BENGKULU
CAPITAL: BENGKULU

Area: 19,919 km²

Bengkulu province, on the southwest coast of Sumatra, has both a dynamic extractives and energy economy combined with longstanding challenges relating to droughts, catastrophic earthquakes, tsunamis, floods and landslides. Bengkulu was influenced by both British and Dutch colonialism and its historic economic importance as a center of trade has resulted in high levels of both resilience and coping capacity in the face of elevated levels of multi-hazard exposure. Along with its growing export and energy economy, Bengkulu is also collaborating with Indonesian national stakeholders to reduce poverty and with international actors, such as the Japanese Red Cross, to enhance DRR efforts.

RISK AND VULNERABILITY COMPONENT SCORE

**MULTI-HAZARD RISK (MHR)** - Low
Score: 0.474  •  Rank: 23/34

**RESILIENCE (R)** - High
Score: 0.551  •  Rank: 9/34

**MULTI-HAZARD EXPOSURE (MHE)** - High
Score: 0.551  •  Rank: 12/34

**VULNERABILITY (V)** - Moderate
Score: 0.444  •  Rank: 16/34

**COPING CAPACITY (CC)** - High
Score: 0.558  •  Rank: 8/34

**DISASTER MANAGEMENT CAPABILITIES (DMC)** - High
Score: 0.540  •  Rank: 12/34

Population (2020 Projected)
2,019,800

Population in Poverty
14.9%

Adult Literacy Rate
98.0%

Access to improved water
57.6%

Average life expectancy
69.2 years

*For more information on data and components please visit: https://bit.ly/2LqVoUO*
MULTI-HAZARD EXPOSURE (MHE)

RANK: 12 / 34 PROVINCES
SCORE: 0.551

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

- **Earthquake**
  - 99%
  - 1,893,415
  - $36.8 Billion

- **Tsunami**
  - 3%
  - 66,176
  - $1 Billion

- **Flood**
  - 16%
  - 307,534
  - $6.66 Billion

- **Flash Flood**
  - 6%
  - 110,123
  - $1.7 Billion

- **Landslide**
  - 5%
  - 98,479
  - $1 Billion

- **Volcano**
  - 1%
  - 21,955
  - $284.3 Million

- **Drought**
  - 70%
  - 1,333,993
  - $30.3 Billion

- **Wildfire**
  - 8%
  - 149,728
  - $1.6 Billion

- **Extreme Weather**
  - 97%
  - 1,850,716
  - $36.3 Billion
VULNERABILITY (V) RANK: 16 / 34 PROVINCES ASSESSED SCORE: 0.444

Vulnerability in Bengkulu is primarily driven by Clean Water Access Vulnerability and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the province’s overall Vulnerability score.

**Environmental Stress**

- **Score: 0.355** RANK: 20/34 PROVINCES ASSESSED
- 7.6% Land susceptible to severe erosion
- 20.59 Livestock Density (per sq km)
- 7064 Net Deforestation (hectares per year)

**Vulnerable Health Status**

- **Score: 0.375** RANK: 22/34 PROVINCES ASSESSED
- 69.21 Life expectancy (years)
- 29 Infant mortality rate (per 1,000 live births)
- 131.7 Maternal mortality ratio
- 8.3% Children (under 5) Wasting
- 9.0% Disability
- 5.7% Unmet health care needs
- 6.9% Households with limited access to health facility
- 1.6% Households with catastrophic health expenditure
- 72.28 Dengue incidence per 100,000 population
- 4.69 Measles incidence per 100,000 population
- 0.04 Malaria incidence per 100,000 population
- 191 TB case notification per 100,000 population
- 21.14 HIV & AIDS incidence per 100,000 population
- 0.15 Prevalence of Leprosy per 10,000 population

**Clean Water Vulnerability**

- **Score: 0.806** RANK: 2/34 PROVINCES ASSESSED
- 57.6% Households with improved water
- 75.9% Households with improved sanitation

