DISASTER PREVENTION EDUCATION and AWARENESS for SCHOOLS
Lalitpur, Nepal

Final Report
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Disaster Prevention Education and Awareness for Schools
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I. Overview

CITYNET Yokohama Project Office belongs to a network of local governments in Asia-Pacific called CITYNET which was established in 1987 with the support of UNESCAP and UNDP. The network currently has 131 members in Asia-Pacific region which consists of cities, institutions, academias, organisations and NGOs. The main purpose of the network is to promote sustainable development in the region through city-to-city cooperation while engaging with various related stakeholders. CITYNET operates its activities under its four main clusters, Climate Change, Disaster, Infrastructure and MDGs.

The project on Disaster Prevention Education and Awareness for Schools was proposed by CITYNET Yokohama Project Office to Toshiba International Foundation in the aftermath of the April 25 Great Nepal Earthquake which wiped out several towns completely and inflicted serious damages in the metropolitan areas. Over 8,000 people lost their lives, many of them children. Large number of school buildings which withstood the shock of magnitude 7.8 have been identified as ‘unsafe’ to use. With limited funds to reconstruct or renovate, classes are being conducted in the open areas or in tents where the learning conditions are poor.

The earthquake which is the largest to have happened in more than 80 years caused significant shock to both children and adults as disaster education was almost non-existent. To better understand the mechanisms of the earthquake and to be able to take necessary precautions and preventive measures, the project focuses on disaster prevention education in schools using commonly available goods.

11 schools from 4 municipalities were selected as a pilot group of teachers who have undergone training starting August 2015.

This report contains the details of the training along with the current outputs and plans for succeeding sessions.

OBJECTIVES

i. To share lessons learnt in Japan through major earthquakes and develop local solutions for Nepal through education and awareness

ii. To introduce Japanese culture through development of educational material
II. **Target Municipalities and Schools**

1. **Madhyapur Municipality**
   - Evergreen Higher Secondary School
   - Ganesh Primary School

2. **Lalitpur Sub-Metropolitan City**
   - Madan Smark High School
   - Tri-Padma Vidyashram
   - Bhasara Secondary School
   - Mitra Primary School

3. **Bhaktapur Municipality**
   - Bashu Higher Secondary School

4. **Kathmandu Metropolitan City**
   - Arunodhaya Lower Secondary School
   - Prabhat Secondary School
   - Next Generation Resident Academy
   - Whitefield Higher Secondary School

III. **Summary of Workshops**

Workshops on Teacher training on Disaster Prevention Education and Awareness in Nepal were conducted with the support of Municipal Association of Nepal (MuAN) in Lalitpur between August 2015 and March 2016. A total of **11 schools and 16 teachers** from **four selected municipalities** attended the workshop to learn disaster prevention activities that may be provided in schools. The training included development of educational material using locally available goods as well as improvising the methods commonly used in Japanese schools including origami, picture story-telling and card games. The workshops were conducted with **Plus Arts** as the main resource organisation. The organisation is a Kobe based disaster education NPO which specialises in using design and graphics as the method of information dissemination particularly aimed at children to teach disaster prevention techniques, survival tactics and response methods. Designing of the educational material used during the games was also supported by **Club Creative**, a Bangkok based NGO which specialises on designing and localising educational tools.

Both public and private schools were represented in the workshops along with resource speakers from **National Society for Earthquake Technologies (NSET)**, municipalities, and the Municipal Association of Nepal. In order to better understand the DRR educational practices in Nepal, the teachers of the target schools were interviewed. The teachers were also
introduced various teaching material to see if they found them interesting in order to narrow down the types of games and tools that would be used during the workshop.

The workshops were conducted in Lalitpur Municipality where teachers from the surrounding municipalities also joined. The workshops are being funded by Toshiba International Foundation.

IV. Program Introduction

This was the first attempt for CITYNET to train Nepalese school teachers on developing disaster prevention education took kits to be used in schools and facilitating the exercises. Through the initial interviews with the teachers, it was apparent that the DRR education being practiced in Nepal prior to the earthquake was very generic with little or no technical knowledge on the mechanisms of the types of disasters that may occur at any given time or place. Most of the material was also produced outside of Nepal and was not localised to the Nepalese context. This background information was crucial in order to develop and design the method of teaching that the teachers would receive on how to properly educate the children on disasters particularly the earthquakes that may happen in Nepal.

