

New Initiatives in the IDNDR

Olavi Elo

"Natural hazards – including earthquakes, tsunamis, volcanic eruptions, landslides, avalanches, tropical cyclones and other windstorms, floods, wildfire, drought, and locust infestations – occur throughout much of the world. Disasters stemming from these hazards kill more than one million people each decade, leave countless others destitute, and cause huge economic losses. Among the myriad of disastrous events in the last few years, each of the largest – a typhoon in Bangladesh and an earthquake in China – has claimed hundreds of thousands of lives. The toll from disasters is particularly severe and tragic in developing countries. In recent years, they have suffered 90% of the deaths and have often had their development goals set back years and even decades. With population growth and urbanization and with disaster-vulnerable development, the risk of still greater tragedies is increasing. Now is the time to confront this issue head-on."

These are the introductory words in a report presented by the Secretary-General of the United Nations as a background document, when the UN General Assembly decided to designate the 1990s as the International for Natural Disaster Reduction (IDNDR).

The Munich Re-insurance estimated that economic losses due to natural disasters have increased three-fold from the 1960s to the 1990s, and in the first few years of the 1990s are running at about \$50 billion per year. The majority of these enormous economic losses are incurred in industrially developed parts of the world, but the relative impact is much greater on countries with lower per capita incomes. For countries with the lowest GNP, disaster mortalities are several times higher than for the middle income countries.

In their important book, *The Environment as Hazard*, Burton, Kates and White describe how deaths and suffering due to natural disasters are closely related to poverty. "Ninety-five per cent of disaster-related deaths occur among two-thirds of the world's population that occupy developing countries."

Two fundamental observations formed the impetus to the IDNDR. First, the extent of loss of lives, physical damage and economic costs caused by disasters; their overall impact has often become an unbearable burden both on the stricken locations and on the socio-economic development process of vulnerable countries. Second, the availability in today's world of a wealth of scientific knowledge and technological know-how, already used in other sectors, that could be transferred and applied to the reduction of the overall impact of disasters on society. As a key result of the preparatory work for the Decade, these essential considerations found broad recognition and were endorsed by the United Nations in the decision to launch the IDNDR.

OBJECTIVES AND GOALS FOR THE IDNDR

When the UN General Assembly adopted resolution 44/236 in 1989 and formally decided on the IDNDR, the following objectives and goals were established:

1. The objective of the Decade is to reduce through concerted international action, especially 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, wildfire, grasshopper and locust infestations, drought and desertification and other calamities of natural origin.
2. The goals of the Decade are:
 - a. To improve the capacity of each country to mitigate the effects of natural disasters expeditiously and effectively, paying special attention to assisting developing countries in the assessment of damage potential and in the establishment of early warning systems and disaster-resistant structures when and where needed,
 - b. To devise appropriate guidelines and strategies for applying existing scientific and technical knowledge, taking into account the cultural and economic diversity among nations,
 - c. To foster scientific and engineering endeavours aimed at closing critical gaps in knowledge in order to reduce loss of life and property,
 - d. To disseminate existing and new technical information related to measures for the assessment, prediction and mitigation of natural disasters;
 - e. To develop measures for the assessment, prediction, prevention and mitigation of natural disasters through programmes of technical assistance and technology transfer, demonstration projects, and education and training, tailored to specific disasters and locations, and to evaluate the effectiveness of those programmes.

The Assembly underlined the fundamental responsibility of the vulnerable countries themselves, in order to initiate coherent disaster-mitigation activities, countries were requested to create multi-sectoral national committees or focal points for IDNDR, which would stimulate and coordinate local initiatives aiming at the objectives of the Decade. The Assembly furthermore called specifically on scientific and technological institutions, as well as industrial corporations, to participate in disaster reduction activities, recognizing very clearly the extent of the benefits, the capabilities and resources of these groups could bring about. Such a country-centred approach is indeed geared to obtaining maximum advantage from country-level expertise and should be embodied in disaster reduction policies and actions right from the outset. To date, over

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100 national committees or focal points have been established in response to the call by the General Assembly and to promotional activities that focused on the identification of local expertise and knowledge that could be mobilized in a country-level disaster mitigation effort. An important concern is that these national groups include all relevant local expertise in disaster management and prevention, as well as in scientific and technical knowledge; all these components are essential for the successful application of advanced technologies to disaster reduction

