Current Achievement of Indonesia Disaster Statistics and indicators

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• SDGs, the need for inclusive and resilience development. Development for the people and give strong attention to vulnerable societies: poor people.

• Vulnerable people should include in the policy planning as part of risk management. Need to be supported by timely, relevant and quality data on disaster related.

• The challenge: still lack of policy relevant data on disaster.

• BPS Statistics Indonesia give strong attention to provide data on disaster related issues. Using several approaches: Village/spatial approach, household approach, and compiling secondary data.

• The main focus of data collection in line with the SDGs: to get information for the whole people especially for those among poor and vulnerable groups.
• Spatial approach: Village Potential Censuses 2014 – PODES (three times in 10 years)

• Podes approach (spatial approach) collect the information related to disaster from villages (82 190 villages) through interview directly with the village officials and community leaders.

• We collect data on each village whether experiencing natural disaster with time reference within last 3 years: Flood, Flash Flood, Tide, Forest Fire, Drought, Earthquake, Typhoon/Cyclone, Landslide, and others.

• Podes also collects data on the effort of anticipating disaster by the people and how the mitigation of natural disaster (tsunami early warning system, safety equipment, community self-help, safety advisory etc)
• Podes also collects data on environment pollution: water pollution, land pollution, and air pollution.
• There are also information on sources of environment pollution such as from domestic waste, factory, and other source of pollution.
• Podes also collect information from each village of the availability of health infrastructure facilities such as Community Health Center (Puskesmas) Midwife Facility, Pharmacy, Integrated Health Service (Posyandu).
• There are also variables about the communication facilities and accessibility of each village. The availability of telephone, internet stall, the availability of BTS (Base transfer Station), The strength of the cellular phone signal.
• There are also data on the accessibility of each village: whether the village can be reached by car through the year.
• These types of data mentioned can be used in case of disaster.
National Socio Economic Survey:

2014 – Social Resilience Module (every 3 years)

- We also collect data on disaster through Nasional Socio Economic Survey (NSES). Variables collected are: Household Experiencing Natural Disasters; Households who Know how to Survive in Case of Natural Disasters; Household member who Traumatic due to Natural Disaster; Household Ever Following Training /Simulation Disaster Rescue.

- From NSES: the Health and Housing Module (2013 and 2016) we also collect data on disaster but limited to whether households sample experienced flood or not.

- Although only limited variables collected from NSES but these sets of data can be disaggregated by social economic characteristics of respondents. There are many informations available if we do cross tabulation with other informations collected by NSES.

- For example we could do analyze the data on disaster victims by decile or presentile of the socio economic status of the households.
• **Secondary Data from National Agency for Disaster Management (BNPB)**
  - Number of Natural Disaster by Type of Disaster
  - Number of Victims Due to Natural Disaster (person)
  - Number of Damaged Houses Due to Natural Disaster
  - Disaster Risk Index

• **Secondary Data from Meteorology, Climatology, and Geophysics Agency (BMKG)**
  - Earthquake Frequency Based on Depth andMagnitude
Number of Villages by Type of Natural Disaster, 2014

Source: Village Potential Censuses 2014

Total number of village in 2014: 82,190; sub districts: 7,074 and regencies/municipalities: 511
Number of Villages That Experiencing Flood Disaster, 2014

Total number of village in 2014: 82,190; subdistricts: 7074 and regencies/municipalities: 511

Source: Village Potential Censuses 2014
Percentage of Villages that Experienced Natural Disaster Incident by Province, 2014

Source: Village Potential Censuses 2014
Number of Villages by Effort in Anticipation/Mitigation of Natural Disaster, 2014

- Natural Disaster Early Warning System: 5942.0
- Evacuation Route: 4911.0
- Safety Equipment: 1548.0
- Tsunami Early Warning System: 559

Source: Village Potential Censuses 2014
Percentage of Household who Experiencing Natural Disasters and Percentage of Household who Traumatic Due to Natural Disaster, 2014

Source: National Socio Economic Survey 2014 – Social Resilience Module
Percentage of Households who Know how to Survive in Case of Natural Disasters, 2014

Source: National Socio Economic Survey 2014 – Social Resilience Module
Percentage of Households Knowing the Signs or Warning to Cope with Disaster Emergency Events and Percentage of Household Ever Following Training /Simulation Disaster Rescue, 2014

Source: National Socio Economic Survey 2014 – Social Resilience Module
Number of Natural Disaster by Types of Disasters 2013-2014

