



INDONESIA

SULAWESI BARAT

NDPBA PROVINCE PROFILE

SULAWESI BARAT

CAPITAL: MAMUJU

Area: 16,787 km²



Sulawesi Barat (West Sulawesi) is also a recent provincial addition (2004) and has historically been affected by earthquakes, floods and tsunamis. Whilst the region's multi-hazard risk and exposure are low to moderate, coping capacity and resilience levels are also low with higher levels of disaster management capabilities. Information access and clean water are challenges and improvements in transportation and communications will help build the DRR capabilities of the region.

RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.506 • Rank: 14/34



RESILIENCE (R) - Very Low

Score: 0.474 • Rank: 29/34



MULTI-HAZARD EXPOSURE (MHE) - Low

Score: 0.447 • Rank: 22/34



VULNERABILITY (V) - Very High

Score: 0.538 • Rank: 4/34



COPING CAPACITY (CC) - Very Low

Score: 0.392 • Rank: 28/34



DISASTER MANAGEMENT CAPABILITIES (DMC) - Very High

Score: 0.567 • Rank: 6/34



Population (2020 Projected)

1,405,000



Population in Poverty

11.0%



Adult Literacy Rate

93.6%



Access to improved water

71.5%



Average life expectancy

64.8 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 22 / 34 PROVINCES
SCORE: 0.447



MHE
0.447

Raw MHE
0.257

Relative MHE
0.636

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

92%

1,170,305
\$32.2 Billion



Tsunami

10%

128,607
\$6.1 Billion



Flood

38%

478,542
\$16.4 Billion



Flash Flood

4%

55,462
\$1.4 Billion



Landslide

17%

215,166
\$2.3 Billion



Volcano

0%

-
-



Drought

2%

28,504
\$296.5 Million



Wildfire

12%

146,670
\$1.6 Billion



Extreme Weather

98%

1,238,125
\$32.7 Billion



VULNERABILITY (V)

RANK: 4 / 34 PROVINCES ASSESSED
SCORE: 0.538

Vulnerability in Sulawesi Barat 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: 0.356 RANK: 19/34 PROVINCES ASSESSED

17.2% Land susceptible to severe erosion	26.24 Livestock Density (per sq km)	566.4 Net Deforestation (hectares per year)
--	---	---



Vulnerable Health Status

SCORE: 0.584 RANK: 5/34 PROVINCES ASSESSED

64.82 Life expectancy (years)	60 Infant mortality rate (per 1,000 live births)	338.39 Maternal mortality ratio	10.5% Children (under 5) Wasting	7.8% Disability	5.9% Unmet health care needs	22.1% Households with limited access to health facility
0.7% Households with catastrophic health expenditure	39.25 Dengue incidence per 100,000 population	11.66 Measles incidence per 100,000 population	0.14 Malaria incidence per 100,000 population	162 TB case notification per 100,000 population	1.84 HIV & AIDS incidence per 100,000 population	1.59 Prevalence of Leprosy per 10,000 population



Clean Water Vulnerability

SCORE: 0.682 RANK: 6/34 PROVINCES ASSESSED

71.5% Households with improved water	73.4% Households with improved sanitation
--	---



Information Access Vulnerability

SCORE: 0.715 RANK: 3/34 PROVINCES ASSESSED

93.6% Adult literacy rate	95.9% Net primary school enrollment rate	7.73 Average years of schooling	59.1% Household using internet
-------------------------------------	--	---	--



Economic Constraints

SCORE: 0.438 RANK: 13/34 PROVINCES ASSESSED

3.2% Unemployment rate	53.8 Age dependency ratio	11.0% Poverty rate	0.365 GINI ratio
----------------------------------	-------------------------------------	------------------------------	----------------------------



Gender Inequality

SCORE: 0.637 RANK: 2/34 PROVINCES ASSESSED

0.98 Female to male literacy rate	0.61 Female to male labor ratio	1.24 Female to male secondary school enrollment ratio	17.8% Percent female seats in government
---	---	---	--



Population Pressures

SCORE: 0.355 RANK: 23/34 PROVINCES ASSESSED

2.1% Average annual total population change	2.1% Average annual urban population change
---	---



COPING CAPACITY (CC)

RANK: 28 / 34 PROVINCES ASSESSED
SCORE: 0.392

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



Economic Capacity

SCORE: 0.271 RANK: 27/34 PROVINCES ASSESSED

69.3% Labor force participation	2,161,381 Average monthly income (IDR)	23.3 GDP per capita (Million IDR)
---	--	---



Governance

SCORE: 0.651 RANK: 12/34 PROVINCES ASSESSED

144 Crime rate per 100,000 population	56.2% Crime clearance rate	86.8% Voter participation
---	--------------------------------------	-------------------------------------



