

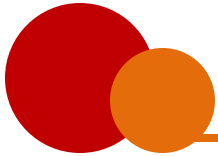


Post disaster recovery in Myanmar: Awareness into Action *for* Reaching the Unreachable

Rajib Shaw, Professor, Kyoto University

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)

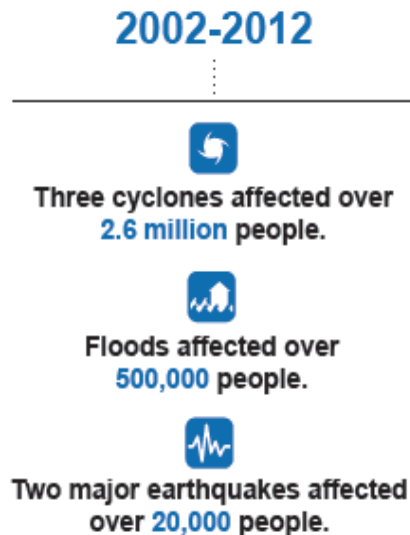


CONTENTS

- 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.

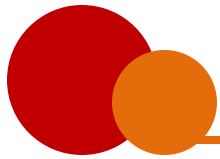
October 2011, Flash floods in Magway Region

30,000 people were affected.

August 2012, Floods across Myanmar:

Floods in different state and regions over 287,000 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**

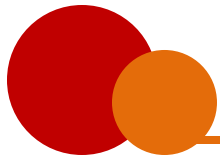
Q. Who helped when you were stacked in the damaged room during earthquake?

By myself	By family members	By friends neighbours	Persons who passed by	Fire brigades	Others
34.9%	31.9%	28.1%	2.6%	1.7%	0.9%

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

(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

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



Key strategy of the activities

Strategy 2: KIDA approach for making knowledge into action

KIDA knowledge Management Model (**K**nowledge-**I**nterest- **D**esire- **A**ction)

Knowledge

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

Interest

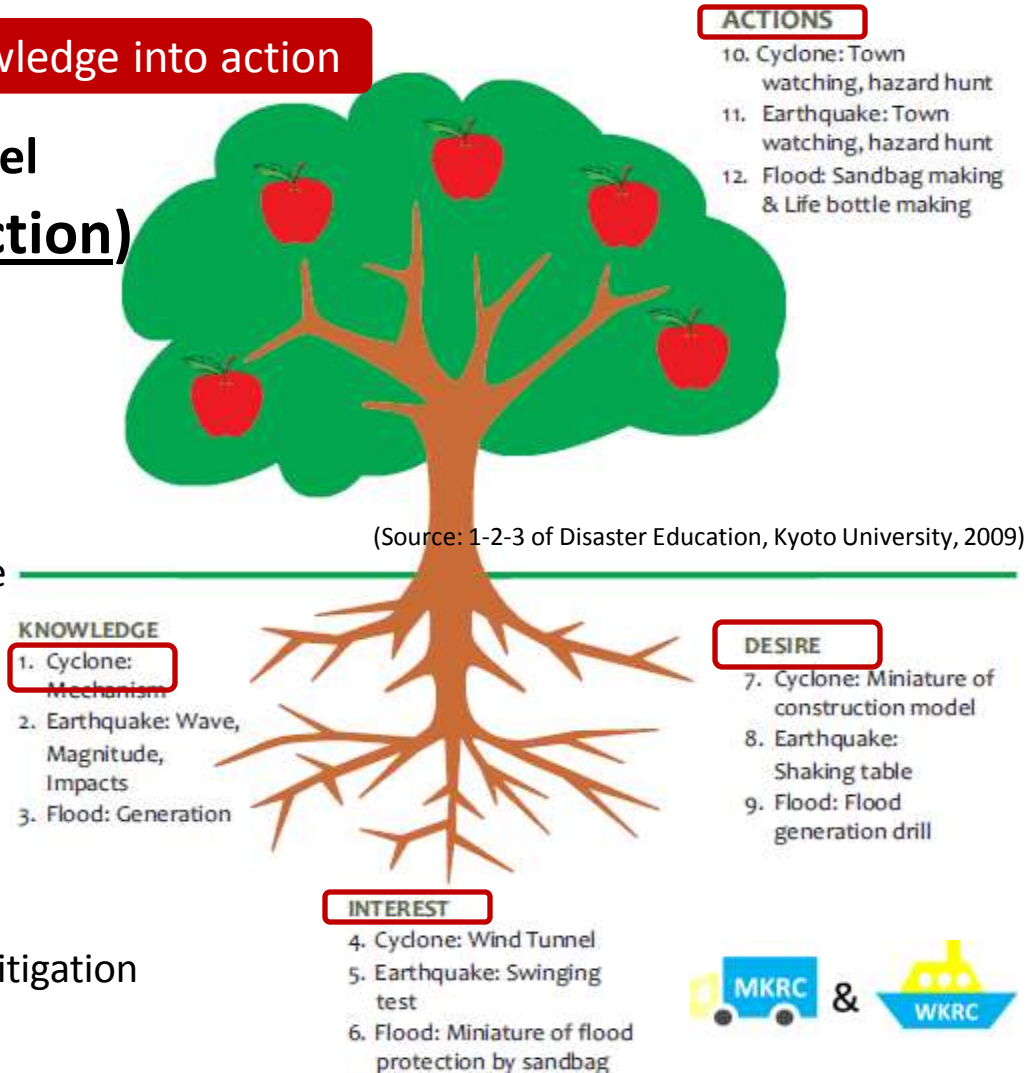
Demonstration of impact of hazard can enhance interest of participants

