

Kathmandu Valley Earthquake Preparedness Initiative (KVEPI)

Agreement #: DFD-G-00-03-00071-00

Final Report

Program Title: Kathmandu Valley Earthquake Preparedness Initiative

Country: Nepal

Disaster/Hazard: Seismic Hazards

Time Period Covered by this Report: Sept. 22, 2003 – June 25, 2005

Total Number of Beneficiaries Targeted: 250,000

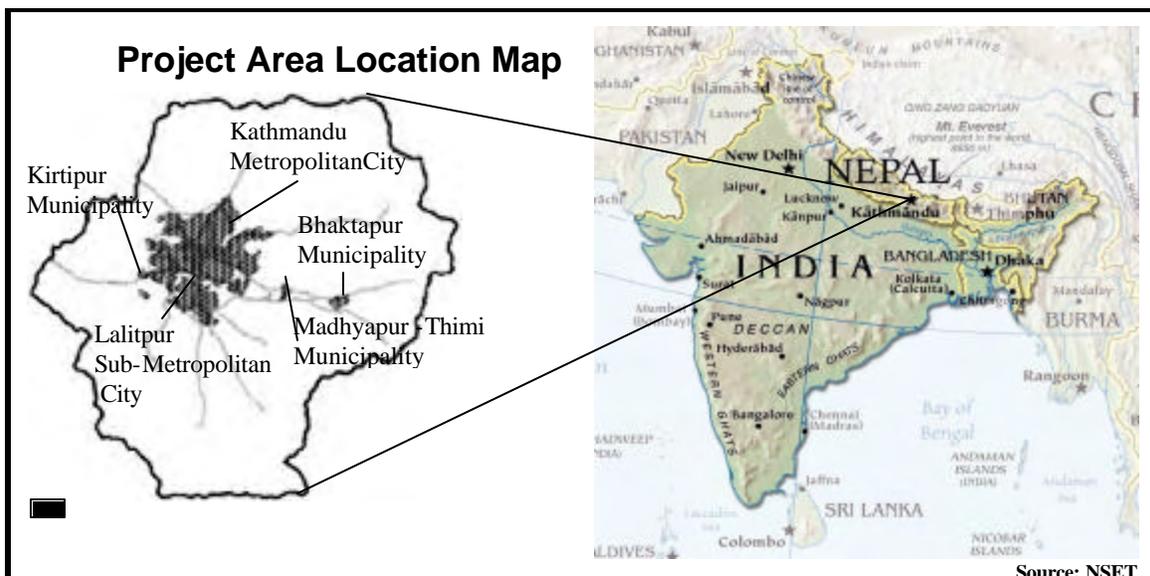
Program Value: \$282,437

Implementing Partners: Nepal Red Cross Society, American Red Cross, and the National Society for Earthquake Technology

Geographic Focus: Kathmandu Valley

Kathmandu Metropolitan City – 3 Wards
Lalitpur Sub Metropolitan City – 2 Wards
Madhyapur-Thimi Municipality – 2 Wards

Kirtipur Municipality – 1 Ward
Bhaktapur Municipality – 2 Wards



I. Executive Summary

The American Red Cross (ARC), with financial support of the Office of Foreign Disaster Assistance formed an agreement with the Nepal Red Cross Society (NRCS) and the National Society for Earthquake Technology (NSET) in Nepal to implement a disaster preparedness program to enhance the capacity of the NRCS national headquarters, local wards and communities to plan, prepare for, and respond to earthquakes and other hazards within the region. The project became commonly known as the Kathmandu Valley Earthquake Preparedness Initiative (KVEPI). The project was implemented over a period of 18 months plus a three-month, no-cost extension, from September 2003 to June 2005.

The Kathmandu Valley is the urban center of Nepal and consists of five major metropolitan divisions with a population of more than 1.5 million people. The five divisions are divided into 110 municipal wards. For this project a total of ten wards were identified from the five divisions by NRCS and NSET to conduct preparedness activities.

The aim of the project is to *save lives, reduce economic losses, and improve resiliency from natural hazards at the community level* and include three main objectives through which this will be achieved:

Objective 1: To build the disaster management capacity of the NRCS at the national, district and sub-chapter level.

Objective 2: To build the disaster preparedness and response capacity of ten wards in the Kathmandu Valley.

