

His Majesty's Government of Nepal

UNITED NATIONS DEVELOPMENT PROGRAMME

**STRENGTHENING DISASTER PREPAREDNESS CAPACITIES IN
KATHMANDU VALLEY**

For

His Majesty's Government of Nepal

Brief Description

Nepal is very vulnerable to various types of natural disasters. Although floods and landslides are the most recurrent, earthquakes remain a major concern, especially for the Kathmandu valley. This natural hazard is compounded by rapid population growth, haphazard housing and settlement patterns, the lack of enforcement of a building code and the lack of regulations for land use.

The present project forms part of a wider Capacity Building on Disaster Risk Management for His Majesty's Government of Nepal programme. The Programme envisages a longer-term capacity building process, while this project addresses short-term, quicker impact activities aimed at increasing preparedness *vis-à-vis* immediate threats affecting the Kathmandu valley. The Project's objective is:

To develop community and municipalities capacity in the Kathmandu valley to cope with the earthquake risk, thus reducing the impact of a potential disaster and gradually reducing the risk.

To achieve this, the project will support the implementation of five, quick-impact components:

1. Community-based emergency plans and establishment of Disaster Management Committees at the ward level
2. Training community members and ward representatives in the basics of search and rescue, first aid and basic life-saving and sustaining techniques
3. Equipment and management mechanisms of warehouses to pre-position life-saving equipment and relief supplies
4. Identification and construction of small mitigation works
5. Supply of equipment for a functional National Emergency Operations Centre

The project constitutes an expansion to the urban level of the Participatory Disaster Management Programme (NEP/99/014) and will be executed in close cooperation and coordination with the Capacity Building Programme.

Date: 25 June 2002

Part Ia. Situation Analysis

Rugged and fragile geophysical structure, very high peaks, high angle of slopes, complex geology, variable climatic conditions and active tectonic processes make Nepal very vulnerable to various types of natural disasters.

Among the major hazards faced by Nepal, floods and landslides the most recurrent, claiming an average of 200 lives annually in the past five years. Other serious risks include earthquakes, epidemics, glacial lake outburst floods (GLOF) and forest fires, alongside minor hazards such as avalanches, storms and hailstorms.

Earthquakes remain a major concern, especially for the Kathmandu valley. Seismic faults pass through the country and the terrain is characterised by steep slopes. This natural hazard is compounded by rapid population growth, haphazard housing and settlement patterns, the lack of enforcement of a construction code and the lack of regulations for land use, which affect both the urban and the rural areas.

A major earthquake on the central hills and mountain region of Nepal today would result in a countless number of casualties in Kathmandu alone, which some estimate between 60,000 and 300,000. Buildings have not been assessed in terms of their resistance and are considered at high risk. Moreover, the existing road system is likely to be affected by numerous and significant landslides, which would cut off access to Kathmandu. The possible resistance of the national airport or any alternative airstrips has not been determined.

The most severe disasters recorded in Nepal's recent history are the earthquakes of 1934 and 1988, and the floods and landslides of 1993. The 1934 earthquake severely affected the country's economy with 60 per cent of houses damaged in the Kathmandu valley alone. The 1988 earthquake destroyed vital infrastructure in the eastern part of Nepal. The recorded overall damage by the floods and landslides of 1993 was high (Rs 4 billion) in the five most affected districts, out of a total of 43 affected districts. This figure is equivalent to around three per cent of the country's annual Gross Domestic Product (GDP) and about 13 per cent of the total annual government budget at the time.

Thus, disasters have had a considerable negative impact on the economy of Nepal, one of the world's poorest countries. As the majority of the population depends on agriculture, it is the small-scale farmers, one of the least privileged groups, who are hit the hardest.

Part Ib. Strategy

The Government Strategy

The **Department of Narcotics Control and Disaster Management** of the Ministry of Home Affairs (MoHA) is entrusted with the relief and rescue aspects of disasters under the Natural Calamity Relief Act (NCRA) of 1982. The NCRA establishes a Central

Disaster Relief Committee (CDRC) under the chairmanship of the Minister, MoHA to formulate and implement policies and programmes related to natural disaster *relief* work.

The CDRC and the District Disaster Relief Committees (DDRC) function on a permanent basis, while local and regional levels committees are only constituted in times of a disaster.

A more recent Act, however, the Local Self-Governance Act of 1999, bestows the disaster relief functions on the local bodies (District Development Committees, Village Development Committees and Municipalities) based on the principle of subsidiarity. The two acts are contradictive, the first one granting authority to the District Administration and the latter to the local bodies. This contradiction has prevented more effective relief operations at the local level.

