



**INDONESIA**

# **SULAWESI TENGAH**

**NDPBA PROVINCE PROFILE**

# SULAWESI TENGAH

## CAPITAL: PALU

Area: 61,841 km<sup>2</sup>



As the name implies, Sulawesi Tengah (Central Sulawesi) is located at the center of the island of Sulawesi and is the largest among all provinces on the island. The

administrative capital and largest city is located in Palu which, in 2018 was rocked by a 7.4-magnitude earthquake and subsequent tsunami that killed at least 1,234 people and displaced more than 60,000 people in Central Sulawesi. With its low levels of resilience and heightened levels of vulnerability, health and economic improvements, increased information access, and transportation infrastructure enhancements will assist the province in combating COVID 19 and the challenges posed by future hazards.

## RISK AND VULNERABILITY COMPONENT SCORE



### MULTI-HAZARD RISK (MHR) - High

Score: 0.532 • Rank: 8/34



### RESILIENCE (R) - Very Low

Score: 0.448 • Rank: 33/34



### MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.474 • Rank: 16/34



### VULNERABILITY (V) - Very High

Score: 0.508 • Rank: 5/34



### COPING CAPACITY (CC) - Very Low

Score: 0.389 • Rank: 30/34



### DISASTER MANAGEMENT CAPABILITIES (DMC) - Low

Score: 0.465 • Rank: 27/34



Population (2020 Projected)

**3,097,000**



Population in Poverty

**13.2%**



Adult Literacy Rate

**98.2%**



Access to improved water

**83.4%**



Average life expectancy

**68.2 years**

\*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 16 / 34 PROVINCES  
SCORE: 0.474



MHE  
0.474

Raw MHE  
0.327

Relative MHE  
0.621

### ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

**84%**

2,357,462  
\$23.8 Billion



Tsunami

**5%**

138,847  
\$1.4 Billion



Flood

**32%**

901,632  
\$9.14 Billion



Flash Flood

**6%**

163,760  
\$1.5 Billion



Landslide

**13%**

365,075  
\$3 Billion



Volcano

**<1%**

1,572  
\$12.5 Million



Drought

**30%**

853,966  
\$8.1 Billion



Wildfire

**18%**

499,402  
\$4.1 Billion



Extreme Weather

**88%**

2,488,649  
\$25 Billion



## VULNERABILITY (V)

**RANK: 5 / 34 PROVINCES ASSESSED**  
**SCORE: 0.508**

Vulnerability in Sulawesi Tengah is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress

**SCORE: 0.353 RANK: 21/34 PROVINCES ASSESSED**

<b>4.4%</b> Land susceptible to severe erosion	<b>18.88</b> Livestock Density (per sq km)	<b>11522.7</b> Net Deforestation (hectares per year)
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### Vulnerable Health Status

**SCORE: 0.675 RANK: 2/34 PROVINCES ASSESSED**

<b>68.23</b> Life expectancy (years)	<b>58</b> Infant mortality rate (per 1,000 live births)	<b>332.14</b> Maternal mortality ratio	<b>12.9%</b> Children (under 5) Wasting	<b>11.4%</b> Disability	<b>8.6%</b> Unmet health care needs	<b>13.4%</b> Households with limited access to health facility
<b>1.2%</b> Households with catastrophic health expenditure	<b>35.44</b> Dengue incidence per 100,000 population	<b>0</b> Measles incidence per 100,000 population	<b>0.03</b> Malaria incidence per 100,000 population	<b>237</b> TB case notification per 100,000 population	<b>25.35</b> HIV & AIDS incidence per 100,000 population	<b>0.97</b> Prevalence of Leprosy per 10,000 population



### Clean Water Vulnerability

**SCORE: 0.564 RANK: 11/34 PROVINCES ASSESSED**

<b>83.4%</b> Households with improved water	<b>72.0%</b> Households with improved sanitation
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### Information Access Vulnerability

**SCORE: 0.620 RANK: 7/34 PROVINCES ASSESSED**

<b>98.2%</b> Adult literacy rate	<b>93.2%</b> Net primary school enrollment rate	<b>8.75</b> Average years of schooling	<b>61.7%</b> Household using internet
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### Economic Constraints

