



Emergency Response Division Disaster Reduction and Recovery Programme (DRRP)



United Nations Development Programme

Sustainable Human Development



In the last two decades, over 3 million people have been killed in natural disasters. According to statistical evidence, there have been three times as many losses resulting from disaster events in the past ten years than was the case in the 1960s. As a consequence, economic losses have been nine times greater during this decade, currently exceeding US \$90 billion a year. In 1998 alone, natural calamities claimed the lives of more than 50,000 people worldwide.

In view of these statistics one might ask whether natural hazards such as floods, fires, drought, landslides and earthquakes are the number one cause of death and destruction. The answer is not so simple. 90 percent of natural disasters occur in the developing countries, where dynamic processes are persistently increasing the vulnerability of communities to these hazards, magnifying their effects as well as their social and economic costs.

Recent major disasters, in Central America and elsewhere, highlight the extent to which vulnerabilities and hazards have accumulated over recent decades. This accumulation increases the risk that, without action, in the future we may expect an even heavier toll in terms of lost lives and livelihoods, damaged physical infrastructure and environmental degradation. These losses will destroy years of achievements and material resources invested in development activities.

Major causes of increased physical, social and economic vulnerability to disasters include, for example, inadequate physical infrastructure, environmental degradation and mismanagement, inappropriate territorial occupation and land use, and concentration of populations in disaster sensitive zones.

These problems are, themselves, also directly influenced by pressures of chronic poverty, social and economic exclusion, rapid urbanisation and population growth, inadequate planning, weak administrative control systems and situations of civil conflict and economic transition.

Disaster loss, therefore, is synonymous with unresolved development problems. In turn, these losses further weaken the development asset base and draw scarce human and financial resources from addressing underlying vulnerabilities to meet humanitarian relief needs.

In response to these grave human and economic consequences, disaster reduction has become an integral component of UNDP's overall planning framework. In particular, UNDP's goal in addressing "countries in special development situations" is to:

- Reduce the incidence and impact of complex emergencies and disasters, natural, environmental and technological, and to accelerate the recovery process towards sustainable human development.

In this context, UNDP's overall objectives in disaster reduction and recovery are to:

- Achieve a sustainable reduction in disaster risks and the protection of development gains
- Reduce the loss of life and livelihoods due to disasters
- Ensure that disaster recovery serves to consolidate sustainable human development

UNDP, through its system of country-based Resident Representatives, Regional Bureaux and specialised programmes such as the Sustainable Environment and Energy Division (SEED), co-sponsorship of the Global Environment Fund (GEF) and its Office to Combat Desertification (UNSO), has been a leader in promoting efforts aimed at preparing for and preventing disasters and mitigating their effects.

The United Nations Programme for Reform, in 1997, proposed a realignment of responsibilities of the UN Emergency Relief Coordinator and that responsibilities pertaining to coordination of natural disaster mitigation be transferred to UNDP. It further confirmed the appropriateness of UNDP's mandate and role in this field, noting that functions of disaster prevention, mitigation and preparedness should, rather, be situated in UNDP. These recommendations were endorsed by the General Assembly at its 52nd session.

In response to these decisions, and to further focus its overall strategy and range of activities in the field of disaster reduction, UNDP established the Disaster Reduction and Recovery Programme (DRRP) as a component of its Emergency Response Division (ERD).

Within UNDP's overall strategic goal framework, DRRP's specific objectives are to:

- Mainstream disaster reduction into development policy, strategies, plans and programmes
- Strengthen capacity of institutions at all levels for enhanced disaster management
- Develop innovative approaches to accelerate sustainable post-disaster recovery, promoting the inclusion of disaster reduction measures into rehabilitation and reconstruction
- Build partnerships, promote networks and facilitate cooperation at international, regional and national levels
- Facilitate the development and delivery of high quality training and human resource development activities
- Promote and develop disaster reduction policies and strategies
- Represent UNDP at inter-organizational fora on the topic
- Provide direct substantive support to multi-sectoral, integrated country programmes.

In order to achieve these aims, UNDP pursues a holistic approach to addressing the multiple causes of disaster risk and seeks to establish partnerships and alliances with a wide multitude of constituencies.