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



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]

Students



20,536

Villagers



4,918

Teachers



5,167

Schools



304

MKRC

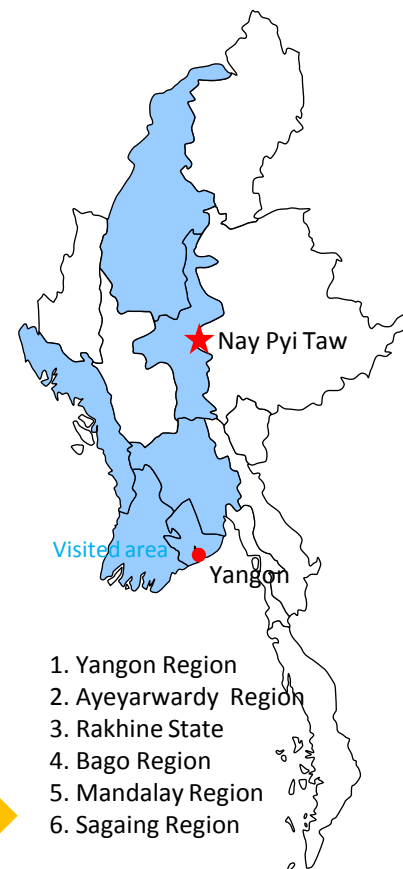
Mobile Knowledge Resource Centre



&

WKRC

Water Knowledge Resource Centre



1. Yangon Region
2. Ayeyarwardy Region
3. Rakhine State
4. Bago Region
5. Mandalay Region
6. Sagaing Region



2008



2009



2010



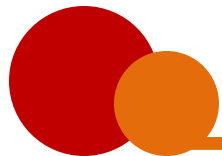
2011



2012



2013



Methodologies in Trainings

WKRC &MKRC contents



Knowledge

Interest

Desire



Safer Timber House





ဘေးကင်းလုံခြုံသောစံပြကျေးရွာ
ပုံစံငယ်



ကန်ပြားများကစားခြင်း



