CONTENT

1. GENERAL INFORMATION
   1.1 Geographical Information
   1.2 Demographical Information
   1.3 Historical Information

2. NATURAL HAZARD IN INDONESIA
   2-1. Natural Hazards Likely to Affect the Country
   2-2. Major Disasters in Indonesia

3. DISASTER MANAGEMENT SYSTEM
   3-1. Administrative System
   3-2. Legal System and Framework
   3-3. Structure of Disaster Management

4. DISASTER MANAGEMENT STRATEGY, POLICY AND PLAN

5. THE IMPLEMENTATION OF HYOGO FRAMEWORK FOR ACTION (HFA)

6. RECENT MAJOR PROJECTS ON DISASTER RISK REDUCTION

8. ADRC Counterpart (Organization & Contact Information)

9. REFERENCES
1. General Information

- **Official Name**: Republic of Indonesia
- **Name in official language**: Republik Indonesia
- **Motto**: “Bhinneka Tunggal Ika” / “Unity in Diversity”
- **National Ideology**: Pancasila
- **Anthem**: “Indonesia Raya”
- **National Flag**: The flag is a simple bicolour with two equal horizontal bands, red (top) and white (bottom) with an overall ratio of 2:3. The red colour represented the blood shed in the War of Independence, stands for courage, while the white could be understood to symbolise the purity of the Indonesians. Another is that red represents the human body or physical life, while white represents the soul or spiritual life; together they stand for a complete human being.

- **Head of State**: President
- **Legislature**: People’s Consultative Assembly
- **Capital**: Jakarta
- **Official Language**: Indonesia
- **Religion**: Islam, Protestantism, Chatolicism, Hinduism, Buddhisme, Confuciasm
- **Demonym**: Indonesian
▪ **Area**: The total area in Indonesia is 1,913,578.68 km², consisting of 34 provinces, 17,504 islands, and 12,827 coastal islands.

▪ **Time Zones**: Indonesia is divided into three time zones:
  1. Western Indonesian Time (WIT): Sumatera, Java, West Kalimantan, and Central Kalimantan.

▪ **Population**: 260,581,100 (2016)

▪ **National currency**: Indonesian rupiah (Rp) (IDR)
1.1 Geographical Information

Indonesia officially the Republic of Indonesia, is a sovereign transcontinental country located mainly in Southeast Asia with some territories in Oceania. Situated between the Indian and Pacific oceans, it is the world's largest island country, with more than thirteen thousand islands. It has an estimated population of over 260 million people (September 2016) and is the world's fourth most populous country, most populous Austronesian nation, as well as the most populous Muslim-majority country. The world’s most populous island of Java contains more than half of the country’s population.

Indonesia is an archipelagic country extending 5,120 kilo meters from east to west and 1,760 kilo meters from north to south, with 3 time zones - Eastern, Central, and Western. Lying along the equator, Indonesia has a tropical climate, with two distinct monsoonal wet and dry seasons. Average annual rainfall in the lowlands varies from 1,780–3,175 millimeters (70-125 in), and up to 6,100 millimeters (240 in) in mountainous regions. Mountainous areas-particularly in the west coast of Sumatra, West Java, Kalimantan, Sulawesi, and Papua-receive the highest rainfall. Humidity is generally high, averaging about 80%. Temperatures vary little throughout the year; the average daily temperature range of Jakarta is 26-30 °C (79-86 °F).

Indonesia is an archipelago comprising approximately 17,508 islands. It has 34 provinces with over 238 million people, and is the world's fourth most populous country. Indonesia is a republic, with an elected legislature and president. The nation's capital city is Jakarta. The country shares land borders with Papua New Guinea, East Timor, and Malaysia. With total area is 5.2 million km² (1.9 million Km² of land and 3.3 million Km² of ocean), West - East Distance edge is 5.110 Km.
1.2 Demographic Information

The current population of Indonesia is 261,270,413 as of Saturday, September 24, 2016, based on the latest United Nations estimates. Indonesia population is equivalent to 3.5% of the total world population. Indonesia ranks number 4 in the list of countries by population. The population density in Indonesia is 144 per Km² (372 people per mi²). 53.4% of the population is urban (140,824,151 people in 2016). The median age in Indonesia is 28.6 years. 58% of the population live on the island of Java, the world's most populous island.

