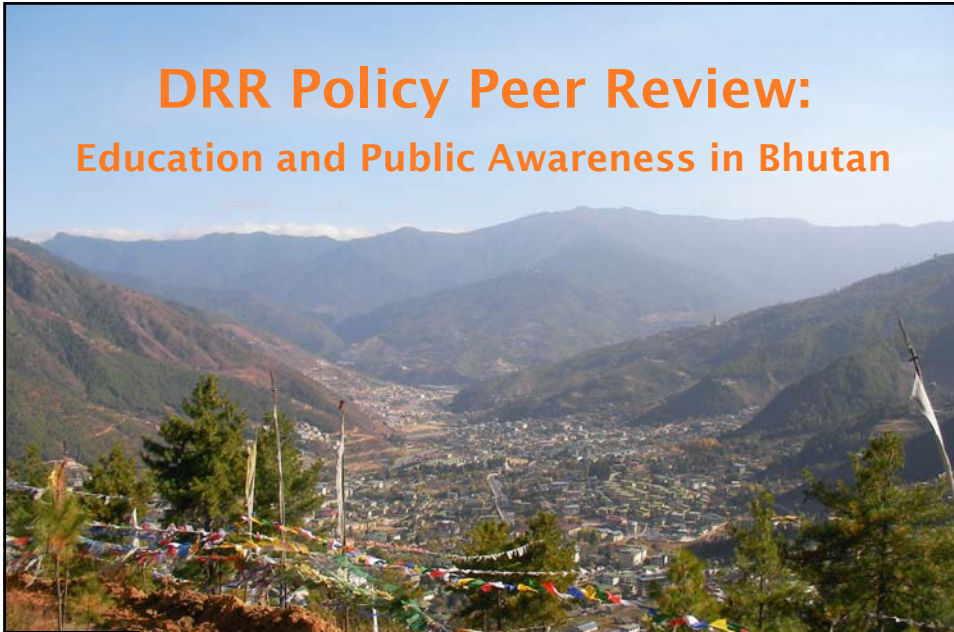


DRR Policy Peer Review: Education and Public Awareness in Bhutan



Koichi Shiwaku
Earthquake Disaster Mitigation Research Center (EDM)
National Research Institute for Earth Science and Disaster Prevention (NIED)

Member

Reviewer Team

- Dr. Koichi Shiwaku, Research Fellow, Earthquake Disaster Mitigation Research Center (EDM), National Research Institute for Earth Science and Disaster Prevention (NIED)
- Mr. Arshad Nawaz Chheena, Deputy Director (Mitigation & Preparedness) National Disaster Management Authority, Prime Minister's Secretariat, Pakistan
- Ms. Maki Yoshida, Researcher, Asian Disaster Reduction Center (ADRC)

Counterparts in Bhutan

- Mr. Namgay Wangchuk, Director
- Ms. Tenzin Choden, Assistant Program Officer
- Mr. Tshering Wangchuk, Assistant Program Officer



Organizations & Officials Visited

1) Department of Disaster Management (DDM), Ministry of Home and Cultural Affairs

- Mr. Namgay Wangchuk, Director
- Ms. Tenzin Choden, Assistant Program Officer
- Mr. Tshering Wangchuk, Assistant Program Officer

2) Department of School Education, Ministry of Education

- Mr Chencho, Offtg. Director
- Mr. Kaka Tshering, Liaison Officer
- Two school teachers

3) Department of Geology and Mines, Ministry of Economic Affairs

- Mr. Yeshey Dorji, Offtg. Director General

4) Standard and Quality Control Authority, Ministry of Works and Human Settlement

- Mr. Phuntsho Wangdi, Director

5) UNDP Bhutan Office

- Mr. Karma Rapten, Head, Environment and Disaster Management Unit, UNDP Bhutan
- Mr. Karma Chogyal, LSA/Program Associate, Environment & Disaster Management Unit, UNDP Bhutan



DRR Activities in Bhutan

- DDM is divided into three divisions;
 - Preparedness and Mitigation
 - Response and Early Warning
 - Recovery and Reconstruction
- DM in Bhutan is CBDRM.
- One-day orientation sessions and one-week training-of-trainers programs is conducted. The trainers then visit each block and each block develops their own disaster management plans, which are intended to be integrated into a national disaster management plan.
- Local hazard map is prepared under CBDRM.
- Cartoon on earthquake preparedness is shown on TV.

