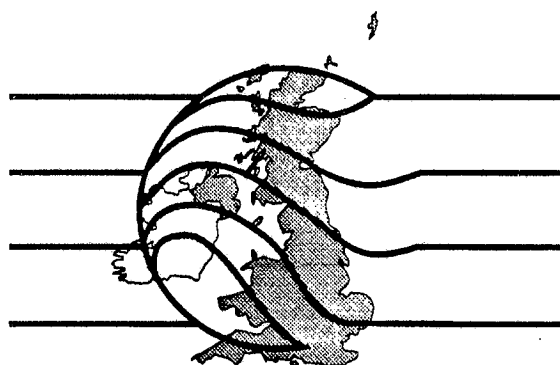


**UK National Report**  
**For the International Decade for**  
**Natural Disaster Reduction**



**UK NATIONAL REPORT  
FOR THE INTERNATIONAL DECADE FOR NATURAL  
DISASTER REDUCTION**

**I. OVERVIEW AND EXECUTIVE SUMMARY**

The UK and the IDNDR

The United Kingdom is prone to a limited range of major natural hazards, in particular river and coastal flooding, and occasional high winds. While these have caused extensive economic losses over the past decade, the threat to communities and loss of life has been relatively minimal. In addition, the development of a sound scientific understanding of the UK risks, the construction of appropriate engineering works and the establishment of natural hazard warning systems have all helped to reduce the threat of disasters.

Scientific and technological work in the preparedness and mitigation field within the UK has therefore proceeded in response to these domestic risks but there has also been a gradual development of major areas of scientific expertise relative to hazards which are not experienced in Britain or which pose relatively minor threats. However, these are significant in terms of designing critical facilities such as nuclear power plants, major tunnels and bridges etc. Overall, pure and applied research has proceeded in response to the full range of global hazards within the fields of: seismology, volcanology, geomorphology, hydrology and meteorology. There is also a major international concentration of scientific expertise in the field of drought alleviation and famine prevention based on hydrological, agricultural and economic analysis. This scientific commitment to hazard research has related to the assessment and analysis of risks, prediction studies as well as the development of a wide variety of social, economic and physical techniques to reduce risks.

Despite the limited range of hazards within the UK, there is extensive interest in reducing risks at a scientific level and this has found expression in many international contexts. Thus the primary focus of the IDNDR initiative in the UK has been on providing assistance to reduce risks within hazard prone developing countries. This emphasis

is in part a reflection of the historical scope of international aid from UK sources. Commonwealth links are very strong and these coincide with many hazard prone regions of the world, such as the Caribbean, South Pacific island countries, Africa, the Indian sub-continent and South East Asia.

This report reflects the primary focus on overseas activities in the UK approach to IDNDR. The text is therefore restricted to describing UK initiatives in reducing natural disasters in developing countries. This first section outlines the main emphasis and concerns of UK involvement in IDNDR. In later sections specific examples of UK initiatives in the field of risk assessment, mitigation and warning are provided. It should be noted that these are only a selection and do not represent the total number of UK projects concerned with natural disaster reduction, whether in the UK or overseas.

### UK National IDNDR Coordinating Committee

The **UK National IDNDR Coordinating Committee** is independent of central government. At the beginning of the Decade, the UK made a conscious decision to involve participation in IDNDR activities by as many interested parties as possible (eg from the scientific/technical, NGO and private sectors). The Committee's broad-based composition and its independence allow it flexibility of action and reflect the UK's view that the IDNDR is of concern to all parts of the community. The UK firmly believes that its response to IDNDR should be active and constitute more than an administrative gesture in response to a UN initiative.

From the outset of the IDNDR, the UK Committee has attempted to promote a balanced response - with an emphasis on the development of research and its applications in the physical, social and medical sciences. In line with the general UK approach to the IDNDR, the Committee has emphasised assistance to disaster prone developing countries.

UK initiatives for the IDNDR have been supported by the development, under the auspices of the UK IDNDR Coordination Committee, of a wide ranging committee/working group structure. The working groups, like the Coordinating Committee itself, have an overseas rather than a domestic focus. The approach adopted by the UK in organising its

response to the IDNDR has led to a very effective relationship between Government and the scientific community. To date, however, the private sector and non-governmental organisations have, unfortunately, not shown the same enthusiasm for IDNDR activities. But it is hoped that the establishment of the new Implementation and Applications Working Group will generate greater interest among these groups. From the outset the UK IDNDR committees have benefited from the active support of the Royal Society and the Royal Academy of Engineering with financial support from ODA and a range of other bodies.