Despite a fairly effective family planning program that has been in place since the 1967, for the decade ending in 2010, Indonesia's population growth was 1.49 percent. At that rate, Indonesia's population is projected to surpass the present population of the United States and would - if the current US population did not rise - become the world's third biggest after China and India by 2043. Some say family planning should be revitalised based on the 1967 program to avoid Indonesia becoming the world's third most populous country, but this aim has faced a hurdle of religiously-based opinion that to follow family planning is equivalent to not being grateful to God.

Indonesia currently possess a relatively young population, thus implies a — potentially — large workforce and consumer base. Indonesia's total median age is 28.2 years (2011 estimate). This indicates that one half of the population is older than 28.2 years, while the other half is younger than this number.

Indonesia includes numerous ethnic, cultural and linguistic groups, some of which are related to each other. Since independence, Indonesian (a form of Malay and the official national language) is the language of most written
communication, education, government, and business. Many local ethnic languages are the first language of most Indonesians and are still important.

The historical population of Indonesian can be shown as follow:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Yearly % Change</th>
<th>Yearly Change</th>
<th>Density (P/Km²)</th>
<th>Country's Share of World Pop</th>
<th>World Population</th>
<th>Indonesia Global Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>260,581,100</td>
<td>1.17 %</td>
<td>3,017,285</td>
<td>144</td>
<td>3.51 %</td>
<td>7,432,663,275</td>
<td>4</td>
</tr>
<tr>
<td>2015</td>
<td>257,563,815</td>
<td>1.29 %</td>
<td>3,190,138</td>
<td>142</td>
<td>3.50 %</td>
<td>7,349,472,099</td>
<td>4</td>
</tr>
<tr>
<td>2010</td>
<td>241,613,126</td>
<td>1.32 %</td>
<td>3,071,685</td>
<td>133</td>
<td>3.49 %</td>
<td>6,929,725,043</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>226,254,703</td>
<td>1.35 %</td>
<td>2,942,855</td>
<td>125</td>
<td>3.47 %</td>
<td>6,519,635,850</td>
<td>4</td>
</tr>
<tr>
<td>2000</td>
<td>211,540,428</td>
<td>1.44 %</td>
<td>2,916,517</td>
<td>117</td>
<td>3.45 %</td>
<td>6,126,622,121</td>
<td>4</td>
</tr>
<tr>
<td>1995</td>
<td>196,957,845</td>
<td>1.66 %</td>
<td>3,104,205</td>
<td>109</td>
<td>3.43 %</td>
<td>5,735,123,084</td>
<td>4</td>
</tr>
<tr>
<td>1990</td>
<td>181,436,821</td>
<td>1.92 %</td>
<td>3,284,925</td>
<td>100</td>
<td>3.42 %</td>
<td>5,309,667,699</td>
<td>4</td>
</tr>
<tr>
<td>1985</td>
<td>165,012,195</td>
<td>2.27 %</td>
<td>3,504,366</td>
<td>91</td>
<td>3.4 %</td>
<td>4,852,540,569</td>
<td>4</td>
</tr>
<tr>
<td>1980</td>
<td>147,490,366</td>
<td>2.44 %</td>
<td>3,353,250</td>
<td>81</td>
<td>3.32 %</td>
<td>4,439,632,465</td>
<td>4</td>
</tr>
<tr>
<td>1975</td>
<td>130,724,118</td>
<td>2.63 %</td>
<td>3,177,867</td>
<td>72</td>
<td>3.22 %</td>
<td>4,061,399,228</td>
<td>5</td>
</tr>
<tr>
<td>1970</td>
<td>114,834,781</td>
<td>2.74 %</td>
<td>2,905,177</td>
<td>63</td>
<td>3.12 %</td>
<td>3,682,487,691</td>
<td>5</td>
</tr>
<tr>
<td>1965</td>
<td>100,308,896</td>
<td>2.7 %</td>
<td>2,503,277</td>
<td>43</td>
<td>3.02 %</td>
<td>3,322,495,121</td>
<td>6</td>
</tr>
<tr>
<td>1960</td>
<td>87,792,512</td>
<td>2.57 %</td>
<td>2,092,943</td>
<td>49</td>
<td>2.91 %</td>
<td>3,018,343,828</td>
<td>6</td>
</tr>
<tr>
<td>1955</td>
<td>77,327,799</td>
<td>2.14 %</td>
<td>1,556,896</td>
<td>43</td>
<td>2.8 %</td>
<td>2,758,314,525</td>
<td>6</td>
</tr>
</tbody>
</table>

