

**A STUDY ON  
POSSIBILITIES AND METHODS OF INTEGRATING  
DISASTER PREVENTION AND PREPAREDNESS ASPECTS  
IN DEVELOPMENT ASSISTANCE**

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# **A Study on Possibilities and Methods of Integrating Disaster Prevention and Preparedness Aspects in Development Assistance**

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## **Executive Summary**

Major part of the international and national efforts are being allocated to disaster relief and reconstruction, while long-term prevention of (natural) disasters remains too often undone. Several studies and many of the current disasters have shown that in economic terms the efforts towards longer-term prevention and preparedness are justified and sustainable (Part I).

The ambitious targets set up for the International Decade for Natural Disaster prevention (IDNDR) are in threat of collapsing because of the lack of resources in the recipient countries and because of the lack of political will in the donor organizations. Nevertheless, much of the development debate e.g. within the OECD/DAC, and the negotiations of combating desertification and drought have focused on disaster prevention and preparedness aspects.

Disaster prevention supports a whole range of long-term objectives aiming at sustainable development (Agenda 21), poverty alleviation, people's participation and international, national and social equity, and halts environmental degradation and the predicted global climate change. As such, disaster prevention is a direct enforcement of the commonly agreed Conventions on Biological Diversity and Climate Change, and the principles on forests, as approved in Rio.

Disaster prevention and preparedness aspects are recommended to be integrated as follows into the development cooperation of Finland (Part II):

\* country analysis and strategies should include the following (natural) hazard assessments and propose development objectives and programmes respectively for each recipient country:

- \* assessments of natural disaster risks at national and regional level
- \* assessment of the macro-economic impacts of the natural disasters typical in the country/region
- \* assessments of the socio-economic impacts of the natural disasters
- \* analysis of the policies, strategies and legislation aiming at disaster prevention and preparedness
- \* analysis of local/regional/national capacity of disaster prevention/preparedness
- \* assessment of earlier risks/vulnerability of FINNIDA projects in the country

\* in sectoral analysis special hazard considerations should be made when identifying and designing/planning agricultural and forestry projects, water supply and sanitation projects, and infrastructural development

\* the recommendations for land use, site selection, construction, awareness-raising and preparedness at project level propose to avoid high-risk areas, to select least disaster-prone activities in high-risk areas, and to have special awareness-raising programmes etc.

\* as with any other risk category (financial, technical, social, institutional), a project may be rejected if the risks related to natural disasters are high, and if it is not possible to mitigate the impacts of highly potential disasters in an appropriate and cost-effective manner

\* environmental (impact) assessment procedure is the most appropriate and economic tool to be used in detailed hazard and risk assessments; during EIAs hazard- and risk-specific information should be gathered and analyzed

\* in project design a special hazard assessment matrix could be used as a planning tool (Part IV).

The three country reviews (Part IV) confirm the unspoken assumption that Ethiopia is the far most advanced country in regard to national strategies, legislation and institutional framework connected to disaster prevention and preparedness. In Viet Nam and in Nicaragua a policy level commitment has been made on the creation of disaster prevention and preparedness strategies and strengthening the respective organizations and cross-sectoral cooperation. Both in Viet Nam and in Nicaragua these policy level commitments were brought up with recent heavy losses caused by natural disasters, and as a response to the set targets of the IDNDR Decade.

## INTRODUCTION

In proclaiming the 1990s as the International Decade for Natural Disaster Reduction, the General Assembly of the United Nations focused on reducing "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 infestations, drought and desertification and other calamities of natural origin". In fact, natural disasters are becoming more severe threats both in terms of numbers and in terms of impacts. Scientific evidence suggests that the frequency of natural disasters has increased in recent decades.

Human actions not only cause various natural hazards through activities such as deforestation, overgrazing and careless use of fire, but also increase the vulnerability to disasters through population growth, unplanned urban settlements in risk-prone areas, and poor siting of infrastructure. Thus, natural hazards addressed by programmes of the Decade are closely linked with climate change, deforestation, ozone depletion, water pollution and biodiversity. Climate change may well affect the occurrence, severity and frequency of future disasters such as inundations from rising sea level, windstorms, floods and continuous drought. Recent research show that relatively small changes in climate can cause significant and potentially disruptive impacts e.g. in semi-arid regions.

