This account includes income and expenditures for four separate entities: (i) the sub-account for disaster mitigation; (ii) the sub-account for the Pan-Caribbean Disaster Preparedness and Prevention Project; (iii) the sub-account for UNDRO/UNEP projects) and (iv) the sub-account for the UNDRO fellowship programme.

**Table 5. Trust fund for the preparation of the International Decade for Natural Disaster Reduction**

Biennium	Income	Expenditure
(In United States dollars)		
1988-1989	212 428	144 822

**Table 6. Account for programme support (includes programme support costs for UNDRO and the International Decade for Natural Disaster Reduction) a/**

Biennium	Income	Expenditure
(In United States dollars)		
1988-1989	1 691 919	1 012 097

a/ Established as at 1 January 1988.

Table 7. Sasakawa/UNDRO disaster prevention award endowment fund a/

Biennium	Income	Expenditure
(In United States dollars)		
1986-1987	94 880	57 957
1988-1989	182 536	140 642

a/ Created in June 1986.

60. As can be seen above, there has been a significant increase in extrabudgetary contributions to URDRO, in particular for earmarked disaster assistance. It is a source of satisfaction to the Office that it has been able to gain the confidence and support of an increasing number of donor countries. However, it is a matter of concern that more than one third of URDRO staffing and associate costs (i.e. travel and communications) need to be met by voluntary contributions, which URDRO has the responsibility to secure each year. This refers in particular to the need to have in URDRO headquarters the necessary backstopping capacity for the Office's ever-growing activities in the field. In this respect, it is interesting to note that the opening balance for the trust fund for the strengthening of URDRO mounted to \$1,894,638 as at 1 January 1990, as compared to \$1,134,802 as at 1 January 1988. Any demand for an increase in the present level of activities would, however, entail expenditure in excess of the level of the Fund.

#### Notes

1/ UNDP/UNDRO co-operation on evaluation, UNDP, December 1989.

2/ Official Records of the General Assembly, forty-fourth Session, Supplement No. 16 (A/44/16), para. 223.

ANNEX I

Regular budget: comparisons of the budget appropriations and expenses for the Office of the United Nations Disaster Relief Co-ordinator (including the New York office) during the bienniums 1984-1985, 1986-1987 and 1988-1989, by object of expenditure

(In thousands of United States dollars)

Object of expenditure	1984-1985		1986-1987		1988-1989		Percentage of growth between 1984-1985 and 1988-1989	
	Appropriation	Expenses	Appropriation	Expenses	Appropriation	Expenses	Appropriation	Expenses
<b>Salaries</b>								
Established posts	2 861.5	2 911.5	3 802.4	4 114.3	4 402.7	4 527.2	54	55
General temporary assistance	91.5	91.8	133.6	91.5	171.3	168.8	87	84
Consultants	10.4	10.1	17.0	6.9	13.1	11.3	25	12
Ad hoc expert groups	18.1		20.8	12.0	8.2	0.1	(55)	..
Overtime	10.1	10.4	15.1	2.6	17.8	11.0	77	5
<b>Common staff costs</b>								
Representation allowances	9.2	9.2	9.2	4.9	9.1	9.2	(0.1)	
Other common staff costs	919.8	910.3	1 173.4	1 085.1	1 433.2	1 359.2	56	48
Travel of staff	229.8	228.5	293.1	232.0	323.8	317.8	41	39
External printing and binding			12.3					
General operating expenses and communications	71.8	12.0	103.6	124.1	159.9	156.2	122	116
Hospitality	1.0	0.9	2.0	0.6	2.2	2.3	120	155
Data processing equipment			35.8	17.9	22.3	16.3	100	100
Grants	953.6	943.6	720.0	357.0	720.0	720.0	(25)	(24)
<b>Total</b>	<b>5 176.5</b>	<b>5 196.3</b>	<b>6 418.3</b>	<b>6 051.5</b>	<b>7 283.6</b>	<b>7 299.4</b>	<b>41</b>	<b>41</b>

ANNEX II

Staffing table of the Office of the United Nations  
Disaster Relief Co-ordinator

	Regular budget 1988-1989	Extrabudgetary resources 1988-1989	Total
<b>Professional category and above</b>			
<b>USG</b>	1	-	<b>1</b>
ASG		-	-
D-2	1	-	<b>1</b>
D-1	3	<b>1 b/</b>	<b>4</b>
<b>P-5</b>	<b>6 a/</b>	<b>2</b>	<b>8</b>
<b>P-4</b>	<b>6</b>	<b>1</b>	<b>7</b>
<b>P-3</b>	<b>3</b>	<b>2</b>	<b>5</b>
<b>P-2/P-1</b>	<b>3</b>	-	<b>3</b>
	<hr/>		
Total	<b>23</b>	<b>5</b>	<b>29</b>
general Service category			
<b>Principal level</b>	<b>3</b>		<b>3</b>
<b>Other levels</b>	<b>11</b>	<b>14</b>	<b>25</b>
	<hr/>	<hr/>	<hr/>
Total	<b>14</b>	<b>14</b>	<b>28</b>
	<hr/>	<hr/>	<hr/>
Grand total	<b>37</b>	<b>20</b>	<b>57</b>
	<hr/>	<hr/>	<hr/>

**a/** Includes one non-recurrent temporary post **authorized** to 31 December 1989,

**b/** New post established as at 1 December 1988.

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## ANNEX III

## Trust funds of the United Nations Disaster Relief Co-ordinator

Statements of income, expenditure, assets and liabilities as at 31 December 1989 for the biennium 1988-1989

(In United States dollars)

