



The International Decade for Natural Disaster Reduction 1990-1999

A report on the activities of the UK National Coordination Committee for
the IDNDR



DFID

Contents

	Page
1. Introduction to the Report	2
2. Background to the establishment of the UK IDNDR Effort	2
3. The Structure of the UK IDNDR activities	2
4. The Work of the UK IDNDR National Coordination Committee and its Working Groups	3
i) Conferences	3
ii) Other Meetings and Workshops	4
iii) Publications	4
iv) Research Activities	5
v) Media and Communications	6
vi) International Involvement	6
5. The Financing of the Committee's Work	7
6. Comment on the Effectiveness of the UK IDNDR Effort	8
7. Plans for the Continuation of Natural Disaster Work post-2000	9
8. Appendix 1. Membership of the Coordination Committee 1993-1999 including Chairmen of the Working Groups	11
9. Appendix 2. Details of key UK and UN contacts	12
10. Appendix 3. Sponsoring Organisations	13

FOREWORD

The IDNDR became a major challenge to an ever-expanding UK disaster community within Government, the Professions, Academia, NGO's and the Private Sector. As chairman of the UK National IDNDR Committee I believe we can take some pride in what has been achieved in reducing risks from natural hazards.

The report that follows documents some of these solid achievements in... networking, research, projects and publications. We have also identified some of the weaknesses and gaps in order to consider how they may best be filled in the increasingly dangerous years that lie ahead. I would like to take this opportunity to thank all that have been involved in the activities during the Decade. Many have been acknowledged in the text below but I would particularly wish to thank DFID, (and its predecessor ODA), for faithfully supporting this initiative over the full decade and we are also grateful to The Royal Academy of Engineering and the Royal Society for their sustained support. It is our hope that this vital work will continue under the able leadership of the Hazards Forum.

As we all know the Decade is certainly not going out with a whimper. We have all been shocked at the devastation of the Orissa cyclone, Hurricane Mitch, floods and landslides in Mexico and China and devastating earthquakes in Turkey and Taiwan. Nearer to home we have also witnessed serious flooding in several parts of the country, and in addition a major disaster on our railway system. These events remind us of the task ahead to improve safety to *people and property* from all *hazards*, with protection provided from all *levels* and *sectors*.

Such disasters also wipe out any triumphalism or complacency that may tempt us at the end of so much sustained effort. This catalogue of disasters reminds all groups that disaster risks can be significantly reduced through improved warnings, public education, retrofitting existing buildings etc. The experience of the USA where major earthquakes, floods and hurricanes have occurred with remarkably low casualties, provided a powerful example of the value of comprehensive risk reduction strategies.

I am confident that those in the UK who are committed to risk reduction, of which there are many, will continue in their efforts into the new millenium. I expect them to build on the gains made during the IDNDR, and also to close some of the gaps which have been identified. I wish them every success.

Dr A A Denton CBE FREng
Chairman, UK National Coordination Committee for the IDNDR

The International Decade for Natural Disaster Reduction 1990-1999

Report on the activities of the UK National Coordination Committee for the IDNDR

1. Introduction to the Report

The purpose of this report is to describe, in a largely factual manner, the work of the UK National Coordination Committee for the IDNDR. It is intended that the report will serve as a record of the many activities undertaken by the Committee and its Working Groups throughout the decade, and will be submitted as a final record of what has been achieved to the Committee's sponsors, The Royal Academy of Engineering, the Royal Society, and the Department for International Development, and to the UN Geneva IDNDR Secretariat.

2. Background to the establishment of the UK IDNDR Effort.

In 1989 the UN General Assembly adopted a definitive resolution calling on all governments to take active steps in natural disaster prevention and mitigation. The resolution asked that, where appropriate, national committees be established in co-operation with relevant scientific and technological communities to advance these general aims. It stated, 'The objective of the IDNDR is to reduce through concerted international action, especially in developing countries, the loss of life, property damage and social and economic disruption caused by natural disasters such as earthquakes, windstorms, tsunamis, floods, landslides, volcanic eruptions, wildfires, grasshopper and locust infestation, drought and desertification and other calamities of natural origin.'

The principal aim of the IDNDR was to capitalise on existing knowledge of ways whereby the impact of these natural events can be mitigated, and to foster the systematic transfer of this knowledge to those countries and communities recognisably most at risk.