Figure: Population of Indonesia (2016 and historical)  
(source: www.worldometers.info)
1.3 Historical Information

The history of Indonesia has been shaped by its geographic position, its natural resources, a series of human migrations and contacts, wars and conquests, as well as by trade, economics and politics. Indonesia is an archipelagic country of 17,508 islands (6,000 inhabited) stretching along the equator in South East Asia. The country's strategic sea-lane position fostered inter-island and international trade; trade has since fundamentally shaped Indonesian history. The area of Indonesia is populated by peoples of various migrations, creating a diversity of cultures, ethnicities, and languages. The archipelago's landforms and climate significantly influenced agriculture and trade, and the formation of states. The boundaries of the state of Indonesia represent the 20th century borders of the Dutch East Indies.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch East India Company</td>
<td>20 March 1602</td>
</tr>
<tr>
<td>Dutch East Indies</td>
<td>1 January 1800</td>
</tr>
<tr>
<td>Japanese occupation</td>
<td>9 March 1942</td>
</tr>
<tr>
<td>Independence declared from the Netherlands</td>
<td>17 August 1945</td>
</tr>
<tr>
<td>United States of Indonesia (USI)</td>
<td>27 December 1949</td>
</tr>
<tr>
<td>USI dissolved</td>
<td>17 August 1950</td>
</tr>
</tbody>
</table>
2. Hazards in Indonesia

2.1 Natural Hazards Likely to Affect the Country

Based on the nationwide disaster risk assessments the Government of Indonesia has listed twelve hazards, as follows:

**Natural**
- Earthquake,
- Tsunami,
- Flood
- Landslide
- Volcanic Eruption,
- Extreme Tidal Wave and Abrasion,
- Extreme Weather,
- Drought
- Forest and Land Fire

**Non Natural**
- Disease Epidemic and Pandemic,
- Technological Failure

**Social**
- Social Conflict and terrorism.

*Figure: Risk Map of Multihazards*
BNPB’s Indonesia Disaster Risk Index or Index Rawan Bencana Indonesia (IRBI, 2013) lists 497 disaster prone districts / cities out of which 323 districts / cities (65 per cent) have been identified as “high risk” and 174 (35 per cent) as “moderate risk” districts.

Indonesia is located in disaster prone area, can be considered as Laboratory of Disasters, due to its geographical, geological and demographic condition. Indonesia is susceptible to various types of natural hazards due to its geographical location and physical environment; being situated in the “Pacific Ring of Fire”, between three Tectonic plates (Indo Australia, Eurasian and Pacific), an area encircling the Pacific Ocean where frequent earthquakes and volcanic activity result from the movements of said tectonic plates.

In fact, the country experiences an average of 20 earthquakes per day (most are too weak to be felt). There are also about 500 volcanoes, of which 128 are active and have been recorded in history to have erupted; while 21 are considered to be the most active namely: Sinabung, Merapi, Kaba, Kerinci, Anak Krakatau, Papandayan, Slamet, Bromo, Semeru, Batur, Rinjani, Sangeang Api, Rokatenda, Egon, Soputan, Lokon, Gamalama, Dukono, Karangetang, Ibu, Talang. Also, being located along the typhoon belt/superhighway in the Pacific makes it vulnerable to extreme weather events. An average of 20-30 typhoons/tropical cyclones visit the country every year, with 5-7 of them considered the most destructive. Total shoreline prone of tsunami is about 21.000 Km, making the country also highly-susceptible to sea level rise and storm surges. Accompanying or resulting from these tropical cyclone events are secondary phenomena such as landslides, floods/flash floods/flooding, typhoon, drought, and heavy monsoon rains.
Aside from the natural hazards, Indonesia also experiences human-induced incidents such as urban/structural fires, air, land and sea mishaps, drowning, collapsed structure, epidemic/disease outbreak, food poisoning, vehicular accidents, gas explosion, chemical poisoning, oil spillage, grenade/bomb explosion/bombings, civil disturbance, and complex emergencies.