အရေးပေါ်အိတ်ပြင်ဆင်ခြင်း



ဘေးကင်းလုံခြုံသောနေရာများ
လေ့လာခြင်းနှင့်မြေပုံများရေးဆွဲခြင်း



လေဆင်နာမောင်း သရုပ်ပြပုံစံငယ်



အသက်ကယ်ရေးခွံများပြုလုပ်ခြင်း



လေဒက်ခံအမိုး အဆောက်အဦ
ပုံစံငယ်



WKRC



MKRC



By SEEDS Asia and MES



လျှပ်စီးလက်ခြင်းနှင့်မိုးကြိုးပစ်ခြင်း
သရုပ်ပြပုံစံငယ်



မြေပြိုခြင်း သရုပ်ပြပုံစံငယ်



"မီးလောင်နေသော
ကောက်လှိုင်းစည်းများ" ပုံပြင်



လျှပ်ခါစားပွဲ စမ်းသပ်မှု ပုံစံငယ်



ခိုင်ခံ့သော သစ်သားအိမ် ပုံစံငယ်

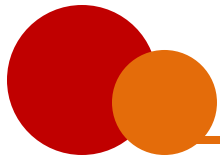


ယိမ်းယိုင်ခြင်းစမ်းသပ်မှုသရုပ်ပြပုံစံငယ် ဘေးကင်းလုံခြုံသော အုတ်တိုက်ပုံစံငယ်



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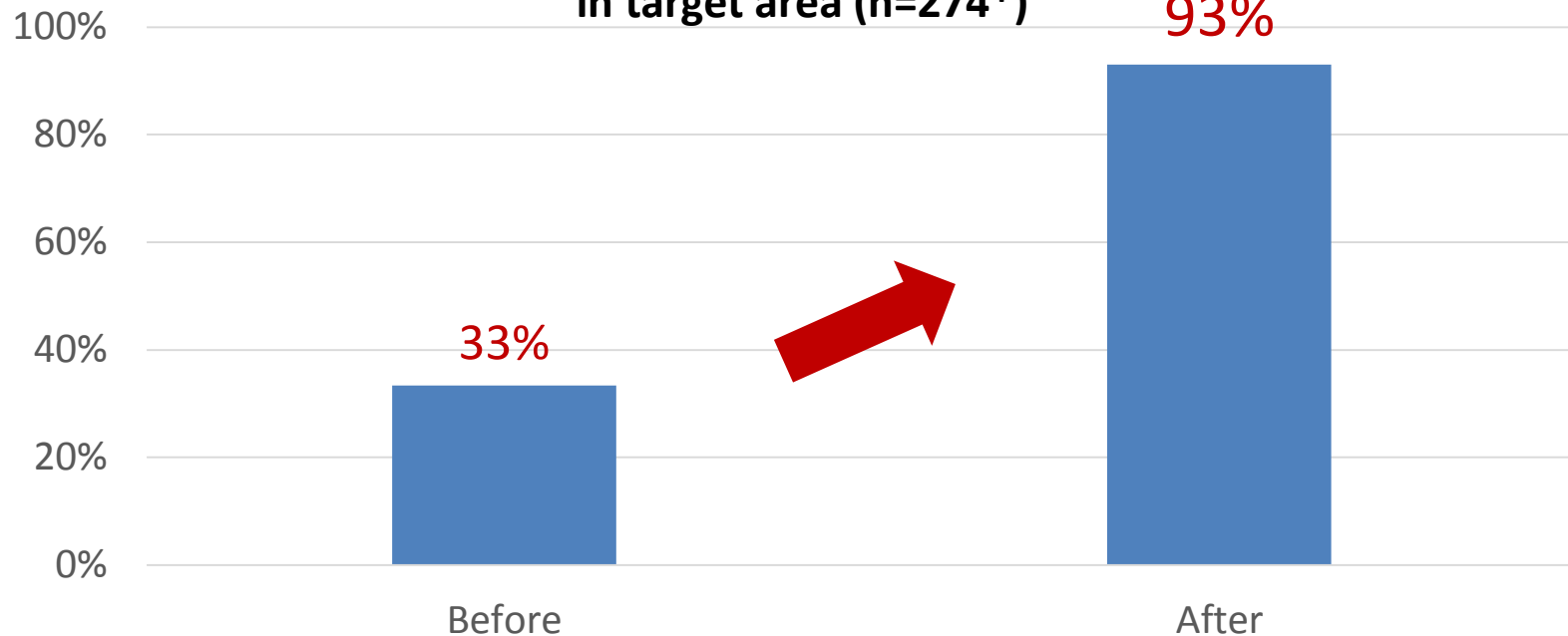
CC BY NC ND