3. The Structure of the UK IDNDR activities

In the UK the initial response to this request was the establishment of a Science, Technology & Engineering Committee (STE) in 1990 under the Chairmanship of Dr Anne McLaren DBE, Foreign Secretary of the Royal Society. In 1993 the UK National Coordination Committee was formed, chaired by Sir John Knill FREng, which formally brought together under its aegis the activities of a number of working groups some of which pre-dated the IDNDR. These included the STE Committee, the Hazards Forum, the Wind Engineering Society, the Medical & Social Sciences Working Group, the Applications & Implementation Working Group, the Drought Mitigation Working Group and the Society for Earthquake & Civil Engineering Dynamics (SECED).

Initially, the Secretariat for the National Committee was provided by the Royal Society and The Royal Academy of Engineering, and the Committee's activities were funded by the Overseas Development Administration (now DFID). Over the decade these arrangements changed with The Royal Academy of Engineering providing a Secretary (Mr A Eades) on a one day a week basis to the National Coordination Committee, and the Royal Society providing the secretariat for the STE Committee. The Committee structure as described has largely remained intact during the decade although individual membership has changed, most notably the retirement of Sir John Knill FREng in 1995 as Chairman of the National Committee to be replaced by Dr Anthony Denton CBE FREng for the remainder of the decade.

4. The Work of the UK IDNDR National Coordination Committee and its Working Groups

The primary function of the National Coordination Committee was to bring together the activities of the various working groups within a coherent structure and to help promote and publicise these activities, to respond to requests from the UN IDNDR office in Geneva, to sponsor World Disaster Day events, and to provide a means whereby the cause of IDNDR was communicated more widely to the disaster community and the public at large. The means by which the Committee attempted to achieve these aims was largely through meetings, conferences and publications and these are listed separately below. This list does not include most of the meetings and conferences organised separately by the working groups.

i) Conferences

1993 'Natural Disasters: Protecting Vulnerable Communities' at the Royal Society and the Institution of Civil Engineers – October 1993

1994 'Natural Hazard Assessment and Mitigation: The Unique Role of Remote Sensing' at the Royal Society – March 1994

1998 'IDNDR Euro-Conference' at The Royal Academy of Engineering - June 1998

'Forecasts and Warnings' at The Royal Academy of Engineering – November 1998

1999 'The Impact of Natural Disasters on Infrastructure Systems' at the Institution of Civil Engineers – May 1999

'Dealing with Natural Disasters; Achievements and new challenges in Science, Technology & Engineering' at the Royal Society – October 1999

'UK IDNDR Wrap Up Conference' at the Royal Academy of Engineering – November 1999

ii) Other Meetings & Workshops

- 1992 'Opportunities for British Involvement in the IDNDR' at the Royal Society – March 1992
- 1993 'Medicine in the IDNDR: Research Preparedness and Response for Sudden Impact Disaster in the 1990's' at the Royal Society – April 1993
- 'Mitigating Drought in Developing Countries: The Contribution of UK Institutions' at the Institute of Hydrology – September 1993
- 'Landslide Hazard Mitigation with particular reference to developing countries' at the Royal Society – November 1993
- 1995 'Windstorm – Coming to Terms with Mankind's Worst Natural Hazard' at the Royal Society – May 1995
- Preventing 'Natural' Disasters – The role of risk control and Insurance' at the Royal Society – October 1995
- 1999 Exploratory Workshop on Drought and Drought Mitigation in Europe, ISPRA, Italy – March 1999

iii) Publications

It should be noted that many of the publications listed below are the proceedings of conferences and other meetings mentioned previously.

Opportunities for British Involvement in the IDNDR. March 1992

Medicine in the IDNDR: Research Preparedness and Response for Sudden Impact Disaster in the 1990's. April 1993

Mitigating Drought in Developing Countries: The Contribution of UK Institutions. September 1993

Natural Disasters: Protecting Vulnerable Communities. October 1993

Landslide Hazard Mitigation with particular reference to developing Countries. November 1993

Natural Hazard Assessment and Mitigation: The Unique Role of Remote Sensing. March 1994

UK National Report for the IDNDR. May 1994

Megacities – Reducing vulnerability to natural disasters. Institution of Civil Engineers. 1995

Structures to withstand disasters. Institution of Civil Engineers. 1995

Windstorm – Coming to Terms with Mankind’s Worst Natural Hazard.
May 1995

Preventing ‘Natural’ Disasters – The role of risk control and insurance”
October 1995

Audit of UK Assets in Disaster Mitigation and Preparedness.
December 1995

The UK National Coordination Committee for the IDNDR; an
explanatory brochure. 1996

At Risk: the Newsletter for the IDNDR in the UK. September 1996,
July 1997, March and October 1998, June 1999 and forthcoming
February 2000.

