Disaster Profiles
of the
Least Developed Countries

Third United Nations Conference on Least Developed Countries
Brussels, 14–20 May 2001

United Nations Development Programme

Explanatory notes

1. The opinion expressed and the information used in this document do not necessarily represent official UNDP policy or position.

2. The data are either extracted from United Nations Development Programme's *Human Development Report (2000)*, the World Bank *World Development Indicators Database (2000)*, the United Nations Conference on Trade and Development *The Least Developed Countries 1999 Report*, the Centre for Research on the Epidemiology of Disasters *EM-DAT International Disaster Database*; or drawn from various national and international sources.

3. All reference to dollars ($) are the United States dollars.

For further information, please contact:

UNDP — ERD
Palais des Nations
CH-1211 Geneva 10
Tel: +41 22-917 81 98
Fax: +41 22-917 80 60
E-mail: erd.geneva@undp.org

INTRODUCTION

The significant detrimental impact of disasters on the development process has been long recognised. Both previous United Nations Conferences on the Least Developed Countries acknowledged the disproportionately high human, social and economic cost of disasters on LDCs. As a point of entry to the problem, the Action Plans for Conference follow-up were primarily focussed on improving response preparedness rather than investing in risk reduction measures anchored in development. Even with some improvements within this restricted focus, particularly in the area of early warning, the Report of the High-Level Panel for the Review of Progress in Implementing the Programme of Action for the LDCs in the 1990s recognised that achievements were limited.

Currently, 24 of the 49 LDCs still face high levels of disaster risk. Of these, at least 6 countries have been hit by between 2 and 8 major disasters per year in the last 15 years. Not only does this point to the significant number of intense hazards such as droughts, floods, cyclones and earthquakes but, also, the high level of social and economic vulnerabilities of the LDCs. A further 16 LDCs have been affected by 1 or 2 major disasters per year, with long-term consequences on human development. Of equal importance, but often unnoticed at the international level, are the multitude of small to medium-scale disasters that affect a localised population. These events, common place in most LDCs, have a cumulative impact on already fragile household economies and can be as significant in total losses as the major and internationally recognised disasters.

I. Impact on the economy

Natural disasters continue to cause heavy losses to capital assets and are particularly severe and lasting in the LDCs. Beyond the direct physical damage, a major disaster causes indirect losses in disrupting production and the flow of goods and services, in turn, resulting in loss of earnings. Short and long-term impact of a disaster can have sharp repercussions on the economic development of a country, affecting GDP, public finances, foreign trade, price indices contributing further to increasing levels of poverty and indebtedness. An approximate calculation shows that where the cost of just one disaster goes beyond 10% of the annual GDP, as was the case after the cyclone of 1992 in Bangladesh, traceable economic losses reached $2 billion.

The broader economic impact of a disaster also needs to be considered in the context of the stage of development of an economy, as defined in terms of factors such as the degree of sectoral and geographical integration, economic specialisation, integration of financial flows, and government revenue–raising capacities. Research indicates that over the past three decades more disaster-prone, low-income countries that are based on simple economies, have experienced a much slower pace of economic development than their less disaster-prone counterparts. In these countries, investment in disaster risk reduction measures would have a clear benefit.

The situation is further exaggerated in countries affected by armed conflict. Infrastructure and productive capital are usually destroyed or not maintained; markets become less integrated and vulnerable areas and groups become less resilient. The impact of disasters is, therefore, intensified. This was the situation in Ethiopia and Eritrea before the collapse of Derg, in Mozambique up to the Peace Accord, and still in Sudan and Somalia. In all these cases, droughts and/or floods resulted in far more significant losses than 'normal'.

Impact on agricultural production: As the most important sector of most LDC economies, agriculture plays a key role in providing food, employment and input for industry and export revenues. But agriculture is also particularly vulnerable to extreme climatic events and natural hazards. Some shocks, such as pest infestations and the flood/drought combination, severely impair agricultural production. For example, it is generally accepted that frequently occurring natural disasters are one of the main contributing factors for poverty in Laos, a country which ranks 140 on the Human Development Index. The 1996 floods in Laos destroyed 30% of the rice production and the World Food Programme estimates that 420,000 people lost their entire crops. For about 40% of these people, it was two or three years in a row.

Impact on infrastructure: Whereas infrastructure is a key component of economic growth, lack of access to infrastructure is a key measure of poverty. The World Bank estimates that 1% increase in the stock of infrastructure translates to a 1% increase in GDP. To reduce rural poverty, effective infrastructure projects related to agricultural production have proven an essential tool. The destruction of such essential rural infrastructure through natural disasters can, therefore, have significant costs that directly affect the poor.

Similarly, infrastructure related to energy, water supply and transportation plays a major role in economic development. Each of these are often badly hit when a natural disaster occurs. For example, during the 1993 floods in Bangladesh 1930 bridges as well as 14500 km of roads were destroyed. During the 1999 floods in Mozambique damage to the road system hampered relief and recovery efforts significantly.