**SCORE: 0.351 RANK: 25/34 PROVINCES ASSESSED**

<b>3.2%</b> Unemployment rate	<b>49.7</b> Age dependency ratio	<b>13.2%</b> Poverty rate	<b>0.327</b> GINI ratio
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### Gender Inequality

**SCORE: 0.470 RANK: 21/34 PROVINCES ASSESSED**

<b>0.99</b> Female to male literacy rate	<b>0.57</b> Female to male labor ratio	<b>1.12</b> Female to male secondary school enrollment ratio	<b>24.4%</b> Percent female seats in government
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### Population Pressures

**SCORE: 0.525 RANK: 9/34 PROVINCES ASSESSED**

<b>1.7%</b> Average annual total population change	<b>4.7%</b> Average annual urban population change
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## COPING CAPACITY (CC)

**RANK: 30 / 34 PROVINCES ASSESSED**  
**SCORE: 0.389**

Sulawesi Tengah exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the province's overall Coping Capacity score.



### Economic Capacity

**SCORE: 0.302** **RANK: 24/34 PROVINCES ASSESSED**

<b>67.6%</b> Labor force participation	<b>2,456,459</b> Average monthly income (IDR)	<b>31.8</b> GDP per capita (Million IDR)
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### Governance

**SCORE: 0.424** **RANK: 27/34 PROVINCES ASSESSED**

<b>316</b> Crime rate per 100,000 population	<b>56.4%</b> Crime clearance rate	<b>84.0%</b> Voter participation
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### Environmental Capacity

**SCORE: 0.441** **RANK: 12/34 PROVINCES ASSESSED**

**10.9%**  
Protected area



### Infrastructure Capacity

**SCORE: 0.424** **RANK: 26/34 PROVINCES ASSESSED**



### Health Care Capacity

**SCORE: 0.441** **RANK: 20/34 PROVINCES ASSESSED**

<b>13.7</b> Hospital beds per 10,000 people	<b>2.23</b> Physicians per 10,000 people	<b>23.57</b> Nurses and midwives per 10,000 people	<b>34.3%</b> Time to public hospital (over 1 hour)	<b>45.9%</b> Immunization rate (children under 5)	<b>70.7%</b> Health care accreditation rate	<b>62.5%</b> Population covered by health insurance
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### Transportation Capacity

**SCORE: 0.312** **RANK: 23/34 PROVINCES ASSESSED**

<b>0.09</b> Road and rail density	<b>36.16</b> Average distance to port or airport
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### Communications Capacity

**SCORE: 0.497** **RANK: 25/34 PROVINCES ASSESSED**

<b>57.7%</b> Mobile phone ownership	<b>0.6%</b> Households with Fixed Phones
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### Energy Capacity

**SCORE: 0.445** **RANK: 24/34 PROVINCES ASSESSED**

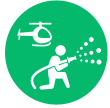
<b>90.7%</b> Households served by state electricity	<b>0.6%</b> Percentage of total national electricity generated in province	<b>52.5</b> Electricity generation GWh per 100,000 Population	<b>49.6%</b> Households with gas for cooking
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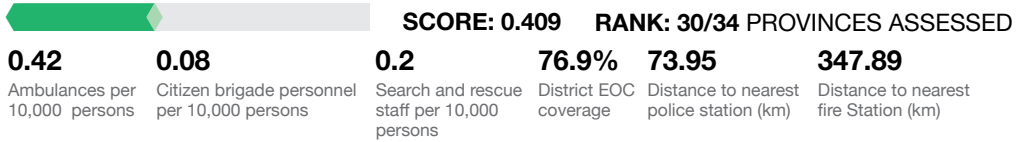
# DISASTER MANAGEMENT CAPABILITIES (DMC)

**RANK: 27 / 34** PROVINCES ASSESSED  
**SCORE: 0.389**

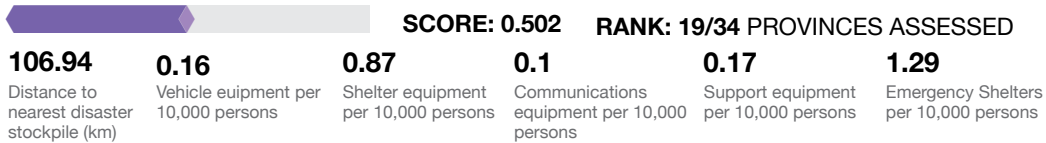
Sulawesi Tengah exhibits weaker Disaster Management Capabilities in the areas of Emergency Services and Early Warning and Monitoring. The bar charts indicate the disaster management themes contributing to the province's overall Disaster Management Capabilities score.