ORGANIZATIONAL ARRANGEMENTS DURING THE IDNDR

Overall advice with respect to the Decade is provided by a Special High-Level Council, and a Scientific & Technical Committee (STC) on the IDNDR has been established. The role of the Committee is to develop overall programmes to be taken into account in bilateral and multilateral co-operation for the Decade, paying attention to priorities and gaps in technical knowledge identified at the national level, in particular by national committees; to assess and evaluate the activities carried out in the course of the Decade, and to make recommendations on the overall programmes in an annual report to the Secretary General

A secretariat responsible for the day-to-day coordination of the Decade has been established and is located in Geneva, Switzerland. Originally, the Secretariat worked in close association with the then UNDRO, since the establishment of the Department of Humanitarian Affairs (DHA), the Secretariat reports to DHA.

The organizations of the UN system have participated in the IDNDR from the early phases of programme development through an Inter-Agency Steering Committee and a Working Group. These have provided a forum for inter-agency coordination and information exchange

ACTIVITIES AND PROGRESS

The first years of IDNDR have been characterized by the formulation of targets and the initiation of projects. The STC has met on four occasions, the last one being in New Delhi in February 1995. *Three Targets of the Decade* to be completed by all countries by the year 2000 have been adopted, namely:

- a. Comprehensive national assessments of risks from natural hazards, with these assessments taken into account in development plans,
- b. Mitigation plans at national and/or local levels, involving long-term prevention and preparedness and community awareness, and
- c. Ready access to global, regional, national and local warning systems and broad dissemination of warnings

Criteria for various types of IDNDR projects at national, regional and international level have been established as well, with the following classification

- a. **International IDNDR Demonstration Projects:** those projects intended to provide clear examples of activities which fall within the framework

programme of the Decade as already endorsed by the Committee. In addition, those projects need a very good operational organization and recognized implementing bodies.

- b. **International and Regional IDNDR Projects:** which fall within the framework programme of the Decade and contribute towards achieving one or more of the targets
- c. **National IDNDR Projects:** which fall within the framework programme of the Decade and contribute to achieving one or more of the targets some of which may carry a particular value.
- d. **National IDNDR Demonstration Projects:** national committees and focal points may wish to designate a limited number of projects in this category, with criteria similar to (a) above, and notify the Secretariat

A note of special concern made at the last STC session is that the latest available statistics indicate that in 1991, 162,000 people lost their lives, and that US\$44 billion in economic damage occurred because of 434 major disasters. In 1992, Hurricane Andrew caused economic losses in the United States of over US\$20 billion while, thanks to effective advance warnings, loss of life was limited.

PROJECTS

At present about 25 projects have been endorsed as International IDNDR Demonstration Projects and there are many more national and regional projects classified as IDNDR projects. A major problem is, of course, securing financial support for these projects. National and Regional projects are formally funded by a Government (National Committee) or Governments (National Committees of the area(s) in which they would be implemented

It was reported at the fourth STC that:

"While funding for most projects has already been provided, as for example by the the European Community Development Fund (EDF), the Netherlands and Germany, UN agencies and non-governmental international organizations, other initiatives, including some demonstration projects, are however facing problems in obtaining financial support. The STC therefore recommended that information about individual projects should be disseminated through a variety of channels, including STOP Disasters, and that the STC should play a more active part in promoting such projects, including contacts with donors."

Guidance on project development to the Secretariat and advice to the STC is provided for by a sub-committee. The terms of reference for this sub-committee specify that it will

- a. encourage the formulation of IDNDR projects in all four categories, especially at national and regional levels,
- b. review proposed projects and, if needed, suggest modifications;
- c. periodically review and recommend projects to be designated as International Demonstration

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Projects, taking into account the need to cover the major programme areas of the Decade and the above criteria,

- d. advise on possible avenues for funding or otherwise supporting International Demonstration Projects and, when requested, other Decade projects;
- e. provide guidance to the Secretariat as required on categorization or projects in line with the above criteria, and
- f. keep under review the above guidelines and criteria and recommend changes to the STC as necessary.

