

ADRC Peer Review Mission Team

(February 23-27, 2014)

Final Report

(as of Feb. 27)

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FY2013 ADRC – Armenia Cooperative Project on Reaching the Most Vulnerable-Orphans and Seniors Inclusive Earthquake Safety in the Capital City of Yerevan and District of Ararat, Armenia

ADRC Expert Team

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- ▶ Junji Moriwaki, ADRC, Japan

Schedule

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- 23 Feb 2014 (Sun): PM : Arrival -Transfer to Hotel
- 24 Feb 2014 (Mon):
 - AM : Showcase of the Project at the office of the Head of Survey for Seismic Protection Agency (presentation by H.Petrosyan, Project Manager)
 - PM: Inspection visits to orphanages
- 25 Feb 2014 (Tue)
 - AM : Inspection visits to nursing homes
 - PM : Workshop at MES RA: Raising awareness for the staff of orphanages and nursing homes through lessons learned and good practice of seismic protection measures, contingency planning and preparedness (Reviewers' presentations & exchange opinions with participants)
- 26 Feb 2014 (Wed)
 - AM : Survey visit to Yerevan School N155, Classes and Drills (comparison with last year, check out improvements and follow-up, etc)
 - PM : Final Evaluation Meeting at the office of the Head of Survey for Seismic Protection Agency
- 27 Feb 2014 (Thu): AM Departure

Project Summary

Armenia Cooperative Project on Reaching the Most Vulnerable-Orphans and Seniors Inclusive Earthquake Safety in the Capital City of Yerevan and District of Ararat, Armenia

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➤ Objective

- Improving earthquake safety of orphanages and nursing homes through providing adequate training and information to residents and technical staff for coping with earthquake disaster

➤ Target

- Most vulnerable social groups of population: out of family children and seniors

➤ Major stakeholders

- Orphans, seniors, mentor, and nurses, and technical staff

➤ Specific Feature of methodology

- Streaming to people who are able to act on themselves
- Stage by stage approach when training is followed by the alert drills
- Periodicity of training

➤ Assumption

- Due to shortage of seismically resistant buildings and structure in the seismically active territory of Armenia, the only prerequisite for raising public awareness could be just human factor based on the psychological preparedness adaptation to not favorable social conditions

Project Activities

1. Acquiring and familiarization of the international experience on seismic protection behavior rules education and training
2. Elaboration of earthquake protection teaching and information materials for orphanages and nursing homes
3. Working meetings and inspection visits, workshop with participation of the ADRC experts
4. Training at the orphanages and nursing homes
5. Preparation of instructions, printing and sharing of educational informative materials

ADRC Teams' Observation and Recommendation

Framework of Evaluation

ADRC experts team evaluated the project activities from the following perspectives:

1. Inspection visits to orphanages and nursing homes are conducted in terms of hazard watching exercise
2. Evaluation is conducted based on disaster risk management cycle (what to do before, during and after an earthquake)
3. Recommendations include on-site improvement as well as advocacy to higher level of the government to secure sustainability of the Project efforts

Examples of check-points in terms of hazard watching exercise

- ▶ Safety of non-structured facilities in every room and building
- ▶ Secured routes to exits: prepare multiple and safer evacuation routes to exits
- ▶ Safety of evacuation areas
- ▶ Preparation of survival kits and emergency materials (including emergency lights and kits, electricity, water, etc..)
- ▶ Emergency communication lines and networks with relatives of residents, hospitals, community, local government, international organizations and overseas donors, etc.
- ▶ Availability of emergency manual to cover all of the above

Mari Izmirlian State Orphanage (Children with 0-16 years old)



► Good

- Regular trainings conducted
- Good relations with neighboring community established
- Director's strong leadership and commitment to reinforcing safety of the facility
- Well-shared information among staff about actions at a time of emergency even during absence of the director
- Experiences of past fire to be expanded to earthquake preparedness
- Playground for evacuation
- Evacuation signs on the walls

► For further improvement

- Evacuation route maps and emergency lights could be put on wall with emergency signage
- Building safety inspection for earthquake required
- Install sloping walkways for handicapped
- Drills in winter could be prepared
- Conducting joint drills with community and other stakeholders could be organized
- School aged children could learn on what to do during earthquakes

