# 5. Now Our School is Safer

**Non-structural Mitigation** 



#### Objectives \_\_\_\_

- To identify vulnerable places in a school.
- To learn how to strengthen vulnerable places in a school.



## **Expected Results**

 Students can recognize their own surrounding by making their own maps.



## **Possible Subjects to Integrate**

- Natural sciences
- Social Sciences
- Extra curricular
- Cultural art and skills (SBK)



# **Required Skills**

- Listen to what people mention
- Understand important points
- Summarize own opinions
- Recent opinions
- Identify problems
- Discussion with family and others



1-111



#### **Needed Materials**

- School map by marking the dangerous places
- •
- Equipments to repair furniture.
- •





# **Examples of possible theme**

Make various rooms in school safer.



#### Indigenous Knowledge

• For fire contexts, ancient people used to provide sand bag tied on the roof of the house which is equipped with a towing rope. In case of fires, sack was withdrawn and its contents (sand) out and can help douse the flames.







#### Pre teaching

- Teacher asks students to see what happens to their class in case of earthquake.
- Teacher asks students to identify items in class which can be dangerous in the case of earthquake



#### **Whilst Activity**

- Teachers ask students to make groups of (4 5 students per group)
- Each group will discuss some ways to reduce disaster risks from identified items.
  - For example: make the amplifier cabinet to the wall, giving additional hooks on the lights

Each group presents their discussion result, other groups give questions and comment.



#### **Post Activity**

- Students determine the best ways to reduce hazards
- Teacher and students practicing the way how to reduce determined risks (can be done in the next meeting to give enough time to collect materials needed).



(photo by YEU)



## **Case Study**

Non-physical Mitigation using houses and furniture miniatures (Indonesia) Joining the handicraft activity, the teacher of Elementary School 24 Padang asked the students to learn non-physical mitigation using paper mockup house and furniture miniatures. The students arranged the miniatures in a certain position, so that when it is vibrated, the furniture will be safe for the house occupants and will not block the evacuation track.



(photo by SEEDS Asia)



- Non-structural mitigation can be developed in school, company, house, village office, and so on.
- Non-structural mitigation can be combined with other disaster education programs.
- Non-structural mitigation can be suggested to related parties or institutions as the guidance in constructing a building.

# 6. Let's Write Your Experiences

Writing



#### Objectives -

- To raise awareness and disseminate knowledge about disaster experience.
- To remember and reconsider about disasters in writing essay.



#### **Expected Results**

• Students can recognize their own surrounding by making their own maps.



#### Possible Subjects to integrate

- Indonesian
- Extra curricular
- English
- Minangkabau Traditional Culture



# **Required Skills**

- Listen to what people mention
- Understand important points
- Summarize own opinions
- Recent opinions
- Discussion with family and others





## **Needed Materials**

- Theme of essayWorksheet for students (if needed)
- •



# **Examples of possible themes**

- Pre disaster: how we can reduce disaster risk
- During disaster: essay on emergency situation
- Post disaster: rehabilitation process, cooperation in the community during reconstruction process



## Pre Activity (5minutes)

- Teachers show various disaster activities by video or pictures or articles
- Teacher introduces concept of disaster management pre, during, and post activities to reduce disaster risks
- Teacher explains today's class objective. Students are going to learn to write an essay
- Teacher explains function/ role of a writing as means of communicating information to readers – and techniques to write good or effective essay
- Teacher and students decide themes of essay to write related to disaster or disaster management





#### Whilst Activity (25minutes)

 Students write an essay on Disaster Risk Reduction (example of theme, experience on last disaster, preparedness toward future disaster, etc)





## Post Activity (5minutes)

- Decide the best essay based on agreed criteria. Decision can be made by teachers or students of other grade.
- Announcement of winners and an explanation why the article becomes a winner



## **Writing Essay**



#### **Case Study**

#### **Disaster Writing Competition for Electronic Media Journalists 2008** (Indonesia)

One effective means to promote disaster and mitigation activity is through mass media. In information era and *knowledge base society* today, the role of mass media can determine the direction of a nation and its civilization. National Agency for Disaster Management (BNPB) in collaboration with the Science and Technology Author Community (Mapiptek) held a writing contest in the print media for journalists. The purpose of this competition is to improve the dissemination of disaster information to public in Indonesia, to socialize disaster problem or its anticipation and prevention in various fields of human life, to inspire and to develop interest in writing about disasters problems on printed media journalists. The theme was improving knowledge to build community preparedness in coping with, efforts in reducing risks/negative impacts, improving community preparedness to build resilient nations in dealing with disasters, etc.



## Indigenous Knowledge

• Writing contest does not have to be in the from of narration or essay, but it can be in the form of dialog, or in Minangkabau context, it can be in the form of 'randai'.



- This activity can be performed inside the classroom during class activity, so that the students can learn and understand disaster better.
- Beside in the classroom, it can also be performed in every community meeting, so the community can get valuable lesson from their own life experience.
- Combined with other disaster education programs, such as preparing newspaper and story telling.
- This activity can be spread to local radio so that the story from the experience of disaster's victim can be broadcasted.



Name :		Class :	
When disaster or	ccured, I was years o	old. At that time I was	with
Essay title			
My experience			
What do you do to prep	222	What is your message to fu	turo children?
yourself in case of disas		what is your message to	idie Cilidieii.
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# 7. Let's See What I Draw

## **Drawing**



#### Objectives .

- To raise awareness and share knowledge about disaster experience.
- To remind and reconsider disasters by drawing.
- To share experiences to the audiences.



#### **Expected Results**

- Students can improve their ability in drawing and expressing idea to others.



## Possible Subjects to Integrated

- SBK (Cultural arts and Skills)
- Extra curricular



# Required Skills

- Listen to what people mention
- Understand important points
- Recent opinions
- Discussion with others

#### Hazards







**Targeting class** 



I-IX

#### Place of implementation



**Teaching** 



#### **Disaster Management Cycle**











## **Needed Materials**

- Drawing Paper
- Color pencils





# Example of possible themes

- Disaster and its impacts
- Several time after earthquake
- My village / my town / my school in the past and now
- Efforts to make my school/my village/my town safe





#### Pre Activity (5minutes)

- Teacher shows some existed disasters either through screening or images
- Teacher introduces the concept of disaster management, that there are things you can do before, during and after disaster to reduce the risk of losses
- Teachers and students determine the themeof drawing to be made (can be done together or determined in group)
- Teacher introduces the way how to draw well



#### **Whilst Activity**

Make drawing based on decided theme





#### **Post Activity**

- Decide the best drawing based on agreed criteria. Decision can be made by teachers or students of other grade.
- Announcement of winners and an explanation why the drawing becomes a winner









# **Drawing**



## Case Study

#### **Recognizing Disaster by Drawing (Indonesia)**

In Padang Pariaman, teachers at Elementary School 05 Batang Gasan tried to include disaster education into Cultural Arts and Skill subjects. Students were asked to remember disaster they knew or they may experience. To lure their memories, teachers play a video and talk about disaster. After watching videos and listening to stories from teachers, students begin to express it in a picture.



(photo by SEEDS Asia)

In 2006, YEU provide assisted children victims of Aceh tsunami. One of the methods used to reveal their hearts and minds was by conducting drawing activity. Their drawings told about disaster they know and they experienced so that later the drawings may be used as a lesson for everyone. Through this activity, children were also taught to be a better and more conscious generation in anticipating and managing disasters in the future.



(photo by YEU)



- Drawing activity with the theme of disaster can be developed by holding a drawing competition in today's community before commemorat Indonesia's independence day on August 17.
- Children's drawings can be sent and published in the paper to show lesson learnt from disasters in order to reduce casualties in the future disaster.
- Images can be incorporated into students' walls magazine or combined with other activities such as storytelling.