	Strengthening of UNDRP	Earmarked and unearmarked disaster relief assistance a/	Disaster prevention and pm-disaster planning	International Decade for Natural Disaster Reduction	Programme support costs	UNDRP/Sasakawa disaster prevention award fund	Total
<b>I. Statement of income and expenditure for the biennium 1988-1989 as at 31 December 1987</b>							
<u>Income</u>							
Pledged contributions	2 095 301	37 029 730	2 128 418	212 428			41 465 877
Public donations	8 802	267 469	15 394				291 365
Subventions		2 934 272	1 081 415				4 015 687
Interest income	167 276	1 003 065	465 086		84 661	182 536	2 702 624
Miscellaneous income	77 497	466 495	144 843		1 607 258	-	2 296 093
<b>Total income</b>	<b>2 348 576</b>	<b>42 501 031</b>	<b>3 835 156</b>	<b>212 428</b>	<b>1 691 919</b>	<b>182 536</b>	<b>50 771 646</b>
<u>Expenditure</u>							
Staff and other personnel costs	1 405 017	2 298 295	1 113 516	120 841	653 125		5 590 794
Travel		182 542	301 561	7 320	39 761	28 712	551 896
Contractual services		1 061	63 114			8 682	72 857
Operating expenses	948	12 406 645	228 905		319 211	2 068	12 957 777
Acquisitions, grants		20 452 987	922 834			es 000	21 460 821
Administrative overhead	182 775	1 060 246	331 396	16 661		16 180	1 607 258
<b>Total expenditure</b>	<b>1 588 740</b>	<b>36 401 776</b>	<b>2 961 326</b>	<b>144 a22</b>	<b>1 012 097</b>	<b>140 642</b>	<b>42 249 403</b>
<b>Excess of income over expenditure</b>	<b>759 936</b>	<b>6 099 255</b>	<b>873 830</b>	<b>67 606</b>	<b>679 822</b>	<b>41 894</b>	<b>8 522 243</b>
<b>II. Statement of assets and liabilities as at 31 December 1989</b>							
<u>Assets</u>							
Cash	1 867 848	16 122 537	2 283 394		773 101	1 022 962	22 068 942
Accounts receivable	34 555	2 139 006	21 400		3 496	11 425	2 209 882
Operating funds provided to executing agencies		86 023					86 023
Receivable from the United Nations General Fund	10 075	136 100		72 794		45 329	264 296
<b>Total assets</b>	<b>1 912 478</b>	<b>18 483 666</b>	<b>2 304 794</b>	<b>72 794</b>	<b>776 597</b>	<b>1 078 816</b>	<b>24 629 145</b>
<u>Liabilities</u>							
Accounts payable		232 346	14 818				247 164
Unliquidated obligations	7 840	2 347 731	159 160	s 188	10 324		2 539 243
Deferred income	10 000						10 000
Due to the United Nations General Fund			120 436		86 451		206 887
<b>Total liabilities</b>	<b>17 840</b>	<b>2 589 077</b>	<b>294 414</b>	<b>185</b>	<b>7796</b>		<b>3 003 294</b>
<u>Fund balance</u>							
Balance available at 1 January 1988	1 134 802	10 012 796	1136 550			1 036 922	13 321 070
Adjustments to opening balance		(217 462)					(217 462)
Excess of income over expenditure	759 836	6 099 255	873 830	67 606	679 822	41 894	8 522 243
<b>Balance available at 31 December 1989</b>	<b>1 894 638</b>	<b>15 894 589</b>	<b>2 010 380</b>	<b>67 606</b>	<b>679 822</b>	<b>1 078 816</b>	<b>21 625 851</b>
<b>Total liabilities and fund balance</b>	<b>1 912 478</b>	<b>18 483 666</b>	<b>2 304 794</b>	<b>72 794</b>	<b>776 597</b>	<b>1 078 816</b>	<b>24 629 145</b>

Includes the UNDRP/PISA supply depot.

ANNEX IV

Statement of UNDRO emergency relief grants for the biennium 1988-1989

<u>Date</u>	<u>Country</u>	<u>Situation</u>	<u>Amount in United States dollars</u>
29 February 1988	Djibouti	Floods	30 000
<b>28 March 1988</b>	Burma	<b>Fire6</b>	25 000
24 May 1988	Rwanda	<b>Floods</b>	25 000
16 <b>June 1988</b>	<b>China</b>	Floode	15 000
5 <b>August</b> 1988	<b>Cuba</b>	Floods	15 000
<b>10 August</b> 1988	<b>Sudan</b>	<b>Floods</b>	20 000
26 <b>August</b> 1988	<b>Nepal</b>	<b>Earthquake</b>	20 000
5 <b>September</b> 1988	<b>Bangladesh</b>	<b>Floods</b>	25 000
28 <b>September</b> 1988	<b>Benin</b>	<b>Floods</b>	20 000
4 Oatober 1988	<b>Haiti</b>	<b>Hurricane Gilbert</b>	25 000
13 October 1988	<b>Jamaica</b>	<b>Hurricane Gilbert</b>	25 000
25 <b>Oatober</b> 1988	<b>Nicaragua</b>	<b>Hurricane Joan</b>	25 000
2 November 1988	<b>Philippines</b>	<b>Hurricane Ruby</b>	25 000
3 November 1988	<b>Panama</b>	<b>Hurricane Joan</b>	15 000
18 November 1988	<b>China</b>	<b>Earthquake</b>	15 000
30 November 1988	<b>Tha i land</b>	<b>Floods</b>	25 000
16 December 1988	<b>Armenia</b>	<b>Earthquake</b>	20 000
<b>15 February 1989</b>	<b>Mauritius</b>	<b>Cyclone Firinga</b>	10 000
<b>2 March 1989</b>	Burma	<b>Fires</b>	20 000
<b>29 March 1989</b>	Yemen	<b>Floods</b>	20 000
<b>30 Mirch</b> 1989	<b>Guyana</b>	<b>Power shortage</b>	15 000
26 April 1989	<b>Zambia</b>	<b>Heavy rains</b>	20 <b>000</b>
17 May 1989	Mauritania	<b>Displaced persons</b>	25 000
17 May 1989	United Republic of <b>Tanzania</b>	<b>Floods</b>	20 000
22 May 1989	<b>China</b>	<b>Earthquake</b>	25 000
21 <b>June 1989</b>	<b>Sri Lanka</b>	<b>Floods</b>	30 000

/...

<u>Date</u>	<u>Country</u>	<u>Situation</u>	<u>Amount in United States dollars</u>
14 August 1989	China	<b>Floods/landslides</b>	25 000
14 August 1989	<b>Senegal</b>	<b>Returnees</b>	25 000
22 September 1989	Antigua	<b>Hurricane</b> Hugo	<b>10</b> 000
22 <b>September</b> 1989	Dominica	<b>Hurricane</b> Hugo	10 000
22 September 1989	<b>Saint Kitts and Nevis</b>	<b>Hurricane</b> Iiugo	10 000
27 September 1989	<b>Montserrat</b>	<b>Hurricane</b> Hugo	10 000
<b>27 September 1989</b>	British Virgin Islands	<b>Hurricane</b> Hugo	10 000
20 October 1989	<b>Viet</b> Nam	Typhoons	15 000
20 November 1989	Thailand	Typhoon <b>Gay</b>	25 000
Total as at 31 December 1989			<u>720 000</u>

## ANNEX V

### The response of the Office of the United Nations Disaster Relief Co-ordinator to specific disasters

#### Algeria - Earthquake

1. On 29 October 1989, M earthquake measuring 6.0 on the Richter scale shook the northern provinces of Algeria, causing more than 30 deaths and injuring 700 persons. UNDR0 immediately organised the air lifting of 80 metric tons of relief supplies from the Pisa depot, valued at \$500,000, which were distributed among 2,000 homeless families. At UNDR0's request, the Organization of Petroleum Exporting Countries fund at Vienna made \$46,000 available to finance the charter of one of the aircraft) the other was paid for by the Government of Italy (which also contributed the \$400,000 worth of relief supplies). At the same time, the Government of Italy requested UNDR0 to organize another airlift from Pisa of 200 heavy duty tents, 10,000 blankets, plastic sheets, family kits, kitchen sets and jerricans.

2. On 17 November, UNDR0 received a request from the Office of the United States Foreign Disaster Assistance to locate, procure and arrange the air transport to Algiers of 180 winter tents and 5,500 blankets. The operation called for the utmost speed as aftershocks had forced more people to leave their homes. At least 12,000 people were expected to spend the winter in tents - within hours the relief supplies had been purchased. At UNDR0's request the Belgian Air Force assisted in flying the relief supplies to Algeria. On 18 November the cargo was already distributed to the affected population. The value of the United States-Belgian-UNDR0 emergency operation amounted to \$95,000.

#### Angola - Displaced persons

3. At the request of the Government of Angola, UNDR0 sent two relief co-ordination officers at the end of August 1989 to undertake an assessment of the priority needs of the population considered most at risk: those displaced by conflict and those in deteriorating health. The mission, undertaken in co-operation with United Nations agencies, relief organizations, donors and relevant government authorities, placed its findings in the context of the overall emergency requirements identified by the Government.