The workshop offered to the teachers in Nepal included methods of developing better educational material and tools including visual aids and physical exercises. Through the practices conducted in Japan, Plus Arts introduced various techniques based on games which are described in this report. The main components of the training were as follows:

i. Understanding disaster mechanisms, prevention methods and response tactics
ii. Development of Kamishibai and its usage in teaching
iii. Using Origami as an educational tool and enhancing creativity
iv. Using locally available material for disaster education
v. Understanding child psychology

V. Core Sessions

Chairperson of Plus Arts Mr. Hirokazu Nagata, Designer from Club Creative Ms. Vuttikorn and the Director of CITYNET Yokohama Project Office Mr. Kendra Hirata visited schools in Kathmandu, Bhaktapur and Lalitpur municipalities to assess the conditions of the educational environment after the earthquake. The visits included both public and private schools. Two of the public schools had red stickers issued by the government indicating the building was unsafe for use. The children of both the schools had either been transferred to a nearby school with better infrastructure or the classrooms were being conducted in temporary
huts made of bamboo and corrugated tin roofs constructed through the assistance of the Government of Nepal and foreign donor agencies.

According to the interviews, although the classes have resumed after a month long delay, many children suffer from stress related syndromes such as insomnia, lack of concentration, sudden burst of tears, shaking, isolation and uncontrolled expression of fear, all symptoms of Post-Traumatic Stress Syndrome (PTSD). There has yet to be any assistance regarding the forementioned issues and the Nepalese teachers or volunteers do not have proper training in handling the cases. Some of the schools had also been assisted by the Red Cross Society of the U.S. who provided basic educational tools and equipment. However it was apparent that the teachers did not know how to use them.

During one of the interviews, there was one aftershock. Before the children could even stand, the teachers were out of the room. The children followed soon after and hesitated to go back into the building. This was also followed by several phone calls and visits from parents to the school who were anxious about their children’s welfare and wanted to take them back home.

This indicated that there is still a very low understanding of the mechanism of the earthquakes, ways for risk identification, and crisis management in the schools.

i. Training workshops

The training was conducted over two days where the teachers were first briefed by a local agency NSET (National Society for Earthquake Technology) who presented on the proper retrofitting of the buildings as well as the thought process that is needed in order to prepare for the earthquakes.

The teachers were then divided into groups according to the municipalities. The first part of the workshop was to familiarise them on the tools that were developed in Japan and Thailand to educate children and the community members. The workshop provided not only the method of using the tools but also shared the process by which such material were developed and customised according to the disasters and the location where the tools were being used. An example from Iloilo, where Frog Caravan was localised to a Filipino version called ‘Kabalaka Camp’ was also introduced to the trainees.
The trainees were then asked to provide inputs for localising the material to fit their context and environment. Numerous good examples and suggestions were shared which was then used to develop the Nepali version of the game and/or tool. The teachers were then asked to test the material amongst the groups to seek further adjustments to finalise the material to be used during the demonstration exercise the following day.

As this was the first such training ever to be received by the teachers, their motivation and eagerness to learn from the experts was very high.

ii. Demonstration exercise:

A total of eight games were developed as follows:

1. **Disaster exercise** - The purpose of this exercise was to simplify the understanding of disaster through physical movement so that children would better understand the situation.

2. **Shuffle game** - The purpose of this game is to understand the correct sequence of things for items which may be useful during disasters and also understanding the flow/process of matters. This helps build logical thinking among children.

3. **Disaster life cycle game** - Developed by the Thai designer, this game allows children to correctly associate the actions with the situation before, during and after the earthquake.

4. **Tossa No Hitokoto** - Literally translated as ‘instinctive reaction’, this game allows children to develop critical thinking during a situation.

5. **Paper craft** - Originally based on ‘origami’, a popular Japanese paper folding technique, the children can learn ways of making various shapes of dishes using newspapers.

6. **First aid game** - As the name suggests this allows children to carry out immediate first aid for people particularly with physical injuries but using basic material available such as newspapers, plastic bags, scarves, and umbrellas.

7. **Emergency kit quiz** - This is a memory game where children can learn about the 12 essential items that may be useful during the disasters.
8. **Bed sheet stretcher** – This exercise shows how a victim can be transported by only using a bed sheet. A proper way of handling is introduced through this game.