The heavy toll exacted by disasters may be partly attributed to the lack of a comprehensive disaster risk management policy and an adequate institutional framework. Inadequate coordination among government agencies involved in disaster management and the absence of clear-cut descriptions of roles and responsibilities of those agencies -- compounded with a scarcity of human and financial resources-- reduces the country's capacity to manage reduce risk.

UNDP Policy Support Strategy

Building upon the wealth of experiences accumulated over years of cooperation with the Government of Nepal in disaster management, UNDP has embarked in a Capacity Building on Disaster Risk Management for His Majesty's Government of Nepal (CBDRM/N). The Programme envisages a longer-term capacity building process, with the overarching goal of increasing the capacity of the people and authorities of Nepal to manage risks, reduce vulnerability and protect lives and development assets from the threat of natural disasters.

Emphasis will be placed on engaging stakeholders at all levels --policy makers, sectoral ministries, district, village and local authorities, civil society, international community, NGOs, etc--, so that:

- a) Authorities at all levels, stakeholders and citizens nation-wide are aware of the risks, are therefore empowered to better protect their lives and properties and are provided with tools to reduce these risks;
- b) A coherent set of legislation, institutional framework and clear-cut division of responsibilities will emerge from the policy dialogue, leading to a concerted and coordinated effort of national, district and local authorities, population and cooperation agencies, before, during and after a natural disaster
- c) An information exchange platform is established so that national efforts, international cooperation and communities' resources are more effectively used, duplications and gaps are avoided;
- d) Preparedness capabilities are increased, especially in those areas where mitigation works are not feasible in the short term; and, ultimately,

- e) Hazard-risk-vulnerability considerations are factored into the overall development planning process thus preventing further deterioration of vulnerable conditions.

Given that the changes at the policy and institutional levels are not immediate, nor the expansion of community work to cover all disaster prone areas in the country, the Programme envisages short-term measures to increase the preparedness and coping capacities of the communities and the municipalities most at risk. The present project addresses the latter in the Kathmandu area, where the risk of a major earthquake is considered extremely high.

By promoting the organisation of wards and communities in Disaster Management Committees and enhancing their capacity to identify the risk and the measures to reduce it and save lives, this project will contribute to:

- Reduce the potential loss of lives in the event of an earthquake in the Kathmandu Metropolitan and valley area
- Establish a platform for coordinated, concerted action, with a bottom-up approach, while slower-pace changes are promoted at the central level
- Raise awareness amongst the population on the benefits of working together for the common goal of safety and security and thus promoting dialogue and peace
- Enhancing disaster related database capacities of the municipalities in the Valley.

The project will also contribute to improve coordination at the national-level through the supply of basic equipment for a fully functional National Emergency Operations Centre within the Singhadurbar premises in Kathmandu.

The project features a strategic partnership between the National Society for Earthquake Technology-Nepal (NSET-Nepal), as the technical entity which will provide its valuable and long standing experience in community-based earthquake mitigation, the Nepal Red Cross Society, entrusted in the prevailing legislation as a focal point for community organisation in disaster preparedness, Ministry of Physical Planning and Works and Institute of Engineering, Tribhuvan University technical organizations for technical backstopping to successfully accomplish the set objectives and activities of the project. UNDP will provide the overall monitoring and technical backstopping, based on its experience in community mobilisation through the Participatory Disaster Management Programme (PDMP).

Part 1c: Linkages to Other Related Programmes and Disaster Management Actors:

UNDP has been supporting the Government of Nepal in disaster-related issues since 1985. Its support has gradually shifted from disaster relief and rehabilitation to more comprehensive, community-based approaches such as project NEP/95/005 "Upgrading Disaster Management Capacity in Nepal", which ran from 1996 through 1997. This project entailed capacity building of selected communities by enabling people to identify

their risks and work together towards mitigating impact. Project NEP/99/014 "Participatory Disaster Management Programme", funded by the UNDP/Japan Women in Development Fund, currently in implementation in four disaster-prone districts, has been especially successful in demonstrating the feasibility and effectiveness of disaster mitigation works through community mobilisation. The duration and coverage of this project, however, is very short and limited, which in turns limits its capacity to transfer knowledge and increase the impact of disaster reduction activities.