4. An UNDR0 representative attended the conference on emergency assistance to Angola for 1989-1990 held at Luanda on 22 September. The purpose of the conference was to alert the international community to the country's needs, as a result of the complex emergency affecting more than two million people. The same day, UNDR0 launched an international appeal for Angola.

### **Bangladesh - Floods**

5. Unusually heavy rainfall between 20 and 28 August 1988 led to peak flood levels of the Brahmapura, Ganges and Meghna rivers in early September. By mid-September flood waters covered 53 districts out of a total of 64; 45 million people out of a population of 110 million were directly affected and enormous damage affected crops, transport and communication systems.

6. The Government requested relief assistance from the United Nations, and UNDR0's first appeal to the international community was launched on 1 September 1988. In view of the complexity and magnitude of the emergency, the Secretary-General appointed the Disaster Relief Co-ordinator as his Special Representative for Bangladesh. In that capacity the Co-ordinator led an inter-agency mission to Bangladesh, which assessed the damage and identified priority relief needs. The assessment covered various sectors and was communicated to donors in a summarized form through the UNDR0 information network.

7. The response of the international community was fast and generous. Donations from 30 countries, governmental and non-governmental agencies reached over \$100 million within six weeks after the launching of the appeal. The local co-ordination of the assistance was ensured by the Government in co-operation with the Inter-Agency Disaster Group, a standing body composed, among others, of the local representatives of UNICEF, UNHCR, WFP, FAO and WHO, and chaired by the UNDP/UNDR0 Resident Representative.

8. Bangladesh's flood emergency and the possibilities of finding solutions to it were included as a special item of the agenda of the forty-third session of the General Assembly. In its resolution 43/9 of 18 October 1988, the General Assembly expressed its concern about the devastating consequences of the 1988 floods, and appealed to Member States and international organizations to strengthen the disaster mitigation capacity of Bangladesh. It also requested the Secretary-General to report on the implementation of the resolution to the General Assembly at its forty-fourth session. The report was prepared by UNDR0 and submitted to the Assembly at that session (A/44/434).

9. International assistance to Bangladesh's rehabilitation programme was the subject of a special meeting convened by the Secretary-General on 16 November 1988 in New York and attended by President Ershad of Bangladesh. The value of Bangladesh's reconstruction needs had been assessed by a joint government/United Nations Task Force at over 1 billion dollars. During a press conference after the meeting the UNDR0 Co-ordinator pointed out that prior to the meeting about 200 million dollars of international assistance had been made available or pledged; afterward about 500 million had become available.

10. Apart from the reconstruction needs, the special meeting discussed concerted efforts in the field of disaster mitigation. UNDP had financed a study by an international expert team on flood policy to Bangladesh. UNDR0 participated in that effort with funds and a staff member for the disaster preparedness component of the study.

### Caribbean - Hurricane Gilbert

11. The hurricane **struck Jamaica** on Monday, 12 September 1988, with winds of up to 125 mph. The hurricane moved **across Jamaica from east to west tearing off roofs** and destroying **crops, vegetation** and infrastructure. At **least 500,000** were **left homeless and damage was estimated** at over \$800 million. **Other Caribbean islands,** notably **Saint Lucia, Martinique; Guadeloupe** and Puerto Rico, **suffered** equally from damage to **infrastructure and plantations.**

12. URDRO **was** informed about the impending threat to the region by the **Pan-Caribbean Disaster Preparedness and Prevention Project.** An alert **was issued to the international community** on 12 September 1986 and was followed on the **same day** by a first report containing a preliminary **assessment of damage.** URDRO dispatched **the Manager of the Pan-Caribbean Project from Antigua to Jamaica** to assist the authorities and the **UNDP/UNDRO Resident Representative** in the co-ordination of relief **efforts.** He was joined shortly afterwards by another URDRO official.

13. Between 12 **September** and 11 October 1988, URDRO **issued** 15 reports outlining the **situation** in the disaster areas. **the flow of international aid and outstanding relief needs.**

### Caribbean - Hurricane Hugo

14. Between 15 and 21 September 1989, **Hurricane Hugo** struck the Leeward **Islands** in the **Eastern Caribbean,** with **winds in excess of 150 mph, causing severe damage** and making **thousands homeless.** **Telecommunications, public utilities and housing were severely affected.** Direct losses to the island States **and territories of Dominica, Montserrat, Antigua and Barbuda, the British Virgin Islands and Saint Kitts and Nevis** were estimated at \$365 million.

15. UNDRO entrusted the Manager **of its Pan-Caribbean Disaster Preparedness and Prevention Project** with monitoring the situation **and activating the various regional and national response systems.** In fact, overall **co-ordination of the disaster relief operation was provided by the Project** in close co-operation with **UNDP, PAHO and local authorities.** Through its direct link with the Caribbean Community **Disaster Relief Unit, UNDRO was able to secure the requests from and pledges for the stricken countries in good time.**

16. UNDRO **issued situation reports** on damage **and relief needs and, together with UNDP, provided emergency grants for the purchase of relief materials totalling \$200,000.** Contributions **reported to URDRO exceeded \$11 million.**

### China - Emergencies

17. Floods, **typhoons, hailstorms and earthquakes** ravaged several **provinces** in the **years of 1988 and 1989.** UNDRO was involved in 12 major events in **which more than 100 million people were affected and over 4,000 lives lost:** floods in Fujian province - May 1988; floods in Zhejiang province - August 1988; hailstorm/rainstorm in Heilongjiang province - August 1988; typhoon in Zhejiang province - August 1988;

flood8 in Shanxi province - **August 1988; earthquake8 in Yunnan province - November 1988; earthquake8 in Sichuan province - April 1989; hailstorm in Sichuan province - April 1989; typhoon in Guangdong province - June 1989; floods/landslides in Sichuan province - July 1989; Typhoon Vera in Zhejiang and Jiangsu provinces - September 1989; Md earthquakes in Shanxi province - October 1989.**

18. The **UNDP/UNDRO** Representative, in **close** co-operation with **government authorities, transmitted** detailed report8 and **UNDRO issued** a total of 17 information reports in 1988 and 15 **information/situation report8 in 1989.**

19. **UNDRO** cash grants of \$30,000 in 1988 Md \$50,000 in 1989 had been promptly provided to bridge the **gap** until the arrival of other **assistance. These, together with UNDP cash grants,** were used **to meet** immediate requirement8 by **purchasing** locally **available** relief supplies. The Government8 of **Australia, Canada and the Netherlands** participated in the **effort** by **ahannelling** their contribution8 **through UNDR0 and UNDP.** The overall total of contribution8 reported to **URDRO** amounted to \$3.2 million in 1988 and \$4.9 million in 1989.

#### **Djibouti - Floods**

20. On 6 April 1989, exceptionally heavy **rain, exceeding 500 mm in three days, caused severe flooding** in Djibouti, affecting **some** 250,000 people **end** rendering borne 150,000 homeless.