<table>
<thead>
<tr>
<th>Disaster Type</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood</td>
<td>683</td>
<td>559</td>
</tr>
<tr>
<td>Flood and Landslide</td>
<td>47</td>
<td>37</td>
</tr>
<tr>
<td>Earthquake</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Tidal Wave/Abrasion</td>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td>Forest Fires</td>
<td>26</td>
<td>101</td>
</tr>
<tr>
<td>Volcanic Eruption</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: National Agency for Disaster Management
Number of Victims Due to Natural Disaster (person), 2013-2014

<table>
<thead>
<tr>
<th></th>
<th>Death</th>
<th>Injured</th>
<th>Disappeared</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>468</td>
<td>3410</td>
<td>44</td>
</tr>
<tr>
<td>2014</td>
<td>550</td>
<td>2104</td>
<td>72</td>
</tr>
</tbody>
</table>

Source: National Agency for Disaster Management
Number of Damaged Houses Due to Natural Disaster, 2013-2014

<table>
<thead>
<tr>
<th>Type</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally damaged/ severely damaged</td>
<td>17789</td>
<td>20087</td>
<td>59644</td>
</tr>
<tr>
<td>Moderate damaged</td>
<td>12597</td>
<td>6069</td>
<td></td>
</tr>
<tr>
<td>Lightly damaged</td>
<td></td>
<td></td>
<td>29448</td>
</tr>
</tbody>
</table>

Source: National Agency for Disaster Management
Flood Disaster Risk Index
Conclusion

• We do recognize that for now and the near future, it is important for Indonesia to provide disaggregate data related to disaster and its socio economic effects (using village based data and NSES data).

• Data from Podes (village based census) combined with data from population census could help much in explaining the occasion or incidence of disaster and those people who are vulnerable to disaster: poor people (for evidence based policy making related to disaster risk reduction)

• Podes data could also be used for preventive effort related to disaster and for enhancing the resilience of society/of the people especially in the areas of mitigation of disaster risk.
Thank you

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Indonesia Disaster Data & Information

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INDONESIA
Indonesia Disaster Database
DIBI (Data Informasi Bencana Indonesia)
DIBI (Data dan Informasi Bencana Indonesia)

Available Data

Statistical analysis

The matic maps

Advanced analysis

Delineator

Dimension

Integration
DIBI development

2014
- Application improvement, migration from php to nodejs

09/13
- Updating disaster data events period 1815-2009

2008
- DIBI based DesInventar adopted
- Online access at http://dibi.bnpb.go.id/
DIBI development

2017
- Qualitative data support, geospasial improvement, more collaboration with other resources
- .................................................................

2016
- DIBI Provinces Level, Multi languages

2015
- Add infographic profile by provinces

2014
- Add population data BPS (Housing and Population Census 2010, Population Projection 2010-2035, Podes 2011)
DIBI (PHP Version before 2014)
DIBI (NodeJs Version 2015)
Mechanism of Disaster Data Management in BNPB

Emergency Operation Center (EOC)

Regional verification & validation

Relevant Agency verification & validation

Center of Data, Information, and Public Relation

Daily Report EOC

Report to President

Exclusive Report

- Disaster Data Handbook

- DIBI Application

BPBD District

Relevant Ministries/Agencies

Media
DIBI Usage

1. Prevention and Preparedness Unit
   - Used to determine the level of hazard, vulnerabilities, and disaster risks.
   - Used to prepare a contingency plan in facing a disaster.

2. Emergency Management Unit
   - Used to conduct emergency response operations.
   - Used to provide emergency support more targeted and equitable.

3. Rehabilitation and Reconstruction Unit
   - Used to retrieve related policy regional development priorities to be relocated

4. Logistics and Equipment Unit
   - Distribution logistics and equipment support during the disaster, so that aid targeted
DIBI In Action

DATA DAN INFORMASI BENCANA INDONESIA
BADAN NASIONAL PENANGGULANGAN BENCANA

Hover the mouse over the map to see province name and the data.

Layer Basar
- Jumlah Kependudukan
- Menurun
- Tertunda
- Meinganggi
- Tidak
- Human Rusak Berat
- Human Rusak Runggu

Layer Kedua
- Jumlah Kependudukan
- Menurun
- Tertunda
- Meinganggi
- Tidak
- Human Rusak Berat
- Human Rusak Runggu

Tahun
1835 s.d. 2015

Submit reset

Aksi Teror / Sabotase
Badur
Banah dan Tanah Longsor
Gelombang Pasang / Aqabi
Genap Bumi
Gempa Bumi dan Tsunami
Hama tanaman
Kebakaran
Kebakaran Mutan dan Lahan
BADAN NASIONAL PENANGGULANGAN BENCANA

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