



INDONESIA

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# NUSA TENGGARA TIMUR

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NDPBA PROVINCE PROFILE

# NUSA TENGGARA TIMUR

## CAPITAL: KUPANG

Area: 48,718 km<sup>2</sup>



Nusa Tenggara Timur (East Nusa Tenggara), with over 500 islands, is a predominantly Christian province and the southernmost region of Indonesia. Historically the area has experienced heightened levels of geophysical and meteorological hazards and both coping capacity and resilience levels are not adequate to meet the elevated multi-hazard risk and vulnerability levels across this province. UNDRR standards for Multi-Hazard Early Warning (MHEWS) systems have been implemented to better prepare for and respond to the many hazards encountered in the region via coordination with BNPB and international partners.

## RISK AND VULNERABILITY COMPONENT SCORE



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

Score: 0.555 • Rank: 5/34



### RESILIENCE (R) - Very Low

Score: 0.412 • Rank: 34/34



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

Score: 0.453 • Rank: 20/34



### VULNERABILITY (V) - Very High

Score: 0.612 • Rank: 2/34



### COPING CAPACITY (CC) - Very Low

Score: 0.338 • Rank: 33/34



### DISASTER MANAGEMENT CAPABILITIES (DMC) - Moderate

Score: 0.509 • Rank: 19/34



Population (2020 Projected)

**5,541,400**



Population in Poverty

**20.6%**



Adult Literacy Rate

**93.2%**



Access to improved water

**82.4%**



Average life expectancy

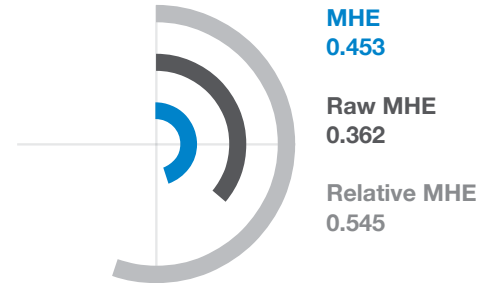
**66.9 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 20 / 34 PROVINCES  
SCORE: 0.453



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



Earthquake

**36%**

1,903,091  
\$7.6 Billion



Tsunami

**1%**

76,582  
\$244 Million



Flood

**8%**

438,724  
\$1.93 Billion



Flash Flood

**4%**

228,927  
\$742.5 Million



Landslide

**20%**

1,050,501  
\$2.9 Billion



Volcano

**6%**

328,773  
\$2.6 Billion



Drought

**84%**

4,381,985  
\$18.1 Billion



Wildfire

**25%**

1,289,448  
\$3.5 Billion



Extreme Weather

**76%**

3,998,628  
\$19.3 Billion



## VULNERABILITY (V)

**RANK: 2 / 34 PROVINCES ASSESSED**  
**SCORE: 0.612**

Vulnerability in Nusa Tenggara Timur is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress



**SCORE: 0.585 RANK: 4/34 PROVINCES ASSESSED**

**26.4%**

Land susceptible to severe erosion

**96.24**

Livestock Density (per sq km)

**6037.1**

Net Deforestation (hectares per year)



### Vulnerable Health Status



**SCORE: 0.626 RANK: 3/34 PROVINCES ASSESSED**

**66.85**

Life expectancy (years)

**45**

Infant mortality rate (per 1,000 live births)