Flood Kenes Monica, 3rd grade (SD Rojoniten)



**Tsunami** Jalu Katrunada, 2nd grade (SD Tegalsari)



Earthquake Deni Herbiyanto, 2nd grade (SD 2 Gading Harjo)

# 8. Let's Reproduce Disaster With Paper

**Paper Crafts** 



#### Objectives -

- Learn about mechanism of disaster occurrence
- Improve awareness of students' family member by showing paper crafts at home



#### **Expected Results**

- Students understand natural disaster mechanisms
- lacktriangle



#### Possible subjects to integrated

- Natural Sciences
- SBK (Cultural Arts and Skills)
- Social Sciences
- Extra-curricular





# **Required Skills**

- Listen to what people mentioned
- Understand important points
- \_





## **Metarials Needed**

- Paper
- Craft model (if needed)
- Color pencils
- •



# **Paper Crafts**



# **Procedures**

## Pre Activity (5minutes)

- 1. Teacher introduces the dangerous impacts of earthquakes, for example: wall came down, cabinet collapses, windows broken
- 2. Teacher explains that today students will learn to make crafts in the form of a mock-up houses without paper roofs or other materials to see what happens when an earthquake occurs
- 3. GroupFormation . Students form groups (3-4 students each group)



#### Whilst activity (60 minutes)

- 1. Each group makes one model cardboard house.
- 2. After the blueprints of the house is finished, students put different small furniture (can be made by paper too) in a model house
- 3. Students place the model house on the table and slowly shake the table as if it is earthquake.
- 4. Students record everything that happens to model house and compare them with records from another friend in a group
- 5. Each group will present their findings
- 6. Teachers and students concluded what items can be dangerous in case of earthquake





#### Post Activity (5minutes)

Teachers evaluate students' crafts by providing comments on the perspective of disaster management include:

- How to organize any furniture / appliances to reduce the risk.
- How students can reduce risk by non physical mitigation







# **Example possible themes**

- Making model of disaster safer house
- Strengthen vulnerable parts of house



#### Case Study

SEEDS Asia and YAKKUM Emergency Unit (YEU) tried to incorporate knowledge about non - physical mitigation in Culture Art and Skills (SBK) subjects for students and teachers in SDN 24 Padang. By using their own model house, students and teachers learn how to make strong house/schools and organize safe place for occupants. By this activity, students and teachers understand the importance of building a house / school and organize a room that provides safety for the occupants if they must evacuate quickly out of the building.



(photo by SEEDS Asia)



#### Indigenous Knowledge

• The concept of a lower hazard traditional house (eg. Rumah gadang/bagonjong from Minangkabau region) compared to a modern house (walls / concrete) was introduced to show that the ancestors of Indonesian people have started considering disaster risk reduction in house construction.



#### **Program Development**

• This activity can be combined with other activities, such as writing, drawing, non-structural mitigation, and evacuation drill.

# Let's compare before and after earthquake







After

# 9. Let's Read My Newspaper

Making disaster newspaper



#### Objectives -

- To give an opportunity for students to investigate about disasters on their own.
- To raise awareness of other community members by disseminating the knowledge from school.



#### **Expected Results**

• Students can improve their ability to express their own mind to the readers.



#### Possible subjects to intergrate

- Indonesian
- Minangkabau traditional culture
- Cultural art and skills (SBK)
- Social sciences
- Extra-curricular
- OSIS



# Required skills

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Find problems
- Research materials
- Discuss with others
- Summarize stories of others
- Evaluate outputs among students
- Communicate with families and community members





## **Needed Materials**

- Theme of essay
- •
- •
- Worksheet for students (if needed)
- •







#### **Preparatory Activity (is given in previous meeting)**

Teacher shows examples of techniques of interviewing people and note taking

 Teacher shows example of techniques of interviewing people and making note into narration

#### **Pre Activity**

- Teacher shows a newspaper to identify components of newspaper, such as name, content, headlines, source of news etc.
- 2. Teacher explains that students are going to learn to make newspaper



## **Whilst Activity**

- 1. Teacher divides students into groups of 4 5 students
- 2. Teacher distributes newspaper size blank paper
- 3. Teacher asks each group to discuss name of their newspaper and writes the name on the paper
- 4. Teacher and students decide themes related to disaster management
- 5. Teacher asks each group to assign role for every member: prepare drawing, article writing, interviewing etc
- 6. Each group member do the assignment according to the role
- 7. Each group arranges results of their works on plano paper
- 8. Each group discusses the best preparation for the paper
- 9. Each group identify shortage of each newspaper draft
- 10. Each group complete shortage of their newspaper draft
- 11. All the results that have been approved are glued in Plano paper like a newspaper







#### **Post Activity**

 Students discuss which newspaper deserves to be posted on the board first, second and so forth based on any agreed criteria



## **Making Disaster Newspaper**

# Example of possible themes

- Various disasters in various places
- Efforts in anticipating disasters
- Impact of disasters on specific fields, such as the availability of drinking water, telephone and electricity networks



#### **Case Study**

#### **Preparing newspaper (**Indonesia)

Rojoninten, Tegalsari, and Gading Harjo 2 Elementary School in Sanden Bantul, together with SEEDS Asia and YAKKUM Emergency Unit (YEU) held a disaster newspaper writing activity to the students. Disaster newspaper is a place for students' appreciation to spill out all the creativities in the form of writings, pictures, or photograph of disaster. The students also have roles like other people such as journalists, editor, and real photographers.



Newspaper "Suara Merdeka" SD 2 Gading Harjo



Newspaper "Kedaulatan Rakyat" SD Tegalsari



#### Indigenous knowledge

Commonly, in every village, there is a place to put newspaper for the community. Sometimes, this
facility can be used to display the students' work, so that the disaster learning can also be enjoyed
by the community.



- Through wall magazine contest to celebrate Independence day of Indonesia, both in school or in the community.
- Displaying the result of disaster wall magazine at strategic places in the community.
- This media can also be used to preserve local language if it is made using local language.
- Combined with other disaster education programs.
- Wall Magazine is spread to the local newspaper for wider publishing.

# 10. Listen to My Story

# Picture / story show



#### Objectives \_\_

- To learn about the people's experiences of disasters.
- To raise awareness of audience and presenters through conducting the show.



#### **Expected results**

- Students can learn how to cooperate with other friends in the process of creating picture/story shows.
- Students can improve ability to express their stories in front of audiences.



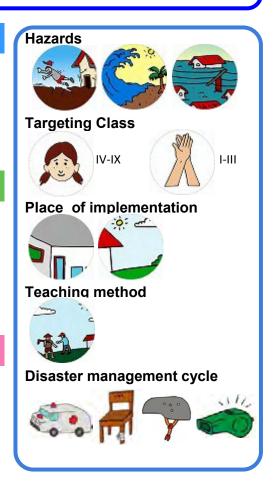
#### Possible subjects to integrate

- Indonesian
- Minangkabau traditional culture
- Art
- Social sciences
- Extra-curriculum



# **Required Skills**

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Summarize stories of others
- Communicate with families and community members





#### **Needed Materials**

- Paper
- •
- Color pencil and pencil
- •





# **Example of possible themes**

- Pre disaster : mitigation and preparedness
- During disaster: evacuation tips, disaster response
- Post disaster: recover the spirit of the victims, rehabilitation and reconstruction

# Picture/story show



# **Procedures**



#### **Pre Activity**

- Students listen to teacher's story related to disaster management. To help understanding, teacher can use pictures or other media like puppet Content of the story can be any aspect of disaster management.
- 2. Students identify the content and the message of the story
- 3. Students identify/ brainstorm techniques of good story telling



## **Whilst Activity**

- 1. Students prepare stories related to disaster management along with its techniques and media
- 2. Students tell their stories in front of the class; others listen and identify the content and the message of the story or they categorize it into which step in the disaster management cycle (before, during or after disaster)



#### **Post Activity**

 Students select the best story and story telling technique (e.g. according to each step of disaster management) and state the reasons



## **Case Study**



After May 27, 2006 earthquake, YAKKUM Emergency Unit (YEU) together with faculty of English Literature, Sanata Dharma University implemented a puppet show entitled keep motivated to survive. The show aimed at providing psychosocial support to victims of disaster in Plaosan area, Prambanan sub-district to restore and maintain their spirit and motivation after surviving the earthquake.





