

## case study



## Nepal: Disaster preparedness in schools Children making their schools and their communities safer

*Teaching disaster preparedness in schools can be an effective way of reaching teachers and students as well as the surrounding communities - making them safer and better prepared for disasters. Over the past three years, Nepal Red Cross Society (NRCS) and its partners have been working with schools in three of Nepal's most hazard-prone districts. Two students illustrate how the program made a difference to their lives - and their communities.*

Working with its partners Nepal Society for Earthquake Technology (NSET) and the American Red Cross, Nepal Red Cross Society (NRCS) has been implementing the “Disaster Preparedness for Safer Schools 2 in Nepal (DPSS2)” program since early 2011. Focusing on the districts of Bhaktapur, Nuwakot and Rasuwa, NRCS has been training teachers and students in disaster preparedness.

Globally, more than 200 million people are affected by disasters each year. Small investments can make a significant difference in saving lives, safeguarding homes and protecting personal assets. Nepal, like other mountainous countries, is prone to storms, floods, landslides, fire and water-borne diseases, which threaten the lives and safety of people living in the area.

The program districts are particularly vulnerable to disasters: their fragile geomorphic setting as well as severe and erratic

climatic conditions render the three districts prone to earthquakes, landslides and storms.

The DPSS2 program works to minimize those threats by teaching teachers and students how to identify risks and hazards in their schools and communities and what they can do before, during and after disasters. The program equips the students and teachers to serve as ambassadors and mobilizers, spreading what they have learned to their friends, neighbours and families. Up until 2014, some 40,000 people and 220 schools have benefited from the disaster preparedness initiative.

In May 2014, a Most Significant Change (MSC) study was conducted for the DPSS2 program. Following consultation with over one hundred students and teachers, the two MSC stories presented here were shortlisted by the project team as the most salient and representative.

## Drop, Cover, Hold

In an earthquake practice **drop**, **cover**, and **hold** on in a safe place. **Drop** to the floor, take **cover** under a sturdy piece of furniture, and **hold** on to a leg of the furniture. If suitable furniture is not nearby, sit on the floor next to an interior wall and cover your head and neck with your arms.

**Hold** the position until the shaking stops.

Responding quickly in an earthquake may help protect you from injury.

“I was very happy to learn that my family members saved their lives by doing what I had taught them.”

“If Nepal Red Cross hadn't launched a program, we wouldn't have any awareness like we do now.”

## Go Bag

A 'Go Bag' is a household emergency kit that is packed into a bag (often a back pack) and kept near an easy exit to grab and go in case of a disaster.

Inside one should keep:

- bottled water,
- dry food,
- important papers,
- medicines
- first aid kit,
- torch/flashlight,
- spare batteries.

## Chhiring Tamang Knowledge can save lives

### Project involvement

I have been a member of the Junior Red Cross Youth Circle (JYRC) since I was in class seven. However, even before this I was always ready to help others if they faced a problem. Now I am the secretary of the JYRC and have participated in various trainings provided by the Red Cross Disaster Preparedness for Safer Schools project (DPSS2). For example, I took part in disaster management training as well as Drop, Cover and Hold drills.

Since joining the JYRC, I always participated in the trainings. I organised meetings for the JYRC members, and I completed the minutes of the meetings. I also motivated my friends to take part in the trainings offered.

I think that the DPSS project was important, as disasters cause a lot of destruction in human life. The project helped us to understand the safe and unsafe places in our houses and in our neighbourhood. It has also helped to mitigate these hazards and make things safer.

Due to the DPSS project, the whole community has greater awareness because the students go back to their own houses and share their experiences and knowledge with their family members.

### Before and after the project

Before the DPSS project, we always followed traditional concepts. Older members of the community said that we need to run away during an earthquake. We also didn't know the cause of earthquakes.

People said the earth rests on a giant turtle and that earthquakes occur when the turtle shifts the weight of the earth from one shoulder to the other shoulder. Now we know the causes and effects of earthquakes and also the right safety measures.

Earlier we didn't know about the 'Go Bag'. Now I have made a Go Bag in my own house in which I keep a torch light, dry food, bandages, water, and money for emergencies.



Chhiring Tamang (17), student at Nirkubhume school in Rasuwa district.

Photo: Arjun Kandel, NSET

### Most significant change

The most important change I have experienced in my life since the project is that I have started to do things in a different way. One day, around three years ago (in 2011), I went to cut grass in the mountains after school. As I was returning back to my house, I felt the trees and the whole ground shaking.

I immediately remembered the training provided by the Red Cross. I also remembered that I had taught 'Drop Cover and Hold' to my family members but I became worried whether my parents and family members performed it during the quake or not.

I found an open space and sat down quietly during the earthquake. After the shaking had stopped, I hurried towards the house. Once I reached my house, I found all my family members safe. I asked what they had done during the earthquake.

My parents told me “we performed drop, cover and hold as you taught us. We came out of the house only after the quake was over.” I was very happy to learn that my family members saved their lives by doing what I had taught them.

### Helping hands

In my opinion the Red Cross is responsible for these changes. Furthermore, my school teachers are also responsible. If Nepal Red Cross hadn't launched a program like

DPSS in such a remote place like our village, then we wouldn't have any awareness like we do now.

### Challenges

Sometimes I faced challenges as I missed my regular classes, but my family members supported me very much. When they knew that I was participating in a disaster preparedness project, they supported me. Overall I didn't experience any real difficulties during this project.

