



# ADRC

## Peer Review Project 2012

Asian Disaster Reduction Center

# Overview of the Mission to Armenia

Counterpart in Armenia:



Survey for Seismic Protection Agency

Person in charge: PhD. Hrachya Petrosyan, Head

Mission Date:

15-20 December 2012

Theme of Review:

Education and Training on Seismic Protection

Behavior Rules in the Cities of Yerevan and Gyumri

(HFA Priority Action 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.)

## Review Team



Team Leader

**Prof. Aiko Sakurai**

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# Field Trip to Earthquake Stricken Areas (Zvartnots Cathedral)(Dec. 16)



- Zvartnots has survived only in ruins since it was completely destroyed by powerful earthquake in the 10th century.
- The ruins of Zvartnots Cathedral are designated by UNESCO as World Heritage Site.

- Zvartnots Cathedral is a 7th-century centrally planned aisled Armenian church built from 641-653.
- This architectural masterpiece is a monument which embodies the centuries old traditions of Armenian architects.



# School N155 Visit in Yerevan (Dec. 17)



Above Left: photo during class on disaster prevention.

Above Right: photo after evacuated at playground, which is expected to be safe from collapse of neighboring buildings.

Below: photo on evacuation route and of a poster to show emergency behaviors

# Workshop in Yerevan (Dec. 17)



A workshop to share Japanese and Nepali cases on earthquake was held on December 17 in Yerevan. With thirty participants from various key organizations on disaster reduction, including Ministry of Emergency Situations, International NGOs, schools and rescue service, active discussions were exchanged to deepen understandings on earthquake disaster prevention and preparedness.

# School Visit & Workshops in Gyumri (Dec. 18)



- The team visited School N11 in Gyumri to observe the school's evacuation drill. In the afternoon, a workshop was held at the school with about 25 participants from schools and local government offices.
- Since Gyumri was located near the epicenter of the 1988 Spitak Earthquake, it was observed that people in Gyumri perceived earthquake with more reality than the people in Yerevan. Our visit was broadcasted on a local TV network.



## Visit of Western Branch Office of Seismic Research Center in Yerevan (Dec. 19)



- To collect more information about SRC's training contents and the awareness raising program, the team visited Western branch office of SRC in Yerevan. The training team presented their training materials and gave a briefing on their program.



# **EVALUATION BY THE PEER REVIEW MISSION TEAM**

Presented at Final Evaluation Meeting  
@the Head of Survey for Seismic Protection Agency  
on December 19, 2012  
(revised after the discussion)

# Evacuation Drill in Yerevan (School N155)



## BAD:

- Students got excited and teachers yelled out. Exit is too tight to help smooth evacuation.
- Doors open outside from two class rooms at the corner partially block the evacuation of students.



## GOOD:

- Military Service reported to the safe evacuation is finished to the school principal.
- Evacuation route is displayed in the school.
- Teams are organized among students and wear colored arm bands.



# Evacuation Drill in Gyumri (School N11)



**GOOD:** Students were very calm and teachers helped to guide using stairs safely.



**BAD:**

- No call over was made at the playground.
- One outside door is permanently closed at the main exit of the School.

# Findings

1. The project team member in NSSP headed by Dr. Hrachya Petrosyan have strongly committed to smooth and successful implementation of the project activities.
  - Started in October 2012, the project has been implemented according the originally planned time schedule as of mid-December.
  - Behavior rules have already been drafted and serious of trainings were conducted with about 2500 participants at schools.

# Findings

2. As seen from the participants at the Workshops in Yerevan and Gyumri, major stakeholders related to disaster prevention education are involved in a process of formulating the behavior rules.
  - Major stakeholders include schools, local government officials, rescue teams, DRR national platform foundation, HFA focal point, UN organizations and INGOs.
  - Japanese 311 experiences and Nepali's earthquake risk reduction efforts were shared at the workshops with around 50 Armenian participants.

# Findings

3. Information and experience sharing with JICA related program members have been promoted since the start of the ADRC Project.
  - The Project team has collaborated with JICA project team for Seismic Risk Assessment and Risk Management Planning in Armenia.
  - JICA training participants have been invited to the Workshops in Yerevan and Gyumri.
  
4. Attendance at two evacuation drills at schools in Yerevan and Gyumri helped the Peer Review Team to make comparisons between two schools at different cities and among Armenia, Nepal and Japan.

## Recommendations regarding evacuation drills

- NSSP could develop a template manual of conducting an earthquake evacuation drill at school based on the drafted list of behavior rules since the different approach was found in the team's observation at schools.
- For preparation, a school could conduct a safety check.
  - Finding out where the safe place and not-safe place during earthquake (including stairs, ceiling lights, windows, etc.)
- Schools could prepare an evacuation map based on school layout map. Avoid non-safe spots until these are fixed.
- Secure enough exits for evacuation. If not available, find out alternative exits.
- Roles of teachers are very important to prepare and secure students' safety during the emergency. Share the information and assign a role to each teacher.

## Recommendations regarding safety of the students and teachers

- Apply earthquake-resistant film to the windows. Having windows with a shatterproof film will prevent injuries from glass being thrown out of the frame during an earthquake.
- Use closed hooks or safety hangers for pictures and mirrors.
- Put non-skid, padded matting under breakables, such as televisions and monitors.
- Anchor all large appliances and pieces of furniture with metal brackets or nylon strapping. Falling cabinets and bookcases can be potential hazards during an earthquake.
- Power back-up system for alarm is essential.
- Radio or Walkie Talkies with specific band may be installed.



# When an earthquake happens at School in Japan:

## Students on the first floor

## Students on the above floors

Secure an exit. Open a door for evacuation. Protect head and body.

Be away from the windows.

Take cover under study desk near bearing walls until shaking is stopped.

4 rules of evacuation behavior should be observed:

1. Do not push in evacuation
2. Do not run during the evacuation inside a school building.
3. Do not speak in evacuation
4. Do not return after evacuation until safety is confirmed

Evacuate to a playground by following a predetermined route.

Protect heads from falling objects and paying attention to the falling objects on the grounds.

Form a line by grade and class.

A class representative call over all the classmates. Report to a classroom teacher. Teacher reports to a deputy principal.

Count time until a call over is finished. In Japan, average is 5-6 minutes

# Evacuation Drill in Japan



(Photo: Save the Children Japan)

# Recommendations (Overall)

- More systematic training modules might be required for increasing the coverage of trainings by NSSP. Target organizations and priority need to be set up for the training.
- Standardized procedure for evacuation should be provided to the organizations, in particular to schools.
- Criteria for evacuation should be revised based on the standardized procedure.
- Plan-Do-Check-Action cycle should be introduced for the training. Provision of training- conducting an evacuation drill- check the good and bad points- improve the procedure.
- NSSP should conduct monitoring and evaluation after the training offered.

# Conclusion

- Findings and recommendations were discussed with NSSP on December 19, 2012.
  - In March 2013, NSSP is planning to conduct simultaneous evacuation drills at all the schools in Yerevan and Gyumri to check the schools' preparedness for an earthquake. The recommendations given by the Review Team will be considered for the further improvement of the Project activities before the school-wide drills.
- The Peer Review Team concluded that the Project has been implemented accordingly and achieved the intended objectives even in a mid-term period of the schedule.