The present committee/working group structure is outlined in Appendix I and the Publications generated by UK IDNDR committees and working groups are listed in Appendix II.

### UK Government response

Responsibility for coordination of the **UK Government** response to the IDNDR and for support for disaster preparedness and mitigation projects lies primarily with the Emergency Aid Department of the Overseas Development Administration [ODA], which is a part of the Foreign Office of the British Government.

The ODA's priority concern has been to encourage the implementation of projects that will have a tangible impact to protect vulnerable communities. At the bilateral level, ODA has, therefore, concentrated its support on programmes that will have a demonstrably beneficial effect on recipient countries' capacity to mitigate or respond to disasters.

The UK sees promotion of and support for disaster preparedness and mitigation programmes in developing countries as an integral part of the continuum which is increasingly recognised as a sound approach to international assistance programmes. This concept, usually defined as the Relief/Development Continuum, envisages the consistent inclusion in emergency relief programmes of elements to facilitate the transition from straightforward relief activities through reconstruction and rehabilitation projects to a smooth resumption of sustainable development programmes. Support for disaster mitigation and preparedness activities can, therefore, be seen as the first step of the

same continuum.

Thus ODA seeks opportunities to support preparedness programmes in the most disaster-prone countries, which are frequently those where long-term development programmes are under way. The intention is that by continuing to concentrate efforts in these areas, those countries will build the capacity to mitigate the effects and cope better with disasters when they do occur, protect development investment and allow normal development programmes to resume as soon as possible.

In response to this, ODA has undertaken a range of activities in the disaster preparedness and mitigation field. These activities include the following:

- integration of mitigation and/or preparedness elements into major ODA development programmes (such as the Bangladesh Flood Action Plan);
- establishment of an annual budget of £2 million (\$2.90 million U.S. dollars), administered by the Emergency Aid Department of ODA - specifically to promote mitigation/preparedness projects and the UK's own capacity for swift, effective emergency response;
- bilateral or multilateral support to UN agencies undertaking risk-reduction activities.

The emphasis that the UK gives to projects in disaster prone areas at the international bilateral level is a clear indication of its commitment to risk reduction in developing countries. The establishment on a separate budget for disaster preparedness has simplified the process of allocating funding and made it less bureaucratic.

The UK's support for the IDNDR and other disaster preparedness programmes is an integral part of the wider UK Disaster Relief Initiative. Following a spate of particularly serious disasters from 1989-1991, culminating in the Iraq refugee crisis, Ministers reviewed ODA's disaster relief policy and agreed that ODA's range of responses to disasters overseas should be enhanced with a capacity to manage directly relief operations in the field. The Disaster Relief Initiative was launched, which enables ODA to send teams of experts to help with

relief work in sudden disasters.

Each disaster is unique and there can be no standardised response. ODA retains the important capability of tailoring its flexibility of response to particular needs. Consistent with this vital principle, ODA's Disaster Relief Initiative contains three key elements: assessment; coordination; and deployment. It is recognised that sending teams of foreign experts to disasters is not always appropriate: local relief, supported with international financial help, is often far more important. That is why the first phase of the Initiative is to ask what the ODA can do to help. Immediately after the Erzincan earthquake in Eastern Turkey in March 1992, for example, ODA sent a senior expert to assess the situation. Relief teams were alerted, but these were not used on the advice of the assessor that foreign teams were not needed. Instead, funds and supplies were provided. Whilst this is primarily a response initiative, in one aspect it can be regarded as falling within the scope of IDNDR in that it enhances the UK's level of preparedness to respond to disasters overseas in the most appropriate way.

On the international level, ODA continues to support the United Nations Department of Humanitarian Affairs (DHA). It recognises the need for the UN to have a strong body to coordinate the UN response to emergencies as well as mitigation and preparedness activities. The DHA was envisaged as a facilitating rather than an operational body. The UK continues to see this as the role of the DHA. From time to time DHA will have a coordination role to play in the field. The UK therefore welcomes the recent agreement between DHA and UNDP which sets out a clear framework for UN field arrangements in emergencies. It is important that DHA now focuses and prioritises its work in support of its core tasks, so that it does not overstretch its already limited resources. In addition to its support to the UN system, the UK Government also liaises closely with the European Union Humanitarian Office (ECHO).