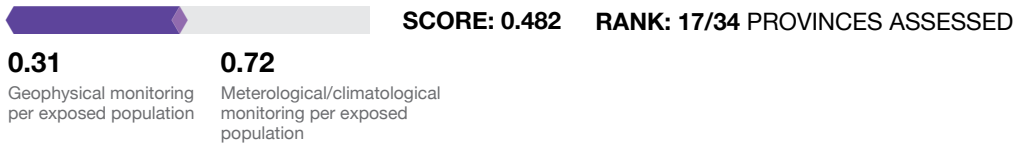
## Emergency Services



## Mass Care Support



## Early Warning and Monitoring





## RESILIENCE (R)

**RANK: 33 / 34 PROVINCES ASSESSED**  
**SCORE: 0.448**

Sulawesi Tengah's Very Low Resilience score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

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



**Vulnerable Health Status**



**Information Access Vulnerability**



**Economic Capacity**



**Transportation Capacity**



**Emergency Services**



**Early Warning and Monitoring**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 3 / 34 PROVINCES ASSESSED**  
**SCORE: 0.340**



**Tsunami**

**RANK: 6 / 34 PROVINCES ASSESSED**  
**SCORE: 0.319**



**Flood**

**RANK: 15 / 34 PROVINCES ASSESSED**  
**SCORE: 0.220**



**Flash Flood**

**RANK: 7 / 34 PROVINCES ASSESSED**  
**SCORE: 0.276**



**Landslide**

**RANK: 4 / 34 PROVINCES ASSESSED**  
**SCORE: 0.333**



**Volcano**

**RANK: 12 / 34 PROVINCES ASSESSED**  
**SCORE: 0.246**



**Drought**

**RANK: 20 / 34 PROVINCES ASSESSED**  
**SCORE: 0.207**



**Wildfire**

**RANK: 6 / 34 PROVINCES ASSESSED**  
**SCORE: 0.271**



**Extreme Weather**

**RANK: 17 / 34 PROVINCES ASSESSED**  
**SCORE: 0.263**



## MULTI-HAZARD RISK (MHR)

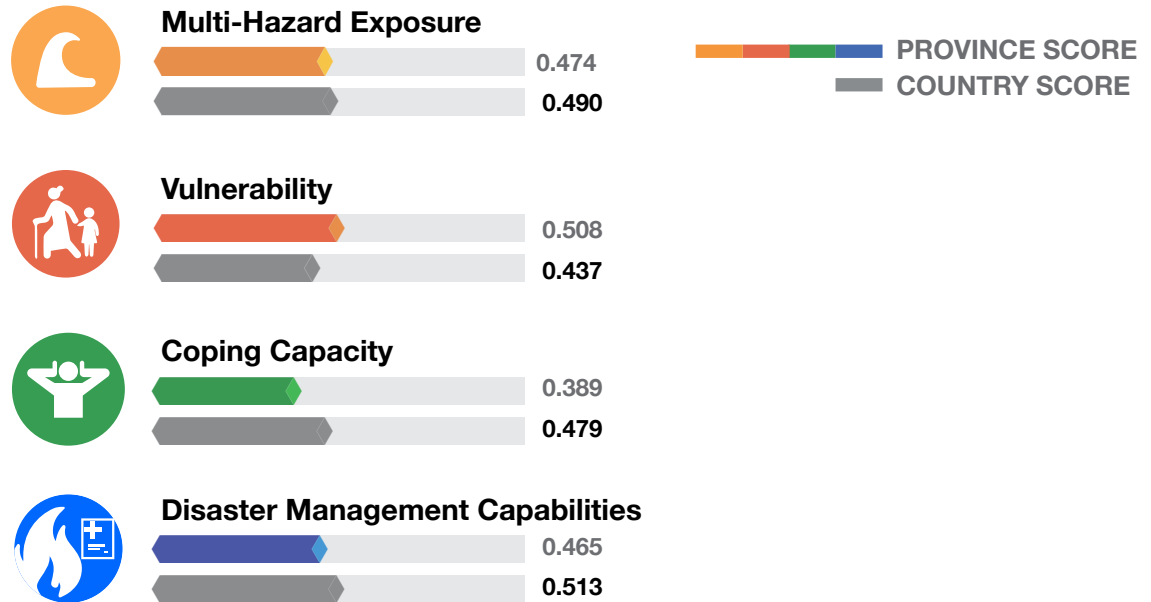
**8 / 34**

RANK WITHIN PROVINCES  
Score: 0.532



Sulawesi Tengah's High Multi-hazard Risk score and ranking are due to Moderate Multi-hazard exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

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





# SULAWESI TENGAH RECOMMENDATIONS

1

## Vulnerable Health Status

Sulawesi Tengah ranks 2nd for overall Vulnerable Health Status, driven by the highest percentage of Unmet Health Care Needs (8.57%), 3rd highest Disability Rate (11.44%), 4th highest Maternal Mortality Rate (332.14 per 100,000 live births). The Infant Mortality Rate (58 per 1,000 live births), and Percentage of Children under 5 years of Age considered to be Wasting (12.9%) are among the highest in the country. Those suffering from poor health are more susceptible to the negative consequences resulting from a disaster.

Continue efforts to improve maternal, infant, and child health, reduce transmission of infectious diseases, and improve access and affordability to healthcare.

Strengthen programs focused on disease prevention and health promotion to counter preventable diseases through vaccination and the growing number of non-communicable diseases in the country (e.g. diabetes and heart disease).

2

## Information Access Vulnerability

Sulawesi Tengah ranks 7th for overall Information Access Vulnerability, driven by the 3rd lowest Net Primary School Enrollment Rate (93.17%), and limited Internet Access (<62% of households have access). Education levels and access to information have bearing on actions that people take or don't take to prepare for and respond to hazards.