UNDP is committed to bring critical mass and coherence to its promotional and advocacy efforts, its work in policy and strategy development and its activities in programme implementation. In this respect, UNDP has established a series of internal working partnerships and strategic alliances with its programmes aiming to create an enabling environment for sustainable human development, governance, poverty reduction and sustainable livelihoods, protection and

regeneration of the global environment and the advancement of gender equity, bring synergy to UNDP's overall efforts to reduce disaster vulnerability.

At the same time, UNDP recognises that significant achievements in disaster reduction cannot be realised without collaborative efforts among United Nations system organisations with development and disaster response operations as well as with other international and intergovernmental organisations, the scientific community, public and private sectors, political and civil society institutions and community-based and non-governmental organisations.

During the first year since the establishment of the DRRP, new disaster management capacity building activities have been initiated in almost 30 disaster prone countries in areas such as assisting in the establishment of national disaster management systems and promoting disaster reduction approaches and their integration into national policies, planning and legislation.

These initiatives, utilising resources earmarked for "countries in special development situations", are in addition to a range of activities funded through other core resources of UNDP and supported by Trust Fund and cost-sharing arrangements

Individual briefs on a selection of UNDP programme activities in the field of disaster reduction have been prepared for public dissemination.

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For more information please contact the Disaster Reduction and Recovery Programme at:

Emergency Response Division, DRRP

- Mail: Palais des Nations
CH-1211, Geneva,
Switzerland.
- Street: 11 Chemin des Anemones,
CH-1219, Chatelaine, Geneva,
Switzerland.
- Tel: (41-22) 917-8285
- Fax: (41-22) 917-8060
- E-mail: erd.geneva@undp.org
- Web: www.undp.org/erd



Bangladesh

Support for Disaster Management

Disaster Context

Talk about natural disasters and many people will automatically think of Bangladesh, one of the most disaster-prone countries in the world. Tropical cyclones, tidal surges, tornadoes, floods, droughts and large-scale riverbank erosion - all wreak havoc on the lives and livelihoods of Bangladesh population. The country's propensity to natural disaster is due to its geographical location and for various environmental reasons. Recent estimates suggest that about 4 percent of the world's cyclones hit Bangladesh, but damage and losses to the country amount to about 96 percent of the global total. In November 1970, Bangladesh's coastal regions were devastated by a cyclone which killed more than 300,000 people and caused over US\$2.5 billion worth of damage to property. More recently, floods in 1988 and 1998 brought immense suffering to the population. Agricultural production was disrupted and the country's economy severely affected in 1998, when nearly two-thirds of the country was under water for three months.

Bangladeshis and their government are doing the best they can to prevent and mitigate natural disasters, but there is an overwhelming need to strengthen the country's Disaster Preparedness and Management capabilities.

Project Title

Support for Disaster Management

The project is designed to help the Disaster Management Bureau (DMB), created in 1992, achieve its objectives and improve the national capacity to better plan and prepare for disasters and to cope with their consequences.

Sectors

- Disaster preparedness
- Capacity building through training and public awareness campaigns
- Risk and vulnerability assessment, cyclone-and flood-proofing studies
- Preparation of local disaster action plans
- Development of training materials

Funding

UNDP has allocated US\$ 2,5 million. The UK's Department for International Development (DFID) has contributed US\$ 0.9 million as cost sharing, UNICEF has allocated US\$ 0.5 million.

Partnerships

- Inter-Ministerial Disaster Management Committee
- National Disaster Management Council
- Training and Public Awareness Task Force
- Committee for the Focal Points on Disaster Management
- DFID (UK)
- UNICEF

Programme Activities

UNDP cooperation with Bangladesh dates back to 1973. Since then, five country programmes have been completed, initially focused on emergency and reconstruction support, and later providing general development support. In January 1996, the First Country Cooperation Framework (CCF) was approved for a three-year period.