## **II. RISK ASSESSMENT**

### **Introduction**

The UK involvement in activities related to hazard and vulnerability assessment have been both extensive and wide ranging, especially in developing countries. They reflect the close cooperation between ODA, specialist Government Agencies, UK scientific institutions and a broad range of non-governmental organisations (NGOs). The following examples are provided to indicate the range of projects that are being undertaken by UK bodies.

### **Earthquake**

#### Secondary Seismic Hazard Assessment - British Geological Survey, funded by ODA

This project has been concerned with hazard mapping and protocol, in Costa Rica and China, to assist planning for mitigation of secondary seismic hazards (e.g. ground motion amplification, soil liquefaction, surface rupture, earthquake induced land slipping, tsunami inundation) in earthquake prone cities sited on Quaternary ("superficial") deposits.

### **Volcanoes**

#### Volcanic Hazard Mapping for Development Planning - British Geological Survey and University of Bristol, funded by ODA

This project is concerned with volcanic hazard mapping in Chile and other Andean countries to assist low risk planning and development, comparing and using integrated rapid and detailed mapping techniques to design and produce appropriate digital thematic mapping systems and qualitative hazard ranking protocol incorporating socio-economic considerations.

Environmental Aspects of Radon and Other Gases in Geothermal Areas  
- British Geological Survey, funded by ODA

Focusing on Kenya, Costa Rica and the Philippines, this is a study of the potential risk to human and animal health and agricultural practice from volcanic gas emissions, including the provision of preliminary geoscience baseline datasets to support epidemiological research.

**Landslide/Subsidence**

Rapid Assessment of Landslide Hazards - British Geological Survey,  
funded by ODA

This project has been investigating landslides in Papua New Guinea, Fiji and Colombia. Remote sensing, engineering geology, rainfall data, GIS have all been used for improved planning and decision making capability for hazard mapping.

Modelling of Subsidence Due to Groundwater Extraction - British  
Geological Survey, funded by ODA

The British Geological Survey have integrated hydrogeological and geotechnical data to improve predictive modelling of subsidence due to groundwater extraction. The focus of the project has been low lying urban areas of China at potential risk from natural disaster, especially enhanced flood risk.

Hazard Assessment in the Cordillera Blanca/Hualcán, Peru - Applied  
Geology, funded by ODA

This project has assessed the risk to the local population of an ice-cored moraine dam from both dam failure and overflow. Mitigation measures to reduce the water level of the dam have been proposed and adopted by the Peruvian Government.



## **Flood**

### Flood Studies Research - Institute of Hydrology

The Institute of Hydrology's "World Flood Study" methodology enables planners and engineers to make rapid estimates of flood magnitudes of various levels of risk on a regional basis worldwide. These methods can be applied at sites without local flow data and are particularly appropriate in regions with sparse data networks. User-friendly software has been developed to enhance this.

### **Observations on Risk Assessment**

There has been continual emphasis on the vital importance of systematic and integrated risk assessment in both the IDNDR initiatives that have been promoted in the UK - as well as in projects - such as that listed above.

There is a recognition in both the research sector as well as within agencies implementing risk assessment programmes that the process requires a mixture of advanced technological monitoring -for example by remote sensing, (the subject of discussions in a seminar held at the Royal Society in March 1994) and by ground survey techniques.

One issue to emerge in repeated seminars/conferences has been the need to recognise that whilst Hazard Mapping is frequently well advanced - Social or Community Vulnerability Analysis has been seriously neglected. The typical Risk Assessment projects noted above are all examples of the application of the physical sciences to various hazard types. Thus far in the IDNDR there have been very limited requests for financial or technical assistance to ODA for specific projects that emphasis social vulnerability analysis.

However three of the working groups: Drought Mitigation, Medical and Social Sciences, and Applications and Implementation are all examining, within their respective spheres, ways to develop vulnerability assessment as a prelude to the introduction of protective measures for exposed communities.

