# **Disaster Inventory/ Information Management** System in Nepal (DesInventar)

NSET Information Kit | 013 | 2011





### BACKGROUND

Despite the fact that every year Nepal is spending a significant financial resources for disaster response, the extent and intensities of disaster are on increase, largely due to poor economic condition and low literacy rate resulting in very low level of awareness, at all levels, of the ways and means to reduce the increasing disaster risks.

There is a total absence of organized and uniform data pertaining to natural disaster losses in the country. Exact statistics are not available on the loss of lives and property caused by historical disaster events. Few available records are only on the events with big impacts but thousands of small events are missing from the scene, which have caused significant loss of lives and property.

Due to this fact, the vulnerability profile of the country is virtually unknown. This is an impediment to the mainstreaming of disaster risk reductions into the development process.

In this context, the National Society for Earthquake Technology-Nepal (NSET) with financial and technical support of United Nations Development Programme (UNDP), endeavored to establish a systematic data inventory of natural disaster events in Nepal. The initial phase of this program covered the time period of 1971-2003 AD. The effort was focused mainly on collection, computer-entry, and analysis of natural disaster data for 33 years. A standard data collection format was developed and used to capture the data from different sources and entered into the "DesInventar System", a methodological tool developed and successfully implemented by Latin American Network of Social Studies on Disaster Prevention (LARED).

#### **GOALS AND OBJECTIVES**

The overall goal of the initiation is the Institutionalization of the Disaster Inventory/Information Management System in Nepal. To achieve this goal, the project was formulated with the broad objective to prepare a systematic database of natural disasters occurred in Nepal for a period of 33 years (1971 January to December 2003). The specific objectives of the program were:

- To identify the types of disasters in Regional, District and Municipality/VDC level
- To find the time variation of natural disasters in different geographical units
- To identify the human and property losses caused by natural disasters
- To prioritize the area mostly affected by natural disasters
- To develop the information library in a system database format on natural disaster at the national level

#### **ACTIVITIES**

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- Definition of Disaster Events in the context of Nepal and Development of a Standard Survey Format
- Identification of Main Data Sources: daily newspapers, periodicals, relevant reports, government records, journals and researches



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- Data Collection: Collection of information and data related to natural disaster events from the main data sources
- Data Verification and Entry: The data thus collected will be verified for consistency and accuracy, the data then will be entered into the DesInventar System by trained personnel
- Data Analysis: The information thus obtained will be analyzed from different angles to find out spatial distribution, trend, pattern and the extent of human and property losses due to natural disaster events
- Calculation of Economic Losses: The total losses by natural disasters will be calculated in terms of present market value, (the total cost of properties like buildings, land, roads and livestock etc will be estimated)
- Dissemination of Results and Findings: The results and findings will be disseminated to the related institutions
  and individuals through workshops and meetings to make the stakeholders informed about the results to buy-in
  suggestions and for consensus building.
- Reporting and Documentation

#### **PROJECT OUTPUTS**

A consistent and sound database on the historical disasters of Nepal with details on the event and impacts are recorded into the DesInventar System since 1971. It will work as a tool for disaster risk mitigation strategy for the country. Such analysis of natural disasters from different angles will help to develop future plans and programs for disaster risk mitigation in the country in one hand and make people aware from the disasters on the other hand. Further, in the following years, we envisage establishment of an adequate, stable, sustainable, and operational system for systematic disaster inventory and management of the disaster database for effective risk reduction and emergency response planning in the country.

#### **LESSONS LEARNED**

The accuracy and reliability of information will be high if data collection is done from the affected area using standard data collection format. It is necessary to pilot a program of such inventory with the data collection activities centered at the Village Development Committee (VDC) Level and the data processing at the District Headquarter Level so that the geographical, temporal, comparative and economic analysis of data will help to develop the plans and programs for disaster risk management for the district.

The district level database and analysis therefore should be submitted to the centre for using it as a tool for development

of strategy, policy and legislation for disaster risk management in the country. It is experienced that to build natural disaster inventory is not much expensive for the country comparing with its potential use.

In continuation of the efforts to institutionalize Disaster Information Management System, NSET with support of UNDP has implemented another project, Preparatory Works for Institutionalization of Disaster Inventory Management System (PW/I-DIMS) in two districts- Chitwan and Tanahu as a pilot exercise. This project aimed to train the potential resource persons, with DesInventar System, working in the field of Disaster Management; installing the system in the pilot districts, check the potentiality of data entry and analysis in the local level.

