

**INDONESIA** 

# **SUMATERA SELATAN**

# **NDPBA PROVINCE PROFILE**



# **SUMATERA SELATAN**

**CAPITAL: PALEMBANG** 

Area: 91,592

 $km^2$ 

Sumatera Selatan (South Sumatra) is a multi-ethnic and diverse region on Sumatra with an abundance of extractive and energy industries. Mountains and rivers characterize



the landscape and Palembang and environs have traditionally encountered fires and flooding, with excellent school-level DRR and localization efforts employed to raise awareness and further DRR. Although coping capacity and resilience levels are moderate across Sumatera Selatan, disaster management capabilities will need to be improved, along with clean water and sanitation services, information access, transportation infrastructure and economic capacities to further mitigate risk.

#### RISK AND VULNERABILITY

#### **COMPONENT SCORE**



#### **MULTI-HAZARD RISK (MHR) - Low**

Score: 0.483 · Rank: 20/34



#### **RESILIENCE (R) - Moderate**

Score: 0.511 · Rank: 18/34



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

Score: 0.466 · Rank: 17/34



#### **VULNERABILITY (V) - Very Low**

Score: 0.384 · Rank: 30/34



#### **COPING CAPACITY (CC) - Moderate**

Score: 0.483 · Rank: 17/34



#### **DISASTER MANAGEMENT CAPABILITIES (DMC) - Very Low**

Score: 0.436 · Rank: 29/34



Population (2020 Projected)

8,567,900



**Population in Poverty** 

12.6%



**Adult Literacy Rate** 

98.8%



Access to improved water

80.4%



Average life expectancy

**69.7** years



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

**RANK: 17 / 34 PROVINCES** 

**SCORE: 0.466** 



MHE 0.466

Raw MHE 0.536

**Relative MHE** 0.396

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



**Earthquake** 

13%

**1**,080,042 \$10.9 Billion



Flood

51%

**4**,173,694 \$44.6 Billion



Landslide

1%

**53.131** 

\$524.9 Million



**Drought** 

40%

**3,284,848** \$33.1 Billion



**Extreme Weather** 

**8,056,287** \$84.7 Billion



Tsunami



Flash Flood

3%

**227,656** \$2.3 Billion



Volcano

**6.708** 

\$65.1 Billion



Wildfire

16%

**1,309,848** \$12.8 Billion





# **VULNERABILITY (V)**

**RANK: 30 / 34 PROVINCES ASSESSED** 

**SCORE: 0.384** 

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



#### **Environmental Stress**

**SCORE: 0.26 RANK: 30/34 PROVINCES ASSESSED** 

2.6% 8.73 3619.4

Land susceptible to Livestock Density Net Deforestation severe erosion (per sq km) (hectares per year)



#### **Vulnerable Health Status**

SCORE: 0.391 **RANK: 18/34 PROVINCES ASSESSED** 

69.65 93.75 11.4% 9.0% 4.1% 18.8% Children (under Unmet health Households with limited Life expectancy Infant mortality rate Disasbility Maternal (per 1,000 live births) access to health facility mortality ratio 5) Wasting care needs (years)

1.4% 28.72 234 13.32 0.35 6.03 0.07

Malaria incidence HIV & AIDS Households with Dengue incidence Measles incidence TB case Prevalence of per 100,000 catastrophic health per 100.000 per 100,000 notification incidence per Leprosy per per 100,000 10,000 population 100,000 population expenditure population population population

#### **Clean Water Vulnerability**

SCORE: 0.556 RANK: 12/34 PROVINCES ASSESSED

population

80.4% 74.7%

Households with improved Households with sanitation improved water

#### Information Access Vulnerability

**SCORE: 0.449 RANK: 15/34 PROVINCES ASSESSED** 

98.8% 97.9% 66.4% 8.18

Adult literacy rate Net primary school Average years of Household using internet enrollment rate schooling



#### **Economic Constraints**

**SCORE: 0.386 RANK: 20/34 PROVINCES ASSESSED** 

4.5% 48.4 12.6% 0.331

GINI ratio Unemployment Age dependency Poverty rate



SCORE: 0.392 **RANK: 30/34 PROVINCES ASSESSED** 

0.99 1.04 21.3% 0.61

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



#### **Population Pressures**

**RANK: 31/34 PROVINCES ASSESSED SCORE: 0.256** 

1.5% 1.9%

Average annual Average annual total population urban population change change



# **COPING CAPACITY (CC)**

**RANK: 17 / 34 PROVINCES ASSESSED** 

**SCORE: 0.483** 

Sumatera Selatan 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.



