

# INDONESIA — MALUKU

## NDPBA PROVINCE PROFILE



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#### PROVINCIAL PROFILE

# MALUKU CAPITAL: AMBON

Area: 46,914 km<sup>2</sup>

Maluku has both a diverse cultural and religious landscape along with a varied and mountainous setting which has benefitted from subnational DRR programs via the



UNDRR, BNPB and others. Table-top exercises and enhancing the legal framework for DRR and CCA have been implemented in Ambon and environs to help respond to volcanic, flooding and other DRR challenges. The heightened level of multi-hazard risk will need to be addressed via enhancements to coping capacity and resilience. Specifically, advancements to ameliorate economic constraints, improve sanitation and increase health care capacity will help address some of these challenges.

#### **RISK AND VULNERABILITY** COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High Score: 0.521 · Rank: 10/34



**RESILIENCE (R) - Very Low** Score: 0.455 • Rank: 32/34



MULTI-HAZARD EXPOSURE (MHE) - Low Score: 0.447 · Rank: 21/34



**VULNERABILITY (V) - Moderate** Score: 0.430 · Rank: 19/34



**COPING CAPACITY (CC) - Very Low** Score: 0.263 • Rank: 34/34



DISASTER MANAGEMENT CAPABILITIES (DMC) - Moderate

Score: 0.530 · Rank: 14/34





Population (2020 Projected) **1,831,900** 



Population in Poverty **17.7%** 



Adult Literacy Rate 99.4%



Access to improved water 90.8%



Average life expectancy

65.8 years

# MULTI-HAZARD EXPOSURE (MHE)

RANK: 21 / 34 PROVINCES SCORE: 0.447



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



Earthquake 65% 990,450 \$5.4 Billion



23%

Flood

**a** 347,805 \$1.79 Billion



Landslide

6% ▲ 84,260 \$408.8 Million



Drought

**83% 1**,273,861 \$6.9 Billion



Extreme Weather **82% 1**,258,438 **56.8 Billion**  

 Tsunami

 18%

 269,483

 \$1.5 Billion

 \$1.5 Billion

 \$1.5 Billion

 \$269,483

 \$1.5 Billion

 \$1.5 Billion

 \$269,483

 \$1.5 Billion

 \$1.5 Billion

 \$269,483

 \$1.5 Billion

 \$3%

 \$44,715

 \$218.2 Million

 \$Volcano

 \$19%

 \$3,773

 \$18.1 Million

 \$Vildfire

 \$22%

 \$22%

**a** 331,432 \$1.6 Billion



# VULNERABILITY (V)

#### **RANK: 19 / 34 PROVINCES ASSESSED SCORE: 0.430**

RANK: 27/34 PROVINCES ASSESSED

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



#### **Environmental Stress**

7.1% Land susceptible to severe erosion

Livestock Density (per sq km)

6.61

2967.4 Net Deforestation (hectares per year)

**SCORE: 0.28** 



#### **Vulnerable Health Status**

36

SCORE: 0.467 RANK: 13/34 PROVINCES ASSESSED 171.43 13.1% 7.8%

Life expectancy (years)

65.82

Infant mortality rate (per 1,000 live births)

0.3% 17.87 Households with

Dengue incidence per 100,000 catastrophic health expenditure population

Measles incidence per 100.000 population

0.9

Maternal

mortality ratio

0.51 Malaria incidence per 100.000 population

Children (under

5) Wasting

250 TB case notification per 100,000 population

Disasbility

RANK: 21/34 PROVINCES ASSESSED

41.1 HIV & AIDS incidence per 100,000 population

5.6%

Unmet health

care needs

2.54 Prevalence of Leprosy per 10,000 population

Households with limited

access to health facility

19.1%



#### **Clean Water Vulnerability**

SCORE: 0.508 RANK: 16/34 PROVINCES ASSESSED

90.8% Households with improved water

Households with improved sanitation

70.0%



#### Information Access Vulnerability

99.4% Adult literacy rate

SCORE: 0.446		RANK: 16/34 PROVINCES ASSESSED
9.81	58.5%	
Average years of schooling		

Net primary school enrollment rate

96.2%

ge years of	Household
ling	using internet

CODE: 0 446

**Economic Constraints** 

	<b></b>	SCOR	E: 0.643	RANK: 2/34 PROVINCES ASSESSED
7.1%	58.2	17.7%	0.324	
Unemployment rate	Age dependency ratio	Poverty rate	GINI ratio	