21. On 10 April, at the request of the Government, **UNDRO** launched **an** appeal for international **assistance,** indicating the relief **and** medical **supplies** urgently needed. Many **countries** responded **immediately and dispatched** relief **materials, food, medical supplies and health equipment.** Some **Government8** also provided **specialized personnel for relief operations.**

22. On 25 April, new rains again flooded Djibouti. An **URDRO-chartered Boeing 707** airlifted 40 **motor-pumps, 12 km of flexible pipes, 150 family kit8 and 2,000 kg of** high-protein biscuits. **This operation was made possible** by a \$500,000 grant from **italy.**

23. The **stagnant** water provided **an** ideal breeding-ground **for** mosquitoes Md brought **with it the danger of an outbreak of malaria.** At the request of the Government of Djibouti, **URDRO chartered a light aircraft to carry out an** anti-malaria spraying operation throughout the country. The operation **was co-sponsored** by the United Kingdom **of Great Britain and Northern Ireland, the OPEC fund and UNDP** and carried out in collaboration with **WHO.**

24. Recognizing the importance of **disaster** mitigation, **URDRO** implemented a technical **assistance** project **financed by UNDP.** The project included the **services** of **an** international expert Md the **provision of equipment** to national services responsible **for disaster management.**

### **Ethiopia - Drought**

25. In the second half of 1987, when drought threatened Ethiopia once again after the famine of 1984/85, the Secretary-General's Special Representative for Emergency Operations and the local United Nations Emergency Preparedness and Prevention Group (consisting of UNICEF, UNDP, UNDRO, UNHCR, WFP, FAO and WHO) collaborated with the Government in issuing unified appeals to the international donor community, and commissioned logistics studies for getting emergency food and other required relief to the most affected areas in time. In view of past difficulties with moving large quantities of food by surface into inaccessible Tigre and Eritrea regions, and in view of its previous air transport experience in Ethiopia, the Office was asked to undertake what evolved into the largest concerted relief programme co-ordinated by UNDRO.

26. From early December 1987 and throughout 1988, an air transport operation, which at various times employed some 40 aircraft, was conceived and managed by UNDRO. In co-operation with the Ethiopian Relief and Rehabilitation Commission, the EEC/Joint Relief Partnership, ICRC and the Governments of Belgium, Canada, Poland, Switzerland and the Soviet Union, a total of 115,000 tons of emergency food and other relief goods were moved to 11 airfields and 15 airstrips to assist almost 20 governmental services, United Nations agencies and non-governmental organisations.

27. In response to UNDRO's various appeals, 16 donor Governments and organisations contributed \$14.2 million, which were spent on three major components: commercial aircraft chartered by UNDRO; military aircraft provided under special funding arrangements with the Government of Belgium and Canada; and various light aircraft or helicopters utilised on a cost-sharing basis to reach secondary distribution points. In the certified statement of account submitted to all donors in early 1989, the Co-ordinator was in a position to point out that, thanks to those various arrangements, the average cost per metric ton transported by the United Nations had amounted to only \$220, and that the operation had contributed significantly to averting the recurrence of famine in Ethiopia.

28. In related activities, UNDRO also organized a series of airlifts from the Pisa supply depot between 2 and 17 June 1988. Five Boeing 707 jet freighters airlifted plastic sheeting, blankets, tents and cooking utensils to Asmara, while a further three aircraft carried similar relief supplies on behalf of the United States Office of Foreign Disaster Assistance directly to Addis Ababa. Furthermore, UNDRO is at present engaged in the construction of an aircraft maintenance hangar for Ethiopia's Relief and Rehabilitation Commission. Funded by the Government of Italy, the hangar will facilitate the repair and maintenance of all aircraft engaged in humanitarian air transport operations.

### **Lebanon - Civil strife**

29. In 1988, military activities throughout the country and the resulting economic crisis required UNDRO's continued emergency assistance to the Lebanese population, especially to vulnerable groups. Some \$116 million were mobilized, of which

\$6.8 million were channelled through UNDRO. The aid was used for over 50 projects in the health, education and social sectors, for the repair of shelters and water supply systems and to assist orphaned and displaced persons. These activities, from which more than one million people in all regions of Lebanon benefited, were implemented by 44 non-governmental organisations and United Nations agencies.

30. In early 1989, UNDRO supervised 21 projects valued at over \$3 million. Following military clashes in mid-March, several projects had to be suspended and some cancelled. Funds were redirected to new projects of higher priority, such as emergency repairs to the water and electricity supply systems of Greater Beirut, and procurement and distribution of drugs for the chronically ill all over Lebanon.

31. As a response to the increasing number of people in need, the Secretary-General appealed through UNDRO on 21 April 1989 for emergency relief aid to Lebanon. By the end of 1989, the assistance in cash, material and services reported to UNDRO exceeded \$100 million, of which \$2 million was given through UNDRO.

32. During the entire 1988-1989 period, UNDRO kept its Beirut office open and operating with appropriate support staff. In addition, various UNDRO missions were sent to Lebanon to follow the evolution of conditions in the capital and outside.

#### Mauritania - Returnees

33. Following communal disturbances in Mauritania and Senegal in late April 1989 tens of thousands of people on either side of the border returned to their country of origin.

34. In Mauritania, some 20,000 were accommodated in reception centres while awaiting reintegration and UNDRO launched an appeal for \$500,000 to cover emergency needs. Two delegates (made available by the Government of Switzerland) went on short-term missions to assist the UNDP/UNDRO Resident Representative in the computerisation of data on needs and contributions and in logistics. A third UNDRO delegate was sent for two months to be part of an ad hoc emergency committee, composed of representatives of the Government, the Mauritanian Red Crescent and the United Nations system, whose task is to co-ordinate relief assistance for the returnees.

35. The European Community transferred to UNDRO 1420,000 for local purchases of relief supplies and for their transport to these areas.

#### Mozambique - Drought and destabilization

36. During the 1988-1989 period, UNDRO continued to assist the Government and the United Nations Special Co-ordinator for Emergency Relief Operations in mobilizing international assistance to meet requirements for dissemination of information on the status of relief operations and in recording donors' contributions. The value of the 1988-1989 requirements totalled 8340 million, of which \$270 million was pledged against requirements. The figures for the period 1989-1990 are \$380 million for requirements and \$280 million in pledges.

37. UNDR0 participated in the **work of United Nations inter-agency missions (for the assessment of needs and the preparation of yearl emergency appeals)** and in the subsequent international **conferences** in Maputo (**26-27 April 1988**) and in New York (**14 April 1989**). Every month situation **report8 were issued** with an update on the emergency situation, **relief activities**, the level of contribution8 and ways to **channel them**, as well as **outstanding requirements**. A **list Of non-governmental organisations active in Mosambique** was issued in 1988 and 1989.

38. An UNDR0 expert installed computer equipment in the **Office of the National Commiss' on for the Emergency** and trained governmental **staff on its use** throughout 1988. With **funds** donated by the **Government of Italy**, UNDR0 financed and supervised the **rerouting along the Beira corridor of some 120 km of the electricity line Beira-Chigodora (Mavusi)**, which supplied **electricity to the port and town of Beira**. Work on the **84.8 million project** was completed **on schedule** in February 1989. Following the receipt of an Australian contribution, it was possible to complete the water **connections of the new rural hospital at Nhamatanda**, in the Beira corridor, which had been rehabilitated with UNDR0 financial **assistance**.