### III. MITIGATION ACTIVITIES

#### **Multi-Hazards**

##### Comprehensive Disaster Management Project of Government of Bangladesh - UNDP with co-funding from ODA

The Comprehensive Disaster Management Project has been developed in order to provide a systematic and integrated approach to disaster management in Bangladesh. A Disaster Management Bureau has been established to coordinate the activities at a national level, and a national disaster preparedness plan is being prepared. ODA's Aid Management Office in Dhaka has been a major funder of this project.

##### Urban Developments and their Vulnerability to Natural Disaster, With Particular Reference to Megacities - WFEO/ Institution of Civil Engineers, funded by ODA

The "Megacities" project outlines measures to reduce the vulnerability of urban areas in developing countries, particularly megacities, to the effects of major natural disasters. Using case studies of Jakarta, Karachi and Metro Manila it will investigate elements of risk reduction, such as increasing awareness, adequate provision of physical infrastructure and the integration of contributions from the various disciplines involved, to construct a methodology of response.

##### Design and Construction of Buildings and Structures to Withstand Natural Disaster - Institution of Civil Engineers, funded by ODA

This project focuses on case studies in Egypt, Turkey, the Philippines, Greece, Jamaica and Colombia. The study will investigate the implementation of technical knowledge, including the application of codes and standards, within construction industry practice. Case studies will monitor public awareness and establish the perceived problems experienced by property owners, designers, builders and enforcement authorities.

## **Earthquake**

Programme of Disaster Management Research and Training in Latin America - Intermediate Technology Development Group, funded by ODA and others.

This is a four year programme for strengthening the capacity of local and regional organisations (NGOs, local and regional governments, national organisations for the prevention and attention of disasters, universities and research institutions) in disaster preparedness, mitigation and prevention. as well as informing and influencing the policies and strategies of national governments, and bilateral and multilateral agencies in the region.

The programme consists of three interrelated projects:

Project 1: a research and dissemination project on key disaster management issues to be undertaken by the Network of Social Studies on Disaster Prevention in Latin America (La Red).

Project 2: a training, information and disaster preparedness, mitigation and prevention project to be implemented in the Grau and San Martin Regions of Peru and the Esmeraldas and Manabi Provinces of Ecuador by ITDG and the Emergency Preparedness Programme of Partners of the Americas.

Project 3: a proposal for the creation of a Latin America Disaster Training Centre.

## **Drought**

Drought Mitigation Working Group of the UK IDNDR Coordination Committee

The members are drawn from a wide range of institutions and include engineers, scientists and social scientists, as well as representatives of NGOs directly involved in drought alleviation projects in this field. The

general objective of the group is to draw on the UK skills and resources to reduce loss of life, environmental degradation, social disruption and economic damage resulting from drought in developing countries. From its inception the Group recognised that drought involves a range of complex issues and that different approaches and disciplines are needed in most projects to effectively solve drought problems. Thus an initial aim of the group has been to provide a forum for the exchange of ideas between the different disciplines. This has been achieved through the group's one day workshop held in September 1993. The 70 participants were able to share their experience and to develop recommendations for future work.

The Group is now moving on to consider specific practical project proposals. A number of topics have been identified and are being developed by Group members. The Drought Mitigation Working Group will act in a coordinating role and assist in seeking funding. The emphasis will be on multi-disciplinary projects, and proposals will focus on indigenous approaches to risk management and on capacity building and drought management, especially in Africa.

### **UK IDNDR International Conference**

The UK scientific community has become increasingly aware of the need to focus mitigation activities on the issue of the vulnerability of communities to natural hazards. This was reflected in the main UK IDNDR Conference in October 1993, which was entitled "Natural Disasters: Protecting Vulnerable Communities". Nearly 50 papers were presented, under the headings of vulnerability of communities; forecasting and warning; preparedness and protection; lessons learned in recovery; and technology, knowledge transfer and future opportunities.

### **UK IDNDR Study Programme - Oxford Centre for Disaster Studies, funded by ODA**

Twenty five study fellows from a wide range of developing countries took part in a two week study programme on disaster management, immediately preceding the UK National IDNDR Conference. This

group was made up mainly of scientists and senior government officials responsible for disaster management. The programme provided both specialist training sessions, and the opportunity for both the sharing of experiences and visits to UK centres of expertise in risk assessment and mitigation. The programme created a new network of concerned individuals - and this has already generated a range of project proposals for mitigation in China and the Caribbean.

