

# Integrate Approach on Natural Disaster to Create a Sustainable Hazard Management

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natural disaster prevention, a comparative study, integrated and sustainable system

**Abstract:** Throughout a **collaborative research** and fieldwork in Indonesia, Japanese and Indonesian students notice a difference between **approaches to disaster prevention** in Japan and Indonesia. We propose an idea to **create a community**, recruiting high school students from nearby communities, to discuss natural disaster prevention.

## 1. Introduction

### 1.1 The Purpose of the Present Paper

- To **understand the differences** between Indonesia and Japan regarding natural disasters
- To **propose ideas** for more effective natural disaster prevention.

### 1.2 Background of the Project

Indonesia and Japan are countries that are often met by many kinds of natural disasters such as volcanic eruption, landslide, earthquakes, and tsunami. By sharing ideas considering natural disaster prevention, it will be possible to create better solution to such problems.



above: Dome Village in Yogyakarta, Indonesia

### 1.3. Research Question

What is an **effective system** for natural disaster prevention considering the measure taken in each country?

## 2. Methods and Results

### 2.1. Project Design / Research Method

**step 1: collecting information** on measures that Japanese and Indonesian local & national governments take for natural disaster prevention (school-by-school project)

**step 2: video conferences** for information sharing and discussion before Yogyakarta fieldwork (collaborative preparation)

**step 3: discussions** in the partner school; **visiting** Regional Health Office of Sleman Regency, Yakkum Emergency Unit, and Dome Village; **interviewing** residences in Dorm Village (**joint fieldwork** in Yogyakarta)

### 2.2. Outcomes of the Project (Findings)

#### In Japan

- No integrated** Department for disaster management
- Evacuation drills** and making hazard maps, as **common** practices
- Shared wisdom for disaster prevention in the forms of sayings

#### In Indonesia

- Integrated** Department for disaster management
- Evacuation drills** less commonly practiced
- Limited sharing of local wisdom for disaster prevention because of

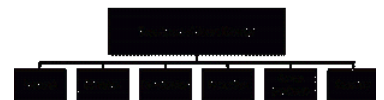
### 2.3 Discussion

A series of collaborative study projects, followed by intensive discussions done by the participants from different backgrounds and cultures, led us to present the following new idea to the society.

- 1) our proposal creating a community of high school students for **raising awareness** of disaster prevention
- 2) the role of the community
  - a place where members hold an **international symposium** on disaster prevention, the issue, gain and **share knowledge** about disaster prevention, and discuss about the issues with high school students worldwide.
  - a place to propose a new idea regarding **methods to educate people** about natural disaster prevention.
- 3) additional specific proposals for each country

#### For Japan

our proposal  
creating **Department of Disaster Prevention** in the government



advantages

- able to standardize rescue process
- able to **supply** food, financial aid, or temporary housing in **more organized** ways
- able to plan a **long-term** hazard management policy

#### For Indonesia

our proposal

making emergency drills **mandate** in all schools in Indonesia

advantages

- able to **enhance the awareness** of disaster prevention

Q: "Are you aware of disaster prevention?"

participants (n=31)	"Yes" 66%	"No" 34%
non-participants (n=73)	"Yes" 52%	"No" 48%

## 3. Conclusion

### 3.1 Obstacles for our proposals

- a proposal for integrated institution declined in the past
- **diverse and difficult geographical conditions** to plan evacuation drills in every school in Indonesia

### 3.2 Implication

Once our idea is spread, we will gain the understanding that **it is too late after the disaster happens**. Japan and Indonesia can leverage their strength, and consequently, good results can be expected.

### Reference

[http://www.bousai.gp.jp/tolink/teambousaijpn\\_2.html](http://www.bousai.gp.jp/tolink/teambousaijpn_2.html)  
<http://hdl.handle.net/10112/11560>