Output 1: Training Result of MKRC&WKRC

Total Quiz result Analysis (7 T/S) : Explanation level of teachers (total average)

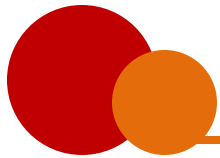
Could you explain the mechanism of each hazard (8 kinds of) ?
Percentage of teachers those who answered "yes"
in target area (n=274*)



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

*Note:

- 1: Only ToT attendees teachers are counted.
- 2: Only some teachers answered only before or sometime only after.



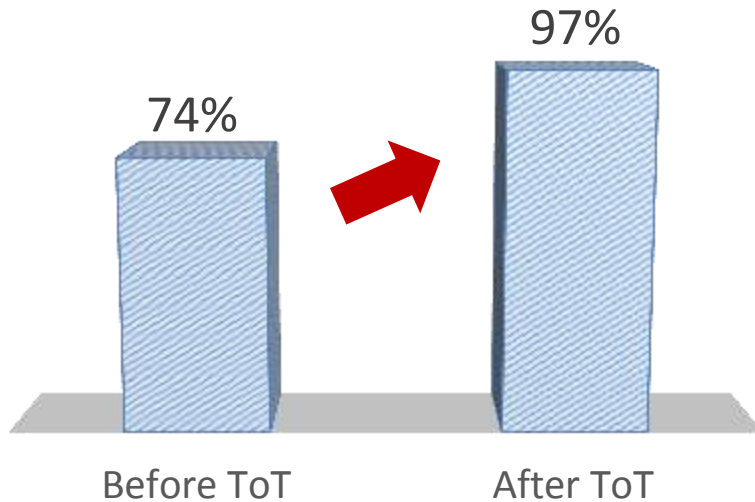
Output 1: Training Result of MKRC&WKRC

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

Total – 46 Questions

TOT: Teachers & TDPC

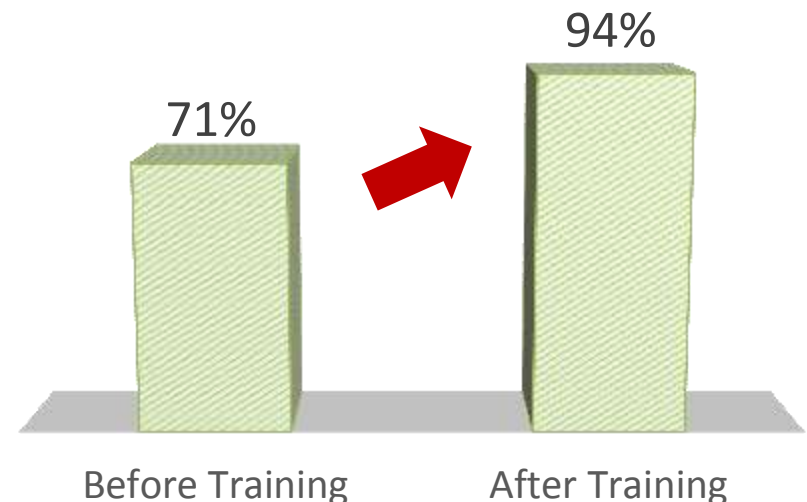
TOTAL AVERAGE OF DRR QUIZ
TEACHERS



n=274*

Students & Community

TOTAL AVERAGE OF DRR QUIZ
STUDENTS&COMMUNITY



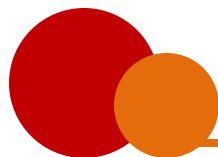
n=2,594*

*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)