Forecasts and Warnings. November 1998

Development at Risk? Natural Disasters and the Third World. Autumn
1998

Exploratory Workshop on Drought & Drought Mitigation in Europe,
March 1999

Teaching about Disasters. A Report and Resource List for Teachers.
Summer 1999

Video on Natural Disasters for IDNDR Day 1999. October 1999

Natural Disaster Reduction in the 1990’s: the UK Contribution.
November 1999 (the second ‘Audit’ Report).

Dealing with Natural Disasters: Achievements and new challenges in
science, technology and engineering. Royal Society News, December
1999

Dealing with Natural Disasters(in preparation).

iv) Research Activities

The primary research activity undertaken by the Coordination Committee was a two year ‘Flagship’ programme on Forecasts and Warnings, proposed by the STE Committee and carried out under the supervision of a Steering Group chaired by Professor Brian Lee. The programme, which was funded by the DFID with additional contributions from the British Council, and Magnox, was focused on the need to effectively communicate disaster warnings to those populations at risk. The research was based on four specific case

studies; the use of satellite and other data in drought and flood warning and monitoring in Southern Africa; warnings of high wind in urban areas in Southern China, Hong Kong and the Philippines; a volcanic hazard evaluation system for Montserrat; and warnings of tropical cyclones in Mauritius. In addition to these a fifth project looked at the social, economic and medical aspects of warning dissemination drawing upon the work generated in the other projects. This was to support the development of a set of guidelines for Disaster Warning Dissemination as part of the Flagship Project. The research was completed in Summer 1998 and the results publicly launched at a conference in November 1998. The report has been widely circulated in the UK and overseas and has been very well received. It showed that where forecasts and warnings are delivered they do reduce the impact of natural disasters but there are many obstacles including poor data exchange.

The Flagship Project is dedicated to the memory of Professor Geoff Brown of the Open University who lost his life on 14th January 1993 while carrying out hazard research at Galeras Volcano, Colombia.

v) Media and Communications

The latter half of the decade has seen the Coordination Committee place more emphasis on the need to promote and publicise the IDNDR cause to a wider audience. This has been achieved in a variety of ways, including the publication of a newsletter 'At Risk', the development of a dedicated web site (web address: www.oneworld.org/idndr), and more attention given to gaining media coverage for events including those organised for IDNDR Days. The latter has resulted in radio and press coverage both national and local which has effectively promoted the IDNDR cause amongst schools in particular. The IDNDR Day activity in 1999 with the theme of '1000 speakers in 1000 schools' was especially successful, with over 1100 schools requesting information packs including a specially prepared video and 700 requiring a guest speaker. The Committee has particularly benefited from the advice, guidance and expertise of Mr Tim Radford, Science Editor of The Guardian, in these matters.

vi) International Involvement

Given that the focus of the Committee's activities has been on natural disasters overseas, a good deal of the work during the decade has been concerned with attendance at, and involvement with, international bodies concerned with natural disasters, and developing links with similar organisations in other countries. In addition, the UK has been represented on international committees, for example, Sir Lighthill FRS sat on the IDNDR International Scientific Committee. Whilst it would be tedious to list every overseas activity of the Committee and its working groups, nevertheless there are some more notable events which should be mentioned.

The first is the World Conference on Natural Disaster Reduction in Yokohama in May 1994 attended by the then Chairman and some members of the Coordination Committee. The Conference served as a mid-decade review of what had been done by all those bodies involved in the IDNDR, and prepared guidelines for action for the remainder of the decade. One significant benefit of the Yokohama meeting for the UK was the agreement of the UK delegates to propose the research project on Forecasts and Warnings to the UK Committee. UK representatives also spoke on behalf of the WMO on forecasts and warnings.

In June 1998, under the auspices of the UK Presidency of the European Commission, a conference was held in London at The Royal Academy of Engineering for all IDNDR National Committees within Europe. Attended by representatives from ten countries, and from ECHO and the UN IDNDR Secretariat, the Conference served a number of purposes, including the exchange of information on European IDNDR programmes, a discussion of end of decade activities and events, and working group sessions on post 2000 disaster reduction activities.