Globally, the UNDP-Bangladesh programme is the third largest country programme, with UNDP grant funding for the period 1997-2000 amounting to US\$ 108 million. The central objective of UNDP's cooperation with Bangladesh is to enable the poor to improve their livelihoods in a practical and strategic manner. To achieve this, UNDP supports programmes and projects in Bangladesh in the following areas:

- Community empowerment
- Non-formal employment generation
- Food security
- Advancement of women
- Environment and natural resource management
- Governance
- Emergency preparedness

These programmes have been developed and are being implemented in partnership with the government of Bangladesh, other national agencies and community organizations, as well as UN agencies and other donors. Local expertise was incorporated into programme design, through the Participatory Rural/Urban Appraisals (PRA/PUAs) methodology.

Around 70 percent of UNDP's resources are targeted to directly benefit communities at the local level. The emphasis in implementation is on social mobilization and participatory planning, promoting accountable and responsive governance, capacity development to improve efficiency in public and private service delivery, as well as environmental regeneration and sustainable natural resource management. In all support activities, priority is given to meeting the needs of the poorest of the poor and to the advancement of women.

The project intervention is almost entirely aimed at capacity building, from community to national level.

The Disaster Management Capacity Building project is being implemented at national and local, district, sub-district and grass roots levels. At the national level, the project supports the preparation of national policy, plan and programmes, development of training materials and the preparation of field studies on people's perceptions and awareness, needs assessment and early warning systems. The project concentrates on the 19 most vulnerable districts. Activities carried out at local levels include re-activation of Disaster Management

Committees, improving public awareness of preparedness, and the development of local disaster preparedness action plans at district, sub-district and grass-roots levels.

The beneficiaries of the project include the Disaster Management Bureau (DMB); the Ministry of Disaster Management and Relief; local administrations and the populations of vulnerable districts

DMB was established in the wake of a devastating cyclone in April 1991, and its capacity is being developed with UNDP's support. The mandate, roles and responsibilities have evolved and now encompass a concerted effort on preparedness; it has also become a depository of disaster-related information.

Recently, UNDP has initiated a process to explore the possibility of developing a multi-component programme approach to overall disaster management. It is likely to involve a number of government agencies engaged in emergency-related activities, and a number of donors.



Bolivia

Preparedness and Mitigation for El Niño

Disaster Context

Bolivia is prone to natural disasters, in particular to droughts in the Altiplano and Chaco regions and floods in the eastern plains. The 1982-83 El Niño phenomenon intensified this seasonal flooding and drought, with grave consequences for the whole country.

The effects of El Niño have a severe impact on the economy of the country, inflicting tremendous hardship upon the local populations. The agricultural sector, which makes up 45 percent of the total gross national product (GNP), is normally the most affected. According to the National Meteorological and Hydrological Service (SENAMHI), the effects of the 1997-98 El Niño surpassed the 1982-83 phenomenon.

To respond to this situation, the Bolivian Government declared a nation-wide state of emergency and created a Technical Support and Strengthening Unit, within the Ministry of Defence, which heads the National Civil Defence System (UTOAF). This unit co-ordinated efforts with other stakeholders with regard to El Niño.

A study on Human Development Report and Social Indicators by the Support to the Economic and Social Policies Unit (UDAPSO) showed that most regions affected by drought and flood are classified with very low Human Development Indexes.

Project Title

Preparedness and Mitigation Activities to Address El Niño Phenomenon Issues in Bolivia.

Sectors

Training:

- Composition and training of rapid assessment teams

- Civil defence refresher courses in first aid and search & rescue
- Assistance in organising the Ministry of Defence's UTOAF

Programmes:

- Formulate a National Disaster Response Plan
- Improve communications networks
- Develop a public awareness and information programme
- Ameliorate resource mobilisation

Funding

UNDP allocated US\$ 200,000. Other contributions include US\$ 500,000 from the European Union (EU) to finance UTOAF activities.

Partnerships

- Ministry of Defence
- Parliament of Bolivia
- Regional governments (Prefecturas)
- Corporación Andina de Fomento

Programme Activities

UNDP provided technical assistance in disaster management. A set of recommendations for preparedness actions was provided by UNDP, which included the establishment of chain commands, structures, procedures, sector roles and responsibilities, civil defence training programmes and public information campaigns. The implementation of these recommendations was hindered by institutional weaknesses of the entire civil defence system. The main problem was probably the very limited capacity to mitigate and respond to emergencies. The lack of legislation outlining institutional roles and responsibilities made it very difficult to implement activities aimed at improving preparedness for the possible conse-

quences of El Niño and provide the government with the required capacities to undertake mitigation and preventative actions.