**339.73**

Maternal mortality ratio

**12.8%**

Children (under 5) Wasting

**9.6%**

Disability

**8.1%**

Unmet health care needs

**18.2%**

Households with limited access to health facility

**0.7%**

Households with catastrophic health expenditure

**24.82**

Dengue incidence per 100,000 population

**1.1**

Measles incidence per 100,000 population

**2.07**

Malaria incidence per 100,000 population

**138**

TB case notification per 100,000 population

**38.33**

HIV & AIDS incidence per 100,000 population

**0.73**

Prevalence of Leprosy per 10,000 population



### Clean Water Vulnerability



**SCORE: 0.698 RANK: 5/34 PROVINCES ASSESSED**

**82.4%**

Households with improved water

**64.6%**

Households with improved sanitation



### Information Access Vulnerability



**SCORE: 0.774 RANK: 2/34 PROVINCES ASSESSED**

**93.2%**

Adult literacy rate

**96.2%**

Net primary school enrollment rate

**7.55**

Average years of schooling

**49.8%**

Household using internet



### Economic Constraints



**SCORE: 0.647 RANK: 1/34 PROVINCES ASSESSED**

**3.4%**

Unemployment rate

**63.4**

Age dependency ratio

**20.6%**

Poverty rate

**0.356**

GINI ratio



### Gender Inequality



**SCORE: 0.538 RANK: 11/34 PROVINCES ASSESSED**

**0.97**

Female to male literacy rate

**0.77**

Female to male labor ratio

**1.14**

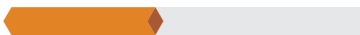
Female to male secondary school enrollment ratio

**10.8%**

Percent female seats in government



### Population Pressures



**SCORE: 0.418 RANK: 17/34 PROVINCES ASSESSED**

**1.8%**

Average annual total population change

**4.8%**

Average annual urban population change



## COPING CAPACITY (CC)

**RANK: 33 / 34 PROVINCES ASSESSED**  
**SCORE: 0.338**

Nusa Tenggara Timur exhibits weaker Coping Capacity in the areas of Energy Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the province's overall Coping Capacity score.



### Economic Capacity

**SCORE: 0.170** **RANK: 32/34 PROVINCES ASSESSED**

<b>68.5%</b> Labor force participation	<b>2,112,649</b> Average monthly income (IDR)	<b>13.6</b> GDP per capita (Million IDR)
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### Governance

**SCORE: 0.556** **RANK: 24/34 PROVINCES ASSESSED**

<b>118</b> Crime rate per 100,000 population	<b>70.3%</b> Crime clearance rate	<b>80.2%</b> Voter participation
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### Environmental Capacity

**SCORE: 0.226** **RANK: 24/34 PROVINCES ASSESSED**

**5.9%**  
Protected area



### Infrastructure Capacity

**SCORE: 0.326** **RANK: 30/34 PROVINCES ASSESSED**



### Health Care Capacity

**SCORE: 0.376** **RANK: 24/34 PROVINCES ASSESSED**

<b>8.1</b> Hospital beds per 10,000 people	<b>1.82</b> Physicians per 10,000 people	<b>19.14</b> Nurses and midwives per 10,000 people	<b>33.5%</b> Time to public hospital (over 1 hour)	<b>51.6%</b> Immunization rate (children under 5)	<b>71.5%</b> Health care accreditation rate	<b>67.1%</b> Population covered by health insurance
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### Transportation Capacity

**SCORE: 0.542** **RANK: 10/34 PROVINCES ASSESSED**

<b>0.51</b> Road and rail density	<b>29.13</b> Average distance to port or airport
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### Communications Capacity

**SCORE: 0.313** **RANK: 31/34 PROVINCES ASSESSED**

<b>45.0%</b> Mobile phone ownership	<b>0.5%</b> Households with Fixed Phones
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### Energy Capacity

**SCORE: 0.072** **RANK: 34/34 PROVINCES ASSESSED**

<b>70.1%</b> Households served by state electricity	<b>0.2%</b> Percentage of total national electricity generated in province	<b>11.81</b> Electricity generation GWh per 100,000 Population	<b>1.2%</b> Households with gas for cooking
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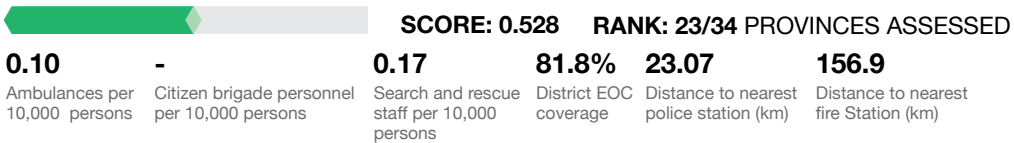
# DISASTER MANAGEMENT CAPABILITIES (DMC)

