

INDONESIA

KALIMANTAN TIMUR

NDPBA PROVINCE PROFILE



KALIMANTAN TIMUR

CAPITAL: SAMARINDA

Area: 129,067

 $\,\mathrm{km}^2$

Given the ongoing and heightened risks of flooding in Jakarta, Indonesia is looking to the far eastern province of Kalimantan Timur (East Kalimantan) to potentially relocate



the nation's capital in the coming decades. Timber and agriculture dominate the local economy and frequent forest fires combine with earthquakes to present DRR challenges. The region possesses elevated resilience and coping capacities along with high level disaster management capabilities, which are enhanced by ongoing DRR and CCA capacity building in the province by local, national and international actors.

RISK AND VULNERABILITY

COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low

Score: 0.415 · Rank: 29/34



RESILIENCE (R) - Very High

Score: 0.598 · Rank: 4/34



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.454 · Rank: 19/34



VULNERABILITY (V) - Very Low

Score: 0.333 · Rank: 32/34



COPING CAPACITY (CC) - High

Score: 0.567 · Rank: 7/34



DISASTER MANAGEMENT CAPABILITIES (DMC) - High

Score: 0.560 · Rank: 7/34



Population (2020 Projected)

3,793,152



Population in Poverty

5.9%



Adult Literacy Rate

99.0%



Access to improved water

83.5%



Average life expectancy

74.2 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 19 / 34 PROVINCES

SCORE: 0.454



MHE 0.454

Raw MHE 0.380

Relative MHE 0.528

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

<1%

\$ 5,566

\$70.5 Million



Tsunami

3%

114,675 \$1.4 Billion



Flood

38%

1,322,712

\$16.48 Billion



Flash Flood

<1%

2,642

\$33.4 Million



Landslide

1%

34,185

\$425.1 Million



Volcano

0%

L -

-



Drought

98%

3,413,429

\$42.6 Billion



Wildfire

21%

4 732,178 \$9.1 Billion

Extreme Weather

90%

3,108,750

\$38.8 Billion



VULNERABILITY (V)

RANK: 32 / 34 PROVINCES ASSESSED

SCORE: 0.333

Vulnerability in Kalimantan Timur is primarily driven by Population Pressures and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the province's overall Vulnerability score.



Environmental Stress

SCORE: 0.306 RANK: 25/34 PROVINCES ASSESSED

1.5%

2.15

17763.4

Land susceptible to severe erosion

Livestock Density (per sq km)

Net Deforestation (hectares per year)



Vulnerable Health Status

SCORE: 0.187 RANK: 34/34 PROVINCES ASSESSED

74.22 Life expectancy

Infant mortality rate

7.5% Children (under 6.3% Disasbility 4.0% Unmet health

Households with limited access to health facility

(years) 0.9% (per 1,000 live births)

5) Wasting

176

0.64

Households with catastrophic health expenditure

Dengue incidence per 100,000 population

87.81

0.49 8.17 Malaria incidence Measles incidence per 100.000 per 100.000 population population

TB case notification per 100,000 population

HIV & AIDS incidence per 100,000 population

care needs

43.08

Prevalence of Leprosy per 10,000 population



Clean Water Vulnerability

RANK: 29/34 PROVINCES ASSESSED SCORE: 0.281

83.5%

89.3%

Households with improved water

Households with improved

sanitation



Information Access Vulnerability

SCORE: 0.228 RANK: 32/34 PROVINCES ASSESSED

99.0%

98.4% Net primary school 9.7

schooling

101.79

Maternal

mortality ratio

Adult literacy rate

enrollment rate

Average years of

84.2% Household using internet

Economic Constraints

SCORE: 0.329 RANK: 28/34 PROVINCES ASSESSED

6.1%

44.5

5.9%

0.330

Unemployment

Age dependency

Poverty rate

GINI ratio



Gender Inequality

SCORE: 0.471 RANK: 20/34 PROVINCES ASSESSED

0.51 Female to male Female to male

1.01

10.9%

Female to male Percent female secondary school literacy rate labor ratio seats in enrollment ratio government