In July 1999, the UK Committee acted as joint task managers with the World Health Organisation in organising a session on Health and Natural Disasters at the End of Decade International Programme Forum held in Geneva organised by the UN IDNDR Secretariat. Formal presentations were made by Dr Peter Baxter, and Professor John Lumley of St Bartholomew's Hospital. In addition to that activity presentations were also made on the Forecasts and Warnings project by Professor Brian Lee, and on the Audit of UK Assets by Professor Ian Davis. The UK National Committee Chairman, Dr A A Denton, served on the planning committee for these events.

Individual Committee members also attended other IDNDR related meetings during the decade as presenters or representatives at regional IDNDR meetings, HABITAT II conferences, Sasakawa Jury meetings and other relevant activities.

5. The Financing of the Committee's Work

Since the Committee's establishment in 1993 the dominant source of funds has been the DFID (previously the ODA). Contributions have ranged from £20,000 to £25,000 annually during the period 1993/94 - 1998/99 and this was increased to nearly £63,000 in 1999/2000 reflecting the increased range of activities in the last year of the decade. In addition to these amounts the DFID also funded the Euro-Conference costing nearly £7,000, and more significantly provided virtually all the finance for the research project on Forecasts and Warnings amounting to £250,000 (£1000 was donated by Magnox) which was supplemented by a further £11,000 resulting from an

underspend of the budget during one of the years under review. The Committee recognises that without this support from DFID little of real value would have been achieved.

6. Comment on the Effectiveness of the UK IDNDR Effort

With any activity of this nature involving many volunteers it is difficult to arrive at a balanced assessment of the effectiveness of the UK IDNDR work. However there is sufficient evidence, both written and otherwise, including the latest Audit report, to suggest that the combined efforts of the Coordination Committee and its working groups have made a moderate though useful impact on the disaster community and related audiences.

Given the limited resources available both in finance and staffing it was inevitable that the impact could best be measured on a cumulative basis, and the growth in conferences, meetings, research work and publications by the end of the decade was producing a much greater though still limited awareness of the IDNDR and its priorities in the UK. In this last respect the cumbersome and unmemorable title given to the decade did not help.

With the Committee's focus largely on overseas countries, itself largely determined by the DFID own policy stance, some UK organisations and individuals opined that the UK IDNDR organisation was too remote and too elitist. Disasters occurred in the UK during the decade, and there was growing recognition of the need to address these. Despite these perceptions however, it must be said that the Committee has fostered networking through its many activities, and links have been established both in the UK and overseas between individuals and organisations which must, in the longer run, be of benefit to those populations most at risk from natural disasters. This is very much in accordance with the Yokohama Conference guidelines.

The transfer of knowledge, both scientific, technical and sociological has significantly improved. Networking greatly helps the capability of disaster specialists. In so doing they are better able to develop programmes which will help mitigate the increasing number of natural disasters expected in the coming years. Needless to say there have been many other activities carried out by numerous organisations, for example universities and NGO's, which were in accordance with the aims of the IDNDR but initiated independently of it.

It should be noted with some satisfaction that Professor Ian Davis was the recipient of the Sasakawa Award in 1997 for the work he has carried out on natural disasters, particularly from a social science perspective. Professor Davis has generously proposed that the award's funds be used to produce a manual of guidelines for local officials to use in the dissemination of warnings.

7. **Plans and recommendations for the continuation of natural disaster work post 2000.**

During the decade of IDNDR, the global population – and therefore the number of potential victims of natural disasters – rose by almost 1 billion. Sea levels rose perceptibly during the decade, and so did global average temperatures. Perhaps because of these three things, at the end of the decade the human and economic costs exacted by natural disasters were greater than at the beginning. The UK National Coordination Committee was specifically established for the decade. This has formally ended, the Committee has no further role and has accordingly voluntarily disbanded. But the need for concerted effort to prepare for natural disasters is greater than ever. Because of the need to sustain such work into the next decade, other organisations were invited to provide a base for such efforts. The Hazards Forum has responded positively, and under the leadership of Mr Stuart Mustow CBE FREng, offered to provide a facility within its organisation to take such work forward. This was approved by the Coordination Committee and the Hazards Forum has now established a working group under the chairmanship of Professor Brian Lee to consider how this can be achieved. The DFID has indicated that it would be prepared to consider support for proposals put forward under this new arrangement. But the UK Coordination Committee feels that there are a number of issues to be tackled.