### **The Hazards Forum**

The Hazards Forum exists to provide a national focal point in which engineering features in the mitigation and reduction of both man-made and natural hazards and disasters. It was established in 1989 by the four larger UK Engineering Institutions as a result of their concern at the major natural and man-made disasters which taken place in recent years. It was felt that there was a need for a forum to focus on the interdisciplinary matters involved in hazards and safety, and to make engineers more aware of their responsibilities in improving safety. To this end, the Hazards Forum has organised both international and national conferences, and started the journal "Avoiding Disasters". The Forum has now developed a wider membership including many scientific professional bodies and learned societies.

### **Observations on Mitigation Activities**

The typical range of projects listed above highlight a number of important characteristics of the UK strategy for Risk Reduction:

- there is an emphasis on comprehensive disaster mitigation projects, embracing a wide range of preparedness and mitigation measures such as the Bangladesh project;
- the UK is collaborating with major international programmes such as the Bangladesh Flood Action Plan which is being coordinated by the Government of Bangladesh working with UNDP and the World Bank;
- protective measures can embrace a wide diversity of

techniques:

hazard reduction techniques (ie flood control measures)

structural measures

non-structural measures

public awareness programmes

evacuation planning

Already projects are being funded that support such approaches either within integrated projects or through specific attention to a given topic, such as the programme for addressing building construction to withstand natural disaster.

- projects are being developed in response to specific IDNDR programmes such as the Megacities Project;
- there is a recognition that as well as promoting action on the ground it is vital to encourage concerned individuals and agencies to meet together to exchange ideas which can and will lead to effective projects. The examples cited of the Latin American programme and the UK IDNDR study programme indicate the considerable value in funding this form of networking;
- mitigation projects may begin their life through the activities of an IDNDR working group. For example the Drought Mitigation Working Group are laying down the groundwork for a range of multidisciplinary projects on indigenous approaches to drought management. It is anticipated that a range of proposals will be eventually submitted for funding to implement these measures.

## **IV. WARNING**

### **Famine**

#### Food Security and Early Warning in South East Ethiopia - Save the Children Fund, funded by ODA

This project aims to monitor the food security in one region of Ethiopia, and provide early warning so that interventions can be timely and appropriate. The intended outputs are a greater awareness of the constituent factors that contribute to food security, a more purposeful and better integrated data collection system, and greater information exchange with other organisations working on similar programmes.

### **Weather Warning**

#### The Meteorological Office

A wide range of meteorological advice and expertise is available from the Met. Office concerning the monitoring and prediction of weather and climate. The Met. Office, which is a Government Agency, has extensive experience in numerical weather prediction and the development of advanced observational systems. Specific examples of assistance currently being provided to other countries and related to natural disaster reduction are given below.

(i) Advisory messages on the expected track and intensity of tropical cyclones are sent to Meteorological Centres at Guam, Melbourne, Beijing, Mauritius and Pretoria. These messages are based on the output from the global numerical weather prediction model and can be supplied for other cyclone areas if requested.

(ii) Experimental seasonal rainfall forecasts for NE Brazil and tropical N Africa are made, based on sea-surface temperature patterns. Information is sent to various Institutes and National

Meteorological Services in the areas concerned. Some forecasts are also published in the NOAA Experimental Long-lead Forecast Bulletin. Research is being conducted into forecasting for other areas using the same technique.

(iii) Funding is provided under the Voluntary Co-operation Programme of the World Meteorological Organisation (WMO). Although not specifically targeted at natural disaster reduction, equipment and training provided to the National Meteorological Services under this programme are aimed at improving their capability to provide services. This naturally includes warning services and as such is in direct support of the aims of IDNDR.

(iv) Support is given to the World Weather Watch programme of WMO through funding of upper air observing stations. Stations currently receiving support are: Vanuatu; Tarawa; Funafuti; Penrhyn Island; and the Seychelles.

### **Observations on Warnings**

The examples noted above aptly reflect the balance of concern between projects which are scientific in nature such as the Weather Warning System and those which are based on social and economic analysis, such as the Food Security project in Ethiopia.