At the Country Team level UNDP has been instrumental in the establishment of an effective UN-DMT to ensure concerted support by the UN system. Considerable work has been developed by the Country Team into a "UN Nepal Disaster Response Preparedness Plan", to ensure that human survival and well-being, particularly of the most vulnerable groups, is protected in whatever emergencies develop. Part I of the Plan has been published and Parts II is ready for publication and part III will be finalised shortly. Training, sensitisation and dialogue have been constant elements of UNDP's past and present activities in disaster management.

Other international agencies and donor countries have supported Nepal's efforts to reduce the impact of disasters. The United States Agency for International Development (USAID) has sponsored two-week workshops in each of the five Development Regions of Nepal, which contributed to raising awareness and highlighting the links between disasters and development. OFDA/USAID has organised several training programmes within the Programme for the Enhancement of Emergency Response.

The International Centre for Integrated Mountain Development (ICIMOD) assisted the Department of Surveys to study Glacial Lake Outburst Floods (GLOF) in the Himalayas, with a view to developing hazard maps, identifying vulnerable areas and risk reduction measures.

The Japan International Cooperation Agency (JICA) has been assisting the Ministry of Water Resources in the establishment of a Water Induced Disaster Prevention Technical Centre (DPTC) which was recently transformed into the Department of Water Induced Disaster Prevention. Its objective is to facilitate research activities, zoning of flood-prone areas, developing forecasting and warning systems and river and landslide control measures. HMG and JICA are currently developing a proposal to prepare a disaster mitigation master plan for the areas affected by the 1993 flood.

The European Community Humanitarian Office (ECHO) is assisting Nepal in piloting community-based disaster preparedness projects. France is sponsoring a seismology programme, with 21 seismological monitoring stations in earthquake prone zones.

In view of the existence of these, and perhaps more, of these initiatives, the CBDRM/N will assist these multiple partners by establishing an Information Exchange Platform where all disaster activities will be mapped and reports produced periodically. This will enhance coordination, avoiding gaps and overlaps and optimising the scarce resources

available for disaster management activities. Moreover, this project has direct linkage with the CBDRM/N.

Part II. Results Framework

The project's development **objective** is to develop community capacity in the Kathmandu valley to cope with the earthquake risk, thus reducing the impact of a potential disaster and gradually reducing the risk. To achieve this, the project will support the implementation of five, quick-impact components:

1. Community-based emergency plans and establishment of Disaster Management Committees at the ward level
2. Training community members and ward representatives in the basics of search and rescue, first aid and basic life-saving and sustaining techniques
3. Supply equipment and management mechanisms of warehouses to pre-position life-saving equipment and relief supplies
4. Identification and construction of small mitigation works
5. Provide basic equipment for a functional National Emergency Operations Centre

The expected **outcome** is an increase in the level of preparedness and coping capacity of the target population in the event of a disaster. The **outcome indicators** are the number of Disaster Management Committees established at the ward level, the number of warehouses managed and equipped, the number of small mitigation works implemented and/or planned, enhanced disaster related database capacities of the municipalities in the valley and the National Emergency Operations Centre.

The expected **outputs** are:

- 1.1 Communities/localities organised and mobilised around the subject of natural disasters, in the form of Ward Disaster Management Committees established in the Kathmandu municipal district and Valley, with clear-cut delimitation of roles and responsibilities of the various community organisations and members
- 1.2 Micro-level hazard mapping developed with the community, with simple, straight forward techniques, with identification of evacuation routes, safe heavens, closest aid centres, etc.

Activities

- Identification of 15 strategic communities to start a pilot-basis mobilisation exercise, in consultation with the Metropolitan City and corresponding municipalities
- Production of instructions and guidelines in simple, comprehensible language
- Training and simulation exercises

- 2.1 Selected members of the wards and communities capable of handling the first stages of life-saving operations

Activities:

- Participatory training programme development
- Pilot exercises and replication
- Continuous training and refresher programmes
- Meetings/ cross visits/ workshops

3.1 All the municipalities within the Kathmandu Valley will enhance the disaster related database capacity

Activities:

- Provide basic training to the municipality staff on maintaining database
- Supply basic equipment and programme to maintain the disaster related database
- Organize a cross visit programme to the mayors of all the municipalities in the valley to Gujarat, India and Bangladesh to learn how other municipalities within the region are being able to mobilize local communities to mitigate/prepared for future disaster.