Objective 3: To increase public awareness about earthquake safety and preparedness practices at the community level.

II. Key Accomplishments

This was the first capacity building initiative for the NRCS on earthquake preparedness and as a result the national society's ability to prepare and respond to emergencies has been greatly enhanced. More than 80 NRCS staff and volunteers have been trained in various disaster management topics and nearly 800 new disaster management volunteers have been recruited. Of these newly recruited volunteers 44 percent were women. Relief supplies for 3,000 families have been procured and pre-positioned and 40 search and rescue equipment sets have been strategically placed throughout the disaster-prone communities. The NRCS has been able to establish a strong working relationship with NSET, municipal and district-level officials, as well as community members. NRCS also oversaw the installation of two 30 meter tube wells in a centrally located urban park. These wells could provide clean water for up to 500 people in the case of an emergency.

This project has established a system of trained volunteers at the community level who are trained as first responders in the event of disasters. It has also led to the formation of disaster management committees at the municipal level. Through the formation of these committees, disaster management networks between the wards and municipalities have also been established. At the community level more than 700 residents have been trained in first aid, disaster management, or search and rescue techniques. Each ward has developed hazard and resource maps and conducted successful disaster simulations. During the course of the ward-level walking tours and the disaster simulations more than 2,000 volunteers were mobilized to participate in these outreach activities.

The project has experienced a high degree of community participation. Public awareness materials have been well received and community awareness events well attended. More than 1,400 community residents participated in walking tours and disaster simulations conducted in the 10 wards. The NRCS developed five different types of awareness materials producing and disseminating 60,500 items. Project activities also received positive media coverage bringing messages of preparedness and resiliency to wide audiences. It is estimated that up to 90,000 people have received messages as a result of community awareness events and media coverage of these events.

Summary of Beneficiaries by Objective

Objective	Target	Actual			Description of beneficiaries
		Sept 03 – Sept 04	Oct 04 – June 05	Total	
<i>Objective 1</i>					
Training	50	82	0	82	Trainees included NRCS staff and volunteers. While a few participants did attend multiple trainings, review of the attendance records show that most participants only attended one training each.
Relief supplies	18,000	18,000	-	18,000	Relief supplies prepositioned to assist 3,000 families (6 members per family)
Tube wells	NS	0	500	500	Each tube well can serve up to 250 persons in case of emergency. It assumed that the population served by the tube wells will also benefit from the relief supplies.
Total for Obj. 1	18,050	18,082	500	18,082	
<i>Objective 2</i>					
Community outreach and organization	NS	729	332	1,061	Includes those who attended orientation meetings, participated in Stakeholder Working Groups, and became members of community disaster committees.
Training	400	0	715	715	Trainees consisted of ward residents trained in disaster management, first aid, and search and rescue.
Disaster planning and preparedness	NS	0	1,585	1,585	Includes those who participated in disaster simulations and attended lessons learned sessions. Assumes those who participated in trainings and community outreach groups also participated in planning and preparedness activities.
Total for Obj. 2	400	729	1,585	1,585	
<i>Objective 3</i>					
Walking tours	NS	0	486	486	Includes those who participated in community walking tours.
Awareness materials	NS	0	60,500	60,500	60,500 pieces of awareness materials disseminated. Assumes at least one person received information for each item distributed.
Community events	NS	0	~90,000	~90,000	Includes estimates of those who attended community events and those reached through media coverage of events.
Total for Obj. 3	250,000	0	~90,000	~90,000	
Overall project total	250,000			~90,000	It is assumed that some of these beneficiaries benefited from multiple interventions. For example those who received training also participated in committees, disaster simulations, etc. The majority of these beneficiaries, however, are those reached through community events and disaster awareness messages—it is assumed that these individuals also have/benefited from multiple interventions.

NS- Not specified in project proposal

III. Key Activities

Based on the three objectives, the project covered a wide range of activities. (See Annex I for photos.) In most cases where targets were specified in the proposal, targets were met and in many instances exceed the original goals. Only in two cases were targets not met.