Population Pressures

RANK: 8/34 PROVINCES ASSESSED SCORE: 0.528

2.5%

3.8%

Average annual total population change

Average annual urban population change



COPING CAPACITY (CC)

RANK: 7 / 34 PROVINCES ASSESSED

SCORE: 0.567

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



Economic Capacity

SCORE: 0.680 RANK: 3/34 PROVINCES ASSESSED

66.4% 3,906,409

155.1 Average monthly income (IDR)

Labor force participation

GDP per capita (Million IDR)



Governance

SCORE: 0.551 **RANK: 25/34 PROVINCES ASSESSED**

75.8% 176 80.7%

Crime rate per 100,000 Crime clearance Voter population participation



Environmental Capacity

SCORE: 0.134 RANK: 29/34 PROVINCES ASSESSED

3.7%

Protected area



Infrastructure Capacity

SCORE: 0.613 RANK: 9/34 PROVINCES ASSESSED



Health Care Capacity SCORE: 0.604 **RANK: 7/34 PROVINCES ASSESSED**

19.9% 52.1% 72.6% 78.7% 18.62 18.4 4.78

Nurses and midwives Hospital beds per Physicians per Time to public hospital Immunization rate Health care Population covered 10,000 people 10,000 people per 10,000 people (over 1 hour) (children under 5) accreditation rate by health insurance



Transportation Capacity SCORE: 0.298 **RANK: 25/34 PROVINCES ASSESSED**

0.10 37.96

Road and rail density Average distance to port or airport



Communications Capacity SCORE: 0.904 RANK: 3/34 PROVINCES ASSESSED

76.9% 2.8%

Mobile phone ownership Households with Fixed Phones



Energy Capacity SCORE: 0.645 RANK: 11/34 PROVINCES ASSESSED

93.8% 1.1% 80.89 95.3%

Households served by state Percentage of total national Electricity generation GWh Households with gas for electricity electricity gererated in province per 100,000 Population cookina



DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 7 / 34 PROVINCES ASSESSED

SCORE: 0.567

Kalimantan 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

SCORE: 0.670 RANK: 5/34 PROVINCES ASSESSED

0.69 0.01 0.23 80.0% 10.62 28.15

Ambulances per Citizen brigade personnel 10,000 persons per 10,000 persons Search and rescue Staff per 10,000 coverage police station (km) persons per sons Distance to nearest coverage police station (km) fire Station (km)



Mass Care Support

SCORE: 0.534 RANK: 13/34 PROVINCES ASSESSED

292.35 0.14 0.68 0.07 0.11 4.36

Distance to Vehicle euipment per nearest disaster stockpile (km)

Vehicle euipment per 10,000 persons stockpile (km)

Shelter equipment per 10,000 persons stockpile (km)

Support equipment per 10,000 persons per 10,000 persons per 10,000 persons per 10,000 persons



Early Warning and Monitoring

SCORE: 0.475 RANK: 18/34 PROVINCES ASSESSED

1.94 0.43

Geophysical monitoring per exposed population Meterological/climatological monitoring per exposed population

4 PDC Global www.pdc.org



RESILIENCE (R)