39. The UNDR0 warehouse at **Pisa** played an increasing role in the provision of relief/survival items to the **victims of the emergency and to displaced persons**. Several shipments of **Shelter materials, blankets and in 1989 generator8** reached **Mozambique** from Pisa. A contribution of **\$230,000 from the Government of Sweden** enabled UNDR0 to start a **stockpile warehouse rehabilitation project in Maputo**. In order to transfer the **technical know-how of an operational stockpile warehouse**, the **Government of Switzerland** seconded to UNDR0 a warehouse management expert.

40. In response to the UNDR0 request to **cover emergency relief and survival need8 of most needy displaced people who had not been assisted**, the **European Community** provided **funds amounting to \$630,000 for the procurement and transport of relief and survival items**. UNDR0 arranged the transport of the items to various distribution points by surface and air. In all, **some 160,000 persons** benefited from the activity.

#### **Nicaragua - Hurricane**

41. **Hurricane Joan hit Nicaragua in October 1988**. Early warnings had led to the evacuation of some **300,000 people**. At the request of the **Government**, UNDR0 launched an appeal for **quantified need8 with indication of priorities**. An UNDR0 **delegate was sent** to assist the **UNDP/UNDR0 Resident Representatives** in field assessment and in the preparation of data for presentation to the international donor community.

42. UNDR0 issued 13 report8 (**between October and December 1988**) on this emergency\*. The value of relief **contributions reported to the Office** amounted to approximately \$32 million. Two **Governments (Canada and the United Kingdom of Great Britain and Northern Ireland)** transferred cash contributions to UNDR0 in response to the appeal. These contribution8 were used to buy **zinc sheets and motorsaws** locally. An UNDR0 emergency **grant of \$25,000** was used on a cost-sharing basis with UNDP to provide household utensils and medical equipment.

43. The very first days of the emergency proved the useful role that amateur radio operators can play in the collection of preliminary data on an emergency,

#### **Romania - Civil strife**

44. On 22 December 1989, the Disaster Relief Co-ordinator sent a message to the Front of the Council for National Salvation offering assistance within the framework of UNDRO's mandate. The Secretary-General was following developments in Romania closely and was being kept informed by UNDRO of the steps being taken to identify and assess specific relief needs,

45. Soon relief assistance began pouring in from all quarters - a spontaneous expression of international solidarity. This largely unco-ordinated and massive arrival of medicines, equipment, relief teams, clothing and other products created logistical problems. On 28 December, the Romanian Ministry of Foreign Affairs accepted the UNDRO offer of assistance and a relief co-ordination officer left for Bucharest.

46. The UNDRO officer met with the new leaders of the country and assisted in the co-ordination of the international emergency assistance. Several meetings were also held with Romanian authorities, heads of diplomatic missions, international organisations and non-governmental organisations operating in Romania.

47. He established close working relations with the first Romanian co-ordinating body and assisted in the setting up of the National Committee for the Co-ordination of Humanitarian Aid. The Committee and UNDRO co-ordinated in particular the mobilisation of the Romanian trucking fleet and refrigerated trains to collect relief supplies from all European donation points. The UNDRO officer returned to Geneva on 9 January 1990 for a meeting with relief agencies and the media, where unmet requirements were discussed.

48. At the request of the Government, he returned to Romania between 16 and 24 January 1990 and worked with the Ministry of Foreign Affairs and the National Committee for the Co-ordination of Humanitarian Aid on questions concerning distribution, monitoring and utilisation of funds generated by the commercial sale of relief food supplies.

49. On 8 February 1990, UNDRO held an Information meeting on Romania at Geneva. The Government of Romania was represented by the Secretary of the Central Committee for the Co-ordination of International Assistance. Contributions reported to UNDRO (including those reported by the International Committee of the Red Cross) amounted to \$241 million, excluding donations in kind, for which no monetary value was given.

#### **Senegal - Returnees**

50. Owing to communal disturbances in Mauritania and Senegal in late April 1959, tens of thousands of people on either side of the border returned to their respective countries. Following the request by the President of Senegal to the Secretary-General for the international community to provide relief and

rehabilitation assistance for 75,000 returnees, two UNDRO delegates went to Senegal in June.

51. With contributions from the Governments of Austria and Canada and the NGO Church World Service, UNDRO implemented a five-month emergency programme for the returnees in the Saint Louis northern province (River Valley). The project included the repair of relief trucks and the purchase and distribution of food supplies. These activities were carried out in close co-operation with the Senegalese Food Security Authority and the specialized agencies of the United Nations.

#### Sudan - Floods

52. On 6 August 1988, UNDRO issued an appeal on behalf of the two million people in and around Khartoum made homeless by floods. The Office dispatched two relief co-ordination officers to the capital to help assess needs, monitor contributions and assist the UNDP Resident Co-ordinator. On 26 August, UNDRO held an information meeting to report to United Nations specialized agencies and intergovernmental and non-governmental organizations on the latest situation in the country. By 30 August 1988, contributions in cash and kind reported directly to UNDRO amounted to over \$18.5 million, excluding supplies for which no monetary value was indicated.

#### Union of Soviet Socialist Republics - Earthquake in the Soviet Socialist Republic of Armenia

53. On 7 December 1988, an earthquake of 6.9 on the Richter scale hit an area of more than 7,000 km<sup>2</sup> with a population of about 700,000 people in the northern part of the Soviet Socialist Republic of Armenia. Some 24,593 lives were lost and more than 8,000 persons were partially or fully disabled. According to government estimates, about half a million people were left homeless. Economic damage caused by the earthquake is estimated at between 13 and 20 billion roubles (between \$21 and 833 billion at the United Nations official exchange rate),

54. The Soviet Government accepted international aid and permitted access to the disaster areas. UNDRO assisted in the mobilisation and co-ordination of international relief. From 8 December 1988 to the end of January 1989, UNDRO issued 14 reports, describing the situation on-site and the flow of aid, and alerting the international community to emergency requirements as they arose. Total foreign relief aid from 74 countries was the highest reported to UNDRO for a single natural disaster.

55. Two UNDRO delegates were among the first to arrive from abroad at the disaster site. They assisted Soviet and Armenian authorities in the organisation of relief and liaised closely with foreign search and rescue and relief personnel. Two UNDRO chartered planes brought tents and blankets from its depot at Pisa to the victims.

56. On 12 December 1988, at the peak of the emergency phase, an information meeting was convened by UNDRO at Geneva with the participation of representatives from the Soviet Government, United Nations agencies, donor Governments and non-governmental and relief organizations.

57. A three-member UNDR0 evaluation mission took place in January 1989. As a result the Office issued a report outlining the main features Of the international aid offered to the victims and ways and means to enhance the future effectiveness of international disaster aid,

58. Lessons learned from the Armenian earthquake were also reviewed at the third meeting of national emergency relief services, held on 19 and 20 October 1989 at Geneva. The need for better co-ordination of the arrival of international relief assistance and in the fields of on-site communication8 and search and rescue was emphasized.

59. On the occasion of the first anniversary of the earthquake, the Disaster Relief Co-ordinator appealed to the international community to continue and to increase its assistance to the victims.

#### Union of Soviet Socialist Republics - Earthquake in the Soviet Socialist Republic of Tadjikistan

60. On 23 January 1989, an earthquake measuring 5.8 on the Richter scale shook the Soviet Socialist Republic of Tadjikistan, situated north of the Afghan border. The epicentre was located in the village of Sharora, about 50 km south-west of Dushanbe. The quake triggered a massive mudflow, which affected an area some 8 km long and 1 km wide, with a volume of more than 10 million cubic metres. The mud barrier and deposits reached a height of 25 metres in Sharora village. Some 200 lives were lost and more than 50,000 people were homeless.

