

School Earthquake Safety Program (SESP)

NSET Information Kit | 002 | 2011



School Earthquake Safety Program (SESP) is an ongoing program of NSET. The concept was pioneered by NSET in 1997 during the Kathmandu Valley Earthquake Risk Management Project (KVERMP). SESP has been developed and implemented for making schools safer against earthquakes by seismic strengthening of school buildings, by training school teachers, students and parents on earthquake safety; and by enhancing earthquake preparedness of schools. It also focuses on making communities safer by propagating the knowledge from schools to the communities, and by training local masons on safer construction practices.

BACKGROUND

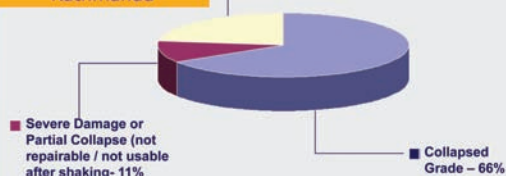
In 1998, NSET conducted seismic vulnerability survey of all public schools in Kathmandu. The findings of the survey were very alarming. The study showed as much as 60% of the public school buildings are highly vulnerable to use even in normal conditions. This situation urged NSET to implement vulnerability reduction programs in schools which lead to a pilot program of retrofitting one of the public schools in a rural area of Kathmandu Valley in 1999. Since then SESP has become a continuous program of NSET.



Vulnerability of Schools in Kathmandu

At IX intensity level of shaking

643 Public Schools in Kathmandu



GOAL & OBJECTIVES

The main goal of the program is: "Make schools and communities safer against earthquakes".

To achieve the goal, SESP has the following principal objectives:

- Assess structural and non structural vulnerability of school buildings
- Identify and implement measures to reduce vulnerabilities
- Raise awareness on earthquake risks and preparedness
- Help schools develop and implement school earthquake preparedness plan
- Build capacity of local masons to construct earthquake safe houses
- Help communities to prepare for earthquakes

PROGRAM COMPONENTS

1. Structural improvement of school buildings
 - Assess vulnerability of school buildings to earthquake and their potential hazards
 - Identify feasible vulnerability reduction options
 - Implement retrofitting or reconstructions to enhance earthquake resistance of the buildings
2. Enhance earthquake awareness and preparedness in schools
 - Conduct orientation and training programs for school teachers, school management committee members, students, and parents on earthquake safety
 - Help schools to prepare and implement school earthquake preparedness plans
 - Help schools to conduct periodic training programs and earthquake drills



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3. Help communities to become safer against earthquakes

- Conduct training programs for local masons on earthquake resistant construction techniques. The trained local masons replicate the technology in their communities
- Assist in developing and implementing earthquake preparedness plan

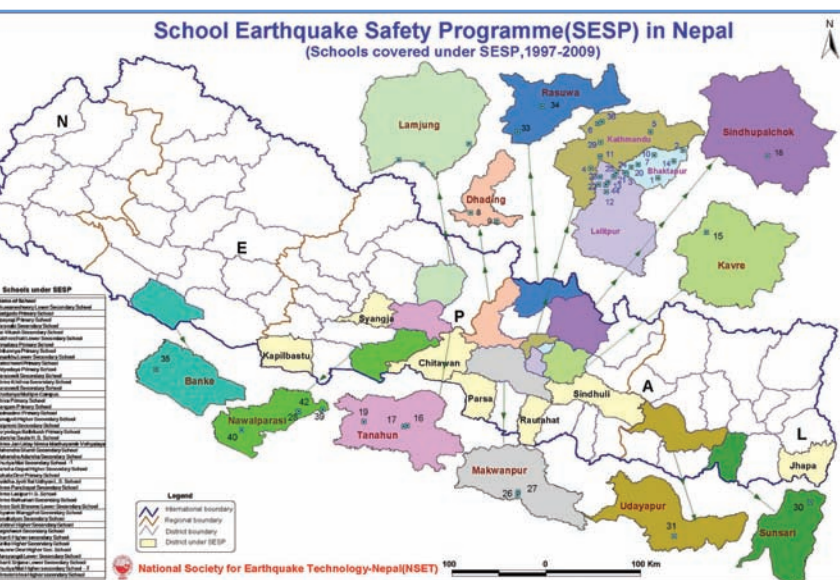
4. Assist institutionalization of school earthquake safety concepts

- Work closely with District Education Office/ Department of Education
- Involve local authorities and other local institutions to the program

ACHIEVEMENTS SO FAR

SESP has so far been implemented in more than 46 schools in different parts of the country. Buildings in these schools have been retrofitted or reconstructed such that they will survive without significant damage during a potential large earthquake shaking. Earthquake preparedness activities have also been implemented in these schools. Further, SESP has reached to nearly 1600 schools in terms of raising awareness on earthquake safety and earthquake preparedness.

Based on the experiences and lessons of SESP during past several years, NSET has recently developed a national strategy for improving earthquake safety of schools in Nepal. The strategy outlines the approaches and ways to cover all the schools throughout the country.



KEY LESSONS

- Schools are the best point of entry for propagating disaster risk reduction at community level
- Transparency plays vital role in community-based programs
- Training program for mason is an essential part for replication of safer construction technology
- Retrofitting can be affordable solution for Nepalese Schools