The above games were developed and localised by the participating teachers during the workshop and demonstrated during the exercise on the final day at a school. Over 100 children parents and teachers from various schools came to enjoy the disaster prevention educational demonstration where children were able to try out all of the eight games.

iii. **Feedback from children, teachers and parents**

At the end of the demonstration, children teachers and parents were asked about their feedback or the reflections on the program. Not surprisingly, all of them said that this was the first time that they experienced a fun learning environment through which disaster can be understood even by a very young child. They indicated that such innovative and creative practice is non-existent in Nepal and this would be a very useful practice for many schools.

Most of the awareness programs until now were too generalised and not country or community specific. Most were too technical and only discussed what needs to be done. The biggest missing link was how disaster preparedness can be done at households and schools.

VI. **Follow-up Workshop**

The initial workshop to expose teachers to new games and exercises to teach disaster prevention tactics to children was very well received as teachers were eager to test the new learnings in their own school. Upon completing the initial four-day workshop on material development, the teachers were given assignments to develop further material, interview earthquake victims and report the progress in the subsequent workshop.

The final workshop held in 2016 invited teachers back to the workshop to share their results of trying
new tools with their students. Many teachers introduced innovative ways in which they developed new games and shared the reactions of the students. Some teachers also developed new physical exercises and demonstrated it during the workshop.

However, the trials were no without challenges. In some areas, parents were skeptical of the lessons being taught to their children at school as they found it difficult to understand the relation between using tools to educate children on disaster. At one of the schools, fellow teachers were reluctant to learn the methods of developing educational material and perceived the initiative as a burden.

Overcoming these challenges, particularly related to the mindset of the people will take time and effort. The participating teachers have, on numerous occasions mentioned that the lessons learnt were very useful and one of the best trainings that they have undergone to develop educational tools for children which can be used for other subjects as well.

VII. Conclusion

The workshop concluded with a realization that Nepal needs a disaster prevention education at a very basic level. As most people do not comprehend the multidimensional facets of the disaster such as for the earthquakes, Japanese knowledge, practice and innovations can provide a high impact solution to not only the people at the grassroots levels but also at municipal and national levels.

Organisations such as Plus Arts is an ideal solution provider for the work that may be conducted in Nepal to build the capacity of not only the school teachers and children but also the communities and municipal managers in charge of town/urban planning.

While there are increasing number of schools particularly in the urban areas in Nepal, most of the teachers are not fully trained nor qualified to become teachers. Particularly for the primary or elementary schools, the capacity of the teachers need to be enhanced in order to introduce more creative material development, teaching methods and styles, improvement of language skills (English), conducive learning environment and understanding of applying technology in classroom teaching.

The current program builds upon the training provided in 2014 to train teachers on Early Childhood Education and is strongly recommended to be continued to improve further capacity of the teachers in Nepal. Education is increasingly becoming a high priority not just for urban dwellers but also for people living in rural areas since it directly affects the income of the individual which in Nepal’s case may mean a life out of poverty.
The vision for sustainable growth in all sectors directly depends on the capacity and ability of the people to comprehend the circumstances around them and to be able to come up with applicable solutions that address the root cause of the issue. To reach this level, the key point will be on how children have been educated during their primary years of learning.

Annex

A special online post has been created by Ms. Ruttikorn Vuttikorn from Club Creative in Bangkok who helped develop the DRR education teaching material illustrating the work that was completed in Nepal.

VIII. Photo Gallery

Many public schools are continuing classes in temporary huts which were constructed with government and foreign assistance.

Many houses are barely standing. However, people still continue to do business as usual.
This public school is also marked red however work is still continuing in the building.

Ms. Vuttikorn from Club Creative explains the rules of the Disaster Cycle Game to the teachers.

This Disaster Cycle Game has been customized to fit the Nepalese context.

Teachers try out origami amongst each other to test if the students will be able to understand the process.

Teachers improvise the original cards and make their own shuffle game to fit the Nepalese context.

Teachers try explaining the guessing game using the handmade story board.
Teachers pose for a group photo after completing the development of the educational material

Teachers try out the memory game with children using locally available items at a local school

Blanket stretcher game seems easy but details are important in understanding the correct process

Students eagerly listen to the rules of the card game which requires them to put the cards in the correct order
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