61. An UNDR0 delegate from Geneva arrived in Moscow on 25 January and proceeded to Dushanbe to assess damage and to establish, together with the authorities Of the Republic, a list of urgently needed relief items,

62. UNDR0's supply depot at Pisa had been depleted owing to the massive assistance provided for Armenia. However, the Government of the United Kingdom of Great Britain and Northern Ireland offered to finance the purchase of the bulk of the relief supplies and the cost of transport called for by UNDR0 to assist the affected population. The British contribution of \$484,000 enabled UNDR0 to purchase 200 insulated winter tents for 14 persons each, 500 diesel heaters, 10,000 blankets and 10,000 pairs of rubber boots for adults and children. The supplies were airlifted from Frankfurt to Tashkent by two Boeing 707 aircraft. UNDR0 supervised the operation and monitored the setting up of shelters.

63. Following this event, UNDR0 and the Soviet Union organized a training seminar on the management of mudflows and landslides caused by earthquakes. The seminar took place in Moscow from 23 October to 3 November 1989.

#### People's Democratic Republic of Yemen - Floods

64. Heavy rains, which started on 19 March 1989 and lasted for more than one week, caused severe floods in central and eastern regions (Hadramawt, Shabwa and Mahra). Some 25 dead, 80,000 homeless, 260,000 affected and crop losses alone reaching

\$5.8 million were reported, The level of damage was comparable to the 1982 flood disaster, which was considered the worst in many years.

65. UNDRO efforts helped to secure contribution<sup>8</sup> amounting to \$2.8 million from Governments, intergovernmental organisations, the League of Red Cross and Red Crescent Societies, other non-governmental organisations, private firms and individual<sup>8</sup> and United Nations agencies. In addition, UNDRO was instrumental in arranging financial assistance of more than \$500,000 from four donors in order to meet the emergency needs of the affected people.

## ANNEX VI

### UNDRO projects for disaster mitigation at the national level

#### Algeria

1. Following the destructive earthquake in October 1989, a mission was undertaken within the context of the Mediterranean seismic risk reduction project to examine the damage and organize a workshop on the evaluation of the event and the application of the results to the improvement of disaster preparedness and awareness. The workshop will be funded through the International Decade for Natural Disaster Reduction.

#### Bangladesh

2. After the disastrous floods of 1988 and as a follow-up to the proposed short-, medium- and long-term flood prevention projects, UNDRO fielded a consultant at the request of UNDP to elaborate a comprehensive programme in disaster preparedness, which included activities to be implemented over a period of five years. The project document was subsequently expanded and prepared in UNDP format by a second consultant.

#### Colombia

3. A broad-spectrum disaster mitigation programme was initiated in 1988 and has included an integrated sequence of pilot activities in different high-risk locations, one each for earthquakes, eruptions, floods, landslides, technological hazards and tsunamis. The programme is managed by the National Disaster Office and activities are designed to stimulate the fullest possible participation of local technical and administrative services. The main emphasis was put on hazard evaluation and mapping, design of monitoring and alert systems, study of vulnerability of buildings, industrial plants and public utilities, revision of emergency plans and training activities. UNDRO assisted national authorities in coping with an eruption of Galeras Volcano.

#### Djibouti

4. Following the difficulties experienced (during severe floods in early 1989, a two-week consultancy mission was organized by UNDRO to update the disaster management plan and review the additional human resources, equipment and co-ordination mechanisms needed to facilitate its effective implementation in future.

#### Egypt

5. The implementation continued of a project for the strengthening of government disaster preparedness and management services. Four consultancy missions were organized for technical assistance to the Academy of Scientific Research and

**Technology in the monitoring of ground-water pollution, desertification and preparation of composite earthquake risk zoning maps. An UNDRO project officer participated in a session of the project steering committee.**

### **Haiti**

**6. A new initiative was launched in 1989 to assist the National Pre-disaster Planning and Relief Office to develop its capability in disaster preparedness. A four-week consultancy mission was undertaken to identify technical assistance needs in disaster management and relief coordination. Detailed cyclone preparedness plans will be made for two of the most vulnerable regions. A project document is being prepared in collaboration with UNDP and activities are planned to start during 1990.**

### **Indonesia**

**7. The first phase was completed of a project for the strengthening of national integrated disaster management capabilities in Indonesia. The project focused on the identification of immediate and longer-term objectives and activities for disaster management. They are risk evaluation and disaster mitigation, operational disaster response development and integrated disaster management planning. Another important aspect was awareness raising for policy-makers, planners and affected population groups, including cross-sectoral training. In response to a government request, a new work programme and project document for the continuation of the activities is being prepared.**

### **Madagascar**

**8. The project aimed at strengthening the national disaster preparedness organization's capability in relation to cyclones, floods and industrial hazards continued, with emphasis on training activities. Activities in 1989 provided training for personnel of the Conseil National de Secours, including on-the-job training in the five provincial emergency centres and two national training seminars, one for 62 medium-level officials in the field of disaster management and the second held at La Réunion at the Centre of Training Studies for 22 high-level officials from Madagascar.**

### **Maldives**

**9. Following serious damage from tidal waves on several occasions in 1987, the Government requested UNDRO assistance to assess future vulnerability and possible mitigation strategies. In 1987 a civil engineering consultant was provided to analyse damage suffered and repairs required. In 1988 a second consultant reviewed future risks to coastal defences and assistance needed for their improvement.**

### **Mauritius**

**10. UNDRO arranged the services of a consultant for six weeks to review the Mauritius Government's state of disaster mitigation in order to develop a detailed**

programme of activities to improve future response and to propose recommendations **for** strengthening the central administrative unit with responsibility for executing disaster mitigation **programmes**, including the co-ordination of all relevant agencies.

#### **Nepal**

11. As part of a **UNDP/UNDRO** executed project entitled "Institutional support to the disaster preparedness plan", which focuses primarily on strengthening institutional capabilities in disaster management and preparedness, a **consultant** carried out three three-month missions. He worked closely with the Ministry of Home and Communications and its Special Disaster Unit, which has been actively involved in drawing up the national disaster preparedness plan. Staff of the Special Disaster Unit were sent for training at the Asian Disaster Preparedness Centre at Bangkok and the first in-country training seminar was held. An emergency control centre is now operational and will improve communications and co-ordination mechanisms in times of crisis.

#### **Philippines**

12. A new programme of disaster management training workshops has been initiated. One national and two local workshops have been held using the technical and training resources of the Asian Disaster Preparedness Centre. A second project has provided practical guidance in typhoon-resistant low-cost housing, including the design and construction of demonstration houses.

#### **Saudi Arabia**

13. A project has been initiated in co-operation with URDRO to strengthen the Civil **Defence** Administration. URDRO sent a consultant for two months to review the structure and legal framework, to draw up emergency planning guidelines for central and regional authorities and to make proposals for emergency stockpiles of relief supplies.

#### **USSR**

14. URDRO organized a three-week mission by five consultants to prepare a comprehensive disaster management and preparedness planning programme for the Soviet Socialist Republic of Armenia, taking into consideration in particular the risks of earthquake, floods, slope instability and industrial hazards.