2.2. Major Disasters in Indonesia

The various types of disasters such as flooding, earthquake, mass movement-wet, and volcanic eruption occurred in Indonesia. Earthquake and flood disrupted 88% of the total number of affected people. On the other hand, earthquake
caused the highest number of death and significant economic losses. This is mainly due to the Sumatra Earthquake in 2004 and Java Earthquake in 2006. Flooding and earthquake will be the two major disasters that have great impact in Indonesia.

The ten deadliest disasters in Indonesia between 1980 and 2015 are shown in the table as follow:

<table>
<thead>
<tr>
<th>Disaster Type</th>
<th>Year</th>
<th>Fatalities</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake and tsunami</td>
<td>2004</td>
<td>165,708</td>
<td>Indian Ocean 9.2 RS</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2006</td>
<td>5,778</td>
<td>Yogyakarta and Central Java 6,3 RS</td>
</tr>
<tr>
<td>Earthquake</td>
<td>1992</td>
<td>2,500</td>
<td>Flores 7,8 RS</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2009</td>
<td>1,117</td>
<td>West Sumatera 7,6 RS</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2005</td>
<td>915</td>
<td>Nias 8.7 RS</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2006</td>
<td>802</td>
<td>Tasik Malaya, West Java 7.7 SR</td>
</tr>
<tr>
<td>Epidemic</td>
<td>1998</td>
<td>777</td>
<td>Dengue, Jakarta</td>
</tr>
<tr>
<td>Drought</td>
<td>1997</td>
<td>672</td>
<td>Central Papua</td>
</tr>
<tr>
<td>Epidemic</td>
<td>1998</td>
<td>672</td>
<td>Rabies, Flores</td>
</tr>
<tr>
<td>Epidemic</td>
<td>2004</td>
<td>658</td>
<td>Dengue, Jakarta</td>
</tr>
</tbody>
</table>

Earthquakes were the overwhelming fatality associated disaster type, followed by epidemics and drought.

3. Disaster Management System
   3.1 Administrative System

Indonesia has three (3) administrative levels of governance; national, province and regency/municipal. Each level of governments has its own disaster management organizations, policy frameworks and budgets. When disasters occur, municipalities respond first. In case disasters are large in scale beyond their capacity, national and province governments provide every possible support. Government decides status and level of national and regional/local disaster, with indicators: number of victims,
the loss of belongings, damages of facilities/infrastructure, area and economy and social impact.

3.2. Legal System and Framework
b. Government Regulation No. 21/2008 Operation of Disaster Management
c. Government Regulation No. 22/2008 Funding and Managing in Disaster Assistance
d. Government Regulation No. 23/2008 Role of International Agencies and Foreign Non Governmental Agencies in Disaster Management
e. Presidential Regulation No. 8/2008 Establishment of NADM

3.3. Structure of Disaster Management
a. National Disaster Management Authority (BNPB)
   -Head of NADM non-ministry institution equals a minister, consists of Steering & Executing components
   - Eight (8), Vice – Chairpersons;
     1. Prime Secretary, has the duties of planning, guidance and control of the program, administrative and resources and cooperation
     2. Deputy for Prevention and Preparedness, has the task coordinating and implementing public policy in the field of prabencana disaster management and empowerment community
     3. Deputy for Emergency Response, has the task coordinating and implementing public policy in the field of disaster management during emergency response
4. Deputy for Rehabilitation and Reconstruction, has the task coordinating and implementing public policy in the field of disaster management in the post-disaster
5. Deputy for Logistics and Equipment, has the tasks coordination and logistical support and equipment in the operation disaster
6. Prime Inspectorate, has the tasks of supervision functional to the tasks and functions in the BNPB
7. Centre of Data Information & PR and Centre of Education & Training
8. Technical Unit