#### **Economic Capacity**

**SCORE: 0.315 RANK: 22/34 PROVINCES ASSESSED** 

67.9% 2,309,090

38.8

Labor force Average monthly income (IDR) GDP per capita (Million IDR) participation



#### Governance

SCORE: 0.651 **RANK: 11/34 PROVINCES ASSESSED** 

164 74.8% 84.0%

Crime rate per 100,000 Crime clearance Voter population participation



#### **Environmental Capacity**

SCORE: 0.332 RANK: 18/34 PROVINCES ASSESSED

8.3% Protected area



#### Infrastructure Capacity

SCORE: 0.533 RANK: 15/34 PROVINCES ASSESSED



**Health Care Capacity** SCORE: 0.393 **RANK: 21/34 PROVINCES ASSESSED** 

32.2% 37.3% 74.9% 63.2% 20.51 10.8 2.84

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



**Transportation Capacity** SCORE: 0.266 **RANK: 27/34 PROVINCES ASSESSED** 

0.13 43.03

Road and rail density Average distance to port or airport



Communications Capacity SCORE: 0.607 RANK: 19/34 PROVINCES ASSESSED

60.7% 1.3%

Mobile phone ownership Households with Fixed Phones



**Energy Capacity SCORE: 0.867 RANK: 4/34 PROVINCES ASSESSED** 

95.2% 5.9% 195.57 91.8%

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: 29 / 34 PROVINCES ASSESSED** 

**SCORE: 0.483** 

Sumatera Selatan 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: 0.594 **RANK: 16/34 PROVINCES ASSESSED** 1.04 0.33 0.09 111.82 61.1% 34.38 Search and rescue District EOC Distance to nearest Distance to nearest Ambulances per Citizen brigade personnel 10,000 persons per 10,000 persons staff per 10,000 coverage police station (km) fire Station (km)

persons



#### **Mass Care Support**

SCORE: 0.39 RANK: 28/34 PROVINCES ASSESSED

416.22 1.12 0.17 0.32 0.79 0.18 Distance to Vehicle euipment per Shelter equipment Communications Support equipment **Emergency Shelters** equipment per 10,000 per 10,000 persons nearest disaster 10,000 persons per 10,000 persons per 10,000 persons stockpile (km)



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#### **Early Warning and Monitoring**

SCORE: 0.322 RANK: 25/34 PROVINCES ASSESSED

0.38 0.41

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

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# **RESILIENCE (R)**

**RANK: 18 / 34 PROVINCES ASSESSED** 

**SCORE: 0.511** 

Sumatera Selatan's Moderate Resilience score and ranking are due to Very Low Vulnerability combined with Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

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













Clean Water Access Vulnerability

Information Access Vulnerability

**Transportation** Capacity

**Economic** Capacity

**Early Warning** and Monitoring

Mass Care Support



# HAZADD-CDECIEIC DICK (HCD)

HAZAKD-SPECIFIC KISK (HSK)	
Earthquake	RANK: 24 / 34 PROVINCES ASSESSED SCORE: 0.171
Tsunami	RANK: 27 / 34 PROVINCES ASSESSED SCORE: 0.129
Flood	RANK: 9 / 34 PROVINCES ASSESSED SCORE: 0.269
Flash Flood	RANK: 15 / 34 PROVINCES ASSESSED SCORE).211
Landslide	RANK: 23 / 34 PROVINCES ASSESSED SCORE).176
Volcano	RANK: 18 / 34 PROVINCES ASSESSED