Environmental Capacity

SCORE: 0.467 RANK: 11/34 PROVINCES ASSESSED

11.5%
Protected area



Infrastructure Capacity

SCORE: 0.231 RANK: 34/34 PROVINCES ASSESSED



Health Care Capacity SCORE: 0.321 RANK: 29/34 PROVINCES ASSESSED

9.1 Hospital beds per 10,000 people	1.24 Physicians per 10,000 people	11.94 Nurses and midwives per 10,000 people	40.1% Time to public hospital (over 1 hour)	46.3% Immunization rate (children under 5)	53.8% Health care accreditation rate	103.9% Population covered by health insurance
---	---	---	---	--	--	---



Transportation Capacity SCORE: 0.076 RANK: 34/34 PROVINCES ASSESSED

0.07 Road and rail density	58.18 Average distance to port or airport
--------------------------------------	---



Communications Capacity SCORE: 0.171 RANK: 34/34 PROVINCES ASSESSED

52.2% Mobile phone ownership	0.0% Households with Fixed Phones
--	---



Energy Capacity SCORE: 0.356 RANK: 29/34 PROVINCES ASSESSED

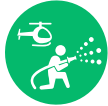
84.8% Households served by state electricity	0.0% Percentage of total national electricity generated in province	3.26 Electricity generation GWh per 100,000 Population	78.4% Households with gas for cooking
--	---	--	---



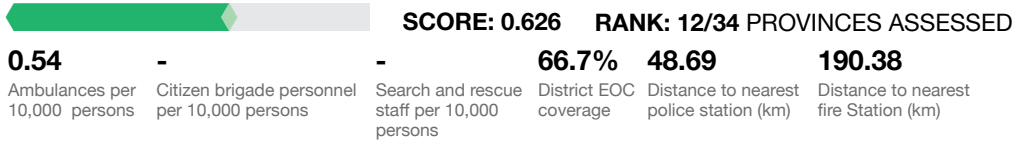
DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 6 / 34 PROVINCES ASSESSED
SCORE: 0.392

Sulawesi Barat 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.



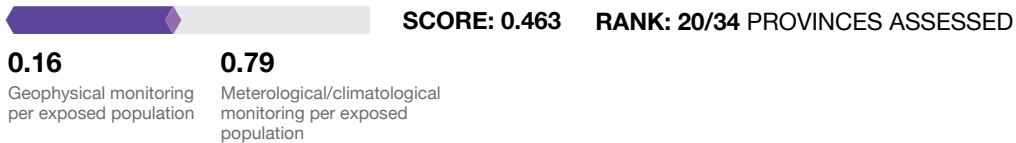
Emergency Services



Mass Care Support



Early Warning and Monitoring





RESILIENCE (R)

RANK: 29 / 34 PROVINCES ASSESSED
SCORE: 0.474

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

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



Information Access Vulnerability



Clean Water Access Vulnerability



Transportation Capacity



Communications Capacity



Early Warning and Monitoring



Mass Care Support



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 4 / 34 PROVINCES ASSESSED
SCORE: 0.339



Tsunami

RANK: 2 / 34 PROVINCES ASSESSED
SCORE: 0.379



Flood

RANK: 18 / 34 PROVINCES ASSESSED
SCORE: 0.210



Flash Flood

RANK: 14 / 34 PROVINCES ASSESSED
SCORE: 0.214



Landslide

RANK: 7 / 34 PROVINCES ASSESSED
SCORE: 0.299



Volcano

RANK: 20 / 34 PROVINCES ASSESSED
SCORE: 0.154



Drought

RANK: 34 / 34 PROVINCES ASSESSED
SCORE: 0.096



Wildfire

RANK: 23 / 34 PROVINCES ASSESSED
SCORE: 0.192



Extreme Weather

RANK: 16 / 34 PROVINCES ASSESSED
SCORE: 0.265



MULTI-HAZARD RISK (MHR)