The structure of BNPB can be shown as follow:

![Figure 3. Structure of National Disaster Management Authority](image)
b. Regional Board for Disaster Management (Province level) / BPBD Provinsi
- Head of RADM (Chief executive) consists of Steering & Executing components (Ess. IIa)
- Four(4), Vice – Chairpersons;
  a. Executive Secretariat (Ess. IIIa)
  b. Chief of Prevention and Preparedness (Ess. IIIa)
  c. Chief of Emergency Field and Logistics (Ess. IIIa)
  d. Chief of Rehabilitation and Reconstruction (Ess. IIIa)

  c. Regional Board for Disaster Management (Regency/Municipal level) / BPBD Kabupaten / Kota
- Head of RADM (Chief executive) consists of Steering & Executing components (Ess. IIb)
- Four(4), Vice – Chairpersons;
  a. Executive Secretariat (Ess. IIIb)
  b. Head Section of Prevention and Preparedness (Ess. IIIb)
  c. Head Section of Emergency Field and Logistics (Ess. IIIb)
  d. Head Section of Rehabilitation and Reconstruction (Ess. IIIb)

4. DISASTER MANAGEMENT STRATEGY, POLICY AND PLAN

   Based on the article 33 of ACT No. 24/2007 that organizing of disaster relief consists of three (3) stages; pre-disaster, emergency response time, and post-disaster. Focus of the directives and national priorities for disaster management as defined in the RPJMN 2015-2019 drafted and formulated as follows:

1) Strengthening the legal framework for disaster relief.
2) Mainstreaming disaster management in development.
3) Enhancement of multi stakeholders partnership in disaster relief.
4) Fulfillment of the management for disaster relief.
5) Increased the effectiveness of disaster prevention and mitigation.
6) Increased disaster preparedness and emergency handling.
7) Increased the capacity of disaster recovery.

The *Rencana Pembangunan Jangka Menengah* (RPJMN), 2015-2019 has outlined the need for mainstreaming disaster risk management in development planning. DRR financing began in 2007 with the issuance of the National Disaster Management Law. The National Disaster Management Plans for 2009-2014 and 2015-2019 articulate the growing commitment to finance DRR mainstreaming. The following are the plans and government regulations related to DRR:

<table>
<thead>
<tr>
<th>No</th>
<th>Type</th>
<th>Number/Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Act</td>
<td>27/2007</td>
<td>On Coastal and Small Islands Management</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>26/2007</td>
<td>On Land Use Planning</td>
</tr>
<tr>
<td>3.</td>
<td>Head of BNPB Regulation</td>
<td>04/2012</td>
<td>On Guidelines for Safe School</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>02/2012</td>
<td>On General Guidelines for Disaster Risk Assessment</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>01/2012</td>
<td>On General Guidelines for Disaster Resilient Village/ Sub-district</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>2013</td>
<td>National Assessment Report on Disaster Risk Reduction</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>2012</td>
<td>Master Plan for Tsunami Disaster Risk Reduction</td>
</tr>
</tbody>
</table>
5. THE IMPLEMENTATION OF HYOGO FRAMEWORK FOR ACTION (HFA) 2013-2015

Indonesia is one of many countries that commits to do Sendai Working Plan (Sendai Framework For Disaster Risk Reduction / SFDRR). The priority of program are:

- Priority 1: Understanding basic risk disaster
- Priority 2: Strengthening disaster risk governance in disaster risk management
- Priority 3: Investing in Disaster Risk Reduction for resilience
- Priority 4: Improve disaster preparedness to respond effectively and to “rebuild better” during recovery, rehabilitation and reconstruction.


<table>
<thead>
<tr>
<th>Priority for Action 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Indicator 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels Level of Progress</td>
</tr>
</tbody>
</table>

Achieved: 4

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities.