#### **Zimbabwe**

15. URDRO organized a multisectoral seminar to review the existing system and procedures for disaster management. This was followed by a three-month consultancy to produce a national plan for civil protection and to identify related training and equipment needs.

## ANNEX VII

## Disaster contribution summary for 1988 and 1989

## A. 1988

country	Disaster	Month occurred	Estimated number of persons affected	Multi- lateral	Bilateral		Non- governmental organizations and Red Cross and Red Crescent societies	Other	Total	Funds entrusted to UNDRO b/	UNDRO cash grants
					a/ Governments	Inter- governmental organizations					
Disasters occurring before 1988, ongoing (contributions made in 1988)											
Ethiopia	Drought/civil strife	4.04		17 591 266	100 197	820	17 696 000	7 621 040	37 453	143 137 581	875 000
	(air lift)	11.87		14 224 489	5 959	845	12 192 006	3 000 000	1000	35 377 334	14 224 489
Lebanon	Armed conflict	10.66		22 669 649	4 056	050	1 376 657	20 725 173		48 767 529	6 780 389
Mozambique	Civil strife	1.87		52 020 320	271 706	423	27 386 275	13 233 647	54 600	364 401 265	1 314 835
Sudan	Drought	11.63		15 312 197	16 423	084	2 328 700			34 063 961	41 667
Disasters occurring in 1988											
Armenian SSR	Earthquake	12.08	500 000	719 076	65 304	235	12 193 385	85 755 296	12 010 944	175 962 9%	699076 20050
Bangladesh	Floods	9.88	75 000 000	12 578 560	56 041	019	32 617 610	11 816 213	858 816	113 912 218	252 671 2s 000
Bangladesh	Cyclone	11.66	2 500 000			249 870				249 870	
Benin	Floods	9.88	60 000	53 000		230 426	6 290	154 236		413 952	20 000
Brazil	Floods	2.88	19 000		2 465	066	55 012	597 281		3 117 359	
Brazil	Floods	7.88	12 000	214 000		25 400		221 370		460 no	214 000
Burkina Faso	Floods	9.88	15 000			536 330	157 230	4s 740		739 300	
Burma	Fires	2.68	20 000	87 000		229 610		20 000		336 610	25 000
Chad	Floods	8.88	47 350	1 783 900		820 878		295 160	6 350	2 906 288	
china	Floods	5.88	200 000	100 000		501 400	611 995			1 213 39s	15 000
China	Earthquake	11.88	1 000 000	278 570	1 822	949	582 072	110 604		2 794 195	1% 300 15 000
Costa Rica	Hurricane Joan	10.88	120 000	52 500	2 105	070	55 555	74 030		2 287 155	2 500
Cuba	Floods	6.88	90 000	596 320						896 320	15 000
Djibouti	Drought	2.88	100 000	1 011 338						1 011 338	120 892 30 000
Haiti	Hurricane Gilbert	9.88	1 000 000	25 000		792 354	50 000	429 961		1 296 335	25 000
India	Earthquake	8.88	60 000	80 000		404 483	573 118	647 991	37 594	1 713 186	
Jamaica	Hurricane Gilbert	9.88	500 000	126 067	6 757	152	722 000	2 37s 966		9 981 185	2s 000
Nepal	Earthquake	8.88	60 000	1 095 327	1 952	026		729 349		3 776 702	1 089 327 20 000
Nicaragua	Hurricane Joan	10.88	350 000	360 678	21 271	386	1 198 445	8 941172		31 771 681	165 678 25 000
Panama	Hurricane Joan	10.88	6 700	15 000		142 321		1 000		158 321	15 000
Philippine8	Typhoon Ruby	10.88	1 000 000	195 869	7 965	835	582 072	865 842		9 609 618	25 000
Rwanda	Floods	5.88	8 000	540 576		904 380	244 798	132 833		1 902 587	355 576 2s 000
Sudan	Displaced persons	2.88	500 000	1 093 251		726 031		1 037 625		2 857 107	
Sudan	Floods	8.88	1 000 000	7 543 860	14 562	797	4 07s 055	9 358 171	332 586	35 872 469	417 418 20 000
Thailand	Floods/mudslides	11.88	978 000	100 000		911 421	119 760	656 032		1 787 213	2s 000
Uganda	Displaced persons	6.88	100 000	1 432 694	1 657	701	1 588 900	110 000		4 78929s	85 390
Total			85 246 050	151 810 809	586 773	362 116	406 929	168 954 952	13 339 343	1 037 2 % 095	26 795 216 370 000

(Footnotes on following page)

(Notes and footnotes to table A)

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**Notes:**

Country: disaster-affected' countries in which UNDRO was involved.

Contribution: dollar equivalent of **cash and** in-kind contributions given for disaster relief and reported to UNDRO.

**a/** Contributions: (a) channelled through the United Nations system, and  
**(b)** made from United Nations **system programmes**.

**b/** These **figures** were calculated based on pledges and using the United Nations **exchange rate** prevailing **at** the time **pledges** were communicated to UNDRO.

## B. 1989

country	Disaster	Month occurred	Estimated number of persons affected	Multi-lateral a/	Bi lateral		Non-governmental organizations and s&d Cross and Red Crescent Societies	other	Total	Funds to UNDRR b/	UNDRR cash grants
					Governments	Inter-governmental organizations					
Disasters occurring before 1989. ongoing (contributions made in 1989)											
Angola	Destabilization	3.88		5 235 613	6 083 731	3 763 735	35 000		15 118 079	61 4%	
Lebanon	Armed conflict	10.86		14 393 557	37 424 238	37 159 604	11 334 449		100 312 148	3 798 873	
Mozambique	Civil strife	1.87		42 989 049	205 767 947	57 010 3 %	6 477 681	2 965 000	315 210 073	2 469 835	
Disasters occurring in 1989											
Algeria	Earthquake	10.89	n.a.	618 670	548 705		342 750		1 510 125	291 770	
Brazil	Floods	7.89	500 000		76 923		26 596		103 519		
Burma	Fires	2.89	22 300	82 000	203 905		46 374		332 279		20 000
Burundi	Floods	2.89	3 600		33 500				33 500		
Caribbean	Hurricane Hugo	9.09	n.a.	747 681	7 623 218	2 446 830	870 040	110 000	11 797 769	462 125	80 000
China	Earthquake	4.09	40 000	115 323	169 491				284 814		25 000
china	Floods/landslides	7.89	100 000 000	624 125	2 718 470	552 486	691 564	436	4 587 085	48 000	25 000
China	Earthquake Shanxi	10.89	50 000	25 000			35 000		60 000		
Djibouti	Floods	4.09	150 000	1 110 000	2 655 750		393 354		4 159 104	500 000	
Ethiopia	Meningitis	3.89	n.a.	1 783 154	1995 943	1 110 734	1 166 336		6 0% 167		
Guyana	Floods	1.69	16 000	45 000					45 000		15 000
Iran	Earthquake	5.89		10 000					10 000	10 000	
Malawi	Floods	2.89	100 000	602 100	3 222 821	113 000	803 779		4 741 700		
Mauritania	Returnees	5.89	98 500	1 078 826	1 204 885	52 000	487 813	768	2 824 292	881 666	25 000
Mauritius	cyclone Piringa	1.89	9 500	60 000					60 000		10 000
Myanmar	Fires	7.89		81 073	9 573			5 891	96 537		25 000
People's Democratic Republic of											
Yemen	Floods	3.89	260 000	862 637	1 514 303	28 249	3% 188	100 000	2 889 371	757 637	20 000
Philippines	Typhoons	10.89	12 000		552 801		203 108		755 909		
Romania	Emergency	12.89	n.a.		44 275 019	7 369 614	14 6 % 914	8 926 985	72 270 832		
Senegal	Returnees	5.89	80 000	857 940	3 013 952	1 088 775	218 800		5 179 467	118 590	25 000
Sri Lanka	Floods	6.89	300 000	428 800	1 381 393	234 375	103 181		2 147 749		30 000
Tadzikistan											
SSR	Earthquake	1.89	12 000	484 000				98 000	582 000	484 000	
Thailand	Typhoons	11.89	154 000	218 294	852 730		110 000		1178 024	135 294	25 000
United Republic of											
Tanzania	Floods	4.89	140 000	20 000	120 100		38 500		178 600		20 000
viet Nam	Typhoon Cecil	5.89	336 000	279 020	73 964		150 000		SD2 984	74 020	
Viet Nam	Typhoon Irving	7.89	n.a.	106 290	30 319				136 609	76 2%	
Viet Nam	Typhoons	10.89	n.a.	153 050	1 631 815	439 M O	393 916	1 761 222	4 379 563	78 050	15 000
Zambia	Heavy rains	2.89	200 000	60 000	110 166		71 465		241 631		20 000
Total											
			102 504 000	73 068 506	323 295 662	111 369 3 %	39 082 808	10 968 302	557 784 636	10 247 646	350 000