There is also extensive UK expertise in the field of flood warning systems which has been developed over many years by the Institute of Hydrology, the National Rivers Authority and others. These flood warning techniques, which involve the use of satellite and ground based weather radar data together with advanced computer modelling, have been extensively applied within a number of developing countries and these programmes are being further developed as a contribution to the IDNDR.



## V. INTERNATIONAL COOPERATION

### Patterns of International Collaboration

The typical projects indicated in this report have mainly been undertaken in close working collaboration with national counterparts. In certain cases there has also been a contribution from the national country to a given project. In addition there is an extensive community of British international consultants who work with ODA as well as a number of UN agencies, providing support to disaster prone countries.

### International Training in Disaster Mitigation/Preparedness

The UK has been very active in supporting a number of international training initiatives that support the IDNDR. These include a contribution towards the work of the Asian Disaster Preparedness Centre (ADPC) which is based in Bangkok, support to the Disaster Management Training Programme which is organised by UNDP/DHA, and a number of UK based programmes such as the annual Counter-Disaster Staff Training Programme organised by the Cranfield Disaster Preparedness Centre (CDPC).

The ODA are currently providing support to develop national training programmes and training materials in Disaster Management and Mitigation the Philippines and Turkey.

### International Council of Scientific Unions (ICSU)

British scientists have played a leading role in ICSU activities, including the chairmanship of the ICSU Special Committee for IDNDR. In particular, there are major UK contributions to the following ICSU projects which have been endorsed by the UN Secretariat as International Demonstration Projects for IDNDR:

1. Joint ICSU/World Meteorological Organisation Programme on Tropical Cyclones;

2. ICSU Programme "Reducing Volcanic Disasters in the 1990s";
3. Global Seismic Hazard Assessment Programme of ICSU;
4. ICSU Programme on Famine and Vulnerable Food Systems.

#### European Union Funded Programmes

UK scientific institutions are increasingly collaborating with institutions in other countries European Community on initiatives concerned with IDNDR. Examples include:

1. Study of Volcanic Emissions and Their Effects on Health at Poas Volcano, Costa Rica - University of Cambridge and Costa Rican Institutions, funded by the E.C. International Scientific Cooperation Programme.
2. EC Laboratory Volcano Project, Furnas Volcano, Azores: Study of Eruption Precursors and Plumbing System Aimed at Eruption Prediction and Understanding of the Eruptive Mechanisms and Hazard Assessment - Universities/Institutions from UK, Italy, Spain, Iceland and the Azores, funded by the EC Environment Programme.

#### European Union Collaboration During the IDNDR

The regional presentation from the European Union describes the range of joint activity that is currently taking place to promote the IDNDR. Members of the UK IDNDR Coordination Committee have contributed to this analysis of European response.

## **VI. OVERALL EVALUATION AND FUTURE PROGRAMME OF IDNDR ACTIVITIES**

During the second half of the IDNDR it is anticipated that the following progress will be made from UK sources:

- the scientific programmes which have been referred to above will continue and will expand. Some of these programmes are currently becoming operational and it is anticipated that significant results will be obtained before the conclusion of the decade;
- the UK is well placed to support the development of technology for risk reduction. For example, extensive work is taking place in the fields of remote sensing and the development of GIS for risk assessment as well as emergency management. Major developments are occurring in the field of weather prediction particularly through the use of weather radar and other advanced forecasting systems. During the remainder of the IDNDR it is likely that there will be many programmes to share this technology with disaster prone developing countries through technical assistance programmes;
- it is anticipated that ODA will continue to fund a balanced programme of preparedness and mitigation activities. Increasingly these will be undertaken in partnership with personnel from within hazard prone countries and the overall focus will be on practical measures where benefits can be secured in the short term;
- through the newly formed 'Applications and Implementation Working Group' it is hoped to promote a series of new initiatives to reduce risks through the work of non-government relief and development agencies. Thus far in the IDNDR their work has been strictly limited, partly in response to the severe pressure that they have been under from a long progression of major international

emergencies that stretch from the aftermath of the Gulf War to emergency situations in former Yugoslavia;