**Information Access Vulnerability**

- **Score: 0.398** RANK: 21/34 PROVINCES ASSESSED
- 98.0% Adult literacy rate
- 98.7% Net primary school enrollment rate
- 8.73 Average years of schooling
- 67.4% Household using internet

**Economic Constraints**

- **Score: 0.359** RANK: 24/34 PROVINCES ASSESSED
- 3.4% Unemployment rate
- 46.2 Age dependency ratio
- 14.9% Poverty rate
- 0.34 GINI ratio

**Gender Inequality**

- **Score: 0.479** RANK: 19/34 PROVINCES ASSESSED
- 0.98 Female to male literacy rate
- 0.62 Female to male labor ratio
- 1.04 Female to male secondary school enrollment ratio
- 15.6% Percent female seats in government

**Population Pressures**

- **Score: 0.336** RANK: 27/34 PROVINCES ASSESSED
- 1.7% Average annual total population change
- 2.3% Average annual urban population change
Bengkulu exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the province's overall Coping Capacity score.
**DISASTER MANAGEMENT CAPABILITIES (DMC)**

Bengkulu exhibits weaker Disaster Management Capabilities in the areas of Mass Care Support and Emergency Services. The bar charts indicate the disaster management themes contributing to the province’s overall Disaster Management Capabilities score.

**Emergency Services**
- Score: 0.652
- Rank: 9/34 Provinces Assessed
- Ambulances per 10,000 persons: 0.46
- Citizen brigade personnel per 10,000 persons: 0
- Search and rescue staff per 10,000 persons: 0.29
- District EOC coverage: 90.0%
- Distance to nearest police station (km): 31.04
- Distance to nearest fire station (km): 204.19

**Mass Care Support**
- Score: 0.297
- Rank: 30/34 Provinces Assessed
- Distance to nearest disaster stockpile (km): 526.28
- Vehicle equipment per 10,000 persons: 0.22
- Shelter equipment per 10,000 persons: 0.66
- Communications equipment per 10,000 persons: 0.06
- Support equipment per 10,000 persons: 0.22
- Emergency Shelters per 10,000 persons: 1.1

**Early Warning and Monitoring**
- Score: 0.671
- Rank: 7/34 Provinces Assessed
- Geophysical monitoring per exposed population: 0.84
- Meterological/climatological monitoring per exposed population: 0.9
### RESILIENCE (R)

**RANK:** 9 / 34 PROVINCES ASSESSED  
**SCORE:** 0.551

Bengkulu’s High Resilience score and ranking are due to Moderate Vulnerability combined with High Coping Capacity, and High Disaster Management Capabilities scores.

**Below are the six thematic areas with the weakest relative scores:**

<table>
<thead>
<tr>
<th>Clean Water Access Vulnerability</th>
<th>Gender Inequality</th>
<th>Transportation Capacity</th>
<th>Economic Capacity</th>
<th>Mass Care Support</th>
<th>Emergency Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RANK:</strong> 14 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.12</td>
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<tr>
<td><strong>RANK:</strong> 17 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.155</td>
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<tr>
<td><strong>RANK:</strong> 19 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.187</td>
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<tr>
<td><strong>RANK:</strong> 23 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.212</td>
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<tr>
<td><strong>RANK:</strong> 24 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.218</td>
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<tr>
<td><strong>RANK:</strong> 29 / 34 PROVINCES ASSESSED</td>
<td><strong>SCORE:</strong> 0.235</td>
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</tbody>
</table>

### HAZARD-SPECIFIC RISK (HSR)

<table>
<thead>
<tr>
<th>Earthquake</th>
<th>Tsunami</th>
<th>Flood</th>
<th>Flash Flood</th>
<th>Landslide</th>
<th>Volcano</th>
<th>Drought</th>
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<td><strong>RANK:</strong> 13 / 34 PROVINCES ASSESSED</td>
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<tr>
<td><strong>SCORE:</strong> 0.272</td>
<td><strong>SCORE:</strong> 0.212</td>
<td><strong>SCORE:</strong> 0.114</td>
<td><strong>SCORE:</strong> 0.192</td>
<td><strong>SCORE:</strong> 0.187</td>
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<td><strong>SCORE:</strong> 0.218</td>
</tr>
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Bengkulu's Low Multi-hazard Risk score and ranking are due to High Multi-hazard exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-hazard risk component scores compared to overall average country scores:
BENGKULU RECOMMENDATIONS