#### Indigenous Knowledge

 Saluang which is a typical and traditional show in Minangkabau is very popular amongst adults and children that it's possible to be used as a medium to convey moral messages or stories. In addition, we can also perform; Randai, batalam, and shalawat dulang.

# 11. Let's Learn How to Cook

Cooking



#### **Objectives**

- To raise awareness toward disasters through the viewpoint of food.
- To learn how to prepare food in post-disaster situation.



#### **Expected Results**

• Students can improve their survival techniques.



## Possible subjects to integrate

- Social sciences
- Natural sciences
- Indonesian
- Minangkabau Traditional Skill (KTM)
- Cultural Art and Skills
- Extra-curricular



# **Required Skills**

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Communicate with families and community members

•

lacktriangle

# Targeting Class V-IX nplemer nethod anagement cycle



# **Needed Materials**

- Ingredients for preserved food
- •

- Ingredients for emergency cooking





# **Example of possible themes**

- Preparing Instant food
- Conserving foods
- Cooking by simple tools





#### **Pre Activity** (5minutes)

(can be conducted in one or two meetings before the main activity)

- 1. Students identifies problems happening during emergency related to food problems
- 2. Students identify locally available food ingredients and ways to cook them
- 3. Students determine the most easily found food ingredients in case of disaster



- 1. Students identify various ways to process food ingredients they have identified and also equipments to process them.
- 2. Students practice food processing with locally available ingredients and tools.











## **Post Activity (5minutes)**

Students discuss requirements for food served in emergency situation



## **Case Study**

## **<u>Let's Cook....</u>** (Indonesia)

Food is one basic needs for disaster affected people. In order to meet temporary needs in emergency situations, SEEDS Asia and YAKKUM Emergency Unit (YEU) invites students and teachers in TegalSari, Sanden, Bantul elementary school to analyze what healthy food can be made to rely on local resources and should be durable or easily made during emergency situation. After analyzing and doing the checklist, students and teachers try to cook the food with simple tools. Food made is serundeng and fried tempeh because they are durable enough and sweet potato because of the material accessible.



Photo by SEEDS Asia

#### Recipes for cooking Timus;

#### Ingredients

- 1 kg sweet potato
- 1 ounceStarch / starch
- 1 ounce Sugar
- Little salt
- Cooking oil
- Vanilla

#### How to cook

- 1. Peel sweet potato
- 2. Wash sweet potato
- 3. Steam until well-cooked
- 4. Take it out and crushed it
- 5. Put starch, vanilla, sugar, salt, blend until smooth
- 6. Make it in round shape (based on taste)



- 7. Fry until well-cooked (yellowish)
- 8. Ready to be served



#### Indigenous Knowledge

 Ancient people had better food sustainability. This activity, besides introducing local food ingredients and how to cook them, can also be used to re-introduce community food sustainability



- Introducing sustainable food or easy-made food by relying on local resources for Disaster Risk Reduction (DRR), can be also introduced to women unions or fathers gatherings as an attempt to spread information about appropriate actions in fulfilling food needs at the emergency situation.
- Combined with other disaster educations such as simulation and evacuation, making preparedness bag, writing, drawing, and so on .

# 12. Let's Play Games

## **Disaster Management Game**



#### Objectives -

- To learn about community or school DRR while having fun playing games.
- To have an interest in DRR activities through games.





#### **Expected Results**

 Students can understand that there are different ways of studying by learning disaster education through games.



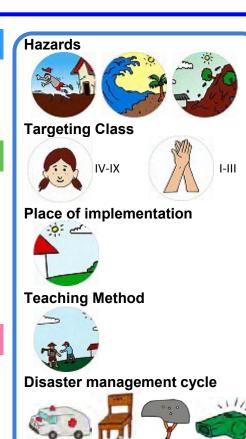
#### Possible subjects to integrate

- Sport
- Art
- Extra curricular



# Required skills

- Listen to what people say
- Understand important points





#### **Needed Materials**

- Paper
- Pencil

- Color pencil





## Indigenous Knowledge

 There used to be called Jamuran games in Java community. This game can be used to train children's preparedness and various kinds of disaster. For example, if someone mentions earthquake, it means that all game participants have to find a shelter or safe place. Teachers can act as a jury.



#### **Disaster Snake and Ladder**

# Introduction (5min)

- 1. Teacher explains disaster management cycle
- 2. Teacher chooses one topic from disaster management cycle, for example; emergency response or preparedness or mitigation.
- 3. Then teacher divides the student into several groups, each group consists of 4-5 students.
- 4. Teacher gives game sheet, figures and dice.

## **Whilst Activity** (60minutes)

1. Student inside the group will play snake and ladder game where their figure should be moved based on the numbers on the dice which they throw before. Every time a figure passes a picture with a sentence on it, students will read and say it loudly thus other students can hear what he/ she says. All of the sentences are about disaster management. The one, who finishes first by moving the figure to finish, is the winner.

(this game can be made by yourself by preparing big paper for the media, pencil to draw and write down the sentences, ruler and eraser )

#### **Post Activity**

- 1. Teacher asks students' response about snake and ladder game.
- 2. Teacher give comment on students' responses.

## Example of possible theme

- Disaster Management
- Disaster preparedness tips



### **Case Study**

#### **Disaster Game Board** (Japan)

By utilizing board game called "Bousai Ekiden (Disaster risk reduction marathon)," students are able to learn about disaster management. In order to go forward to goal, students need to answer to the questions related to disaster preparedness and response, such as important and useful materials in case of emergency situation.



(Source: DRR study net )

## **Disaster Management Game**



## **Procedures**

## **Playing Disaster Response**

## Pre Activity (5minutes)

- 1. Teacher explains disaster management cycle (see page 7 in this handbook)
- 2. Teacher chooses one topic from disaster management cycle, for example; emergency response or preparedness or mitigation.
- 3. If the selected topic is fire threat, teachers prepare the necessary equipment like buckets.
- 4. Then the teacher form a group consisting of (4-15) students.

## Whilst Activity (60minutes)

- 1. Teacher orders the students to make a line and give a small container to the student at the front line.
- 2. Teacher asks the students to pass the container filled by water to others in order to fill bigger container in other side of student line. The first team who can fill the big container is the winner. (big container is symbolized as fire which has to be extinguished)

#### **Post Activity**

- 1. Teachers give explanation on purpose and objective of the game.
- 2. Students respond if the game is useful or not.
- 3. Teachers provide feedback in order to organize this game better in the future.



#### **Case Study**

#### Disaster Response Game (Japan)

Kouchi City Otsu elementary school has conducted *renteng ember* game where students make in line and pass a bucket to other student next to them. This game aims at teaching the students how to cope with fire which occurs after earthquake. By this game, students are able to learn not only the way to deal with fire but also the importance to cooperate with other students and community members in order to cope with emergency situation.