- a vital function will be to move the general emphasis of the British contribution to IDNDR from one of 'provision' to 'enablement'. The expanding need is to promote networking within regions as well as internationally in order to share experiences and transfer technology to make quantum leaps forward between countries facing similar problems with diverse levels of provision;
- the focus of work will need to fill the gap that exists in the sphere of the social and medical sciences. Thus far in the decade the UK has emphasised the role of the physical sciences in promoting practical projects that develop monitoring and warning systems, safer building construction, flood protection measures etc. There has been little corresponding attention to ways to make societies more resilient possibly even addressing such matters as human rights concerns where vulnerable families have no alternatives other than to live in highly dangerous locations. Another possible area for further work is investigation of the potential for the use of different media in raising public awareness in disaster prone countries of what can be done community level to mitigate and prepare for emergencies;
- a growing concern in the field of mitigation planning is to place emphasis on the development of human resources. Therefore it can be assumed that the current training initiatives are likely to expand significantly during the Decade. It is likely that the UK will continue to support such initiatives with a particular emphasis on the development of national and regional programmes.
- The UK Committee may, following the example set by other national committees of donor countries, seek opportunities to establish partnerships with national committees in developing countries.

## Conclusion

To conclude this mid-decade progress report, UK based scientists, technologists, development workers, trainers, consultants and officials in the private sector, NGO's and Government are increasingly active in supporting the IDNDR. They are supported by a responsive IDNDR organisational structure and through the active commitment of ODA who place disaster risk reduction very high on their agenda for sustainable development.

For the remainder of the Decade and beyond, the UK will build on activities underway and continue to seek opportunities for new initiatives. The multi-disciplinary approach of the UK IDNDR Committee equips it particularly well to make an valuable contribution in promoting technology transfer. The Committee intends to work to realise this potential. But there are no grounds for complacency. It is widely recognised that a very significant task is faced by the international community in the remaining years of the Decade. It is a sobering fact that whilst increasingly effective mitigation measures are being introduced, risks to vulnerable populations are expanding at a faster rate than the application of such safety measures. The aims of the IDNDR are ambitious. But the UK remains confident that, by effective and well-targeted use of its resources, much can and will be done to achieve the those aims.

## APPENDIX I

### List of UK IDNDR Working Groups Reporting to the UK IDNDR Coordination Committee

- Earthquake Risk Mitigation Working Group
- Science, Technology and Engineering Working Group
- Drought Mitigation Working Group
- Hazards Forum
- Medical and Social Sciences Working Group
- Implementation and Applications Working Group

Details of Working Groups from: Ms L M Cook

UK IDNDR Secretariat  
Royal Academy of Engineering  
2 Little Smith Street  
London SW1P 3DL UK

Tel: +44 (0)71 222 2688  
Fax: +44 (0)71 233 0054

## APPENDIX II

### List of UK IDNDR Publications Resulting from Events Organised by Working Groups Reporting to the UK IDNDR Coordination Committee

1. "Opportunities for British Involvement in the IDNDR", Proceedings of a Workshop held at the Royal Society, London, 27 March 1992.  
ISBN: 1 871634 296

Free of charge - available from UK IDNDR Secretariat,  
Ms L M Cook, Royal Academy of Engineering,  
29 Great Peter Street  
London SW1P 3LW.UK  
Tel: +44 (0)71 222 2688  
Fax: +44 (0)71 233 0054

2. "Medicine in the IDNDR: Research, Preparedness and Response for Sudden Impact Disasters in the 1990s", Proceedings of a Workshop held at the Royal Society, London, 19 April 1993.  
ISBN: 1 871634 15 6

Free of charge - available from UK IDNDR Secretariat, address as above.

3. "Mitigating Drought in Developing Countries: The Contribution of UK Institutions", Summary of a Workshop held at the Institute of Hydrology, Wallingford, 7 September 1993.

(Contact Institute of Hydrology,  
c/o Professor Wilkinson,  
Crowmarsh Gifford, Wallingford, Oxford OX10 8BB UK.

4. "Natural Disasters: Protecting Vulnerable Communities", Proceedings of a Conference held at The Royal Society and The Institution of Civil Engineers, 13-15 October 1993.  
ISBN: 07277 1936X,

available from: Institution of Civil Engineers,

c/o Thomas Telford Services Ltd,  
Thomas Telford House, 1 Heron Quay, London E14 4JD UK  
(£70 Europe, £78 elsewhere).