RANK: 18 / 34 PROVINCES ASSESSED

SCORE: 0.209



**Drought** 

**RANK: 17/34 PROVINCES ASSESSED** 

SCORE 3.226



Wildfire

**RANK: 7 / 34 PROVINCES ASSESSED** SCORE: 0.264



**Extreme Weather** 

**RANK: 10 / 34 PROVINCES ASSESSED** 

SCORE: 0.289



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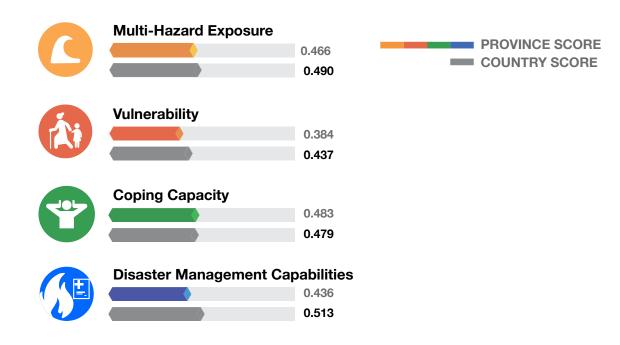
# **MULTI-HAZARD RISK (MHR)**

20 / 34

RANK WITHIN PROVINCES Score: 0.483

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

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



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## SUMATERA SELATAN RECOMMENDATIONS

#### **Clean Water Access Vulnerability**

Findings show that Sumatera
Selatan has the 12th lowest ranking
for overall Clean Water Access
Vulnerability, 10th lowest ranking for
Access to Clean Water (80.37% of
households have access) and the
13th lowest ranking for Access to
Sanitation (74.67% of households
have access).

Prioritize investments to expand and improve clean water and sanitation infrastructure and service delivery in urban and rural areas. Given that flood exposure is significant in Sumatera Selatan (50.56% of the population and 51.45% of economic assets are susceptible to flood impacts), institute measures to protect water supplies and reduce the risk to public health from untreated sewage.

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#### Information Access Vulnerability

Sumatera Selatan ranks 15th for overall Information Access Vulnerability, driven by Average Years of Schooling (8.18 years) and limited Internet Access (only 66.42 % of households reported using the Internet).

Improve physical access to education, especially in rural areas through infrastructure improvements (e.g., roads, electricity and telecommunication services). Foster engagement among parents, teachers and school administrators through participation in school committees to raise awareness of parental roles in supporting student learning, reduce absenteeism, and reinforce the value and importance of education.

### SUMATERA SELATAN RECOMMENDATIONS



#### **Transportation Capacity**

Sumatera Selatan has the 13th lowest Transportation Capacity in the country, despite having one of the few railways in the country. Rail and Road Density is limited, with only 0.13 km per square kilometer, and the Average Distance to a Port or Airport from populated areas is over 43 km.

Increase investment in transportation infrastructure improvements through public-private partnerships. Expanded transportation networks will facilitate disaster response and recovery operations, improve access to education and health care, assist in the delivery of other services such as clean water and electricity, and increase economic opportunities for the province.



#### **Economic Capacity**

Findings show that Sumatera Selatan has the 13th lowest Economic Capacity, driven by the 5th lowest Average Monthly Income (2.3 million IDR). Lower incomes may be explained by the province's primarily agricultural economy.

Increase access to financing and support structures (e.g. microfinance services and loans) for farmers, small business owners and household enterprises to expand production and marketability of goods and produce.

Diversify the local economy by promoting educational school-towork programs.`

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## SUMATERA SELATAN RECOMMENDATIONS



#### **Early Warning and Monitoring**

Sumatera Selatan has the 10th lowest ranking for overall Early Warning and Monitoring capabilities. Increase the number of monitoring stations for meteorological and climaterelated hazards to boost effectiveness of hazard alerting for flooding, drought, wildfires and extreme weather in the province.



#### **Mass Care Support**

Sumatera Selatan has the 7th lowest ranking for overall Mass Care Support, driven by the number of Shelters per 10,000 persons (0.79) and the average Distance to Disaster Stockpiles (over 416 km away).

Identify additional structures that can serve as emergency shelters and develop memorandums of agreement with stakeholders to formalize their use during and after a disaster.



Better solutions. Fewer disasters.

# Safer World.

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