(source: DRR study net )



- Disaster education can be applied in other local games.
- Disaster game can be played by anyone and at any level; villagers, government officials, etc...
- Disaster game can be played anywhere, not just in schools but also within the village, or at children play places, such as kindergarten, play group, children daycare, etc
- Disaster game can be combined with other disaster education programs.

# 13. I Know What I Need

**Preparing Emergency Bag** 



#### Objectives \_

- To raise awareness and spread knowledge about disaster experience
- To remember and reconsider disaster as the topic for writing essays



## **Expected Results**

- Students can improve their ability to practically calculate items that they need to prepare within the limits of budget.
- Students can identify important, useful materials and tools for emergency case.



## Possible subjects to integrate

- Mathematics
- Social sciences
- Economics
- Extra-curricular



# **Required Skills**

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Discuss with others
- Evaluate outputs among students
- Communicate with families and community members





#### **Needed Materials**

- Possible materials for emergency bag (illustration, picture, or real materials)
- Worksheet for students[for mathematics]
- **\_\_\_\_**

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# **Preparing Emergency Bag**



# **Procedures**



#### Pre Activity (5minutes)

• Teacher explains the steps to prepare for emergency bag, particularly focused on how to prioritize things needed.



## **Grouping** (5minutes)

- 1. Teacher asks the students to form groups consisting of 3-5 children per group
- 2. Each group determines their own responsibilities for each member

#### Making List of Items (45minutes)

- 1. Students are asked to see the impacts of disasters and problems incurred thereafter.
- 2. Students are asked to practice on prioritizing needs
- 3. Students create a list of items for emergency bag
- 4. Students are asked to check price list of various goods
- 5. Teachers decide available budget students choose items to be purchased according to priority
- 6. Students make a final list of items to be purchased





#### Presentation (10minutes)

 Speaker from each group presents list of items for their emergency bag.

#### Post Activity (5minutes)

• Teachers evaluate every list of emergency bag and give comment from disaster management point of view.





# **Example of possible theme**

- Preparing items based on particular disaster
- Preparing items based on available budget.



#### **Case Study**

#### **Designing Children Version Disaster Emergency Bag** (Indonesia)

Through mathematics, teacher asks the students to calculate how much money should be spent to purchase needed goods for emergency situations. Then, with limited budget, students must be able to choose which items become a priority to purchase. After that, students compile all goods into emergency bags. Through this activity, SEEDS Asia and YAKKUM Emergency Unit (YEU) is try to introduce different approaches in disaster education teaching to students in elementary school in Rojoniten Sanden, Bantul, Yogyakarta.





(photo by SEEDS Asia)

#### Emergency Bag (Japan)

Kobe Gakuin University has produced disaster risk reduction programs which can be utilized for normal curriculum in elementary school. As one of the programs, the emergency bag making has been introduced in order to integrate the concept of disaster risk reduction into mathematics. Through the subject, therefore, students are also able to have opportunity to think about materials that they need to prepare for emergency case.



(Source: Kobe Gakuin University)



# Indigenous Knowledge

 Sarung in Indonesian community can be utilized as a tool of preparedness in case of emergency, for example, can be used as blankets, mattresses, and also to carry people.



#### **Program Development**

Disaster emergency bag is applicable in family scope and by adapting the context in the family.
 Therefore, the needs which will be the priority can be different or more varied.

# **Preparing Emergency Bag**





# 14. That's Our Report

**Disaster Risk Reduction (DRR) Reporter** 



#### Objectives \_\_

- To disseminate information on DRR to whole community
- To raise awareness of students and local people on Disaster Risk Reduction (DRR)



#### **Expected Result**

• Students can improve their ability to express their own voices to audiences/listener.



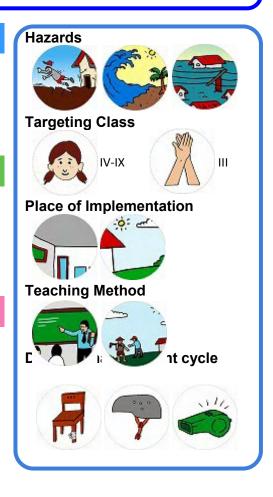
## Possible subjects to integrate

- Indonesian
- Citizenship education
- Extra-curricular



# **Required Skills**

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Discuss with others
- Evaluate outputs among students
- Communicate with families and community members
- •





## **Needed materials**

- Work sheet s for students

- Paper
- Pencil

## **Disaster Risk Reduction (DRR) Reporter**



# **Procedures**



#### Introduction

**Preparation** (to be conducted before the meeting)

- 1. Teacher gives examples of how to interview people and how to report the result, or how to get news and report it
- 2. Teacher explains that they are going to learn how to develop a radio/ TV news program

#### **Whilst Activity**

- 1. Teacher divides students into groups of 4 5
- 2. Teacher asks each group to discuss the name of their radio / TV
- 3. Teacher and students decide the themes of the news related to disaster management or school disaster education
- 4. Each group assign role for each member, e.g. news writer, news caster, a role to prepare sound system, a role to design a cardboard TV etc
- 5. Each group broadcast their own news program (other groups can be assigned to locate the area stated in the news on the map)

## **Post Activity**

- 1. Teacher and students decide the best news
- 2. Teacher asks students to watch news broadcasting at home and retell it at school.



# **Example of possible themes**

- Pre disaster activity; mitigation, preparedness
- Activity during disaster
- Post disaster activity
- \_



#### **Program Development**

 Schools can regularly use the facilities available as a means of sharing information from teacher to student and student to student.

# 15. I Read, You Listen...

# **Reading Newspaper**



#### Objectives \_\_

- To understand what happened during and after disasters.
- To compare the situations of different phases; before, during, and after disasters.





#### **Expected Results**

• Students can improve their ability to read texts and to express their opinions.



#### Possible subject to integrate

- Indonesian
- Social Sciences
- Extra curricular



# Required Skills

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Discuss with others
- Evaluate outputs among students
- Communicate with families and community members

# Hazards



**Targeting Class** 



IV-IX



#### Place of implementation



#### **Teaching method**



## Disaster management cycle









#### Needed materials

- Newspaper
- Color paper
- Map

- Paper
- **Pencils**
- (TV)





# Example of possible theme

- Pre disaster activity; mitigation, preparedness
- Activity during disaster
- Post disaster activity





#### Pre Activity (20minutes)

- 1. Teacher explains that disaster risk can be reduced if the disaster and its impact are well understood. Today they are going to learn about various disasters in Indonesia along with their impacts.
- 2. Teacher shows Indonesian map in front of the class and asks some students to locate several areas which experienced disasters based on specific situation given by teacher. For example:
  - This province experience big earthquake and Tsunami in 2004
  - This area is still affected by hot mud
- 3. Teacher asks students to mention kind of disasters and the areas experienced each disaster.





## Whilst Activity (40minutes)

1. Teacher distributes pieces of papers to groups of or individual student. Dependent on the capacity of the students, the color can be three or four, each represents one kind of disaster. E.g.:

Red : earthquake Yellow : volcano eruption

Blue : flood

2. Teachers read news flash from cardboard TV screen or from the hidden places as if it is broadcasted from a radio and asks students to show the type of disaster and other information contained in the news by using colored paper.

For example: Breaking News:

2.BMG (Meteorological and Geophysical Agency) has just reported that due to heavy rain that fell all day, some flooded areas in Jakarta, cause tremendous traffic jam. That's our report.