Kids' Home State Orphanage (Children with 0-6 years old)



➤ Good:

- Each mentor and baby sitter already assigned to take care of specific children during emergency
- Reporting line to fire fighters already established
- Director recognizes importance of having earthquake resistant buildings
- Displayed emergency instructions on the wall

➤ For Further Improvements:

- Bed numbers could be written larger and clearer
- Evacuation routes and emergency light could be shown on wall
- Exit door need to be open in a case of emergency
- Existence of swing-in doors could be documented
- 22 out of 67 children are around age 6. These children could learn on what to do during earthquake

Kharberd Ararat District State Orphanage

(children with special needs from 0 to 18 years old and more)

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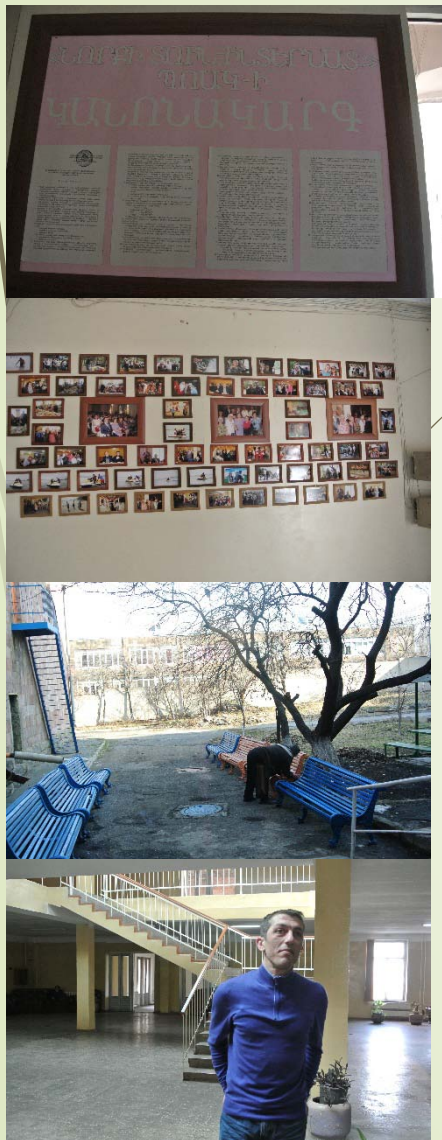
➤ Good

- Earthquake-resistant new building and old building under renovation
- Enough spaces for evacuation
- In renovated rooms, emergency lights equipped and furniture fixed-on to walls, doors open outside
- Evacuation route displayed on wall, but only a single exit and route
- Wheel chair children living in the first floor
- Building entrance with sloping walkways for wheel chairs
- Pediatrician Director with passion

➤ For Further Improvement

- Each room should have an evacuation map with multiple routes and emergency information
- Built-in emergency facility (drinking water and food, etc.) could be prepared
- Electricity, water and communication should be secured for emergency
- Robust communication between facilities and hospitals, local government and MES should be established in advance

Yerevan Nork State Nursing Home (230 65+ residents and 130 staff)



► Good:

- Have emergency evacuation plan though old and not updated
- 40% of residents healthy and able to walk
- A contact list of residents' families in place
- Good district (called as a green garden) administration and good linkages already established
- 10 male staff expected to be leaders at a time of emergency

► For Further Improvements:

- Need to update evacuation plan
- Evacuation map should be displayed on wall
- Building inspections required (built in 1994)
- Robust communication between facilities and hospitals, local government and MES should be established in advance
- Disaster preparedness and response team should be formed in advance

Yerevan #1 State Nursing Home (250 residents with 140 staff)



➤ Good:

- Building inspection already conducted by SSP inspector
- Based on the result of inspection, ministerial collaboration made among Ministry of Labor and Social Issue, Ministry of Urban Development and Ministry of Emergency
- One story building to be constructed for 60 patients in bed by Kuwait assistance

➤ For Further Improvements:

- Need to conduct hazard watching for non-structural material
- Need to prepare emergency manual before the next evacuation drill
- Secure safety of administrative staff as respondents to emergency
- Display evacuation map on wall
- Electricity, water and communication should be secured for emergency

School No155 Yerevan (1200 G1-G9 students)

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Good

- Updated evacuation maps and exit signage displayed on wall
- Evacuation maps included a route from all the rooms and locations of all the emergency equipment
- Emergency plan existed including contact list, roles and responsibility of teachers
- Director of school as a strong advocator on disaster management
- Disaster family plan already developed through whole school project, and families discussed evacuation plans and maps, leading to change parents' awareness of disasters
- Changed doors to swing-out with their own budget
- 22 hours of disaster related education provided after school
- School prepared all the educational materials

For Further Improvement

- Hazard watching could be done by students
- Strong ground shaking and movement during earthquakes could be appreciated through training videos
- Evaluate appropriate behaviors during strong ground shaking
- Check safety of exits before evacuation
- Evacuation route options could be prepared

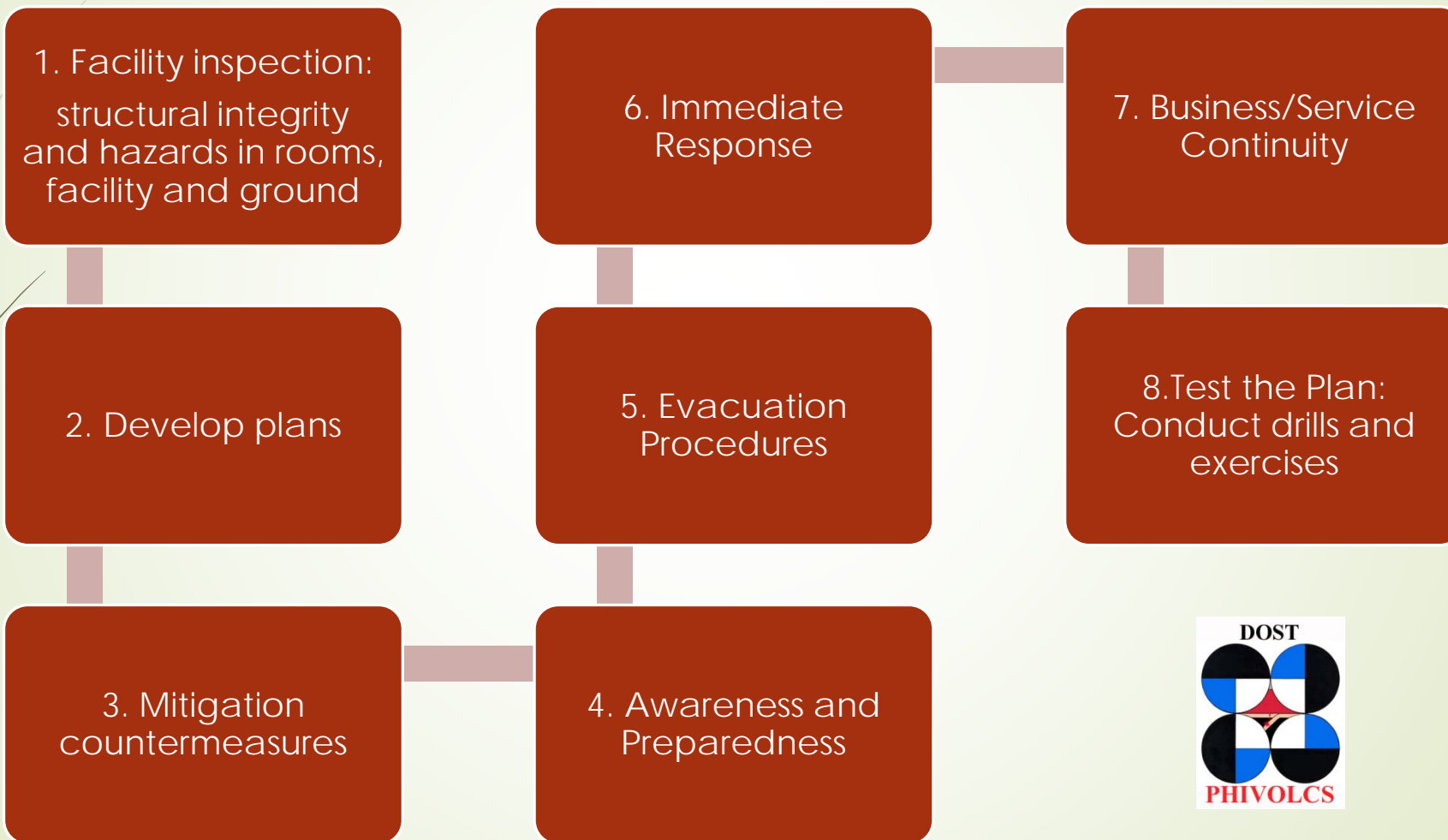
Summary of Observation from Inspection

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Visits

- ◆ In all of the visited institutions, directors were very much concerned about the safety of residents during earthquake incidents. Some measures are taken at each institution. A comprehensive approach is lacking at each institutions.
- ◆ From a disaster management perspective, all the institutions visited firstly need to establish a team responsible for disaster management.
- ◆ With a support of SSP, the team at each institutions need to prepare a manual on earthquake preparedness and response. Steps are shown and a sample structure of the manual is also indicated in the following pages.
- ◆ Building inspection should be conducted at all the nursing homes and orphanages in order for them to identify safer places in the facility.
- ◆ With building inspection, each institutions could conduct hazard watching to find safe and dangerous zones in their facilities.
- ◆ With all the above preparations in place, evacuation drills and training should be executed.
- ◆ Experiences at the selected institutions should be shared among all the relevant facilities in Armenia.

Earthquake Preparedness and Risk Reduction: Steps to Get Ready!



Structure of Disaster Manual for Nursing Homes (Sample from a Japanese Manual)

BEFORE an Earthquake

- Preparation in Advance