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

Self help Activities

Self Help



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

Mutual Help



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



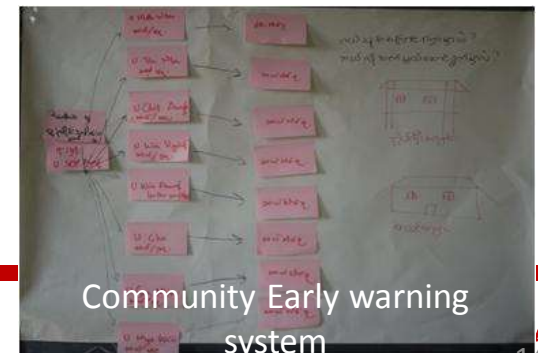
Achieving skill of carrying injured person



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



Supporting DRR by Government



Search & rescue by Government



Providing tents for victims by government



Cyclone shelter



Disaster Management Planning by government



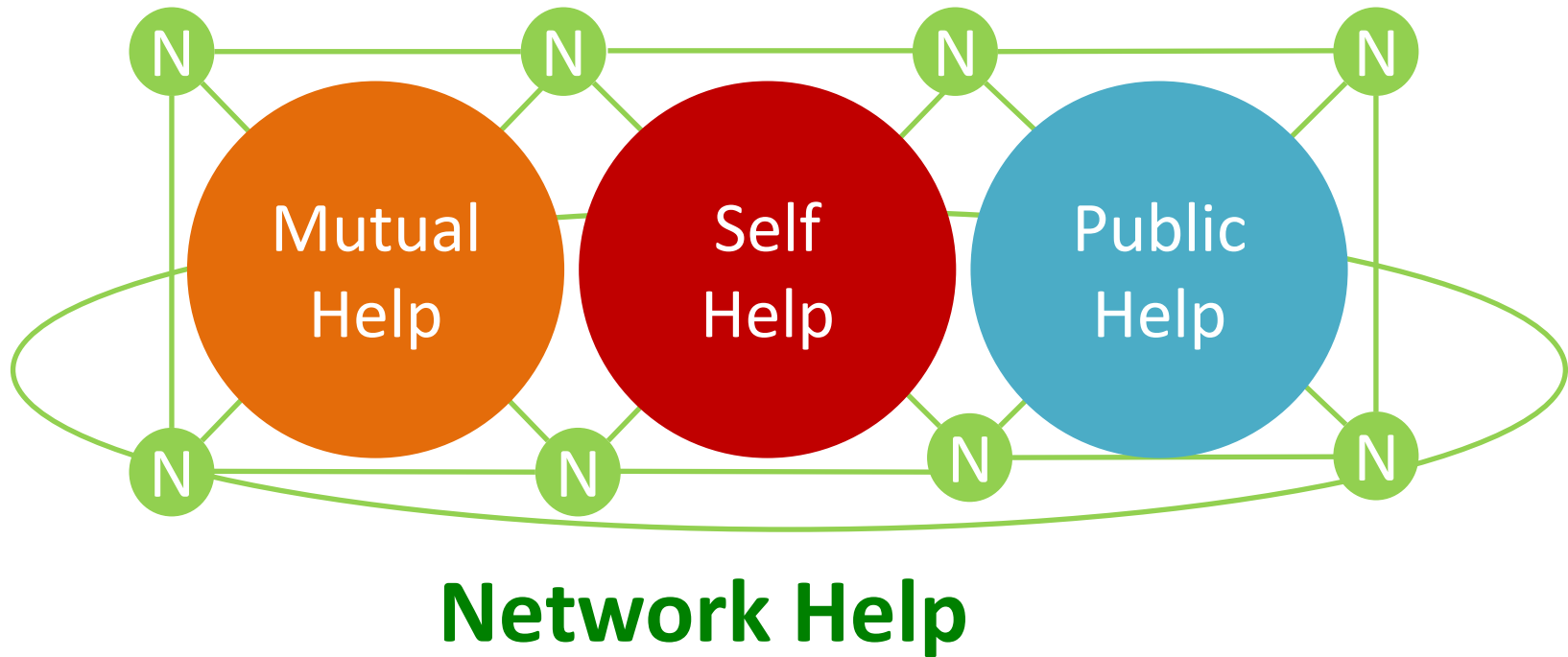
Providing relief items for victims by government