(Footnotes on following page)

(Notes and footnotes to table B)


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**Notes:**

Country: **disaster-affected countries in which** UNDRO **was** involved.

**Contributions:** dollar equivalent of **cash and in-kind contributions** given for disaster **relief and** reported to UNDRO.

**n.a.:** Not available.

**a/** Contributions: (a) **channelled** through the **United Nations**  and  
**(b) made** from United **Nations** system programmes.

**b/** These figures were calculated based on **pledges and using the United Nations** exchange rate prevailing **at the time pledges were communicated** to UNDRO,

ANNEX VIII

Total contributions by donor country (all disasters) for which  
value was reported to the Office of the United Nations  
Disaster Relief Co-ordinator (1988-1989) a/

(In United States dollars)

country	1988	1989	Total 1988-1989
Algeria	1 000 000	6 200	1 006 200
Argentina	136 496		136 496
Australia	9 215 191	9 405 104	18 620 295
Austria	2 992 560	721 054	3 713 614
Bahrain	b/	250 000	250 000
Bangladesh	b/		b/
Barbados	7 500	b/	7 500
Belgium	2 318 518	754 450	3 072 968
Bhutan	70 043	-	70 043
Bulgaria	725 000	-	725 000
Burundi	b/		b/
Canada	51 460 878	20 135 581	71 596 459
Chile	20 000	5 000	25 000
China	9 748	273 526	283 274
Cuba	b/	-	b/
Cyprus	113 111		113 111
Czechoslovakia	2 026 881	b/	2 026 881
Democratic Yemen	b/		b/
Denmark	15 874 953	5 624 503	21 499 456
Dominica		b/	b/
Dominican Republic	b/		b/
Egypt	b/	b/	b/
Ethiopia		b/	b/
Finland	4 943 193	3 625 086	8 568 279
France	23 826 879	21 944 978	45 771 857
German Democratic Republic	26 792 960	535 790	27 328 750
Germany, Federal Republic of	47 884 803	45 494 640	93 379 443
Greece	b/		b/
Guyana		b/	b/
Holy See	100 000		100 000
Hungary	82 874	b/	82 874
Iceland	54 989	b/	54 989
India	100 000	499 000	599 000
Indonesia	b/	10 000	10 000
Iran (Islamic Republic of)	b/		b/

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Country	Total		
	1988	1989	1988-1989
Iraq	b/	b/	b/
Ireland	1 411 501	253 837	1 665 338
<b>Israel</b>	b/	b/	b/
Italy	74 770 940	63 294 221	138 065 161
<b>Jamaica</b>	b/	b/	b/
Japan	44 296 450	9 300 851	53 597 301
<b>Jordan</b>	b/	b/	b/
<b>Kenya</b>	24 300		24 300
Kuwait	b/	1 000 000	1 000 000
Lebanon		31 670	31 670
Libyan Arab Jamahiriya	230 000	b/	230 000
Luxembourg	847 101	143 000	990 101
<b>Madagascar</b>	b/	b/	b/
<b>Malaysia</b>		15 000	15 000
Maldives	40 000		40 000
<b>Mauritius</b>	5 000		5 000
<b>Mexico</b>	100 000		100 000
Mongolia	b/	33 000	33 000
<b>Morocco</b>	b/	121 915	<b>121</b> 915
<b>Netherlands</b>	33 533 689	11 593 236	45 126 925
<b>New Zealand</b>	477 146		477 146
Nigeria	b/	b/	b/
<b>Norway</b>	13 762 343	4 630 672	18 393 015
<b>Oman</b>		b/	b/
<b>Pakistan</b>	<b>928</b> 043		928 043
Philippine8		500	500
<b>Poland</b>	2 600 000	b/	2 600 000
Portugal	35 100	46 519	81 619
<b>Qatar</b>	b/	b/	b/
Republic of Korea	2 441 950	138 000	2 579 950
Romania	b/	b/	b/
<b>Saudi Arabia</b>	500 000	b/	500 000
Singapore	150 000		150 000
Somalia		b/	b/
Spain	1 820 115	1 263 414	3 083 529
Sri Lanka	b/	b/	b/
Sudan	b/	b/	b/
<b>Sweden</b>	62 800 954	34 760 872	97 561 626
<b>Switzerland</b>	8 237 909	2 713 380	10 951 289
Syrian Arab Republic	b/	b/	b/
Togo	235 849	238 095	473 944
Trinidad and Tobago		b/	b/
Tunisia	b/	6 400	6 400
Turkey	262 576		262 576

Country	Total		
	1988	1989	1988-1989
Uganda	b/	-	b/
<b>Union of Soviet Socialist Republics</b>	34 530 634	413 000	34 943 634
United Arab Emirates	b/	b/	b/
United Kingdom of Great Britain and Northern Ireland	46 853 858	15 341 486	62 195 344
United States of America	147 168 489	87 678 864	234 847 353
Uruguay	b/		b/
Venezuela	-	b/	b/
Yemen	b/	30 769	30 769
Yugoslavia	839 380	b/	839 380
Zaire	150 000	100 000	250 000
<b>Total, Governments</b>	<b><u>668 809 904</u></b>	<b><u>342 433 613</u></b>	<b><u>1 011 243 517</u></b>
<b>Intergovernmental organizations (AGFUND, Council of Arab Ministers for Social Welfare, EEL, OAU, OPEC)</b>	<b><u>118 253 247</u></b>	<b><u>118 556 868</u></b>	<b><u>236 810 115</u></b>
<b>Grand total</b>	<b><u>787 063 151</u></b>	<b><u>460 990 481</u></b>	<b><u>1 248 053 632</u></b>

a/ Contribution made bilaterally or channelled through the United Nations system.

b/ Contribution reported to UNDR0 without a corresponding value.

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