DRR Activities in Bhutan

- Teacher's training
- Simulation drill focused on earthquake disaster
- Some education activities for students
- GLOF hazard map was developed. Ministry appointed evacuation place for community.
- Awareness raising of planners and decision makers for building safety against earthquake, especially in urban area.



Strength and Weakness

Strength

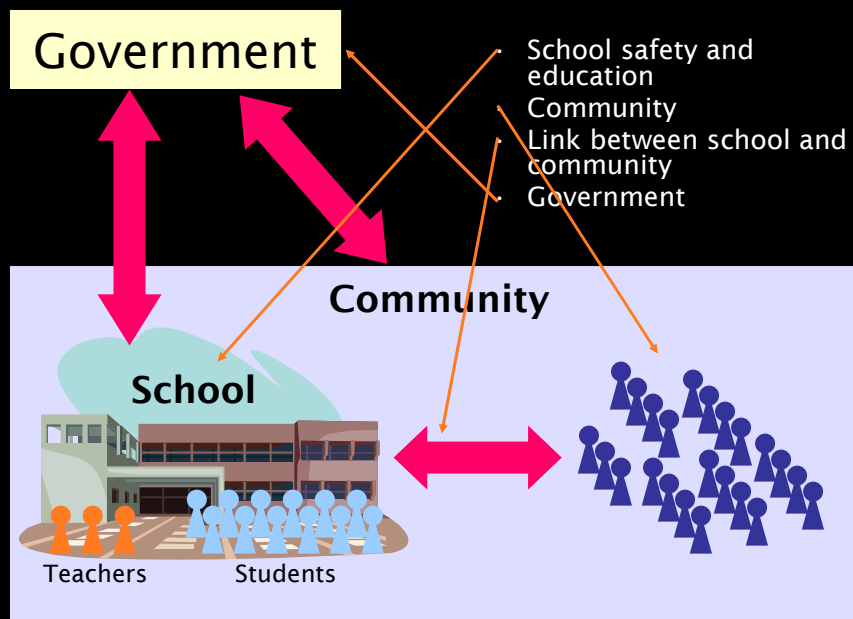
- Strong leadership of the DDM in coordinating all disaster-related activities and programs in Bhutan.
- Provision of finances: establishment of a relief fund, mitigation and preparedness fund, and emergency response fund.
- Coverage of all phases of the disaster management cycle (with DDM divisions managing Preparedness and Mitigation, Response and Early Warning, and Recovery and Reconstruction).
- Full commitment of the country to prepare a National Disaster Management Plan by initiating workshops for the development of local Disaster Management Plans.
- Participation of communities in preparing local plans for specific or relevant hazards.
- Establishment of an awareness campaign for schools through the development of a School Disaster Management Plan.
- Masonry training for selected areas.
- Relationships with international organizations.

Strength and Weakness

Weakness

- Insufficient link between regular teaching system and disaster education.
- Insufficient link between disaster risk reduction and development plans/policies.
- Strength of school buildings has not been checked.
- Few staff in disaster-related departments (DDM is fully aware of this issue)
- Multiple hazard situations have not been well considered.
- As for safer construction, works has been conducted in urban areas.

Relationship among Stakeholders



Recommendations: School Safety and Education

- Though some efforts have been made to conduct awareness campaigns in the schools, more work can be done to include disaster risk reduction in the regular teaching system, such as incorporating it as a subject in the curriculum of schools/colleges.
- Both curricular and extra-curricular activities should be utilized for school disaster education.
- Active programs for students should be included.
- Teacher guidelines should be developed.
- Hazard maps can be utilized for school disaster education so that students will learn the hazards that exist in the areas where they live.
- The strength of school buildings should be examined for emergency planning.
- All school buildings should be examined to determine their level of disaster resistance.

Recommendations: Community

- Hazard maps should be used to create evacuation plans and to identify evacuation sites at the community level.
- Hazard maps indicating evacuation sites should be developed for community members.
- Community should be more involved in any decision making.

Recommendations: Link between School and Community

- Community should be involved in school projects since schools are core community institutions.
- Hazard maps should be shared among the community, school teachers, and students.

Recommendations: Government

- More programs could be initiated to promote the inclusion of disaster risk reduction as a mainstream component of development activities.
- Monitoring system for safer construction should be prepared for awareness raising as well as keep of construction quality.
- The government should invite a wider range of perspectives from third parties.
- More capacity development of national/local government officials who are in charge of disaster management.

Thank you for your attention!!