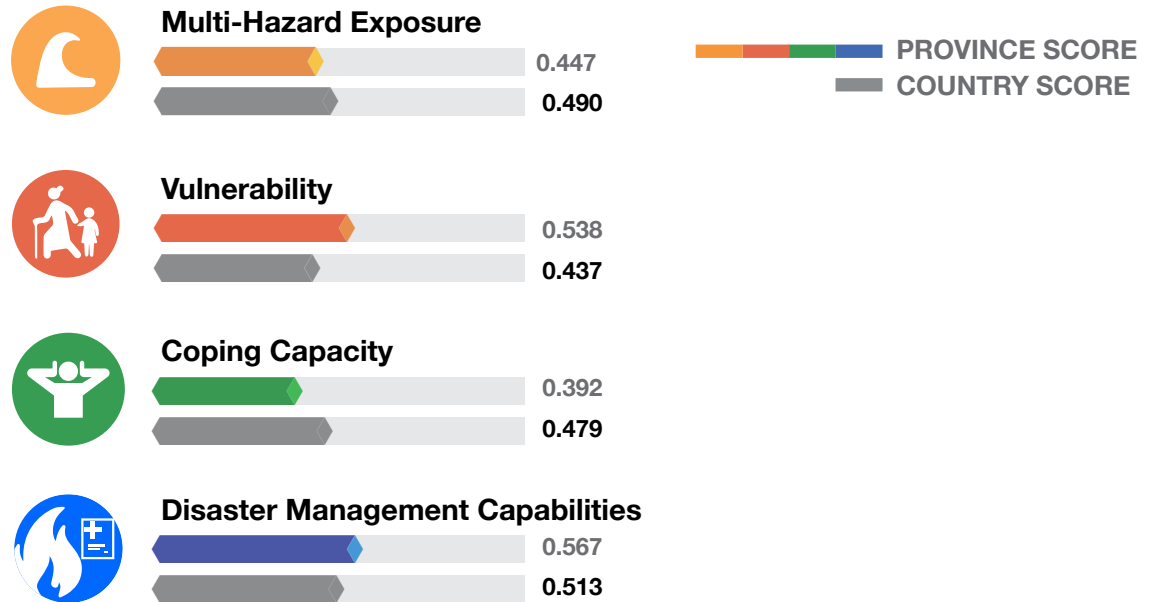
14 / 34

RANK WITHIN PROVINCES
Score: 0.506



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

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



SULAWESI BARAT RECOMMENDATIONS

1

Information Access Vulnerability

Sulawesi Barat has the 3rd highest Information Access Vulnerability in Indonesia, driven by the 6th lowest Net Enrollment in Primary School. In addition, over 40% of households do not have Internet Access.

Improve physical access to education, especially in rural areas through infrastructure improvements (e.g., roads, electricity and telecommunication services).

Continue partnership engagements with I/ NGOs and stakeholders to implement programs focused on overcoming challenges in education service delivery and improving learning outcomes among students. 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 of education.

2

Clean Water Access Vulnerability

Sulawesi Barat has the 6th highest Clean Water Access Vulnerability in Indonesia, with only 71.5% of households having Access to Improved Water and 73.39% of households having Access to Improved Sanitation.

Invest in clean water infrastructure to improve access and service delivery to remote areas.

Implement risk reduction measures that protect investments and reduce potential health risks arising as a result of hazard induced impacts (i.e., earthquakes and flooding).

SULAWESI BARAT RECOMMENDATIONS

3

Transportation Capacity

Findings show that Sulawesi Barat has the lowest Transportation Capacity in the country, with the greatest Average Distance to a Port or Airport (58.18 km), and the 5th lowest Road and Railway Density (0.07 km per square km).

Continue to invest in long-term planning and development of transportation infrastructure and improvements. Prioritize infrastructure development in remote areas to improve access to services and facilitate response operations during a disaster.

Multi-stakeholder approaches to improving transportation capacity could also facilitate enhancements to other much needed infrastructure services (e.g., water, telecommunications, energy), as these are often installed along improved roadways.

4

Communications Capacity

Sulawesi Barat has the lowest ranking for overall Communications Capacity in the country. Data indicate that no households have Fixed Phones, and only 52.18% of residents own Mobile Phones.

Limited Communications Capacity has direct bearing on the receipt of timely warning information. Utilize all available communication channels (e.g., TV, radio, SMS, Internet) for disseminating hazard alerts, and implement outreach campaigns to increase hazard awareness and community preparedness.

Pursue public/private partnerships to expand telecommunications infrastructure and reach, especially in rural areas.

SULAWESI BARAT RECOMMENDATIONS

5

Early Warning and Monitoring

Findings show that the province has the 2nd lowest geophysical hazard monitoring coverage in the country. Given the province's exposure to earthquake, landslide and tsunami hazards, work with existing institutions to improve coverage of monitoring stations.

Strengthen mechanisms for receiving timely warning information and explore ways to increase efficiency and redundancy in disseminating alerts and warnings to the population given the limited penetration of telecommunications infrastructure in the province.

6

Mass Care Support

Findings show that the province has the 10th highest ranking for Mass Care Support, primarily due to the Number of Shelters (4.82 per 10,000 persons) and its proximity to a Disaster Stockpile (77.19 km). However, Sulawesi Barat's capabilities to provide mass care are hampered by a lack of Disaster Equipment.

Invest in vehicles and equipment to support communications, sheltering and other needs (e.g., lighting, generators, chainsaws) to enhance the province's ability to meet the care needs of the population during a disaster.

**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



/PDCGlobal



www.pdc.prg



ndpba@pdc.org