Description:
The Indonesian National Agency for Disaster Management (BNBP) noted in the progress report the incorporation of disaster risk reduction in the national development plan, sector strategies and plan, climate change policy and strategy, and
Common Country Assessment (CCA)/United Nations Development Assistance Framework (UNDAF). The integration of disaster risk reduction is absent in the poverty reduction strategy papers and civil defence policy, strategy, and contingency planning. Numerous guidelines and regulations on disaster risk reduction and disaster management are in place from the central government levels to the district/city levels. Central and local level capabilities are improved however the district/city level needs strengthening.

| Core Indicator 2:  |
| "Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels" |

**Level of Progress Achieved: 3**
Institutional commitment attained but achievements are neither comprehensive nor substantial

**Description:**
Budgets for disaster risk reduction initiatives have been programmed, allocated, and integrated into the regular programs by the line ministries. The provincial level of government is working on integrating disaster management into local development plans and budget. The districts and cities with developed disaster management plans are encouraged to incorporate these plans into the development plans.

| Core Indicator 3:  |
| "Community participation and decentralization is ensured through the delegation of authority and resources to local levels" |

**Level of Progress Achieved: 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities.

**Description:**
The government indicates the legislation exists to mandate disaster risk reduction at the local level. Therefore, the local governments have the legal responsibility and systematic budget allocations for disaster risk reduction. An estimated .1 to .38 percent of the local budget is assigned to DRR.
Indonesia implemented decentralization since 1999 which directs DRR to the local BPBDs for the districts and cities. BNBP supports rather than leads the BPBDs and provides facilities, infrastructure, and technical assistance.

<table>
<thead>
<tr>
<th>Core Indicator 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A national multi-sector platform for disaster risk reduction is functioning</em></td>
</tr>
</tbody>
</table>

**Level of Progress Achieved: 3**
Institutional commitment attained but achievements are neither comprehensive nor substantial

**Description:**
The national platform representatives include civil society organizations, national finance and planning institutions, key economic and development sector organizations. The national coordinating authority responsible for disaster management and disaster risk reduction in Indonesia is BNPB. In 2008, the National Platform for disaster risk reduction, Planas PRB was established. The multi-stakeholder platform involves members from government institutions, non-governmental organizations and the private sector. Recently, a new chairman and new management team have been appointed.

**Priority for Action 2**
*Identify, assess and monitor disaster risks and enhance early warning*

<table>
<thead>
<tr>
<th>Core indicator 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.</em></td>
</tr>
</tbody>
</table>

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
All the provinces in Indonesia have possessed multi-hazard risk assessments. Around 20% of the districts and cities have also developed their risk assessments. At the central level, the line ministries have also conducted risk mapping in accordance with their responsibilities. These risk analyses have been
enriched with vulnerability and capacity information from the community, as well as index of potential losses.

<table>
<thead>
<tr>
<th>Core indicator 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities</td>
</tr>
</tbody>
</table>

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Responsibility to monitor, archive and disseminate data on key hazards and vulnerabilities lies in different line ministries. The Ministry of Energy and Mineral Resources is mostly responsible for geological hazards, particularly volcanic eruption and landslide. The Ministry of Public Work is responsible for flood hazard. BMKG is responsible for climate-related hazards and tsunami. The Ministry of Forestry is responsible for forest and land fires. BNPB facilitated the line ministries in disseminating important data. It has also developed hazard and vulnerability databases.

<table>
<thead>
<tr>
<th>Core indicator 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early warning systems are in place for all major hazards, with outreach to communities.</td>
</tr>
</tbody>
</table>

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Early Warning Systems in Indonesia has relatively been more advanced for hazards such as flood, tsunami, extreme weather, extreme waves, volcanic eruption and forest fires. The problem, however, lies in EWS’ outreach to the grassroots communities and capacity strengthening to build communities’ capacities to respond to warnings.

<table>
<thead>
<tr>
<th>Core indicator 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.</td>
</tr>
</tbody>
</table>
Level of Progress achieved : 4
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities.

Description:
With regard to trans-boundary risks, Indonesia is highly committed to joint management of cross-border risks, particularly related to tsunami and smoke hazards. ASEAN, South Asian and several other countries in the Asia Pacific region have been actively involved in Indian Ocean Tsunami Warning System (IOTWS). Indonesia plays a leading role in the management of trans-boundary risks through the AHA Center. The country has also been active in Pacific Tsunami Warning and Mitigation System (PTWS) and ASEAN Earthquake Information Center (AEIC).