- 3. Teachers display the map on the blackboard and then repeat the above activity but this time students must put their colored paper at the correct location on the map
- 4. Teachers divide the class into groups of 2-3 students
- 5. Teacher gives each group one sheet of paper contained brief news about natural disaster in certain area and ask them to demonstrate reading TV or radio news flash. Other groups listen to and compete as in previous step.









# **Reading Newspaper**

#### Pre Activity (40minutes)

- 6. Teachers distribute newspapers to each group and asks them to create their own news flash based on news on newspaper. (teacher can also asks students to go to the library within a certain time to prepare themselves)
- 7. Teacher asks each group to broadcast the news that had been prepared in the form of television or radio news. Other group listento and compete as in previous activities

#### **Post Activity** (5minutes)

 Teachers with students make some conclusions from various kinds of disaster mentioned in the news flash (that Indonesia in located in disaster-vulnerable area, thus disasters potential and disaster risks must be anticipated)



#### **Case Study**

#### (Indonesia)

Listening to radio and watching television are fun activities for most children. If the news readers or the announcers are children and the news broadcasted are about disaster, we can imagine how easy the attempts to integrate disaster education will be. And it can be carried out by various methodologies which will be fun and not boring. Teachers of Rojoniten Elementary School in Sanden, through Social science class, asked the students to learn many Indonesian regions which are disaster vulnerable.



(Photo by SEEDS Asia)

#### (Indonesia)

Almost similar with Rojoniten Elementary School, teachers from 25 Padang Junior High School also invited the students to become announcers and news readers to pass the information about disaster and disaster prone areas. The difference is that, before the activity was started, teachers gave homework to the students to make their own story at home. Therefore, the news which would be informed were the work of the students themselves, it was not prepared by teacher.



(Photo by SEEDS Asia)



- This activity can be combined with other activities. For example, we can combine writing and making newspaper.
- At a certain moment, this activity can be made as a contest, for example, news reading contest, finding and showing location in the map, or re-telling what has been heard.



(Source: Padang Ekspres)

# **Reading Newspaper**



(Source: Padang Ekspres)

# 16. Let's Listen to What They Say

**Stories of People who Experienced Disasters** 



#### Objectives \_\_

- To understand what happened during disaster
- To know lessons leant from affected people
- To understand the importance of lives and cooperation in communities



#### **Expected Results**

• Students can improve their ability to summarize stories and to express their own opinions.



#### Possible subject to integrate

- Indonesian
- Citizenship education
- Socal sciences
- Extra curricular



# Required Skills

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Discuss with others
- Evaluate outputs among students
- Communicate with families and community members



#### **Targeting Class**



I-IX

#### **Place of Implementation**



#### **Teaching Method**



#### **Disaster Management Cycle**











#### **Needed Materials**

- List of the important
   points which teachers
   want studens to include in their stories.
- •\_\_\_\_\_
- •
- •

#### **Stories of People who Experienced Disasters**



### **Procedures**

#### Opening (5 minutes)

Teacher explains that being prepared for future disaster is a possible thing to do.



#### Film Screening (20 minutes)

Teacher screens film about many kinds of disasters for students. Teacher can screen film about possible disaster in the future.

#### Story from the affected people (30 minutes)

Teacher can invites community member who has the experience of disaster to share his/ her experience in dealing with the disaster. For instance, the story can cover:

- Damages caused by disaster
- Sad story
- Happy story and lessons learned: cooperation among community members





#### Comments and feedbacks from students (10 min)

Teacher invites any comment or feedbacks on the movie and story told by affected people. Students can also write the feedbacks on a piece of paper.

#### Evaluation (5 min)

Teacher wraps up the lesson by highlighting lessons learned from the past and the importance of disaster preparedness.

#### **Example of possible theme**

- Experiences during disaster
- Preparing for/ anticipating future disaster
- Learning from natural phenomena



#### **Case Study**

#### (Indonesia)

Similar activity was also conducted in Elementary school 8 Sintuk Toboh Gadang, Padang Pariaman. A teacher in front of his students talked about his experienced during west sumatera earthquake on 30 September 2010. The teacher tells the story of how he was able to survive from the quake. From this activity, students can be take important lesson about disaster, and what can be done currently.



(photo by SEEDS Asia)

#### Listen to Disaster Story (Japan)

Maiko High School has invited many affected people as guests from outside of the school in order to tell students the real stories od disasters, especially on the Great Hanshin-Awaji earthquake.



(Source: SMA Maiko)



#### Indigenous Knowledge

 Many old people in the village community have the ability to read natural phenomena which in some cases can be signs of incoming hazards. Through this activity, the ability can be passed on to younger generation.



#### **Program Development**

- Such activity can be done in the classroom during teaching and learning process so that students can learn and understand about disaster better.
- Beside in the classroom, this activity can also be conducted in every community meeting so that they can take valuable lessons from every important incident in life.
- Combined with other disaster education programs such as making newspaper, writing, drawing and story telling / pictures

# 17. Let's Listen to the Experts

**Story from Stakeholder** 



#### Objectives .

- To understand the importance of community facilities.
- To understand what happened during and after disaster.
- To understand what students can do before, during and after disasters



#### **Expected Results**

• Students can improve their ability to summarize stories and to express their own opinions.



#### Possible subject to integrate

- Indonesian
- Extra curricular



# Required Skills

- Listen to what people say
- Understand important points mentioned by a teacher
- Summarize own opinions
- Present opinions
- Discuss with others
- Evaluate outputs among students
- Communicate with families and community members



#### Targeting class



#### Place of implementation



#### Teaching method



#### Disaster management cycle











#### **Needed Materials**

- List of important points to deliver.
- Paper
- Pencil



## Example of possible theme

- Impact of disaster on telecommunication network, electricity, drinking water, or health facility
- Possible disaster preparedness



#### **Program Development**

 This program can be combined with other programs such as essay writing, drawing, and newspaper making





#### **Procedures**

#### **Introduction (10min)**

Teacher explains that preparedness for future disaster can be done when people understand about disaster and its impacts. Today, they will learn impacts of disaster on certain public service or facility, (depend on who the speaker is) for example electricity installation or telephone.



#### Whilst Activity (45minutes)

- Teacher invites an officer from a public service or facility to share his/ her story dealing with disaster (related to his/ her field of work).
- 2. While listening to the story, students make a list on impacts of disaster on public service/ facility



#### **Post Activity (10minutes)**

Teacher asks students comment or impression about the story they had just got or listened to or students can write their short impression on a piece of paper.

#### **Evaluation** (5minutes)

Teacher makes a conclusion by showing lessons learned from the past and the need for disaster preparedness .



#### **Case Study**

#### Story from Disaster Response Team (Japan)

Maiko High School has invited many stakeholders to give explanation on the important roles of stakeholders in case of emergency situation. The guests came from different organizations and institutions such as fire station, police station, health center, and affected community.



(Source SMA Maiko)

#### Story of rescuing flood victims by Search and Rescue team (Indonesia)

Elementary school 1 Laban in Sukoharjo, Central Java, together with YAKKUM Emergency Unit (YEU) invited SAR team in Sukoharjo district to share their experience during Bengawan Solo (Solo River) flood. While sharing their stories, the team also introduced various equipments they used in rescuing, such as rubber boat, rope, stretcher etc.

# 18. Listen to My Song

Sing a Song



#### Objectives

 To raise awareness and disseminate information about disaster which is related to dangerous/ unsafe places by composing and remembering lyrics.



#### **Expected Results**

• Students can learn way to express their voices to audiences by utilizing different ways.



