Post disaster recovery in Myanmar: Awareness into Action for Reaching the Unreachable

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Board Chairman, SEEDS Asia

(in partnership with Myanmar Engineering Society(MES), and Collaboration with Ministry of Education & Relief and Resettlement Department, Ministry of Social Welfare Relief and Resettlement)
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1. Background: past disasters

2. Key Strategy of Activities in Myanmar

3. Activities

1. Key Finding:
   Lessens learnt and challenges
Background: Painful experiences

“Myanmar Ranks first as the most at risk country in Asia Pacific according to the UN Risk Model” by UN-OCHA

Dec 2004 The Great Indonesia Sumatra Tsunami
At least 61 people were killed

May 2008 Cyclone Nargis:
Almost 140,000 people death/missing in delta region

June 2010, Northern Rakhine state:
The flood Killed 68 people and affected 29,000 families

October 2010, Cyclone Giri:
At least 45 people were killed, 100,000 people became homeless

March 2011, M.6.8 Earthquake in Shan State,
18,000 people affected, at least 74 people were killed.

October 2011, Flash floods in Magway Region
30,000 people were affected.

August 2012, Floods across Myanmar:
Floods in different state and regions over 287000 people were affected

November 2012, 6.8 Earthquake in Thabeikkyin
Key strategy of the activities

Strategy 1: Concept “3 helps”

Ref: Example from Kobe earthquake, 1995 in Japan

Analyzed by “3 helps”: Self help, Mutual help, Public help

Q. Who helped when you were stacked in the damaged room during earthquake?

<table>
<thead>
<tr>
<th></th>
<th>By myself</th>
<th>By family members</th>
<th>By friends neighbours</th>
<th>Persons who passed by</th>
<th>Fire brigades</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>34.9%</td>
<td>31.9%</td>
<td>28.1%</td>
<td>2.6%</td>
<td>1.7%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

97.5% were saved their life by Self help & Mutual help

Actually public help consisted very less percentage at response in huge disaster, thus need of self help and mutual help are required.

(資料)「1995年兵庫県南部地震における火災に関する調査報告書」（平成8年11月 日本火災学会）より作成
Key strategy of the activities

Strategy 2: KIDA approach for making knowledge into action

KIDA knowledge Management Model
(Knowledge-Interest-Desire-Action)

Knowledge
Basic demonstrations models/posters are prepared for providing the basic information

Interest
Demonstration of impact of hazard can enhance interest of participants

Desire
Specific model of disaster resistant houses are provided to enhance the willingness of the participants

Action
Practical exercises on Mapping, non structural mitigation measures, drills can guide participants to take appropriate measures

(Source: 1-2-3 of Disaster Education, Kyoto University, 2009)
Key strategy of our activities

Strategy 3: ToT for sustainability

Training of Trainers (ToT to school teachers)

Learn from the Exhibitions of MKRC

Training for students by the teachers who received ToT training

Utilize the exhibitions of MKRC
In terms of target: To people who response

Public Awareness in wide range

We have reached to......

[As of 31st Aug, 2014]

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Villagers</th>
<th>Teachers</th>
<th>Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>20,536</td>
<td>4,918</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
<td>5,167</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td>304</td>
</tr>
</tbody>
</table>

MKRC
Mobile Knowledge Resource Centre

WKRC
Water Knowledge Resource Centre

Visitied area
1. Yangon Region
2. Ayeyarwady Region
3. Rakhine State
4. Bago Region
5. Mandalay Region
6. Sagaing Region

In terms of target:
To people who response
Methodologies in Trainings
WKRC & MKRC contents

Knowledge  Interest  Desire

Safer Timber House
Could you explain the mechanism of each hazard (8 kinds of)?
Percentage of teachers those who answered "yes" in target area (n=274*)

Before: 33%
After: 93%

Answered by teachers
Average of 7 townships on 8 kinds of hazard

*Note:
1: Only ToT attended teachers are counted.
2: Only some teachers answered only before or sometime only after.
Output 1: Training Result of MKRC&WKRC

Total Quiz result Analysis (Oct 2013 - till September, 2014) : Total Average

Total – 46 Questions

**TOT: Teachers & TDPC**

TOTAL AVERAGE OF DRR QUIZ TEACHERS

Before ToT: 74%
After ToT: 97%

n=274*

**Students & Community**

TOTAL AVERAGE OF DRR QUIZ STUDENTS&COMMUNITY

Before Training: 71%
After Training: 94%

n=2,594*

*Note for numbers of teachers:
1: Only ToT attended teachers are counted.
2: A few teachers answered only before or sometime only after.