Thus, national policies and activities that are designed to reduce the vulnerability to disasters are needed and recommended by the resolution. Such policies and activities should include economic aspects, monitoring of the major natural hazards, development of structural and non-structural measures, establishment or improvement of early warning systems and setting up of preparedness systems. The development of national disaster mitigation programmes is of utmost importance in developing countries.

To date, on a consequence of the Decade in over 100 countries national committees or focal points have been established. The growing number of national committees indicates that their role in implementing Decade activities at the national level has been recognized. National committees are assisting in identifying national priorities, formulating and implementing disaster mitigation and prevention plans, and providing information and advice to concerned governments, public services and related organizations. The donor community should closely collaborate with recipients and guarantee on their part that disaster prevention and preparedness strategies and priorities are included in all development programmes and projects, and macro-economic planning.

The Scientific and Technical Committee of UN was charged with developing overall programmes to reduce losses from natural disasters. The Committee has recommended that by the year 2000 all UN countries should have in effect:

- \* comprehensive national assessments of risks from natural hazards, with these assessments taken into account in development plans;
- \* mitigation plans at national and/or local levels, involving long-term prevention and preparedness and community awareness;
- \* ready access to global, regional, national and local warning systems and broad dissemination of warnings.

These recommendations are further stressed by a call for the UN countries of recognition of disaster prevention, warning and preparedness as integral parts of national planning to achieve sustainable development.

Also Finland has endorsed the General Assembly resolution 44/236. The Finnish national committee of the IDNDR Decade lies under the responsibility of the Ministry of Interior. Other members of the committee are the Ministries of Health and Environment, the Finnish International Development Agency (FINNIDA) on behalf of the Ministry of Foreign Affairs, the Finnish Red Cross Society, the Technical Research Centre of Finland and the Finnish Academy of Science. The committee has especially targeted its efforts towards disaster prevention and relief operations in developing countries.

So far, Finland has given partly financial, partly technical support to the international IDNDR Trust Fund. The bilateral cooperation programmes have brought involved also a range of disaster prevention and preparedness aspects. For instance, programmes and projects in meteorology (the Diana Project/FAO/ESA, or the Meteorology Development Programme in the Central American Isthmus), in housing and urban development (the Nacala Integrated Urban Development Project in Mozambique, in forestry (the Central America Forestry, or the Forestry Master Plans), in telecommunication (the Upa-Zilla Telecommunication in Bangladesh), and in agriculture (the Selale Peasant dairy development project in Ethiopia) have already directly or indirectly incorporated aspects of disaster prevention and preparedness on regional, sub-regional or programme and/or project level. Finland has also carried out a survey of "Technology and Expertise for Natural Disaster Prevention, Available in Finland" in 1991.

This study is a continuation to the survey of 1991. In brief, methods for the long-term planning of the humanitarian assistance, and methods for the integration of disaster prevention into the project planning process and the formulation of country strategies are being reviewed. The regional bureaus of the Finnish International Development Agency formulate the country strategies together with the representatives of the recipient country. The purpose of this study is to set the framework and the priorities within which Finland should coplan and coordinate her development cooperation in the country concerned. Thus, the study will help the drafters of the country strategies. Special case studies