The government decided to clarify institutional roles and to implement an effective civil defence system. The legislative branch, through the Commission of Defence, also requested support to approve a law establishing a new and modern National Risk Prevention and Emergency Response System.

At the request of the government and the Bolivian Parliament, the project studied the formulation of a draft law, which is currently being discussed in regional and national workshops.

The law will directly benefit government institutions and will assign clear roles and responsibilities in the field of disaster prevention and response. Indirectly, people living in vulnerable areas will benefit from the government's enhanced technical capacities to provide civil protection.

The Corporación Andina de Fomento (Regional Co-operating Body) and the Economic Commission for Latin America and Caribbean (ECLAC) conducted an evaluation of the short- and long-term impacts of the 1997-98 El Niño event, particularly its disastrous effects in the Andean countries (Bolivia, Colombia, Ecuador and Peru). The evaluation concluded that, in these four countries, losses totalled almost US\$ 7.3 billion; the sectors most affected were agriculture, industry and transport. The project provided logistical support for the evaluation activities.

Through this project, UNDP is helping the Bolivian Government lay the foundations for sustainable disaster management institutions, linking disaster management policy to sustainable development planning, effective coordination and human resource development. The main output of the project highlights the link between disasters and development.



Botswana

Strengthening National Disaster Management

Disaster Context

Although floods, bush fires and pest infestations regularly affect Botswana, recurrent drought is by far the country's major natural disaster. Almost half of its total land area has a mean annual rainfall of less than 400 mm, 80 percent of the land is made up of sandy or shallow soils which do not retain water or nutrients well. As a result, both surface and ground water are scarce.

Given Botswana's vulnerability to drought, several studies in the late 1970s and early 1980s were carried out to analyse the effects of drought on arable agriculture, livestock and people. At the same time, an Inter-Ministerial Drought Committee was set up, with representatives from the main ministries and government agencies responsible for drought-related programmes.

After the 1979-80 drought, the government introduced improved mechanisms for assessing the severity of drought and responding to it in a speedier and better co-ordinated manner. Drought committees at district level were established, as was an inter-sectoral system for predicting and monitoring the effects of rain failure.

Institutions throughout Botswana concentrated on drought until the early 1990s, when the National Committee on Disaster Preparedness was established to handle disasters in general. As a priority, the committee felt that a policy framework should be produced to facilitate co-ordination, improve overall effectiveness in disaster management, and lay the groundwork for an effective disaster management plan.

Project Title

Strengthening of the National Disaster Management Structures and Mechanisms in Botswana.

The objectives of the project were to:

- Undertake a hazard assessment and mapping exercise
- Produce a framework for disaster policy and prepare a disaster management plan
- Design a follow-up project to the preparatory assistance project

Funding

UNDP allocated US\$ 38,826, while the World Health Organisation contributed US\$ 4,836. In-kind contributions from the Botswana Government amounted to Botswana Pula 50,000 (about US\$ 11,000).

Partnerships

Government of Botswana

World Health Organisation

Programme Activities

In 1994, UNDP commissioned a team of three consultants as part of a preparatory assistance project. This project was included in UNDP's overall programme of assistance to Botswana, which concentrated on four areas:

- human resource development,
- employment creation;
- natural resource conservation and utilisation;
- public administration and management.

The preparation of a national disaster policy and a disaster management plan would link in with the overall development strategy. By alleviating poverty through the creation of jobs and human resource development programmes, Botswana would be better able to recover from disasters and re-establish its physical and social infrastructure. Similarly, in strengthening national capacity to manage natural resources, UNDP was strengthening many institutions that would be called upon in times of disaster.

Finally, the development and implementation of the disaster policy and plan would be streamlined into the plans and programmes of relevant public institutions.