#### Possible subject to integrate

- Cultural Art and Skills (SBK)
- Extra curricular
- lacktriangle



# **Required Skills**

- Listen to what people say
- Understand important points
- lacktriangle
- lacktriangle
- \_









**Targeting Class** 



I-IX

#### Place of implementation



#### **Teaching method**





#### Disaster management cycle



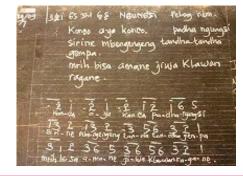




#### **Needed Materials**

- Lyrics and tones related disaster management
- •

- Paper
- Pencil





## **Example of possible theme**

- Pre disaster: tips for disaster preparedness
- During disaster: tips for emergency response
- Post disaster: recovering spirit of affected people



# **Procedures**

#### **Pre Activity (5minutes)**

- 1. Teacher explains some disasters that have occurred in Indonesia, particularly experienced by the teachers or students.
- 2. Teacher asks students to identify various things they can do before, during and after disasters occur. Teachers write every things mentioned by students on the blackboard.
- 3. Teacher gives an example that many of these activities can be remembered by utilizing songs.



#### **Whilst Activity (25minutes)**

- Teacher shows an example of one song which can be used to convey important messages. Teacher can rearrange the song by changing the lyrics to be used to convey intended messages
- 2. Teacher asks students to sing the song
- 3. Teacher asks the students to understand message in the lyric.
- 4. Teacher divides the students into groups (3 4 students per group)
- 5. Teacher asks each group to make their own song. Lyric can be made from what they have discussed previously.
- 6. Teacher asks each group to sing their own song.







#### **Post Activity** (5minutes)

- 1. Teachers and students choose the best songs (both content and harmony)
- 2. Teachers concluded that by using songs, students can learn about disaster management



#### Indigenous Knowledge

 Minangkabau community has Tak tong tong song whose lyrics can be utilized to convey certain messages, including disaster management.

#### Sing a Song



#### Case Study

#### Let's Sing About Disaster (Japan)

"Bringing Happiness to All Over the World" is the song made by the affected people of the Great Hanshin-Awaji earthquake in Kobe. Now the song has been translated into other language such as Chinese in order to encourage people who have been in disaster-affected area.



(Source: SEEDS Asia)

#### **Disaster management in Singing** (Indonesia)

In SD 01 Enam Lingkung and SD 08 2x11 Enam Lingkung, teachers invite students to sing songs related to disaster education in order to integrate disaster education into cultural arts and skills subjects.



(Source: SEEDS Asia)



#### **Program Development**

- Through singing competitions in commemorating Indonesia's independence day either in school or in community
- Make disaster song mandatory for every school event
- Combined with other disaster education programs
- Disseminated on local radio stations

Lyrics of children songs : Tanjung Perak

# CHILDREN OF INDONESIA, READY AND PREPARED

(Composed by: Ranie & Susi YEU)

I am Indonesian child Ready and prepared every time When disasters come I'll be strong cos I'm prepared

If later earthquake comes I'll hide under d' table I'll wait and pray 'till earthquake stops later alert

When tsunami hits I'll be prepared cos I know its signs Quake comes sound comes Let's evacuate soon When flood's coming Rescue people Safe d' vulnerable first Children, women I'll search safe place

**Lyric of : Wake Up** Mbah Surip

#### **TSUNAMI**

Wake up I see Tsunami
I run scarily
Run....watch out..waves
Watch out tsunami
If you see, should you run
don't forget...your family



#### **FLOOD**

Flood's everywhere
Watch out
Let's run, let's flooded out
Than get trapped in floods
Let's flooded out,
Let's run

Lyric of Traditional song : Apuse

#### LANDSLIDE

Disaster's everywhere Landslide's one of them And I wanna help people Give clothes and food Give clothes and food





# 19. Listen to My Prayer

Dzikir dan Muhasabah



#### Objectives \_\_\_

- To increase faith in God Almighty
- To find the phenomenon of disaster from the standpoint of religion
- To know the verses / prayers associated with natural phenomena / disasters



#### **Expected Results**

• Students can learn about natural phenomenon/disaster, related to religion.



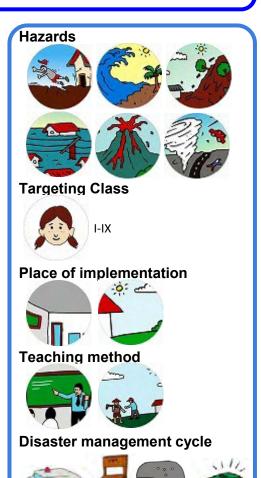
#### Possible subjects to integrate

- Religion education
- Citizenship education



# Required Skills

- Listen to what people say
- Understand important points
- Communication with family / other





#### **Needed Materials**

- List of verses o prayer related to natural phenomenon/disaster
- •\_\_\_\_\_
- •

#### Dzikir dan Muhasabah



#### **Procedures**



#### **Pre Activity**

- 1. Students listen to stories by the teacher associated with existed disasters by utilizing drawings or other media. Theme of the stories can be disaster management concept, that there are things you can do before, during and after disaster
- 2. Students identify the contents and moral lesson from the story
- 3. Teacher asks the students to mention some natural phenomena / disasters commonly occur.



#### **Whilst Activity**

- 1. Teachers convey about the verses related to natural phenomena
- Teachers convey about the prayers or verses that can be used by students to stay calm in a panic state, for example; during disaster



#### **Post Activity**

 Teacher guides the students to read and remember verses and prayers mentioned before.



#### **Program Development**

- This activity can be developed in Smart religion competition
- Dzikir and muhasabah can be inserted into Ramadhan education activity.
- This activity can be given not only in schools but also in surrounding communities where students live, where they usually join Al-qur'an Education activity.



#### Indigenous Knowledge

- In Minangkabau context, Shalawat can be used as a medium for dzikir.
- Takbir and shalawat competition can also be joined with this activity.

# **Chapter 4**

# Implementation Process: Case Study of Disaster Education



# 4. Case Study: Disaster Education Program in Schools in Padang City and Padang Pariaman District

Five months after West Sumatra 2009 earthquake, SEEDS Asia in collaboration with YEU (YAKKUM Emergency Unit) observed the need for disaster preparedness activities, especially through education. After doing assessment activity and after going through various considerations, SEEDS Asia and YEU decided to intervene in a program called Disaster Education or School Disaster Education in; 4 schools in Padang city, and 8 schools in Padang Pariaman district. These schools are reconstructed by JICA (Japan International Cooperation Agency) funding.

After coordinating with West Sumatra Provincial Education Office, Padang City Education Office, Padang Pariaman Education Office, and related Technical Operator Unit from these schools, the implementation of these activities began in February and August 2010. The implementation process are as follows:

#### Information Dissemination on Disasters, Disaster Management and Disaster Education in Schools



This whole activities was initialized by disaster information dissemination activity, disaster management and disaster education in schools. These activities were conducted in order to raise teachers' awareness about potential threats in their areas and introduce a variety of activities that may be conducted at school either before, during and after disaster happens to reduce the risks that may arise.

After participating in this activity, teachers realized that although they ever conducted some activity together with

other parties, it was more focused on a single phase disaster management training that was not sustainable yet, thus they need more comprehensive and continuous efforts. In addition, teachers did not too worry that by implementing this disaster education, their school will have difficulty achieving the target set by the government because the whole operation can be integrated with their school curriculum so it does not become an additional work for teachers.



#### **Meeting with Core Team**



After disseminating information to the school, then followed by meetings with the Core Team in their respective areas, in Padang Pariaman involving 8 teachers / principals as representatives from each school assisted by SEEDS Asia and YEU, as well as 4 teachers from Padang city. At this meeting, they will discuss about the integration of disaster materials into curriculum. Teachers and principals jointly develop RPP (Learning Implementation Plan) in accordance with hazard materials, and adapt them to SK (Competency Standards) and KD (Basic Competence), which are already existed in the curriculum both at the elementary and junior high schools.

