

WORKSHOP TO IMPROVE THE COMPILATION OF RELIABLE DATA ON DISASTER OCCURANCE AND IMPACT

Bangkok, Thailand
2 – 4 April 2006

INDONESIA DISASTER MANAGEMENT INFORMATION SYSTEM

**THE NATIONAL COORDINATING BOARD
FOR DISASTER MANAGEMENT
BAKORNAS PB**

www.bakornaspbp.go.id

INDONESIA

OUTLINE

- Disaster management in Indonesia
- The role of data and information in the disaster management
- Challenges

Disaster Management In Indonesia

Overview

- ◆ Indonesia is located in the disaster very prone area.
- ◆ National disaster management policies focus on :**The Holistic Approach to cope with Disasters**
 - Focusing on prevention and mitigation beside repressive and rehabilitative disaster management measures
 - Giving all efforts to emergency response and immediate recovery in the disaster impacted area
 - Involving all stakeholders (Government, private sectors and community) in the disaster management measures
- ◆ In the decentralization era, districts/municipalities have more authority to manage their region. Hence, they have more responsibility to cope with disaster.
- ◆ In central level, disaster management measures are done in the sectoral basis within the coordination of BAKORNAS PB
- ◆ In fact, Disaster management in Indonesia still concentrates in emergency response
- ◆ Need accurate and reliable disaster data as a basic consideration for Disaster management and development planning.

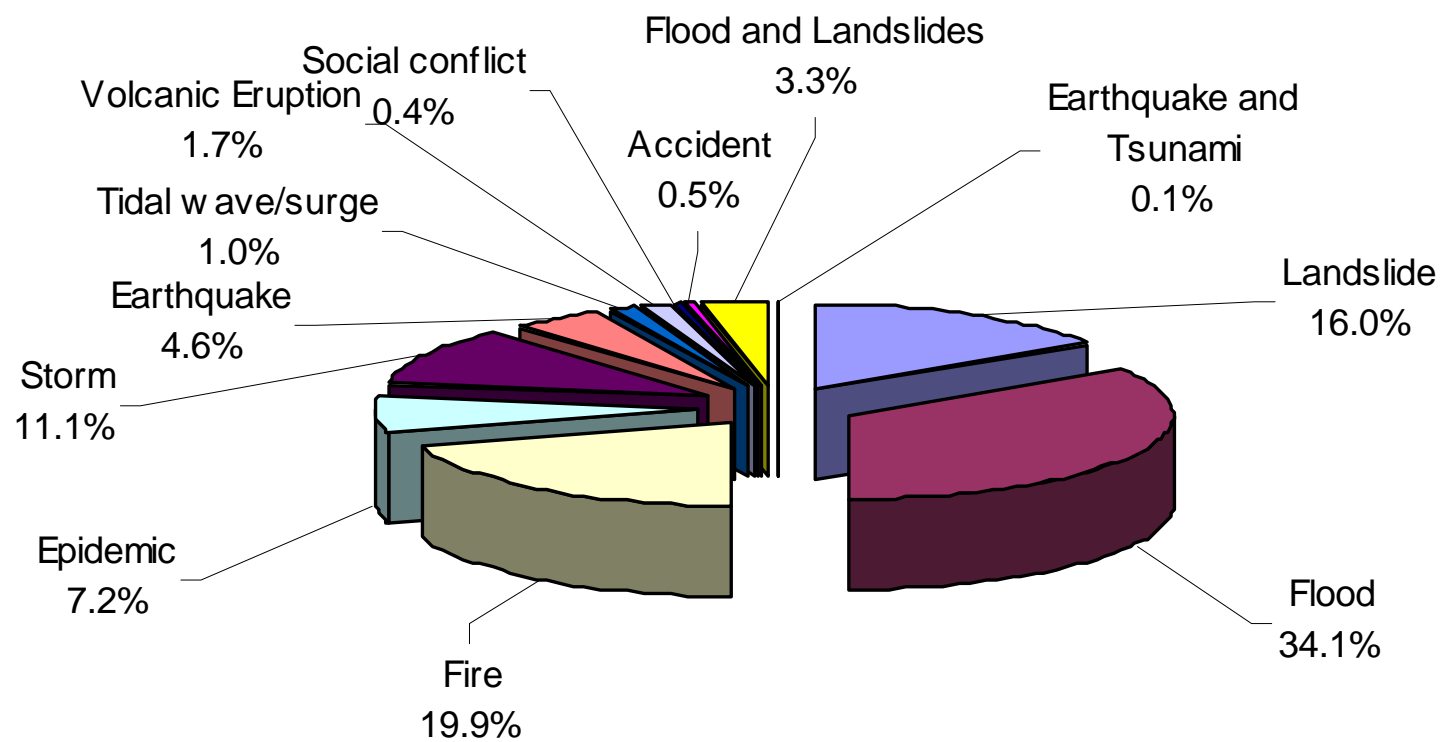
Summary of Natural Disasters in Indonesia (2002 - 2005)