II. Links between disasters and poverty

Poverty is rising in Central Asia, Latin America and Sub-Saharan Africa and remains a problem in South Asia. While most poverty reduction strategies do not make an explicit reference to disaster vulnerability as a contributing factor to aggravating poverty, the linkages are clear:

There is a close correlation between disasters, poverty and environment: As the poor exploit environmental resources for survival, disaster risk increases. The connection between destruction of the environment — forest, soil, wetlands and water sources — and disaster risk can be quite significant. Landslide, drought and flood patterns are altered in many parts of the world due to climatic changes and environmental management actions. At the same time, major disasters, such as the cyclones and floods in Mozambique, Madagascar and Haiti, can have a long-lasting negative impact on the environment, increasing the risk of future disasters. Demographic pressures result in an intensified utilisation of more marginal land in most of the LDCs. These lands, by their very nature, are likely to be more vulnerable to adverse weather conditions.

The rate of population growth is highest in 'Least Developed Countries' (LDCs): The countries classified as the 'least developed' are growing at such a rate that their population will double in less than 30 years. Many LDCs, home to 80 per cent of the world's population, are also among the world's most disaster-prone, such as Bangladesh, Cambodia, Ethiopia, Haiti. Considering that the poor in these countries are often the most exposed to disasters, the numbers of people affected are likely to double in the next 30 years unless serious measures are taken to protect them. With the likelihood that these people will have an increasingly limited access and entitlement to resources, disaster vulnerability will, in turn, increase.

Repeated exposure to disasters can lead into chronic poverty: Households and communities can often get through the first year of a drought reasonably well but if repeated, losses quickly mount. Recurring economic stresses caused by natural calamities induces fluctuations in income, compelling households to sacrifice potential investment. In turn, economic pressures increase vulnerability, often forcing people to live in dangerous locations, overriding the more remote threat of disasters. Sub-Saharan Africa has continued to suffer natural disasters and political upheavals throughout the 1990s. These events remind us what is hidden in poverty statistics: that the conditions of poverty are closely linked to disaster vulnerability. Many households in Africa are regularly exposed to risks from poor weather conditions, diverting resources to emergency response and reconstruction, taking a serious toll on what the national economy can allocate on other development programmes.

III. Courses of action

Poor households and poor nations throughout much of the world face two disadvantages. First, the inability to generate an income, second, vulnerability to physical, social, and economic downturns. Drought, flood, conflict, inflation, sickness and recession hit these groups and countries hardest. Furthermore, repeated exposure to these downturns reinforces their conditions of poverty. The circular nature of poverty and vulnerability does not preclude effective action. There is considerable scope for reducing disaster risk, particularly in the LDCs, through the application of appropriate disaster mitigation, preparedness and rehabilitation programmes.

Such measures should not be viewed as discrete activities undertaken by specialist government agencies but as measures that must be incorporated in development projects, economic activities and government policy more generally. An investment in protection does not necessarily imply a reduction in investment to create economic assets.

Broader government development policy and sectoral plans can readily recognise the potential threat disasters pose to sustainable, equitable development and focus attempts to reduce vulnerability. The degree of public sector and donor commitments to such issues should not be measured in financial terms alone. More specific actions could focus on the following areas:

Integrate disaster reduction measures into relevant development programmes in high risk areas: The overwhelming proportion of UNDP resources, and those of ODA contributors more generally, are directed to LDCs and low income countries where 90 per cent of the world's poor live. There is great opportunity to mainstream disaster reduction into these programmes. Responsibility for disaster reduction clearly rests primarily with disaster-prone countries and their authorities. However, external agencies could provide more effective support by mainstreaming the disaster reduction goal in all their development activities. The objective of incorporating such measures would be twofold: to protect development investment from being affected by disasters, and to ensure that development programmes do not increase the risk of impact from disasters.

Incorporate disaster reduction measures into all post-disaster rehabilitation and reconstruction programmes: Disasters often provide the opportunity — political will and heightened public awareness of risks — for future protection. All post-disaster rehabilitation and reconstruction programmes, especially those that attract external investment, should ensure that disaster reduction is incorporated into these efforts rather than reconstituting risks.

Utilise existing instruments for assessment and planning at country level for greater attention to disaster risks: For example, the Common Country Assessment (CCA) and United Nations Development Assistance Framework (UNDAF) bring together the various stakeholders and serve as the basis for country-level programmes and projects. Disaster risks need to be built into these process of development. There are already some LDCs, such as Mozambique, that have identified reduction in the vulnerability of the poor to natural disasters among the priorities of its national poverty reduction strategy.

Increase commitment to support national capacity building, with particular emphasis on human resource development and governance: In considering issues of donor policy, the additional dimension of governance, supporting national capacity building and training for improved disaster risk management, should also be taken into account. In the context of disasters, good governance implies a government genuinely committed to the well being of all communities. It will accord high priority to social and economic factors that contribute to disaster vulnerability and to mitigating their impact.