INFORMATION STRATEGY

Eleven issues of STOP Disasters, the IDNDR newsletter, have been issued to date. The press run has been gradually increased from 8,000 to 10,000 (December 1992) and plans are presently under consideration to reach a target circulation of 30,000 in line with the recommendation of the second STC meeting. The newsletter is currently distributed in 178 countries to national IDNDR committees, national agencies involved in disaster management, inter-governmental, non-governmental organizations, research institutes, financial and banking institutes, insurance companies, etc, which have an interest in the Decade programme. The newsletter is published by the Osservatorio Vesuviano in co-operation with the IDNDR Secretariat.

The 1992 International Day for Natural Disaster Reduction was observed under the theme "Natural Disaster Reduction for Sustainable Development". An encouraging participation in the observation programme was registered both at national and international levels. At the international level a statement was made by Mr Boutros Boutros-Ghali, Secretary General of the United Nations, on the occasion of the Day. Similar messages were also released to the media by the Secretary General of the World Meteorological Organization and the Executive Director of the United Nations Centre for Human Settlements (habitat). At two Press conferences organized in New York and Geneva in co-operation with the UN/DPI, Mr Jan Eliasson, Under-Secretary General for Humanitarian Affairs, Mr James P Bruce, Chairman of the IDNDR Scientific & Technical Committee, and Mr Charles LaMunière, Director and Deputy to the Under-Secretary General for Humanitarian Affairs, brief correspondents on the growing human and economic losses resulting from natural disasters, the importance of natural disaster reduction for sustainable development and the opportunity which the Decade programme offers for international co-operation in the field of natural disaster reduction.

Information packages containing a set of audio-visual productions prepared by the IDNDR Secretariat and information material from other sources relating to the theme, were compiled and dispatched to national IDNDR committees to supplement their observance programmes. National IDNDR committees displayed an active interest in the Day and used the opportunity for

promoting the Decade's objectives and for mobilizing support for disaster reduction activities. An encouraging feedback has been received from national IDNDR committees which organized varied and innovative observance programmes. The 1993 International Day for Natural Disaster Reduction will be observed under the theme *Stop Disasters. Focus on Schools and Hospitals*.

An implementation plan of the IDNDR Information Strategy was approved by the fourth STC session. The plan aims to contribute, through the Decade Programme and a participatory approach, to the establishment of a long-term communicative relationship between generators, transmitters and users of information, an essential prerequisite for motivating people to adopt or promote disaster reduction measures.

An information campaign which would concentrate on the three targets of the Decade on a step-by-step basis was identified to be important to mobilize the efforts of all Decade partners along a clearly defined path which would enable the achievement of tangible results by the end of the Decade, laying a good basis for continuing efforts in set directions.

In each campaign phase, the scientific community, disaster prone communities, governments in developing and industrialized countries, the media and all other Decade partners would be asked to contribute their share to the achievement of each target which can be planned and also quantified in terms of achievement. The focused approach would also facilitate the mobilization, the prioritization and channelling of support to a selected number of disaster-prone groups, countries or regions which might seek assistance or collaborative efforts in each case. The phased approach would also ensure that the basic questions as to who is vulnerable to disasters, why and at what level, would be answered at different levels and addressed sequentially, prior to any attempt at transmitting information on disaster reduction measures.

FOLLOW-UP ON UN CONFERENCE ON ENVIRONMENT AND DEVELOPMENT AND AGENDA 21

The STC at its fourth session in New Delhi reviewed the outcome of the UNCED in Rio in June 1992 and identified four major follow-up activities that could potentially help to reduce disaster losses.

1. The formation of a Commission for Sustainable Development to monitor progress on Agenda 21,
2. The Framework Convention on Climate Change;
3. Negotiation of a new Convention on Desertification and Drought, and
4. The Conference on Sustainable Development of Small Island States (Barbados, April 1994)

Of special interest to participants at this meeting may be the reference to chapter 7 of Agenda 21. This chapter deals with *Promoting Sustainable Human Settlement Development* and contains direct reference to "promoting human settlement planning and management in disaster-prone areas".