No	Type of Disaster	Event	Death	IDP's	Houses
1	Landslide	228	553	30,275	3,733
2	Flood	488	773	1,339,664	83,541
3	Fire	285	79	40,285	11,139
4	Epidemic	103	923	31,997	-
5	Storm	159	22	7,722	10,932
6	Earthquake	66	1,058	116,681	75,784
7	Tidal/surge	15	0	1,030	92
8	Volcanic Eruption	24	2	79,359	6
9	Social conflict	6	38	149	-
10	Accident	7	327	-	-
11	Flood and Landslides	47	139	74,123	10,841
12	Earthquake and Tsunami	1	128,858	522,462	179,321
TOTAL		1,429	132,772	2,243,747	375,389

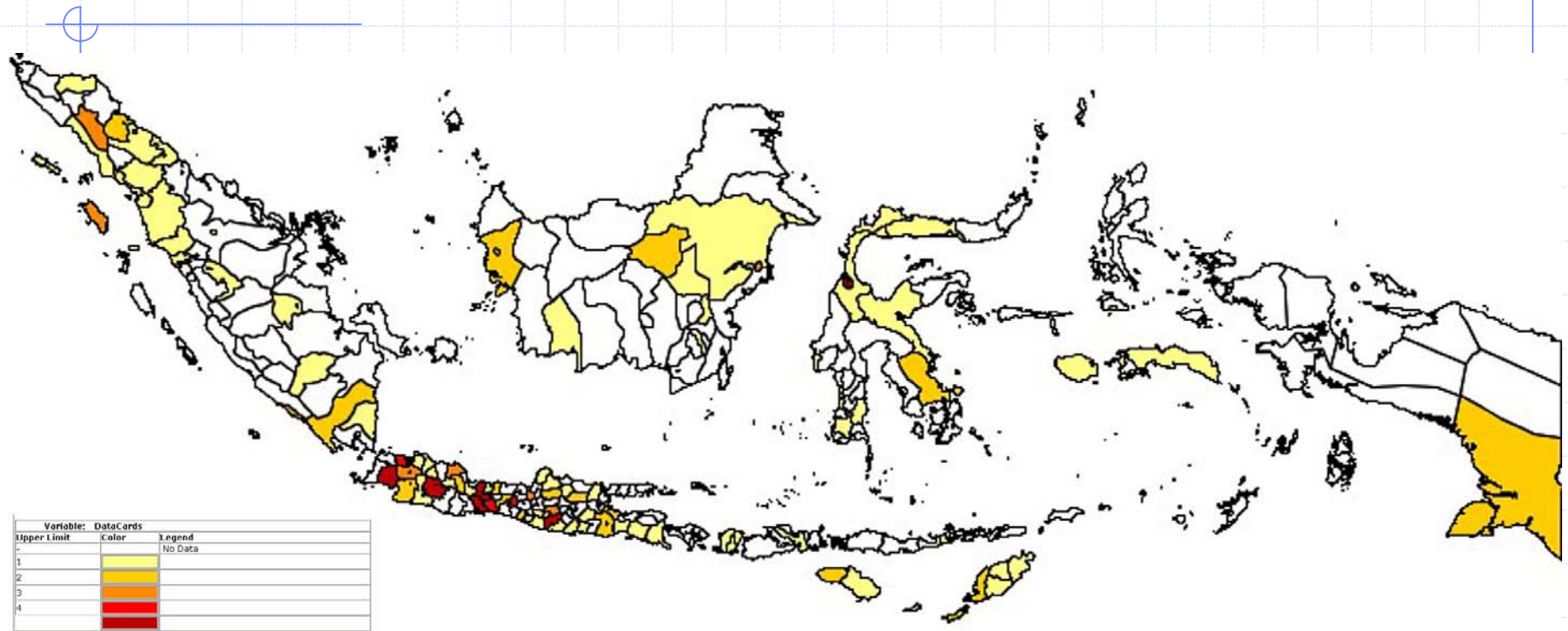
Missing People during Earthquake and Tsunami Aceh : 37.063 people