In terms of securing strategic warehouse locations, only 3 out of 4 planned locations were established. This occurred because the NRCS was unable to find a suitable fourth location. Ware housing space was exceedingly difficult to secure in all of the districts. This obstacle is noted in the lessons learned portion of this report with recommendations to focus more effort on the issue if future programming occurs. The anticipated consequence of this is that relief supplies may be less accessible in case of a major disaster.

The other target not met was the establishment of Stakeholder Focus Groups. Only 4 out of 5 planned groups were formed. A group was not established in Kathmandu Metropolitan district because the local officials did not have the time to devote to the necessary activities. The anticipated consequence of this is that the key leaders and community members in that district will be less informed and less prepared in the event of a major disaster. In all other areas, however—training, committee formation, disaster plan creation—the Kathmandu Metropolitan district met or exceeded all targets.

Summary of key activities and accomplishments

Key Activities	Target	Actual			Percent target met	Reason target not met	Means of verification
		Sept 03 - Sept 04	Oct 04 - June 05	Total life of project			
Objective 1: To build the disaster management capacity of the NRCS at the national, district, and sub-chapter level							
<i>Training and capacity building</i>							
NRCS staff and volunteers completing Disaster Management Training of Trainers	25	28	0	28	112%		Training attendance records
NRCS staff and volunteers trained in Inventory and Warehouse Management	20	28	0	28	140%		Training attendance records
NRCS staff and volunteers completing Earthquake Preparedness Technical Training	25	26	0	26	104%		Training attendance records
Community level Search and Rescue course developed	1	0	1	1	100%		Training attendance records
New disaster management volunteer recruited	--	0	797	797	--	Target not specified in proposal	NRCS records
Female volunteers recruited	--	0	351	351	--	Target not specified in proposal	NRCS records

Trainings requested by wards	--	0	25	25	--	Target not specified in proposal	NRCS records
Procurement and prepositioning of relief supplies							
Strategic warehouse locations secured	4	3	0	3	75%	Only three strategic points were found feasible in the districts.	District chapter warehouse records
Non-perishable family kits procured and warehoused	3,000	2,400	600	3,000	100%		District chapter warehouse records
Search and Rescue equipment sets procured and warehoused	40	40		40	100%		District chapter warehouse records
Other activities							
Tube wells installed	2		2	2	100%		Direct observation
Objective 2: To build the disaster preparedness and response capacity of ten wards in the Kathmandu Valley							
Community outreach and organization							
Municipal level orientation meetings conducted	5	0	5	5	100%		NRCS quarterly reports
Municipal level Stakeholder Working Groups (SWG) formed	5		4	4	80%	SWG not formed due to time constraints of local officials.	NRCS quarterly reports
Ward level orientation meetings conducted	10	10	0	10	100%		NRCS quarterly reports
Ward level Disaster Management Committees formed	10	10	0	10	100%		NRCS quarterly reports
Disaster Management Committees still in operation at project completion	10	NA	10	10	100%		NRCS quarterly reports
Training							
Trainings in Disaster Management conducted	10	0	10	10	100%		Training attendance records and reports
Trainings in Basic First Aid conducted	10	0	10	10	100%		Training attendance records and reports
Training in community level Search and Rescue conducted	10	0	10	10	100%		Training attendance records and reports

Ward members trained in Disaster Management	200	0	212	212	106%		Training attendance records and reports
Ward members trained in Basic First Aid	200	0	241	241	121%		Training attendance records and reports
Ward members trained in Search and Rescue	200	0	262	262	131%		Training attendance records and reports
<i>Community-based disaster planning and preparedness</i>							
Hazard and Resource maps produced	10	0	10	10	100%		Direct observation
Hazard maps posted in public locations	10	0	10				Direct observation
Ward level Disaster Management Plans produced	10	0	10	10	100%		Direct observation
Disaster simulations conducted	10	0	10	10	100%		Direct observation and NRCS reports
Volunteers mobilized for disaster simulations	--	0	475	475	--	Target not specified in proposal	Direct observation and NRCS reports
Cross training and lessons learned sessions held	8	0	14	14	175%		NRCS quarterly reports
Objective 3: To increase public awareness about earthquake safety and preparedness practices at the community level							
Ward level walking tours conducted	10	0	10	10	100%		NRCS quarterly reports
Volunteers mobilized for walking tours	--	0	122	122	--	Target not specified in proposal	NRCS quarterly reports
Community residents participating in walking tours	--	0	364	364	--	Target not specified in proposal	NRCS quarterly reports
Community residents participating in disaster simulations	--	0	1,110	1,110	--	Target not specified in proposal	NRCS quarterly reports
Types of public awareness materials developed	--	3	2	5	--	Target not specified in proposal	Direct observation and NRCS reports
Public awareness materials produced and disseminated	--	0	60,500	60,500	--	Target not specified in proposal	Direct observation and NRCS reports
Ward level community awareness events organized	20	0	25	25	125%		NRCS quarterly reports