Increase access to, and understanding of, hazard alerts and warning information especially in rural areas, to promote the protection of life and property.

Build community resilience to natural hazards through education and outreach programs that enhance hazard awareness and preparedness.

# SULAWESI TENGAH RECOMMENDATIONS

## 3

### Economic Capacity

Sulawesi Tengah has the 11th lowest overall Economic Capacity in Indonesia, influenced by relatively low Average Monthly Income (2.4 million IDR), and GDP per Capita (31.8 million IDR).

Institute vocational and technical programs that bridge the gap between labor market needs and the lower levels of education typical in the province to increase household incomes.

## 4

### Transportation Capacity

Findings show that Sulawesi Tengah has the 12th lowest Transportation Capacity in the country. Road and Railway Density is 0.09 km per square km. Focus efforts to expand and modernize airport and seaport facilities and improve connectivity between seaports and land-based infrastructure to expedite the transport of relief supplies during and after a disaster and support the province's growing economy.

Prioritize infrastructure development in remote areas to improve access to services and facilitate response operations during a disaster.

Adopt a multi-stakeholder approach to infrastructure improvements to enhance other services that improve the health, education and economic well-being of the population.

## SULAWESI TENGAH RECOMMENDATIONS

### 5

#### Emergency Services

Findings show that Sulawesi Tengah has the 5th lowest ranking for overall Emergency Services capabilities. Drivers include Average Distances to a Fire Station (348 km) and Police Station (74 km).

Improvements to transportation capacity will increase access to existing emergency services and provide opportunities for enhancements.

### 6

#### Early Warning and Monitoring

Sulawesi Tengah ranks 17th for overall Early Warning and Monitoring capabilities. The province is exposed to multiple hazards, including flood, earthquake, landslide, volcanic eruption, drought, wildfire, tsunami, flash flooding and extreme weather (tornado). The greatest single hazard exposures are to extreme weather and earthquakes. Over 88% of the population and 90% of economic assets in the province are exposed to extreme weather events. Nearly 84% of the population and 86% of economic assets are exposed to earthquakes.

Strengthen engagement with detection and monitoring institutions to enhance notification and dissemination of warning messages for both geophysical and meteorological/ climate-based hazards.

**Better solutions.  
Fewer disasters.**

# Safer world.

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