3.1 Pre-position assets strategically located in the Kathmandu valley to provide immediate emergency relief to communities affected by a disaster

Activities:

- Identification of suitable communities/locations
- Management and pre-positioning of basic life saving equipment at 15 communities
- Determining the list of adequate supplies and equipment and stocking
- Development and agreement on a warehouse management system and procedures

4.1 Participatory disaster mitigation at the community level implemented with the PDMP methodology, in the Kathmandu valley. A minimum of 5 small mitigation and/or preparedness works, identified with the community, in construction through community mobilisation at the end of the first year

Activities

- Participatory identification of risk reduction measures
- Community organisation to undertake the required works
- Provision of technical guidance, monitoring and supervision of works
- Enhancing capacities of partners and feeding the central planning and decision-making levels, via lessons learnt processes, publications, etc.
- Identification of safe heaven/areas
- Provision of drinking water and sanitation facilities in the safe heaven/areas and open space as identified by the communities
- Preparing and posting sign boards of the area/community with emergency routs and safe heaven/areas, and
- Earthquake preparedness/mitigation activities as designed by the local communities.

5.1 Emergency response operations of the Government coordinated and effective from the central level. Establishment, equipment and operations of a National Emergency Operations Centre

Activities

- In consultation with the Government, identification of a suitable location for a functional NEOC
- Supply the basic equipment for a functional NOEC

This project will be a component/ part of the Capacity Building on Disaster Risk Management for His Majesty's Government of Nepal (CBDRM/N) programme which will be co-funded by UNDP, DFID and other donors. The CBDRM/N envisages a longer-term capacity building process, with the overarching goal of increasing the capacity of the people and authorities of Nepal to manage risks, reduce vulnerability and protect lives and development assets from the threat of natural disasters. Lessons-learnt during its execution will feed into the Programme and will contribute to reaching the latter's overall capacity building objective and to the policy-development process. It will benefit from the experience of the Participatory Disaster Management Programme (PDMP) which has been implemented under the same philosophy of maximum community involvement and whose manager will assume the overall technical supervision and management of this project. The implementing partners, NSET-Nepal and the Nepal Red Cross Society will contribute their long-standing experience.

Thus, the execution of this project will not only create capacities at the community level, but it will contribute to strengthen two Nepalese organisations who may well replicate this experience in other high-risk areas of the country.

Part III. Management Arrangements

The project will be executed under UNOPS execution modality, with the Ministry of Home Affairs (MoHA) and/or Ministry of Local Development as the National Executing Agency.

Components 1, 2 and 3 of the project will be executed via a subcontract with the Nepalese Red Cross Society, whose international and national experience in community-based disaster preparedness and prevention is recognised worldwide. The Red Cross will provide UNDP with periodic reports on ongoing activities and UNDP Nepal will provide technical backstopping and assistance as required.

Component 4 will be executed in consultation with, and with the support of, the Ministry of Local Development (MLD), as it entails the mobilisation of wards and communities. The Nepal Red Cross Society and NSET will also be involve in the implementation of component 4. UNDP will also ensure that the MLD is duly involved in the implementation of component 3.

Component 5 will be executed with the National Executing Agency (MoHA and/or MLD and/or Prime Minister's Office), with technical backstopping and monitoring by UNDP Nepal.

NSET-Nepal will be subcontracted to provide technical advice on demonstrated bottom-up earthquake mitigation activities, materials, guidelines and building designs for the implementation of components 1, 2, 3 and 5.

Institute of Engineering (IoE) and/or Ministry of Physical Planning and Works (MPPW) will also be contracted for the component 3 and 5 of the programme along with NSET and Nepal Red Cross Society.

UNDP will designate the Manager of the Participatory Disaster Management Programme as the Manager of the present project, who will be responsible for the overall technical backstopping, supervision and reporting.

All partners will meet regularly to assess progress and constraints, decisions concerning components 1, 2, 3 and 5 will be taken jointly, and regular reporting and feedback mechanisms will be agreed and adhered to during the course of the project. UNDP will produce one progress and one final report, with the support of the implementing partners.

Part IV. Legal Context

This document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between His Majesty's Government of Nepal and the United Nations Development Programme, signed by the parties on 23 February 1984. The host country-executing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agent described in that Agreement.

The following types of revisions may be made to this document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the document have no objections to the proposed changes:

- a) Revisions in, or addition of any of the annexes of the document
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the programme, but caused by the rearrangement of inputs already agreed to or cost increases due to inflation, and,
- c) Mandatory annual revisions, which rephrase the delivery of agreed inputs or increased export or other costs due to inflation or take into account agency expenditure flexibility