IV. Constraints and Challenges

- Delayed project implementation period: The total duration of the project was planned to occur between September 2003 to March 2005, however due to delays in the signing of the agreement between ARC and NRCS, project activities did not begin in earnest until late December 2003. Because of a delay in the agreement between ARC and NSET, ward selection did not begin until March 2004. A no-cost extension was granted and project activities concluded in June 2005.
- Political unrest: Political disturbances led to the postponement of scheduled activities in some project areas. A general strike called by competing political parties disrupted planned activities in some urban wards and discouraged the participation of community members.
- Technical support: ARC technical support was reduced due to changes in staffing and shifts in staff roles responsibilities (e.g. ARC Disaster Preparedness Manager resigned and ARC Regional Head of Delegation was subsumed by tsunami-related responsibilities allowing for less time for support of Nepal programming after December 2004).

V. Lessons Learned and Recommendations

- Time line for the project was too short and requires additional time for the “ramping up” of activities and conducting outreach to the targeted communities. Considering the scope of the activities implemented, an increase in the duration of the project period should be considered. Two years would be a more appropriate length of time to complete a project with similar activities. Based on this expanded time frame, the project could be organized into three distinct phases

Pre-development phase: Community mobilization activities should be focused in this phase. Activities during this phase would include the orientation for stakeholders, ward selection, ward and municipality level committee formation, training course revision/updating, organization of trainings, selection of storage and warehousing sites, procurement of relief items and rescue equipment, and the production of awareness materials.

Development phase: Community strengthening activities should be focused in this phase. Activities would include ward-level training, walking tours, community awareness events, Disaster Management Plan preparation and publication, simulation exercises, prepositioning of relief and rescue materials, and lesson learned meetings among trained volunteers.

Post development phase: Community sustainable measures should be focused in this phase. These would include refresher training, follow up and support to ward-level disaster management committees in order to update disaster plans, continuation of community awareness events, reviews and lessons learned of simulation exercises. This phase would also include the project evaluation and hand over of systems created to the disaster management committees.

- Additional program staff would allow for better management of the project activities. In addition to the existing program coordinator and account officer, one full-time project

assistant at headquarters level would help with the administration and logistics of the project and separate community motivators for each program ward would facilitate greater interaction between community members and project staff as well as foster enhanced community participation and commitment. .

- Greater technical and administrative support from ARC to guide and advise NRCS project staff would be valuable. Support should include technical guidance in developing and employing monitoring and evaluation tools.
- Coordination between NRCS and NSET could be improved with better written guidelines and definition of roles and responsibilities. NRCS and NSET should be encouraged to practice more information sharing and establish regular meetings to communicate activity updates and experiences.
- Refresher training should be offered to ward residents on an annual basis. Search and rescue trainees should also receive separate first aid training.
- Simulation activities require more time to complete and should be followed with lessons learned sessions immediately afterward.
- Warehousing property and management must be a priority with future programming. The current situation of borrowing or leasing warehouse space is not a permanent solution for the storage of relief items. Warehouse space must be identified early on in the project and a plan should be made for sustaining the warehouse and relief items after project completion. Written warehouse agreements should be put in place prior to the procurement of relief items.
- Considering the high seismic risk in the Kathmandu valley and increased awareness and interest among community members and municipal officials, the earthquake preparedness initiative should be expanded to additional wards within the Kathmandu Valley. Due to the current political unrest, migration to and within the valley continues to increase as people seek secure shelter. This internal influx of people increases the likelihood of high casualties in the event of a major disaster. The earthquake preparedness initiative has been extremely successful in sensitizing the community residents about earthquake vulnerability in the valley. Neighboring communities of program wards have approached the NRCS and requested earthquake preparedness projects in their wards as well.