Even before the project was set up, UNDP made arrangements for certain government officials to participate in a Southern African regional workshop on disaster management, which was held in Zimbabwe. This inter-country workshop established strong linkages/networks and facilitated an exchange of experience and knowledge. The workshop continues to bear fruit: some participants are still part of the government's technical group which carried out annual drought assessment tours, produced reports and made recommendations to the Government of Botswana.

UNDP assistance has produced a national disaster policy and has strengthened various institutions. A Disaster Management Office is now established in the Office of the President.

The beneficiaries of the project include government departments, the Office of the President and the community at large.



Caucasus

Disaster Management Capacity Building

Disaster Context

The demise of the Soviet Union paved the way for Armenia, Azerbaijan and Georgia, to re-establish their national identities, economies and political viability. On the road to nationhood, each has had to face major political turmoil and internal strife. Amongst other challenges, some of the most permeating relate to the growing vulnerability to natural and man-made hazards leading to major disasters and hampering socio-economic development in the region.

The Caucasus has a history of natural disasters. It is seismically active and has proven to produce devastating earthquakes such as that in Spitak, which caused the loss of 40,000 lives in Armenia in 1988. According to Armenia's National Survey for Seismic Protection (NSSP), 300,000 lives may be lost as a direct result of the next strong seismic event. Among other frequent natural hazards in the region, floods, induced by heavy rainfall, are widespread and cause population displacement and economic disruption. Mudslides and landslides are recurring phenomena adversely affecting energy supply, communications and transport. This must be added to other environmental concerns associated with a decaying industrial base.

Natural and man-made hazards in this disaster-prone region are impediments to sustainable human development. Given the countries' political struggle and their degree of social and economic progress in the post-Cold War era, none can afford to experience a setback in growth and development.

Project Title

Disaster Management Capacity Building in the Caucasus

Sectors

- Capacity building
- Risk and hazard maps for early warning systems
- Training
- Medical capacity
- Public awareness campaigns

Funding

UNDP has allocated US\$ 700,000 to implement a regional project, as well as US\$ 600,000 for national projects in Armenia, Azerbaijan and Georgia. UNDP has also funded the activities of Country Programme Officers for a period of 12 months in these countries. Contributions from other sources include £25,000 from the United Kingdom

Partnerships

- Committee on Defence and Security
- Parliament of Georgia
- National Survey for Seismic Protection of Armenia
- Cabinet of Ministers of Azerbaijan

Programme Activities

Programme activities began with the designation of Country Programme Officers in Tbilisi, Baku and Yerevan in October 1997. The first step toward regional co-operation was marked by the enthusiastic participation of a number of government representatives from Armenia, Azerbaijan and Georgia in a meeting held in Tbilisi in May 1998. Representatives of the respective governments demonstrated their commitments to the ideals of UNDP and concluded on the ways and modalities for an

integrated approach to disaster reduction in the Caucasus.

Regional Disaster Management Workshop

In October 1998, UNDP convened a regional workshop in Hungary, which marked another milestone in disaster reduction for Armenia, Azerbaijan and Georgia. Aimed at strengthening regional co-operation and national capacity building. The workshop created a conducive environment for constructive exchange and cross fertilisation of ideas among national authorities. The event brought together high and mid-level government officials, UNDP and other UN agencies' representatives, non-governmental organisations and other representatives of civil society involved in disaster reduction and recovery. The workshop developed an innovative approach to project formulation by directly involving national counterparts. Participants gained significant insight in disaster reduction by analysing numerous case studies and attending training sessions on legislation, insurance, emergency health management, psycho-social and environmental aspects of disasters, and transportation of dangerous goods.

The workshop yielded four concrete results. the inauguration of three national projects and one regional project aimed at creating sustainable disaster reduction structures in the Caucasus. The national projects will address issues of governance, early warning, mitigation, preparedness, rapid response, search and rescue, and disaster insurance, as well as the psychosocial, legal and environmental aspects of disaster reduction. The regional project will concentrate on issues of concern to the three countries and on improving co-operation and collaboration among them. The participants agreed to designate the following institutions as focal points: Centre for Seismic Protection in Yerevan, Armenia, Centre for Technological Disasters in Baku and Centre for Natural Disasters in Tbilisi, Georgia.