5. "Landslides Hazard Mitigation with Particular Reference to Developing Countries",

Proceedings of a Workshop held at the Royal Society, London, 12 November 1993.

(Contact: The UK IDNDR Secretariat, address as above.)

6. "Natural Hazard Assessment and Mitigation: The Unique Role of Remote Sensing",

Proceedings of a Discussion Meeting held at the Royal Society, London, 8-9 March 1994.

(Contact: Professor Geoff Wadge, NUTIS, Dept. of Geography, University of Reading, Reading, UK)

List of events organised by Working Groups reporting to the UK IDNDR Coordination Committee - as above (with addition of Seminar 6/6/94)

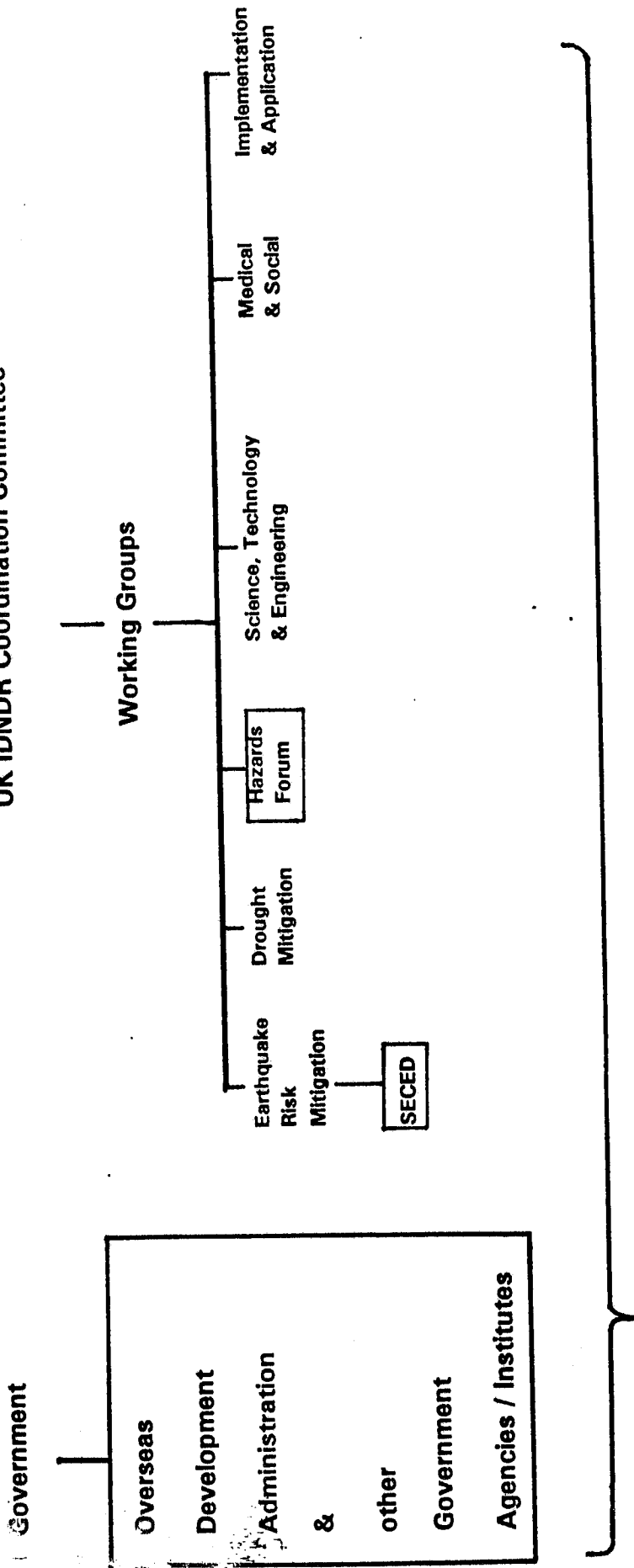
Information regarding the funding of Disaster Preparedness and Mitigation Projects from:

Ms Janet Douglas  
Emergency Aid Department  
Overseas Development Administration  
94 Victoria Street  
London SW1E 5JL UK

# Appendix I

**APPENDIX 1:**

**UK IDNDR Coordination Committee**



**Products:** \* Meetings and Publications to advance knowledge and build networks

\* Scientific Research Activities

\* Risk reduction Projects