# Training for Trainers for Integrating Disaster Contents in Curriculum at Elementary and Junior High School Levels.

Training for Trainers was conducted in two separate locations in Padang city and Padang Pariaman district. In Padang city, schools that involved in this activity were SD 23, SD 24, SMP 07 and SMP 25 Padang. While in Padang Pariaman, schools involved in this activity were SD 08 Sintuk Toboh Gadang, SD 05 Batang Gasan, SD 07 Sungai Geringging, SD 08 2x11 Enam Lingkung, SD 01 Enam Lingkung, SD 03 V Koto Kampung Dalam, and SD 02 V Koto Timur, and SMP 01 Enam Lingkung.

In this meeting, each participant was trained on disaster materials that can be integrated into education curriculum at elementary and junior high levels. Participants (teachers and principals) integrate disaster materials by comparing to SK (competency standards) and KD (basic competencies) in each subject for each class. After that, participants also develop indicators for each disaster material.

Each participant agreed to intergrate disaster material into suitable subjects, which are already existed in educational curriculum, in order not to create new curriculum, nor to add teaching hour for the



teachers. These activities followed by preparation of RPP (Learning Implementation Plan) for each material, and also action plan at each school, in accordance with the target subjects to be integrated.

#### **Disaster Education Activity in Schools**

Based on the action plans of each school, SEEDS Asia and YEU then conducted training on disaster education in each school. Teachers in each school tried to practice the techniques and methods of giving disaster education in classroom. For this first stage, class activity practice was conducted by teachers assisted by officers from SEEDS Asia and YEU so when teachers had difficulty, the officer can help them.

During this activity there are still some weaknesses that need to be improved by the teacher. For example, some teachers still use a lot of time to talk, thus reducing time portion for students to learn or practice. There are still some teachers who do not understand very well learning steps to do, and there are some who missed the important points that should be understood by students before starting this activity. But at least the teachers started to get a picture of disaster education implementation.









**Document of Disaster Education Curriculum** 

Development of content standard
Unit/indicator : Elementary school
Grade/semester : I/II

No.	Standard Competency	Basic Competency	Indicator	Main Material
1	1.1 Understanding about natural disaster, its signs and impacts on human life.	1.1 Knowing about natural disaster and its impacts on human life	1.1.1 Mentioning kinds of disaster through pictures 1.1.2 Sharing about the influence of natural disaster on human life based on the pictures 1.1.3 Sharing about the influence of natural disaster on human's influence based on personal experience	Natural disaster and its impacts on human life
		1.2 Knowing about signals of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)	1.2.1 Mentioning the signals of natural disaster through audio visual presentation 1.2.2 Mentioning the signals of natural disaster through stories from the olds (natural signs)	Signs of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)
2	2. Understanding about instructions cue, applying and knowing the ways to evacuate in case of disaster	2.1 Finding the meaning and apply the evacuation cues or instructions in case of disaster	2.1.1 Finding the meaning of evacuation cues or instructions in case of disaster 2.1.2 Applying the evacuation cues or instructions in case of disaster 2.1.3 Preparing emergency kit for mitigation 2.1.4 Simulating how to evacuate based on the cues heard	Evacuation cues in case of disaster
		2.2 Evacuation drills in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)	2.2.1 Deciding alternative route for evacuation in case of disaster 2.2.2 Deciding places to avoid in case of disaster 2.2.3 Simulating how to evacuate in case of disaster	Evacuation in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)
3	3. Understanding about possible cooperations in evacuation in case of disasters and their effects on disaster risk reduction	3.1 Practicing possible cooperation for evacuations in case of disaster	3.1.1 Mentioning kind of possible cooperation for evacuations in case of disaster 3.1.2 Practicing some cooperation ways for evacuation in case of disaster 3.1.3 Simulating how to cooperate in case of disaster	Cooperation for evacuation in case of disaster
		3.2 Explaining the relationship between cooperation for evacuations with disaster risk reduction	3.2.1 Explaining the advantages of cooperating in mitigation 3.2.2 Explaining the impacts of not cooperating each other in mitigation 3.2.3 Explaining the relationship between cooperation and mitigation	Relationship between cooperating each other with disaster risk reduction

Development of content standard
Unit/indicator : Elementary school
Grade/semester : II/II

No.	Standard Competency	Basic Competency	Indicator	Main Material
1	1.1 Understanding about natural disaster, its signs and impacts on human life.	1.1 Knowing about natural disaster and its impacts on human life	1.1.1 Mentioning kinds of disaster through pictures 1.1.2 Sharing about the influence of natural disaster on human life based on the pictures 1.1.3 Sharing about the influence of natural disaster on human's influence based on personal experience	Natural disaster and its impacts on human life
		1.2 Knowing about signals of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)	1.2.1 Mentioning the signals of natural disaster through audio visual presentation 1.2.2 Mentioning the signals of natural disaster through stories from the olds (natural signs)	Signs of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)
2	2. Understanding about instructions cue, applying and knowing the ways to evacuate in case of disaster	2.1 Finding the meaning and apply the evacuation cues or instructions in case of disaster	2.1.1 Finding the meaning of evacuation cues or instructions in case of disaster 2.1.2 Applying the evacuation cues or instructions in case of disaster 2.1.3 Preparing emergency kit for mitigation 2.1.4 Simulating how to evacuate based on the cues heard	Evacuation cues in case of disaster
		2.2 Evacuation drills in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)	2.2.1 Deciding alternative route for evacuation in case of disaster 2.2.2 Deciding places to avoid in case of disaster 2.2.3 Simulating how to evacuate in case of disaster	Evacuation in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)
3	3. Understanding about possible cooperations in evacuation in case of disasters and their effects on disaster risk reduction	3.1 Practicing possible cooperation for evacuations in case of disaster	3.1.1 Mentioning kind of possible cooperation for evacuations in case of disaster 3.1.2 Practicing some cooperation ways for evacuation in case of disaster 3.1.3 Simulating how to cooperate in case of disaster	Cooperation for evacuation in case of disaster
		3.2 Explaining the relationship between cooperation for evacuations with disaster risk reduction	3.2.1 Explaining the advantages of cooperating in mitigation 3.2.2 Explaining the impacts of not cooperating each other in mitigation 3.2.3 Explaining the relationship between cooperation and mitigation	Relationship between cooperating each other with disaster risk reduction