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1994 WORLD CONFERENCE ON NATURAL DISASTER REDUCTION

A World Conference on Natural Disaster Reduction, organized in coordination with the UN Department of Humanitarian Affairs / International Decade for Natural Disaster Reduction and the government of Japan, will be held in Yokohama from 23-27 May 1994. The aims of the conference are to

- a. review IDNDR accomplishments at national, regional and international levels;
- b. chart an action programme for the future;
- c. exchange information on the implementation of IDNDR programmes and policies;
- d. increase awareness of the importance of the progress of disaster reduction policies

Participation in the conference is to include government ministers and high-level officials who will be preparing and presenting national reports on their IDNDR-related activities. Additionally, participants are expected from regional and international organizations, concerned with natural disasters, governmental and non-governmental representatives, and other interested persons. Furthermore, an invitation is extended to all who are involved in Decade activities, including those from the fields of planning, finance, foreign affairs, health, science, engineering, civil defense, private sector, including the insurance industry, the media and emergency preparedness

There will be a series of Topical Sessions on:

- Cost Benefits of Hazard Mitigation
- Drought Management
- Inter-relationships between Technological and Natural Hazards
- Building Hazard-resistant Structures
- Warning Systems and Preparedness for Disaster Reduction
- Vulnerable Groups and Communities

The conference is designed to be neither exclusively technical nor political, but rather to provide an opportunity for policy makers to exchange ideas and hazard reduction strategies in a unique forum

The results of the conference will contribute to the mid-term review of the Decade in 1994 by the UN Economic & Social Council, as required by the General Assembly

CONCLUDING REMARKS

The objectives, goals and targets for the IDNDR are straightforward, and I do not believe anyone questions them. However, natural disasters occur in many different forms and cause a wide spectrum of impacts. The consequences of a natural disaster depend on many factors, including the socio-economic, and it has been suggested that anthropogenic influences are the main cause for the growing disaster potential. In particular, unplanned, often informal settlements in disaster-prone regions and rapid urbanization, expose man to dangers directly or indirectly related to natural disasters

However, there is still hope and I would like to conclude with a quote from a recent speech by Mr Jim Bruce, Chairman of the IDNDR Scientific & Technical Committee

"Through the decade of the 90s, we are determined to reach a higher plateau of global awareness of the suffering and damages due to natural disasters and to put in place the actions, both possible and necessary, to reduce these human and economic losses. But it will take a major effort on the part of all disaster-prone countries – that is all of our countries – to bring this about. The IDNDR provides an opportunity and a framework for international co-operation. For the sake of the people of the world, let us work together to make it happen."

DISCUSSION

Chair: Baroness Cox

Speaker in audience. The papers seem to be addressing mainly acute problems and their medical aspects. Would it not be wiser for us to address the really major medical problem, which is the size of the population of the world? Many of the problems we are facing are because we are becoming too densely populated. It is one of the main issues that the medical profession could assist in here and now

Michel Lechat. I think you are completely right – that's true for poverty, conflict, ecology and survival of the planet. A cyclone in Bangladesh 100 years ago killed 50,000 people. The same cyclone recently killed 350,000. The population of the world may not become stable until 2075. We have to start now to stabilise the population and even hope it could be reduced.

Peter Warren. May I respond to that point about population. About eight years ago it was at a joint meeting between the officers of this society and the US National Academy that Frank Press originally introduced us to the IDNDR. The next meeting of our joint group came up with a statement on population which was fed into the UN.

Alf Keller. The emphasis in today's conference has been mainly about managing disasters but, perhaps except for this morning, pre-planning or mitigation has been on the back burner. Obviously it is very difficult to get the economic figures, but if we draw upon experiences in other areas one will find that a pound spent on pre-planning will save £10 or £100 or even £1,000s in the real situation. Pre-planning does require collecting information, and I am not sure that some of the technical problems that have been raised about gathering information are as bad as some people envisage. For example, with risk analysis one fatality can result in five severely wounded people in a pyramid structure, and they may correspond to another five or six lightly wounded people. I am sure it is not possible to obtain complete figures in disasters, nevertheless with modest effort one could obtain sufficient generic information which could lead us to rather more rational planning.

Ian Davis. It strikes me that the overall focus has been on response, as we have just heard. I just wonder if there is a surplus of energy amongst the donor countries for medical response, and emergency search and rescue, and so on. If so, this could be channelled into training local people in such issues, or into more preparedness planning. I understand that the UK spent £100,000,000

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last year on response and only 0.5% of this was spent on preparedness – a mere £500,000 according to a Parliamentary question, or twice the value of my house. Something is wrong. Some of this energy and creative skill could be rechannelled, or is there such an imperative demand upon donors to share medical skills? Perhaps you can't ask an accident and emergency specialist to change to do prevention – is it like asking a leopard to change his spots?