 - Safety checks of surrounding areas
 - Safety checks of facilities (Structure and non-structure)
 - Risk Assessment (prepare a worst case scenario)
- Establishing a Disaster Management Organization
 - Roles and responsibilities among management and staff
 - Prepare a contact list
 - Set a guideline on assembling staff
- Information Gathering
 - Identify residents and users of the facility
- Preparation of food, water and emergency goods (back-up electricity, communication devices, etc.)
- Building networks among community and local authorities
- Training and Drills
- Prepare as a emergency shelter for evacuees

During an Earthquake

- Secure safety of residents and facilities
 - Prevent fire and fire extinguishing
 - Checking the safety of all the residents and rescue
 - Checking the safety of the facilities
 - Information gathering
 - Evacuation of residents
 - Contacting relatives of residents
 - Assembling the staff
- Maintain physical and mental health of residents (during emergency response)
 - Arrange doctors and nurses
 - Arrange transportation of ill-residents

Recommendations to the Project Team

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1. Building inspection for earthquake resistance at each facilities is strongly recommended. Human factors could be more effective with facility reinforcement
2. Help nursing homes and orphanages to conduct hazard watching
3. Earthquake Protection Rules could be used as a checklist by each institution and help each institution to develop their own emergency plan
4. Prepare more precise scenarios and information guidance during strong shaking. Strong ground shaking and movement could be appreciated through training videos (e.g. <http://www.youtube.com/watch?v=RxitlewLv9c>)
5. Experiences by selected facilities experiences should be documented and shared among all the other facilities in the country
6. School No.155 as a good show case to share with orphanages and nursing homes

Recommendations to the Project Team

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7. Responsible ministries for orphanages and nursing homes (Ministry of Labor and Social Issues as well as Ministry of Emergency Situations) should be aware of the urgent needs for preparedness of these facilities as well as immediate assistance following a strong earthquake.
8. Higher level advocacy is required to strengthen collaborative relationships among MES, Ministry of Labor and Social Issues and Ministry of Urban Development to make the Project efforts sustainable
9. The Project should be connected to the overall disaster preparedness and response strategy in Armenia (How to protect vulnerable sectors at a time of disaster)
10. Since this project is very GOOD and practical, share the project experiences with other ADRC member countries