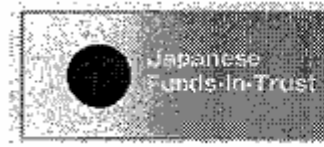


# GAMES

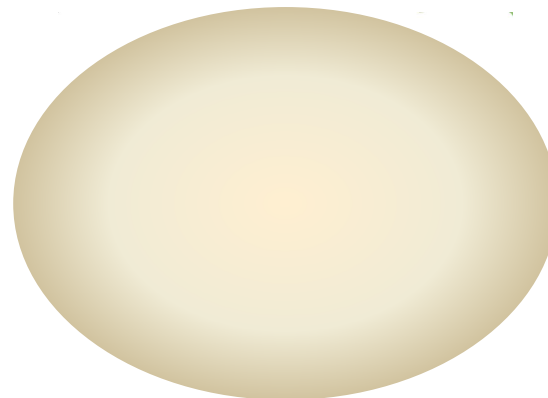
Riskland Game ISDR  
Simulation Game Indonesia



# ***SIMULATION GAME OF NATURAL DISASTER***

***Developed By:***

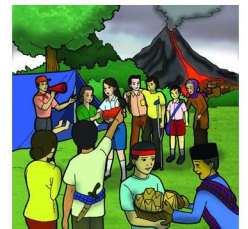
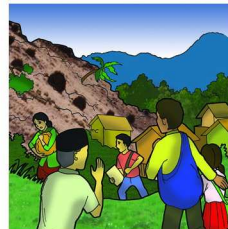
***Institute for Educational Studies and Development (IESD)  
Brawijaya University, Malang – Indonesia***



# **Description of Simulation**

## **Game of Natural Disaster**

- ✓ **educational simulation game that deals with disaster understanding and prevention.**
- ✓ **conveys messages written in the answering cards that help students to understand what natural disaster is and how some actions can reduce the impact of disasters**



# ***SIMULATION GAME OF NATURAL DISASTER***

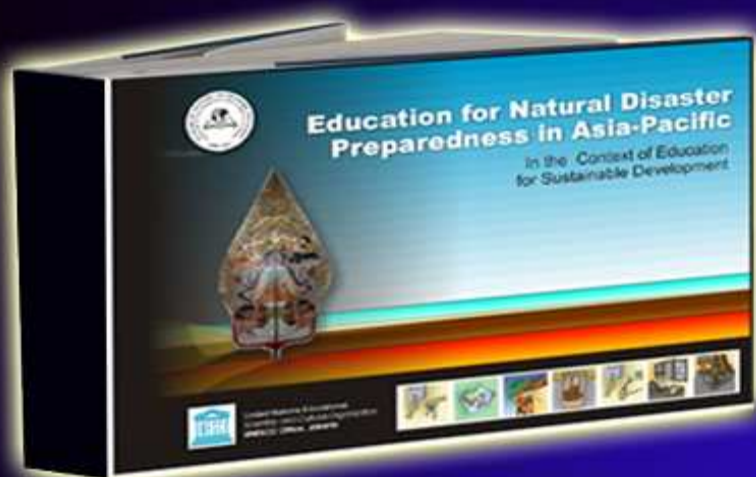
- ***TOOL KIT : 1 game board, 26 answering cards, 2 question cubes and 1 reference booklet***
- ***FORMAT: Simulation Game***
- ***TARGET : High School Students***
- ***EDUCATIONAL PURPOSES : Motivational, Instructional, Participatory and Follow-up Types***
- ***ASSUMED AREAS : South East Asia***
- ***STORY: 6 kinds of Natural Disaster, Earthquake, Tsunami, Floods, Landslides, Volcano Eruption, Hurricane as topics of understanding through game and discussion***





## Education for Natural Disaster Preparedness in Asia-Pacific in the Context of Education for Sustainable Development

### A Simulation Game of Natural Disaster



"A Simulation Game of Natural Disaster" is an educational board game that deals with disaster understanding and prevention. The game conveys messages written in the answering cards that help you understand what natural disaster is and how some actions can reduce the impact of disasters.

#### Rules of the game:

**Number of Players:** Two or more, but the best is four (it can be played in teams so that the entire class participate).

**What You Need:** the game board, two pictured cubes, 36 answering cards (which should be shuffled, before each new game), one reference booklet, an one sheet of cognitive evaluation form.

**How to play:** Determine who will play first by hand signing. Each player will receive 6 cards, while the other 12 cards are placed on the desk. The player then tosses the disaster cube and see what kind of natural disaster picture you get at the cube side. Now, turn the outer web-shape disc towards clock wise to match the picture. The second toss determines the kind of question written in the inner web-shape disc. Turn the inner disc as you do for the outer disc. If any player has a card matching with the question, then he/she must read it while the other listening. If among the players do not have the respective card, he/she must take one by one card from the desk until it matches with the question. Then the card must be placed on the desk and cannot be used again. The first player with no card is the winner. You may play as many time as you wish or check your answer with the reference booklet before answering the cognitive evaluation form provided.

Your tutor will score the cognitive attainment.

#### If your score is :

<50 = Not yet prepare and you need to practise it again  
50-75 = Average and you are advice to frequently practise  
>75 = Distinction, congratulation, you may expect to survive during disaster.

### A Simulation Game of Natural Disaster







### EARTHQUAKE

**What is ?**  
Violent shaking or joint of the earth's surface due to movements originating from deep underground.  
*What is the synonymous name of earthquake happened in 26 December 2004 in the Indian ocean?*

### EARTHQUAKE

**Why does it occur?**  
Earthquakes are produced at plate boundaries where two plates are colliding, spreading apart, or sliding past each other. When these plates move suddenly they release an incredible amount of energy that is changed into wave movement

### EARTHQUAKE

**How do you recognise it?**  
\* Shaking and tremor of things  
\* Sudden cracked roads or buildings  
\* *What device measures the power of earthquake?*

### EARTHQUAKE

**What do you do before disaster?**  
\* Pick safe places in each room  
\* Practice drop, cover, and hold on  
\* Secure your home's structure and objects inside and outside

### EARTHQUAKE

**What do you do during disaster?**  
\* If inside when the shaking starts, move no more \* Than a few steps and drop, cover, and hold on  
\* If outside, find a clear spot and drop

### EARTHQUAKE

**What do you do after disaster?**  
\* Expect after shocks  
\* Check yourself and then others  
\* Look for fires

### TSUNAMI

**What is ?**  
Gigantic wave or series of waves, caused by an earthquake, volcanic eruptions or landslides under the sea.  
*What is the literal meaning of tsunami in Japanese language?*

### TSUNAMI

**Why does it occur ?**  
Earthquake-induced movement of the ocean floor most often generates tsunamis. Landslides, volcanic eruptions, and even meteorites can also generate tsunamis.

### TSUNAMI

**How do you recognise it ?**  
\* Immediate noticeable recession in water away from the shoreline.  
\* *Even though Seumeleu island is the closest to the epicenter earthquake happened in December, 26, 2004, the number of casualties is minimal, Why?*

# ATTAINMENT EVALUATION



If your score is :  
<50 = Not yet prepare and you need to practise it again  
50-75= Average and you are advice to frequently practise  
>75 = Distinction,  
***congratulation, you may expect to survive during disaster.***