John Lumley: I would like to ask Dr Elo whether there was any potential for twinning of countries. There is an important amount of skill in this room, but we don't have many disasters. On the other hand, if we actually twinned countries many of the skills here could be used. Perhaps, across the UN you could have groups of five countries with donors and recipients in those groups.

Claude de Ville: 99% of our time is on disaster preparedness and prevention in the Americas. 95% of the funding is also for this. In terms of twinning don't believe that the western world is a donor region and the rest are recipients. Our main experience in Latin America is that donor countries are Latin American countries themselves. They are much more often donors than recipients. It makes more sense for twinning within regions than across parts of the world.

John Lumley: If you wanted to learn, then by twinning with Africa you would be more likely to gain experience than if you twinned with France!

Olavi Elo: A comment on twinning. The various regions of the world have different problems. As Claude was saying, there was nothing much to twin with outside. We have experience on twinning around accident and medical issues. In accidents and injuries in India we had a couple of conferences. Participants at those conferences afterwards or before went around staying a few days or weeks in some institutions and worked with them in improving their capacity and competence – if that were possible. But in disaster planning and preparedness it is a different kettle of fish – you don't really need people with medical skills but people who can put together a project or programme which ODA would buy and start implementing. My third comment is that Africa is totally different from Latin America or Asia. In many African countries they don't have the capacity of their own. I doubt whether many preparedness projects which you would start to develop with them would really take root because the basis is not there. A certain level of development is required before a planning and preparedness project can take off.

John Lumley: I wasn't thinking necessarily of the medical people, I was thinking of engineers, etc. You say you have got dull, non-existent national committees but you could stimulate them. Groups of five nations, perhaps, rather than just twins.

Claude de Ville: One comment on twinning. We would be glad to serve as brokers for twinning between institutions, rescue teams, hospitals, universities, etc. Country twinning is not very practical.

John Lumley: I thought that's what the United Nations was all about!

Michel Lechat: Twinning means you are excluding other countries! We were talking about flexibility this morning. You cannot put countries in a fence.

Speaker from audience: Too much attention has been given to immediate responses. I don't think that's wrong. It doesn't have to be one or the other. In one WHO episode I was involved in – the massive exodus of Kurdistan refugees – putting in multi-agency teams to train very quickly the local aid workers in what to expect and how to respond can have quite a large impact. You train small groups of local aid workers – doctors, nurses and administrators in what they are likely to have to deal with and how they need to train replacement groups as well. It is very difficult to measure the effectiveness of this. It involves putting a team of trainers in within a week of the start of the crisis whilst your medics and engineers are doing the hands-on work.

Roger Feldman: I want to carry on with that thought. I thought this conference had actually emphasised the importance of training as an element. But there is an element of training that is somewhat lacking in discussion. If you look at the International Health Exchange request for information about individuals it asks for individuals who are already experienced – at least two years and six months – a significant amount – of overseas experience before they will be sent. The bulk of people in this room are here because they have that kind of experience. I think what is missing in our discussion of training is training of the young people who want to do something but who have no experience and need it before they go.

Michel Lechat: One word on training – people from developing countries need to go to the Yokohama conference – an invaluable experience – and Fellowships should be made available for them to attend.

Baroness Cox

It only remains for me to thank and congratulate the organisers, speakers and participants for this very excellent day. I am certain that there will be some very concrete outcomes of this meeting. We have had many useful and practical suggestions. One was from Dr Peter Baskett to complete the cards he has left so as to inform him of your involvement in disasters. I would also highlight the ideas that have come up today on subjects for future workshops, such as the dissemination of information on man-made disasters and controversial areas such as political crises where people in need are deprived of access to relief. Ian Davis's concept of social vulnerability also raises very sensitive issues, but very important ones for helping suffering in disasters. I hope this meeting represents a beginning and not an end to this debate.

I would like to again thank the organisers for the opportunity we have had to come together for this very important day. Ever since being catapulted to my astonishment into the political arena there is a principle I adhere to which is that politicians should have open ears, open eyes and open minds before having an open mouth! Thank you.

Appendix A

Medical Workshop

Royal Society, 19 April 1993

SPEAKERS

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Appendix A

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