RANK: 4/34 PROVINCES ASSESSED

SCORE: 0.598

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

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













Population Pressures

Gender Inequality

Transportation Capacity

Governance

Early Warning and Monitoring

Mass Car Support



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 32 / 34 PROVINCES ASSESSED

SCORE: 0.079



Tsunami

RANK: 23 / 34 PROVINCES ASSESSED

SCORE: 0.168



Flood

RANK: 24 / 34 PROVINCES ASSESSED

SCORE: 0.170



Flash Flood

RANK: 31/34 PROVINCES ASSESSED

SCORE0.102



Landslide

RANK: 31 / 34 PROVINCES ASSESSED

SCORE).127



Volcano

RANK: 31 / 34 PROVINCES ASSESSED

SCORE: 0.077



Drought

RANK: 11/34 PROVINCES ASSESSED

SCORE 0.238



Wildfire

RANK: 19 / 34 PROVINCES ASSESSED

SCORE: 0.207



Extreme Weather

RANK: 30 / 34 PROVINCES ASSESSED

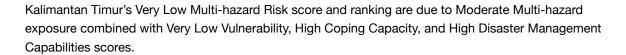
SCORE: 0.189



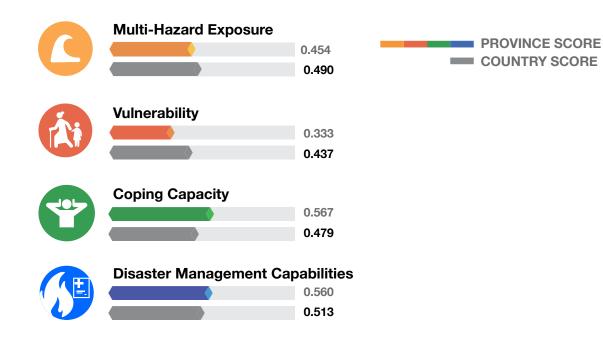
MULTI-HAZARD RISK (MHR)

29 / 34

RANK WITHIN PROVINCES Score: 0.415



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



76 PDC Global www.pdc.org

KALIMANTAN TIMUR RECOMMENDATIONS

1

Population Pressures

Kalimantan Timur ranks 8th for Population Pressures, driven by the 5th highest Average Population Growth rate (2.45). As the new capital of Indonesia moves to Kalimantan Timur in 2024, predicted growth in population will put added pressure on resources such as land and water. Develop policies and improvement plans that establish equitable distribution of clean water and sanitation services and management of waste to protect environmental resources and enhance sustainable water management and delivery.

Adopt a whole-of-society engagement approach to promote interagency cooperation and collaboration in long-term sustainable development planning for Kalimantan Timur's future to ensure adequate and equitable distribution of services, infrastructure and economic opportunities. Provide incentives for the implementation of risk reduction initiatives as new infrastructure and housing developments ensue to minimize future damages and losses resulting from the impacts of natural hazards.

2

Gender Inequality

Indicators driving Kalimantan
Timur's overall Gender Inequality
score include female to male
Labor Ratio, ranking 3rd,
and female representation in
Parliament, with fewer than 11%
of government seats held by
women.

Invest in programs that support women's sexual and reproductive rights to facilitate increased participation in, and contribution to social and economic development. Support economic advancement of women by promoting investment opportunities such as access to micro finance programs and cash transfer programs to boost economic growth and productivity of small farms and businesses.

Empower and enhance participation of women in formal and informal leadership positions, including community disaster preparedness and recovery processes.

KALIMANTAN TIMUR RECOMMENDATIONS



Transportation Capacity

Kalimantan Timur has the 10th lowest ranking for Transportation Capacity. The Average Distance to a Port or Airport is 38 km. Road and Rail Density is 0.1 km per square km. Improvements in transportation infrastructure will facilitate emergency response and recovery operations and contribute to positive economic outcomes.



Governance

Kalimantan Timur has the 10th lowest ranking for overall Governance in the country, driven by lower Voter Participation (80.73%) and the 11th highest Crime Rate (176 per 100,000 persons).

Garner support for increased public security through law enforcement presence and surveillance, youth education, community service and personal safety programs.

178 PDC Global www.pdc.org

KALIMANTAN TIMUR RECOMMENDATIONS

5

Early Warning and Monitoring

Findings show that Kalimantan
Timur ranks 18th for Early
Warning and Monitoring. With a
high rate of exposure to drought,
extreme weather and flooding,
strengthening meteorological
and climate-based monitoring
stations would strengthen
capabilities in the province.

Boost public-private collaboration and coordination to ensure that hazard warning information is disseminated to as wide an audience as possible through multiple channels.

Strengthen education and outreach programs to promote hazard awareness and preparedness and increase community resilience.



Mass Care Support

Kalimantan Timur ranks 15th for overall Mass Care Support, however capabilities could be strengthened through requisition of additional Disaster Equipment for transportation, sheltering support, and communications.

Enhance logistical planning to adequately meet the needs of disaster-affected populations.



Better solutions. Fewer disasters.

Safer World.

1305 N Holopono Street Suite 2, Kihei, HI 96753 P: (808) 891-0525 F: (808) 891-0526



@PDC_Global







ndpba@pdc.org