# Development of content standard Unit/indicator : Elementary school Grade/semester : III/II

No.	Standard Competency	Basic Competency	Indicator	Main Material
1	1.1 Understanding about natural disaster, its signs and impacts on human life.	1.1 Knowing about natural disaster and its impacts on human life	1.1.1 Mentioning kinds of disaster through pictures 1.1.2 Sharing about the influence of natural disaster on human life based on the pictures 1.1.3 Sharing about the influence of natural disaster on human's influence based on personal experience	Natural disaster and its impacts on human life
		1.2 Knowing about signals of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)	1.2.1 Mentioning the signals of natural disaster through audio visual presentation 1.2.2 Mentioning the signals of natural disaster through stories from the olds (natural signs)	Signs of natural disaster (earthquake, tsunami, flood, landslide, storm, fire)
2	2. Understanding about instructions cue, applying and knowing the ways to evacuate in case of disaster	2.1 Finding the meaning and apply the evacuation cues or instructions in case of disaster	2.1.1 Finding the meaning of evacuation cues or instructions in case of disaster 2.1.2 Applying the evacuation cues or instructions in case of disaster 2.1.3 Preparing emergency kit for mitigation 2.1.4 Simulating how to evacuate based on the cues heard	Evacuation cues in case of disaster
		2.2 Evacuation drills in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)	2.2.1 Deciding alternative route for evacuation in case of disaster 2.2.2 Deciding places to avoid in case of disaster 2.2.3 Simulating how to evacuate in case of disaster	Evacuation in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)
3	3. Understanding about possible cooperations in evacuation in case of disasters and their effects on disaster risk reduction	3.1 Practicing possible cooperation for evacuations in case of disaster	3.1.1 Mentioning kind of possible cooperation for evacuations in case of disaster 3.1.2 Practicing some cooperation ways for evacuation in case of disaster 3.1.3 Simulating how to cooperate in case of disaster	Cooperation for evacuation in case of disaster
		3.2 Explaining relationship between cooperation for evacuations and disaster risk reduction	3.2.1 Explaining the advantages of cooperating in mitigation 3.2.2 Explaining the impacts of not cooperating each other in mitigation 3.2.3 Explaining the relationship between cooperation and mitigation	Relationship between cooperating each other and disaster risk reduction

Development of content standard
Unit/indicator : Elementary school
Grade/semester : IV/II

No.	Standard Competency	Basic Competency	Indicator	Main Material
1	1.1 Understanding about natural disasters, their causes, effects and impacts on human life.	1.1 Describing various kinds of disaster and their impacts on human life.	1.1.1 Create clippings about natural disasters 1.1.2 Tell a story about disasters based on the clippings 1.1.3 Create newspaper clipping about the impacts of disaster 1.1.4 Tell a story about the effects of disaster 1.1.5 Tell a story about the impacts of disaster based on own experience	Various disasters and their impacts on human life
		1.2 Desciribing various causes and effects of disasters (earthquake, tsunami, flood, landslide, storm, fire) and their signs.	1.2.1 Create newspaper clipping about the causes of disaster 1.2.2 Explaining about the causes of disaster based in the clipping 1.2.3 Tell a story about the impacts of disaster based on own experience 1.2.4 Explaining the solutions to prevent disasters 1.2.5 Making disaster simple detector based on area condition.	Various causes and effects of disasters (earthquake, tsunami, flood, landslide, storm, fire) and their signs.
2	Understanding how to evacuate in case of disaster and how to reduce disaster risk and deciding evacuation route	2.1 Finding the meaning and apply the evacuation cues or instructions in case of disaster	2.1.1 Finding the meaning of evacuation cues or instructions in case of disaster 2.1.2 Practicing how to evacuate in case of disaster 2.1.3 Simulating how to evacuate based on the cues heard	Evacuation cues in case of disaster
		2.2 Evacuation drills in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)	2.2.1 Deciding alternative route for evacuation in case of disaster 2.2.2 Deciding places to avoid in case of disaster 2.2.3 Simulating how to evacuate in case of disaster	Evacuation in case of disaster (earthquake, tsunami, flood, landslide, storm, fire)
3	3. Understanding about possible cooperations in evacuation in case of disasters and their effects on disaster risk reduction	3.1 Practicing possible cooperation to rescue themselves in case of disaster	3.1.1 Mentioning kind of possible cooperation for evacuations in case of disaster 3.1.2 Practicing some cooperation ways for evacuation in case of disaster 3.1.3 Simulating how to cooperate in case of disaster	Cooperation for evacuation in case of disaster
		3.2 Explaining relationship between cooperation in evacuation with disaster risk reduction	3.2.1 Knowing kind of cooperations to do 3.2.2 Knowing kind of post-disaster needs 3.2.3P ost-disaster mental/psychological recovery (children and parents)	Relationship between cooperating each other and disaster risk reduction

Development of content standard
Unit/indicator : Elementary school
Grade/semester : V/II

No.	Standard Competency	Basic Competency	Indicator	Main Material
4	Understanding the attitudes that must be held during and after disasters, and their impacts on disaster risk reduction	4.1 Describes the attitudes that must be held during and after disasters occur	4.1.1 Retelling the attitudes that must be held in case of disaster 4.1.2 Explaining examples of post-disaster attitudes based on own experience 4.1.3 Practicing the attitudes that must be held during and after disaster.	Attitudes that must be held in case of disaster
		4.2 Describing the relationship between those attitudes with disaster risk reduction	4.2.1 Classifying disaster risk reduction 4.2.2 Discussing about what attitudes that be must be held in case of disaster	Relationship between those attitudes with disaster risk reduction
		4.3Practicing these attitudes in case of disaster	4.3.1 Practicing the attitudes that must be held during and after disaster.	
5	Understanding self- preparedness and its impact on disaster risk reduction	5.1 Explaining self- preparedness in coping with disaster	5.1.1 Discussing about preparedness steps in dealing with natural disasters	Self-preparedness in dealing with disaster
		5.2 Describing the relationship between self-preparedness with disaster risk reduction	5.2.1 Prepare evacuation route map to reduce disaster risk 5.2.2 Explaining the relationship between self-preparedness with disaster risk	Relationship between self- preparedness with disaster risk reduction
		5.3 Practicing self- preparedness in case of disaster	5.3.1 Simulating self-preparedness in case of disaster	Self-preparedness in case of disaster
6	Understand the relationship between destruction of nature by man with natural disasters (earthquake, tsunami, flood, landslide, storm, fire)	6.1 Explaining about the relationship between nature destruction with natural disaster	6.1.1 Discussing about any kinds of nature destructions 6.1.2 Explaining about the relationship between nature destruction with natural disaster	Relationship between nature destruction with natural disaster
	and preservation as disaster prevention efforts	6.2 Explaining about preservation for disaster prevention	6.2.1 Discussing other forms of nature preservation 6.2.2 Explaining about preservation for disaster prevention 6.2.3 Participating in nature preservation in order to prevent disaster (landslide, flood)	Nature preservation as disaster prevention efforts

#### **About SEEDS Asia**

SEEDS Asia is a voluntary non - profit organization working to make vulnerable communities to respond to disasters. SEEDS Asia adopts a multi local threat-based approach to strengthen communities through prepared generation, training, and action, provide vulnerable people with the right tools and technologies, and share knowledge and ability. And promote relationship between stakeholders to prevent loss of life and suffering.

Towards a safer community, SEEDS Asia chooses interlocked and integrated approach on disaster management and environmental conservation under human security, to ensure a safer community in Asia Pacific region. As a non-profit organization registered in two countries, India and Japan, members of SEEDS which come from different backgrounds are drawn together to promote community-based disaster management.

SEEDS Asia (Kobe, Japan) was originally established in September 2006, and has worked extensively in the Asia-Pacific region to spread the concept of combination between environmental management and Disaster Risk Reduction, both are the expertise of SEEDS in India. SEEDS India is under one flatform with SEEDS ASIA which has been highly developed and assisted SEEDS Asia to reach vulnerable communities in a region.

#### YEU at Glance

YAKKUM Emergency Unit (YEU), a member of ACT (Action by Churches Together) International Alliance, has been established since 2001 as an emergency response team from YAKKUM (Christian Foundation for Public Health). YEU has a strategic vision to become a rapid and sustained emergency response and preparedness institution with a strong network People Based Organization, and international cooperation, accountability, and competent service and human resources staff s.

From nine years responding to disasters, up to January 2009, YEU have assisted 68 villages throughout Indonesia with 91.420 people and 11 villages in Myanmar and Gaza city with 7,980 people. The programs carried out had also developed from emergency response toward rehabilitation and disaster preparedness.

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#### Thanks to:

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