Total people died : 165.921 people

DISASTER OCCURANCE IN INDONESIA 2002-2005



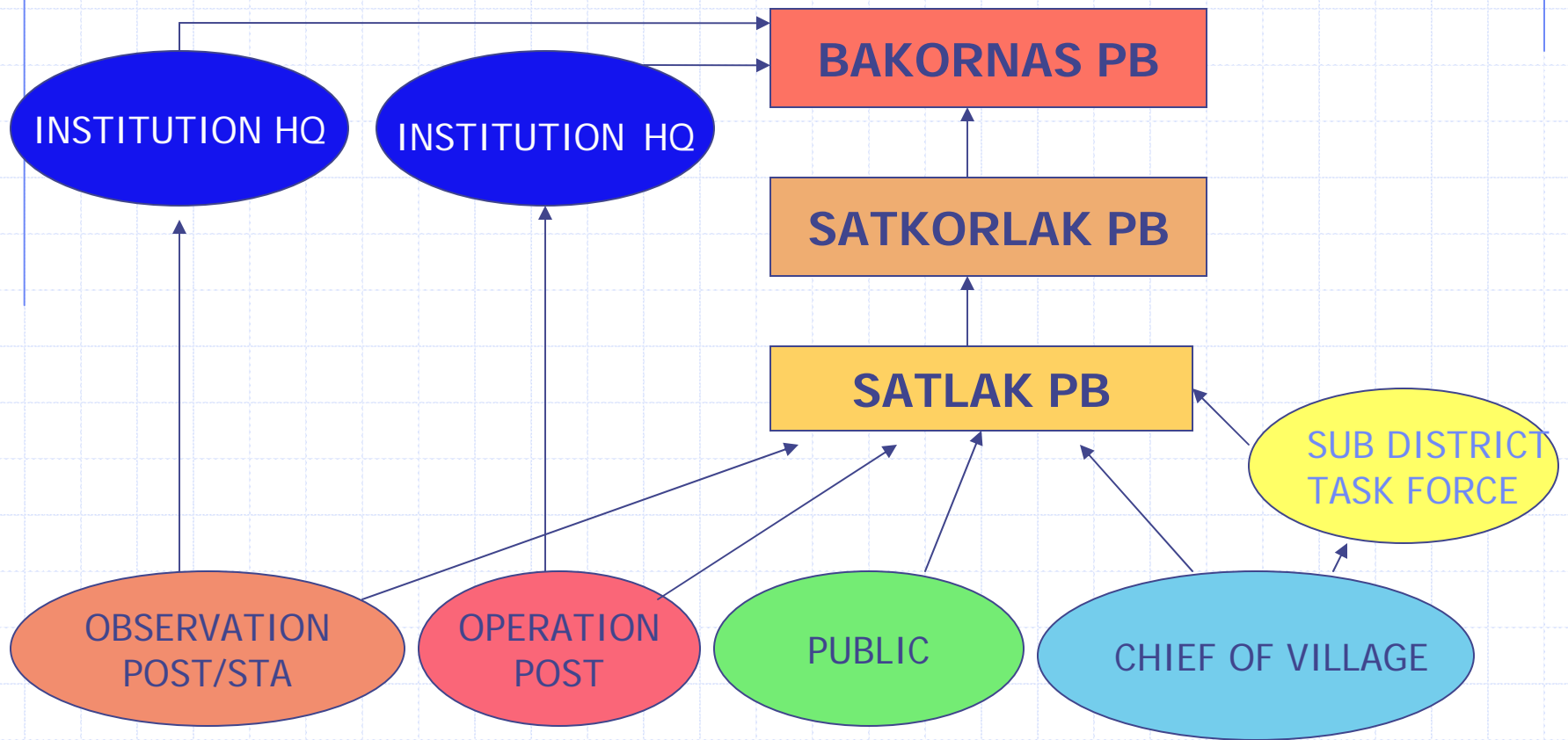
Disaster Events Distribution Map



Remarks :

- Base map need to be updated, many data unable to fit in the base map. It Needs 149 more districts to be added in the base map.
- Created by using Disinventar
- Disaster Data 2005, Bakornas PB

OPERATING PROCEDURE FOR REPORTING DISASTER OCCURANCE



Problems in disaster data collecting

- Various sources with different format and content (figure)
- Media is quicker than official report but the accuracy is often low.
- Estimation disaster loss data is very rough.
- Inaccurate information leads to take improper disaster management action and enable to create chaotic situation (Padang earthquake, 2005)
- Inaccurate information are often deflected into political issue against government
- Indonesia consists of 33 provinces and 440 districts/municipalities. Many districts have limited communication facilities. They are not ready to report immediately after disaster occurred or even in the regular basis.

Realize the need of:

- Development of Disaster management information system
- Integration disaster data and information