*Note for numbers of students and community
1: Bogale T/S result is not included yet
2: A few students answered only before or sometime after...
## Output 1: Training Result of MKRC&WKRC

**Total Questionnaire result Analysis (Oct 2013- till September, 2014) : Action for DRR (TOT)**

<table>
<thead>
<tr>
<th>JICA (2013 Oct-2014 Sep)</th>
<th>TOT</th>
<th>School Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare emergency goods at school or home.</td>
<td>97%</td>
<td>87%</td>
</tr>
<tr>
<td>2. Tell the disaster story you have seen from video to students</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>3. Make life saving bottle at school or home</td>
<td>94%</td>
<td>77%</td>
</tr>
<tr>
<td>4. Listen more carefully to the announcement or news from Radio/TV/Newspaper</td>
<td>84%</td>
<td>96%</td>
</tr>
<tr>
<td>5. Tell safety tips to students which you learned from posters.</td>
<td>99%</td>
<td>93%</td>
</tr>
<tr>
<td>6. Discuss and made school evacuation plan with other teachers.</td>
<td>96%</td>
<td>80%</td>
</tr>
<tr>
<td>7. Research the history of disaster of your village/town</td>
<td>73%</td>
<td>35%</td>
</tr>
<tr>
<td>8. Check the furniture of your school/home to mitigate the risk of disaster by fixing to the wall etc</td>
<td>81%</td>
<td>72%</td>
</tr>
<tr>
<td>9. Join CBO’s activity for DRR.</td>
<td>93%</td>
<td>69%</td>
</tr>
<tr>
<td>10. Get more interest in learning about disaster</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>11. Play DRR card game with students or family</td>
<td>87%</td>
<td>78%</td>
</tr>
<tr>
<td>12. Conduct evacuation drills</td>
<td>81%</td>
<td>78%</td>
</tr>
<tr>
<td>13. Make sandbags</td>
<td>89%</td>
<td>61%</td>
</tr>
<tr>
<td>14. Making own miniature models</td>
<td>68%</td>
<td>53%</td>
</tr>
<tr>
<td>15. Establish School DRR taskforce</td>
<td>72%</td>
<td>-</td>
</tr>
<tr>
<td><strong>Average Action Indicated</strong></td>
<td>87%</td>
<td>77%</td>
</tr>
</tbody>
</table>
Self help Activities

Gaining knowledge on DRR

Identifying the risk of surrounding

Experiencing evacuation drill

Preparing Live saving bottle & Emergency bag

Learning safety tips

Building safer housing

Gaining skills for survival

Gaining skills for survival
Mutual help Activities

- Achieving skill of CPR
- Achieving skill of using fire extinguishers
- Achieving skill of First Aid
- Knowing the way how to make safer community with others
- Achieving skill of carrying injured person
- Help person with special needs in evacuation
- Making sandbag with community members
- Community Early warning system
Public help Activities

- Services from FSD
- Securing space for relief camp
- Search & rescue by Government
- Providing tents for victims by government
- Cyclone shelter
- Supporting DRR by Government
- Providing relief items for victims by government
- Disaster Management Planning by government
Key findings: Lessons learnt

Enhancing capacity for DRR

= Enhancing 3 helps + Network

Network Help
Key findings: Need for System Integration

1. Community-School linked DRR education and activity for DRR to be sustainably implemented (monitoring system in it)
2. Market(needs)-oriented training to be conducted.
Output 2: Prepare to operate DRRAC

Materials for learning/teaching

DRR Learning Tool Kit
Key findings: Lessons learnt

From the lessons learnt from past projects

Effectiveness

- With KIDA model, MKRC&WKRC has been confirmed the effectiveness in increasing awareness together with gaining knowledge and skills (+ led to actions) within a short time of training.

Positive impact

- After training, one teacher could spread to 96 students/family per year as average. One students can spread 12 people who are surrounding of him/her such as family members and friends.
- Children are tend to take action more than teachers.
- Participated students/teacher showed the proper action when the early warning for Tsunami was issued 11th April 2011.

Limitation in activities

Limited in opportunities (children who are not schooling) and follow-up (not all students and teachers were covered). Developing the plan and implementation of DRR activities in schools and community needs to be initiated and followed some way.

Limitation in area

Even in the focus townships, 50% of schools were visited. 260 BEHS, 510 BEMS in Ayeyawady itself...
Thank you very much for your kind attention

Daw Aung San Su Kyi and U Thura Shwe Mann
July 2013

U Thein Sein, President of Myanmar, Then Prime Minister, October 2011