### Improvements

In my opinion this programme is limited by working only at the school level. If some elderly members of the society got direct trainings from the Red Cross workers, then they would believe the students much more, and our society would experience faster changes.



Students practicing a drop, cover, hold drill.

Photo: Tirtha Raj Joshi, Nepal Red Cross Society

## Santoshi Bishwa Karma From learning to teaching others

### Project involvement

I am currently involved in the Red Cross Disaster Preparedness for Safer Schools project (DPSS2). When I was in class six or seven, Red Cross staff selected me for earthquake training in the process of selecting Dalit (marginalised) community students for training.

I was very curious about the Red Cross project and became involved. Our parents and grandparents do not know what to do during an earthquake. I took the basic disaster management training.

I think the DPSS program is important as each house has a child that comes to school. Students learn and then share their knowledge with their families and the community members. They learn what to do in a disaster, like that we should not run away during earthquakes.

Also, the students learned to do 'Drop Cover and Hold' under the bed or to protect themselves. For example, if we cannot get under a bed or table, we can protect ourselves from falling objects with the help of a pillow or mattress.

The students in my school learned to save themselves and their family members from disasters.

### Before and after

Before we didn't know what to do with injuries like burns or that we needed to clean our wounds. Now we know about first aid services. Before I did not know what to do in an earthquake but now I have even taught other students what to do in times of an earthquake. There is a primary school close to my house and I have taught them to perform "Drop Cover and Hold" during earthquakes.



Santoshi Bishwa Karma (17), student at Bhairam

school in Nuwakot district. Photo: Narendra Shrestha, NRCS

"They taught us what to do and I taught my family members."

### Disaster preparedness plans

- Secure large objects and furniture that could fall, break, slide or collide during an earthquake and cause crushing or piercing injuries.
- Your choices are to relocate, remove or refit, or to anchor, fasten, or secure. For example:
  - ▶ **Fasten** bookcases, display cabinets and other tall and heavy furniture to the wall.
  - ▶ **Position** them away from anywhere where they could block exit pathways.
  - ▶ **Secure** anything that could fall on people while they are sleeping.
  - ▶ **Secure** water heaters, gas cylinders, outside fuel tanks and other gas and electrical appliances.
  - ▶ **Install** latches on cabinets and drawers.
  - ▶ **Hang** heavy items, such as pictures and mirrors, away from exit doors, beds, couches or anywhere that people sleep or sit.
  - ▶ **Anchor** computers and televisions.
  - ▶ **Secure** fire extinguishers.
  - ▶ **Move** beds away from windows.

## Background

Rasuwa and Nuwakot are two districts that are extremely vulnerable to disasters.

They have fragile geomorphic conditions with severe and erratic climatic conditions.

The two districts are prone to landslides and storms. Along with Bhaktapur and most other areas of Nepal, they are in a belt of high earthquake intensity.

“Earthquakes are among the deadliest of natural hazards. Most deaths are due to building collapse or to secondary hazards, such as fires, tsunamis, flooding, landslides and the release of chemicals or toxic materials. Injuries tend to be due to less-severe building damage, parts of buildings or their contents falling or breaking, and failure to take precautions during aftershocks.”

*IFRC (2013): Public awareness and public education for disaster risk reduction: Key messages; p. 33.*



## Most significant change

The most significant change in my life since the program has been our Family Disaster Preparedness Plan (which help to reduce vulnerability due to disorganised or unpracticed responses). For this, all family members must work in unity to know each person's role during a disaster. I knew this from my training at school but my parents didn't know this.

Earthquakes may happen at anytime. To prepare for this, all my family members

gathered in one place and wrote down each person's role and responsibilities. In the plan, we wrote down how to protect our vital organs from damage in an earthquake. For example, we can do that by hiding under a table or a bed or sitting in a safe place such as under a wooden door-frame in order to protect our heads.

Before I kept books in a rack without tying it with ropes. As people passed by touching it, some of the books fell off the rack. In our library, books are fixed by tying with ropes.

Seeing that, I also did the same in my house. I have also fixed the mirror by tying it with a rope on a nail. As I have been taught, I have secured photo frames hanging on the wall in the same way.

The Red Cross has helped with this change. They taught us what to do and I taught my family members. Sometimes I faced questions from my parents about this training and faced some challenges. My parents would ask me “where are you going and why are you doing these activities” - but I eventually convinced them so it was alright in the end.

This publication was produced for American Red Cross by Banyaneer, a consultancy specializing in the reinforcement of community resilience across South & South-East Asia. See [www.banyaneer.com](http://www.banyaneer.com) for more information.



Students at Nirkuhume school in Rasuwa district enjoying a game about disasters. Photo: Samadhi Marr, Banyaneer

For further information on the DPSS2 program, please contact:

**Nepal Red Cross Society**  
Tirtha Raj Joshi  
Senior Program Coordinator  
Tel: +977 (0) 1 4270650  
E mail: tirtharaj.joshi@nrccs.org

**Nepal Society for Earthquake Technology**  
Surya Acharya  
Director  
+977 (0) 1 5592688  
Email: sacharya@nset.org.np

**American Red Cross**  
David Andrew Strobel  
Regional Representative  
Tel.: +66 (0) 84752-5185  
E-mail: drew.strobel@ifrc.org