Clean Water Access Vulnerability

Bengkulu has the 2nd highest Clean Water Access Vulnerability in Indonesia. Only 57.6% of households in the province have access to an Improved Water Source, and 76% of households have access to Improved Sanitation services. The province also has significant exposure to drought, earthquakes, landslides and severe weather hazards, all of which can present challenges for sustainable clean water infrastructure development.

Secure investments to strengthen existing clean water and sanitation infrastructure to reduce hazard-related impacts (e.g., repair or replace pipes to reduce leakage in drought prone areas to conserve water resources; implement mitigation strategies to reduce impacts on infrastructure resulting from earthquakes and landslides).

Continue collaboration and coordination among local government ministries, NGOs and community-based organizations to implement strategies to expand improvements in clean water, sanitation and hygiene throughout the province.

Gender Inequality

Findings show that female representation in Parliament (<16%) is considerably lower than the country’s target for female representation in government of 30%. In addition, Bengkulu ranks 14th for female to male Literacy Rate.

Promote gender equality through the enactment and implementation of laws that establish rights, responsibilities and opportunities for women, men, girls and boys related to education, leadership and employment.

Increase opportunities to expand participation of women in education and economic activities through the enactment of policies that provide quality, affordable childcare and health care services.
BENGKULU RECOMMENDATIONS

Transportation Capacity

Bengkulu has the 4th lowest ranking for Transportation Capacity, driven by the 2nd greatest Average Distance to a Port or Airport Facility (49 km). Limitations in transportation capacity impede economic growth and reduce efficiencies in disaster response and recovery efforts. A lack of improved roads also has implications for delivery of other infrastructure services such as water and energy, as these are often juxtaposed with one another.

Secure funding to expand transportation capacity in the province, with a focus on improving access to underserved areas.

Invest in mitigation strategies that protect new transportation infrastructure from hazard impacts.

Economic Capacity

Bengkulu ranks 17th for overall Economic Capacity. While Labor Force Participation is relatively high, findings show that GDP per Capita is the 7th lowest in the country, and Average Monthly Income is less than 2.5 million IDR. Nearly 15% of Bengkulu’s population lives below the poverty line. Drivers of Bengkulu’s economy include energy (coal resources) and agriculture.

Increase access to financing and support structures (e.g. microfinance services and loans) for poor and vulnerable populations.

Boost efficiency of financial sector systems to streamline access to credit and processing of loans for informal sector enterprises.
**BENGKULU RECOMMENDATIONS**

### Mass Care Support

Bengkulu has the 5th lowest Mass Care Support capabilities in the country, driven by limited access to Disaster Stockpiles (the average distance to the nearest stockpile is over 500 km away) and number of Emergency Shelters (only 1.1 per 10,000 people).

- Improving transportation capacity and access to clean water will have direct bearing on mass care support by enhancing access to disaster stockpiles.

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Build shelter capacity by equipping new development initiatives (e.g., schools, gymnasiums and community centers) with the necessary amenities to provide dual use and ensure that new structures are built to codes and standards to withstand hazard impacts.

### Emergency Services

Bengkulu has the 9th highest overall Emergency Services ranking, but capabilities could be increased by greater numbers and strategic placement of fire stations. Currently, the Average Distance to a Fire Station in Bengkulu is over 200 km away from populated areas. The Average Distance to a Police Station is over 31 km away. Excessive response times during an emergency can be life-threatening.

- Expansion of transportation networks will have direct bearing on the provision of Emergency Services.

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The establishment and training of Citizen Brigades in disaster preparedness and response will also help build resilience at the village level.