<table>
<thead>
<tr>
<th>Priority for Action 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use knowledge, innovation and education to build a culture of safety and resilience at all levels</td>
</tr>
</tbody>
</table>

Core indicator 1
Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved : 4
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities.

Description:
BNPB has facilitated the set-up and maintenance of the Indonesian disaster data and information. Other ministries and agency such as BMKG manages data related to extreme weather, earthquake and tsunami. The Ministry of Energy and Mineral resources maintain data related to volcanic eruption and land mass movement. Several local governments, together with non-government partners such as university, have developed disaster information systems that are specific to their needs. The media has also been proactive in disseminating disaster-related data and information.

Core indicator 2
School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Indonesia sees an increased commitment in this issue, as the Ministry of Education and Culture, Ministry of Public Works, Ministry of Religious Affairs, Ministry of Home Affairs, BNPB and non-government stakeholders have jointly worked towards stronger implementation of DRR through the curriculum. More and more training programs have been developed by non-government partners to strengthen capacity for better recovery.

**Core indicator 3**
Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Government ministries/agencies have developed methods and tools for risk assessments, like BMKG or the climate agency, for instance, developed assessment methodologies for tsunami, extreme weather and extreme wave, and earthquake and flood. The Geological Agency developed methodologies and tools for volcanic eruption and land mass movement. The Ministry of Public Work developed flood risk analysis. The National Science Institute (LIPI) developed Preparedness Analysis. BNPB has also developed multi-hazard risk assessments methodologies. However, the country has yet to develop cost-benefit analysis for risk sensitive investments.

**Core indicator 4**
Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.
**Priority for Action 4**  
**Reduce the underlying risk factors**

<table>
<thead>
<tr>
<th>Core indicator 1</th>
<th>Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.</th>
</tr>
</thead>
</table>

**Level of Progress achieved : 4**  
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/or operational capacities.

**Description :**  
DRR has long been linked to environmental management and mainstreamed into development. The forthcoming Middle-term National Development Plan 2015-2019 combines both these issues, which have also been supported by numerous regulations enacted by the line ministries. There has been a mechanism for Payment for Environmental Services, but the technical guidelines may need to be further refined.

<table>
<thead>
<tr>
<th>Core indicator 2</th>
<th>Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.</th>
</tr>
</thead>
</table>

**Level of Progress achieved : 3**  
Institutional commitment attained, but achievements are neither comprehensive nor substantial.

**Description :**
Indonesia implements social development programs for population at risks, mostly in the aftermath of a disaster event. A number of social development programs have addressed people’s vulnerability such as the rice for the poor program, the social security program for senior citizens and social assistance program for people with disability. Micro insurance and micro financing programs have also been developed by the government and private sector, but the penetration has been limited to several areas only.

Core indicator 3
Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved : 2
Some progress, but without systematic policy and/ or institutional commitment.

Description :
There have only been pilot initiatives in formulating economic and productive sectoral policies and plans to reduce the vulnerability of economic activities. Policies at the local level have not been systematic and mechanism to empower vulnerable people’s livelihoods has not been adequate. Local economic development implemented has not incorporated risk sensitive considerations.

Core indicator 4
Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved : 4
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

Description :
Indonesia has long made it obligatory for housing developers to conduct an environmental assessment, which contains risk reduction elements, prior to start building and to comply with building codes. Many regulations have been enacted to this regard, such as the Law on Spatial Planning and Law on High-
rise Building, the building code, micro-zoning regulations and others. In areas highly-prone to earthquake, governments and non-government partners have disseminated information to the public on the importance of earthquake-resistant building. Building artisans in those places have also been trained on earthquake safe construction. Early efforts to certify building quality, particularly for public buildings, have also been implemented.