THREE MAIN PROBLEMS OF THE DEVELOPMENT OF INFORMATION SYSTEM IN INDONESIA

◆ **COMPATIBILITY**

- **Software**
- **Content/Data**

◆ **HUMAN RESOURCES**

- **Capability**
- **Promotion & mutation**
- **Incentives**

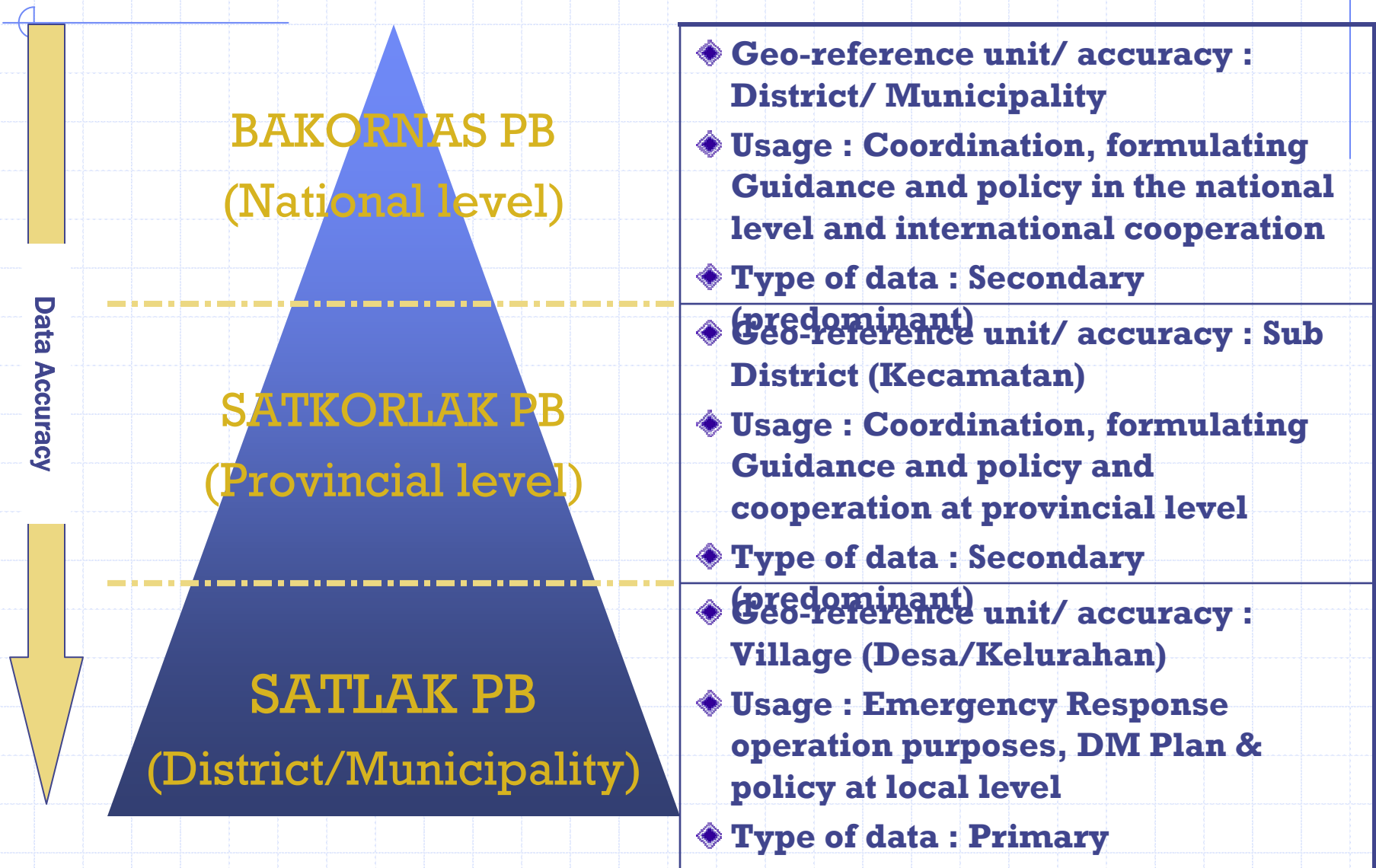
◆ **SUSTAINABILITY**

- **High Cost in the Development, operation and maintenance of the system**
- **Need Manual and intensive dissemination**
- **Limited use of Output**

ROLE OF DATA AND INFORMATION IN THE DISASTER MANAGEMENT

- ◆ Disaster management activities need quick and accurate decision making processes, therefore accurate and reliable data/ information are required
- ◆ Data/ information of disaster contribute a vital role in the disaster management plan which is in turn will be incorporated with development plan.
- ◆ As an achievement indicator for measuring the implementation of National Action Plan for Disaster Risk Reduction.

Disaster Data and Information Characteristics



Proposed Data Collecting Mechanism

Components	Actual	Proposed
Data Source	Satkorlak PB Relevant Institution, Media	<ul style="list-style-type: none"> ■ Satkorlak PB in terms of regular disaster report and rehabilitation and reconstruction project proposal ■ Relevant Institution
Data Communication	One way/passive	Two ways/active
Communication tools	Fax, phone Internet, <i>www.bakornaspbp.go.id</i>	Multimedia :, Radio, Fax, phone, Internet <i>www.bakornaspbp.go.id</i>
Validation & Verification	Satkorlak PB /provincial level	SatkorlakPB compare to other sources, on site verification if necessary
Terminology and data unit	vary	Terminology and unit must be uniform. It needs manual/Guideline/SOP
Communication data officer	duty officer of coordination post	Operation Center/Data and Information Bureau
Data Analysis	Very limited, Ms. Excel application, No Spatial data/map	Enhancing process and analysis data, introducing new application program, spatial data format
The use of Information system	Very limited	Significant, achievement indicator for the implementation of disaster management plan

Challenges

- ◆ Indonesia need to develop effective Disaster management information system to cope with geographical situation (archipelago country) and the frequency and variety of disaster
- ◆ Needs user friendly application program for disaster management information system
- ◆ Many relevant institutions/sectors have disaster data and information in their own systems, so data interface is necessary
- ◆ Manual will be very important to standardize data format



**Thank You
for
Your Attention**