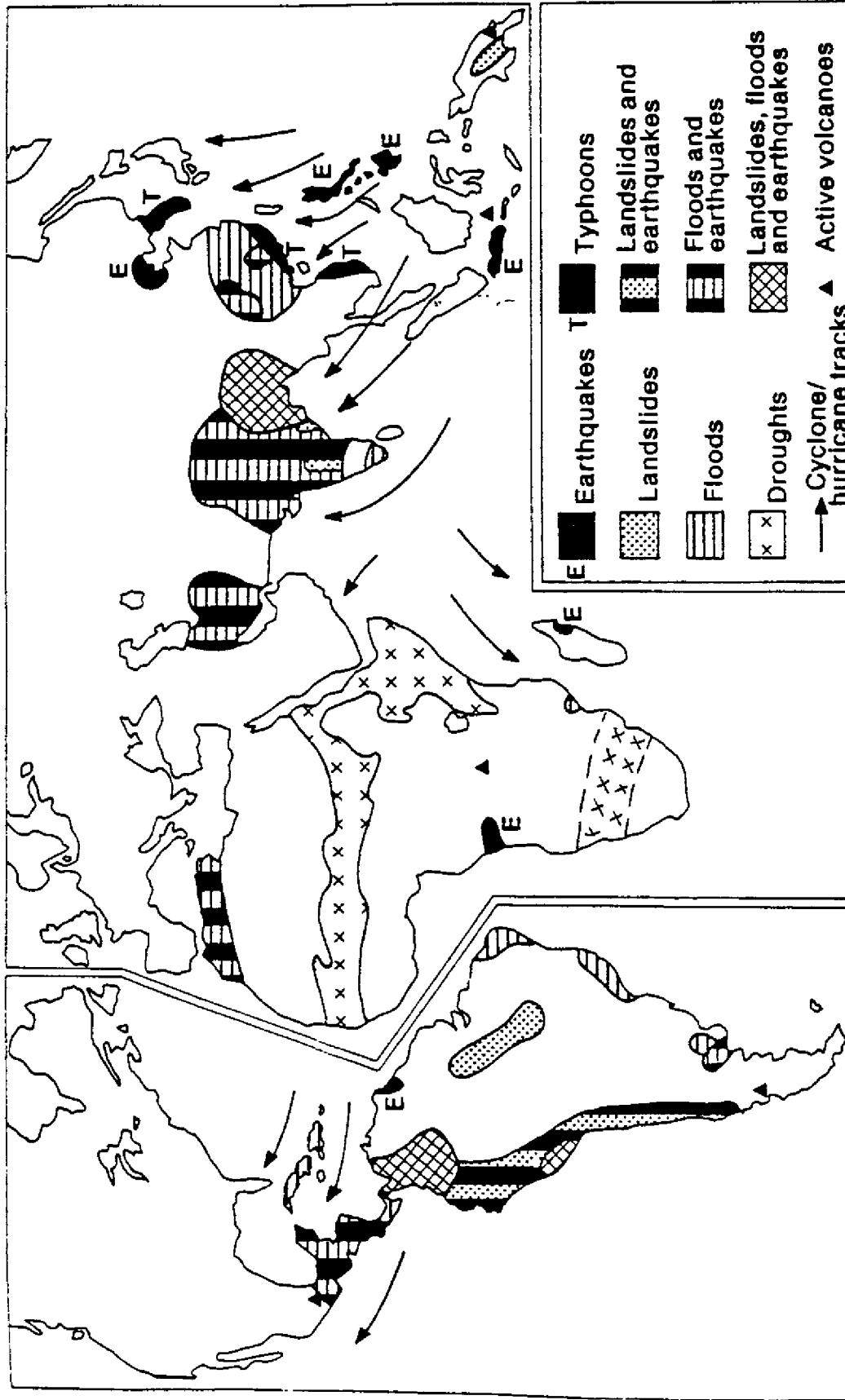
review national policies of disaster prevention and disaster preparedness in Ethiopia, Nicaragua and Viet Nam.

In brief, the terms of reference formulate the scope and content of the study as follows:

- 1 To review the available material concerning the relationship between sustainable economic and social development, and natural hazards and disasters in developing countries.
- 2 To review current approaches and practices for promoting disaster prevention and mitigation in the context of development planning management in the donor countries generally.
- 3 To analyze the role of environmental impact assessment (EIA) procedures and guidelines in the context of disaster prevention and preparedness.
- 4 To analyze, on the basis of the given country specific material, the risks caused by disasters to the projects and programmes of the Finnish International Development Agency in the target country.
- 5 To analyze, on the basis of the given country specific material, how the institutional, material and personnel capacities and resources of the existing local institutions, which are dealing with the matters relevant to disaster prevention and preparedness, can be strengthened through Finnish development assistance.
- 6 To review project documentation, and to analyze in which manner and to what extent disaster prevention and preparedness aspect have been considered in Finland's development assistance projects and programmes in the country concerned. The main focus of the analysis should be on how the existing projects and programmes could be extended to cover also the disaster prevention and preparedness aspect.
- 7 To draft proposals and recommendations on how to incorporate the aspect of disaster prevention and preparedness to the country programmes and project planning. Also new project ideas should/could be included.
- 8 To draft proposals for guidelines on risk assessment to be included in project planning and preparation procedures.

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## Main Types of Natural Disasters in Developing Countries



Source: Barke, M & O'Hare, G. (1987). *The Third World - Conceptual Frameworks in Geography*. Oliver & Boyd, Edinburgh.