**RANK: 19 / 34 PROVINCES ASSESSED**  
**SCORE: 0.338**

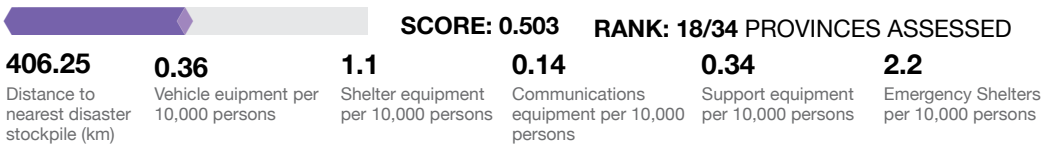
Nusa Tenggara Timur exhibits weaker Disaster Management Capabilities in the areas of Early Warning and Monitoring and Mass Care Support. The bar charts indicate the disaster management themes contributing to the province's overall Disaster Management Capabilities score.



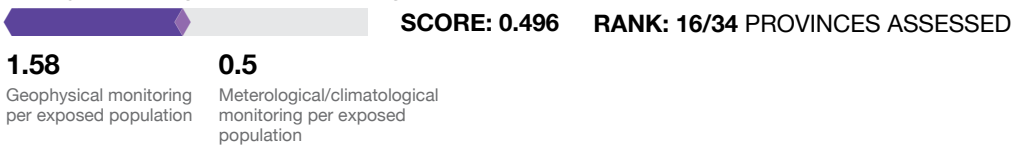
## Emergency Services



## Mass Care Support



## Early Warning and Monitoring





## RESILIENCE (R)

**RANK: 34 / 34 PROVINCES ASSESSED**  
**SCORE: 0.412**

Nusa Tenggara Timur's Very Low Resilience score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

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



**Information Access Vulnerability**



**Clean Water Access Vulnerability**



**Energy Capacity**



**Economic Capacity**



**Early Warning and Monitoring**



**Mass Care Support**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 17 / 34 PROVINCES ASSESSED**  
**SCORE: 0.250**