- a) Research agencies should find new ways of funding interdisciplinary research, particularly to involve the medical and social scientists in why natural disasters happen and what can be done to prepare for them.
- b) There should be a serious look at the economic costs – and not just losses in the insurance sector. The overall costs of disasters are not consistently calculated anywhere. A clearer knowledge of the economic damage done by natural calamity could guide governments towards steps to reduce losses.
- c) The growth of megacities raises new questions not just about the potentially horrendous scale of the loss of life, but also about the sheer cost of rebuilding after natural disaster. Policymakers and insurers should be considering the inherent problems of ever-larger cities and consider the economic benefits of reversing the trend.
- d) Any future UK involvement in natural disaster reduction should take into account the opportunities for a pan-European initiative, through the European Union, the European Science Foundation etc.
- e) The UK government should press for greater preparedness measures worldwide. Preparedness is not just a humanitarian concern: such steps would help global stability and sustainability. It should reverse the universal position in which aid budgets for

preparedness are tiny compared with those for relief. More spent on the first will reduce the need for the second.

- f) The UK government should have an overarching policy on disasters and their funding, and this ought to be widely discussed. This might encourage the gathering and publication of government data, and greater communication between the various arms of government.

Appendix 1

Membership of the Coordination Committee including Chairmen of the Working Groups. 1993-1999.

Dr A A Denton CBE FREng	Chairman
Sir J Knill FREng	Chairman (1993-1995)
Dr P Baxter*	Medical & Social Sciences WG
Mrs E Bennett	Hazards Forum
Dr P Bennett FREng	(1993)
Dr C Browitt*	SECED
Mr R Clarke	DFID
Lady Cox	(1995)
Professor Sir B Crossland CBE FREng FRS	(1993)
Professor I Davis*	Applications & Implementation WG
Dr A Dlugolecki	(1996)
Ms J Douglas	(1993-1995)
Professor J Hunt CB FRS*	STE Committee
Mr J Jones	(1993)
Dr A Gustard*	Drought Mitigation WG
Dr R Lambert	(1996)
Professor B Lee	Portsmouth University
Mr M Leonard	
Dr A McLaren DBE	(1993-1996)
Mr T Radford	The Guardian
Professor S Steedman	Gibb Ltd
Dr J Twigg	Benfield Greig Hazard Research Centre
Dr J Wallace	(1994-1997)
Professor W Wilkinson	(1993-1994)
Professor P Wolf FREng	(1993-1997)
Dr T Wyatt FREng*	Wind Engineering Society
Miss R Cooper	The Royal Society
Mr A Eades	Secretary

* Indicates Chairman of Working Group

Appendix 2

Details of key UK and UN contacts

UK

Dr A A Denton CBE FREng. Chairman of the UK National Coordination Committee for the IDNDR. c/o The Royal Academy of Engineering, 29 Great Peter Street, London, SW1P 3LW.

Mr A Eades. Secretary of the UK National Coordination Committee for the IDNDR. The Royal Academy of Engineering, 29 Great Peter Street, London, SW1P 3LW. Tel: 0171 227 0515

Mr R Clarke. Conflict & Humanitarian Affairs Dept, DFID. 94 Victoria Street, London, SW1E 5JL. Tel: 0171 917 0792

Miss R Cooper. The Royal Society. 6 Carlton House Terrace, London, SW1Y 5AG. Tel: 0171 839 5561.

UN

Mr P Boulle. Director. UN IDNDR Secretariat. Palais de Nations. 8-14, Avenue de la Paix, 1211 Geneva 10, Switzerland. Tel: 00 41 22 917 9724

Mr W Wagner. Deputy Director. UN IDNDR Secretariat. Palais de Nations. 8-14, Avenue de la Paix, 1211 Geneva 10, Switzerland. Tel: 00 41 22 917 9720

Appendix 3

Sponsoring Organisations

The Department for International Development. Conflict & Humanitarian Affairs Department. 94 Victoria Street, London, SW1E 5JL.

The Royal Academy of Engineering. 29 Great Peter Street, London, SW1P 3LW.

The Royal Society. 6 Carlton House Terrace, London, SW1Y 5AG.