### Core indicator 5
Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Starting from the 2006 Yogyakarta earthquake, Indonesia has endeavored to mainstream DRR into post disaster recovery and rehabilitation. Every post-disaster recovery program in the country has since needed to be started with a Post-Disaster Need Assessment and the formulation of Action Plan for Rehabilitation and Reconstruction. BNPB regulation No. 17/2011 on rehabilitation and reconstruction has further internalized DRR mainstreaming in recovery. The government has also implemented “building back better” approach in most post-disaster events since 2006.

### Core indicator 6
Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

**Level of Progress achieved : 3**
Institutional commitment attained, but achievements are neither comprehensive nor substantial.

**Description :**
Efforts to develop analytical instruments to assess the disaster impacts of major development projects have just been piloted, although the country has made it prerequisite to conduct Environmental Impact Assessment at the individual project level, and Strategic Environmental Analysis for areas that have
many development projects that may potentially damage the environment.

<table>
<thead>
<tr>
<th>Priority for Action 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengthen disaster preparedness for effective response at all levels</strong></td>
</tr>
</tbody>
</table>

### Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

**Level of Progress achieved : 4**

Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**

Currently all provinces and more than 90% of the districts and cities in Indonesia have possessed their own local DM agencies. BNPB continues to build the technical capacity of these BPBDs. Many areas have developed rapid response teams and at the national level two specialist rapid response teams have been established. Many regions have developed risk-sensitive spatial planning and implemented programs for disaster preparedness, contingency planning, and response. DRM policy that employs a risk reduction perspective has been in place, but it has yet to be implemented well and throughout all over the country.

### Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

**Level of Progress achieved : 3**

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

**Description :**

More than 25 percent of all districts and cities have formulated contingency plans for various types of hazard. However, only a limited number has been prepared with sufficient gender sensitivities. Contingency plans have mostly been prepared to
respond to emergency situations and not for continued basic service delivery. Only a limited number of BPBDs have been able to implement contingency plans through regular disaster drills and rehearsals.

<table>
<thead>
<tr>
<th>Core indicator 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.</td>
</tr>
</tbody>
</table>

**Level of Progress achieved : 3**
Institutional commitment attained, but achievements are neither comprehensive nor substantial.

**Description :**
On-call budgets have been allocated at the national level by the line ministries and at the local level by a number of provincial and district/city governments. However, the regulations that stipulate this issue are not clear, so that not all local governments can allocate such budget. Disaster risk insurance, catastrophe bonds and other risk transfer mechanisms have not been developed adequately in the country.

<table>
<thead>
<tr>
<th>Core indicator 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.</td>
</tr>
</tbody>
</table>

**Level of Progress achieved : 4**
Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities.

**Description :**
Information exchange during emergency has long been established in Indonesia. For volcanic eruption, the Geology Agency regularly disseminates warning messages during hazardous situations. The Ministry of Public Works regularly conveys information on flooding to communities potentially affected. Both systems have reached household level through the BPBDs. The country has also developed PostDisaster Need Assessment/PDNA and trained people to implement this instrument.
6. RECENT MAJOR PROJECTS ON DISASTER RISK REDUCTION

Recent Major Projects on Disaster Risk Reduction;

a. Encourage the integration of disaster management in the Region Medium Term Development Plan (RPJMD)
b. Create Risk Map and Disaster Management Plan
c. Develop Technology for Disaster Management
d. Develop Continjency Plan
e. Establishment of Village Disaster Resilient
f. Establishment of City Disaster Resilient
g. Establishment Safe School in collaboration with the Ministry of Education
h. Socialization of Sustainable Disaster Risk Reduction
i. Development of Indonesia Disaster Data Base (DIBI)
j. Masterplan PRB Tsunami in Indonesia

7. ADRC Counterpart (Organization & Contact Information)

Organization: National Authority for Disaster Management (BNPB – Badan Nasional Penanggulangan Bencana)
Address: GRAHA BNPB, Pramuka streets Kav 38, East Jakarta, 13120
Phone / Fax: +6221-29827793
Email: contact@bnpb.go.id

8. REFERENCES


Indonesia Disaster Reference Handbook 2015
https://dibi.bnpb.go.id

https://en.wikipedia.org/wiki/Indonesia

https://www.worldometers.info/world-population/indonesia-population