**Tsunami**

**RANK: 15 / 34 PROVINCES ASSESSED**  
**SCORE: 0.248**



**Flood**

**RANK: 22 / 34 PROVINCES ASSESSED**  
**SCORE: 0.179**



**Flash Flood**

**RANK: 6 / 34 PROVINCES ASSESSED**  
**SCORE: 0.291**



**Landslide**

**RANK: 2 / 34 PROVINCES ASSESSED**  
**SCORE: 0.404**



**Volcano**

**RANK: 1 / 34 PROVINCES ASSESSED**  
**SCORE: 0.416**



**Drought**

**RANK: 1 / 34 PROVINCES ASSESSED**  
**SCORE: 0.368**



**Wildfire**

**RANK: 2 / 34 PROVINCES ASSESSED**  
**SCORE: 0.350**



**Extreme Weather**

**RANK: 13 / 34 PROVINCES ASSESSED**  
**SCORE: 0.278**



## MULTI-HAZARD RISK (MHR)

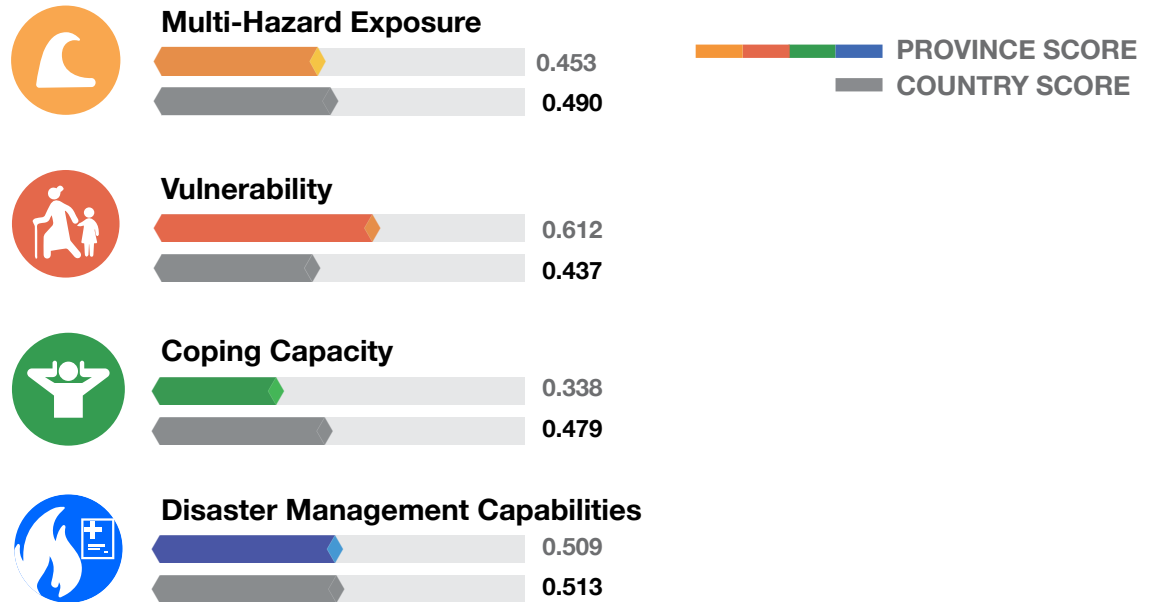
**5 / 34**

RANK WITHIN PROVINCES  
Score: 0.555



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

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





# NUSA TENGGARA TIMUR RECOMMENDATIONS

## 1

### Information Access Vulnerability

Nusa Tenggara Timur has the 2nd highest Information Access Vulnerability in the country with the lowest Internet Use (49.83% of households). The province has the 6th lowest ranking for both Adult Literacy and Average Years of Schooling, and ranks 7th lowest for Net Primary School Enrollment.

Expand telecommunications infrastructure in the province to improve overall access to information and provide additional avenues for provision of hazard alerts and warning information, especially in rural communities. Telecommunications infrastructure expansion would also benefit schools and provide teachers with opportunities to improve qualifications and skills through online learning.

## 2

### Clean Water Access Vulnerability

Findings show that Nusa Tenggara Timur has the 5th highest Clean Water Access Vulnerability, with the 3rd lowest percentage of Households with Improved Sanitation (64.55%) and the 13th lowest percentage of Households with Improved Water (82.35%).

Invest in improved water and sanitation infrastructure to increase access to clean water and reduce health risks.

Findings show a high rate of exposure to drought and extreme weather in Nusa Tenggara Timur. Invest in infrastructure to promote water conservation and support farmers through training and education on drought resistant crop varieties and farming practices to reduce water stress and drought impacts.

# NUSA TENGGARA TIMUR RECOMMENDATIONS

## 3

### Energy Capacity

Findings show that Nusa Tenggara Timur has the lowest ranking for Energy Capacity, with the 2nd lowest number of households served by the state electricity company (70.07%) and the 2nd lowest percentage of households (1.2%) using gas for cooking purposes. According to a Badan Pusat Statistik (BPS) National Socioeconomic Survey, 26.98% of households in the province cook with kerosene and 70.94% cook with wood.

Expansion of energy capacity in the province would have the added benefits of boosting productive capacity of small businesses as well as bring social benefits of enhanced education support and community engagement.

## 4

### Economic Capacity

Nusa Tenggara Timur has the 3rd lowest overall Economic Capacity ranking in the country, with the lowest GDP per Capita (13.6 million IDR), and the lowest Average Monthly Income (2.1 million IDR). The province also has the highest ranking in the country for Economic Constraints, driven by the highest Age Dependency score and the third highest poverty score.

Given the prevalence of poverty in the province and reduced economic capacity, pursue long-term economic plans and programs that both promote social benefits for elderly, low income, and single-parent households, and allocate the revenue required to balance the costs of these benefits.

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

# NUSA TENGGARA TIMUR RECOMMENDATIONS

## 5

### Early Warning and Monitoring

Findings show that Nusa Tenggara Timur ranks 16th for Early Warning and Monitoring. Enhanced monitoring and forecasting of meteorological and climate-related hazards will assist farmers in anticipating hazard impacts on crops and expand reach to remote communities.

## 6

### Mass Care Support

Nusa Tenggara Timur ranks 18th for Mass Care Support. The Average Distance to a Disaster Stockpile is over 406 km away, and the capacity of Emergency Shelters (2.2 per 10,000 persons) is limited.

Nusa Tenggara Timur's large proportion of dependent populations will require targeted logistical planning to ensure the requirements of the very young and elderly are met.

**Better solutions.  
Fewer disasters.**

# Safer world.

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