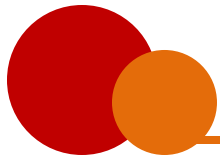
特定

Key findings: Lessons learnt

Lessons learnt and the way forward

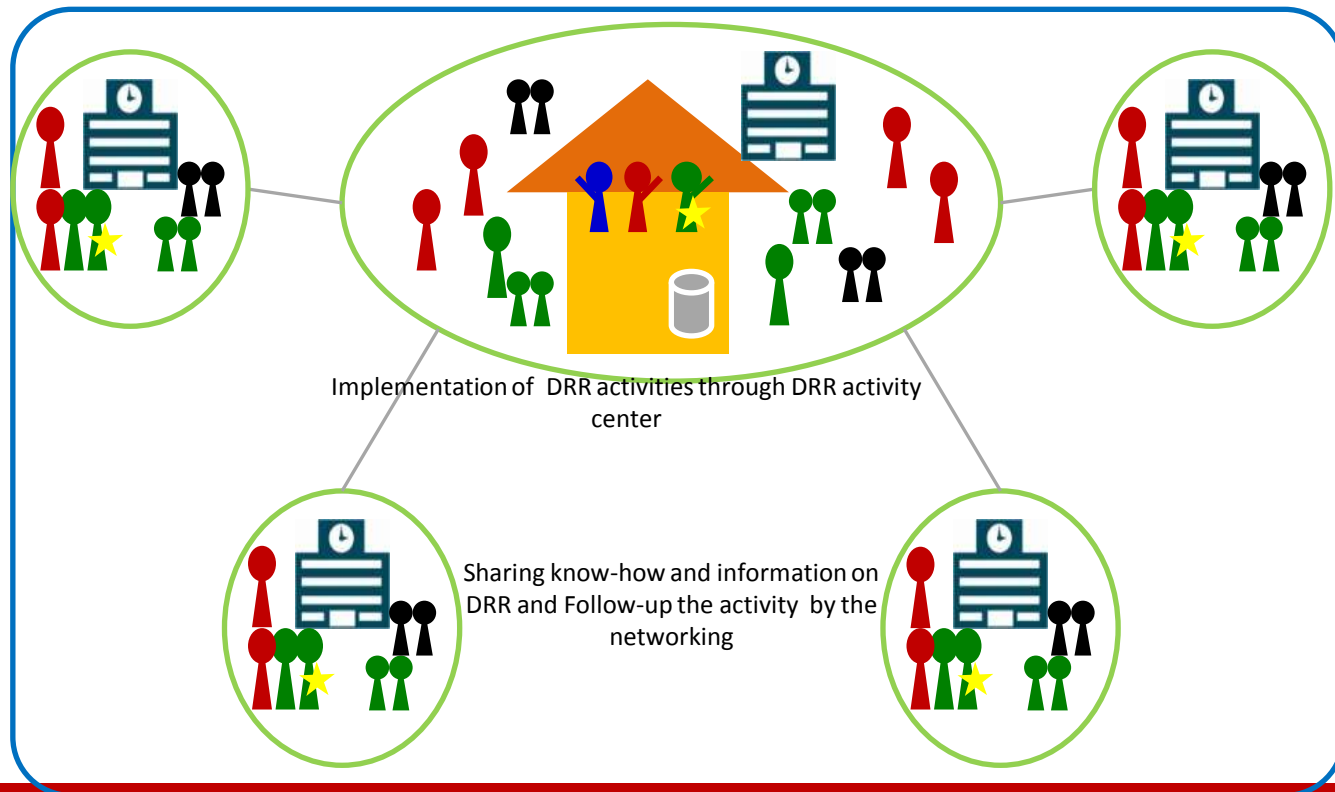
Enhancing capacity for DRR
= Enhancing 3 helps + Network

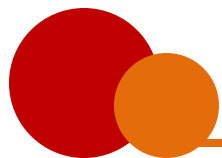




Key findings: Need for System Integration

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.

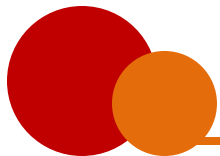




Output 2: Prepare to operate DRRAC

Materials for learning/ teaching





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