#### Gender Inequality

SCORE: 0.290 RANK: 33/34 PROVINCES ASSESSED 0.65 1.04 26.7% 1 Female to male Female to male Percent female Female to male labor ratio secondary school literacy rate seats in enrollment ratio government **Population Pressures** 

SCORE: 0.373



1.9% 2.5% Average annual Average annual total population urban population change change

**PDC** Global

**PROVINCIAL PROFILE** 

# COPING CAPACITY (CC)

RANK: 34 / 34 PROVINCES ASSESSED SCORE: 0.263

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

Ċs	Economic Cap	acity	00005-0400			5
ŶŶ			SCORE: 0.166	RANK: 33/34 PROVIN	CES ASSESSE	D
	63.0% Labor force	<b>2,941,409</b> Average monthly	<b>19.1</b> GDP per capita			
	participation	income (IDR)	(Million IDR)			
	Governance					
			SCORE: 0.257	RANK: 34/34 PROVINCES ASSESSED		
	158	24.3%	79.3%			
	Crime rate per 100,000 population	Crime clearance rate	Voter participation			
	Environmental	Capacity				
			SCORE: 0.404	RANK: 15/34 PROVING	CES ASSESSED	)
	<b>10.0%</b> Protected area					
	Infrastructure	Capacity				
			SCORE: 0.319	RANK: 31/34 PROVING	CES ASSESSED	)
	Health	Care Capaci	ity SCORE: 0.23	31 RANK: 34/34 PROV	INCES ASSES	SED
	13.9 2.6	62 12.18	<b>42.0</b> %	<b>40.8</b> %	43.6%	59.4%
	Hospital beds per Phys 10,000 people 10,0		and midwives Time to p 000 people (over 1 ho	ublic hospital Immunization rate bur) (children under 5)		Population covered by health insurance
	Transp	ortation Cap	acity SCORE:	0.303 RANK: 24/34 PF	ROVINCES ASS	ESSED
	0.13	39.81				
	<b>0.13</b> Road and rail density		distance to port			
	Road and rail density	Average or airport		E: 0.481 RANK: 28/34	PROVINCES A	SSESSED
	Road and rail density Comm 57.0%	Average of or airport	apacity SCOR	E: 0.481 RANK: 28/34	PROVINCES A	SSESSED
	Road and rail density	Average of or airport		E: 0.481 RANK: 28/34	PROVINCES A	SSESSED
	Road and rail density Comm 57.0% Mobile phone ownership	Average of or airport	apacity SCOR	E: 0.481 RANK: 28/34 ANK: 30/34 PROVINCES		SSESSED
	Road and rail density Comm 57.0% Mobile phone ownership	Average or airport	apacity SCORI			SSESSED
	Road and rail density Comm 57.0% Mobile phone ownership Energy	Average or airport unications C 0.6% Househol Capacity SC 0.2% tate Percenta	apacity SCORI	ANK: 30/34 PROVINCES	ASSESSED	



# DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 14 / 34 PROVINCES ASSESSED SCORE: 0.263

Maluku exhibits weaker Disaster Management Capabilities in the areas of Emergency Services 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: 0.379 RANK: 31/34 PROVINCES ASSESSED 0.34 0.55 54.6% 65.35 671.01 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

**SCORE: 0.48** 



#### **Mass Care Support**

118.70.14Distance to<br/>nearest disaster<br/>stockpile (km)Vehicle euipmen<br/>10,000 persons

#### 0.14 0.64 Vehicle euipment per 10,000 persons Shelter equipment per 10,000 persons

0.080.14ntCommunications<br/>equipment per 10,000<br/>personsSupport equipment<br/>per 10,000 persons

**1.47** Emergency Shelters per 10,000 persons



#### Early Warning and Monitoring

SCORE: 0.733

0.733 RANK: 4/34 PROVINCES ASSESSED

RANK: 21/34 PROVINCES ASSESSED

Geophysical monitoring per exposed population

1.47

#### 0.92

Meterological/climatological monitoring per exposed



# **RESILIENCE (R)**

#### RANK: 32 / 34 PROVINCES ASSESSED SCORE: 0.455

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

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













Economic Constraints Clean Water Access Vulnerability

er Economic Capacity

Health Care Capacity

Emergency Services

Mass Care Support



# HAZARD-SPECIFIC RISK (HSR)

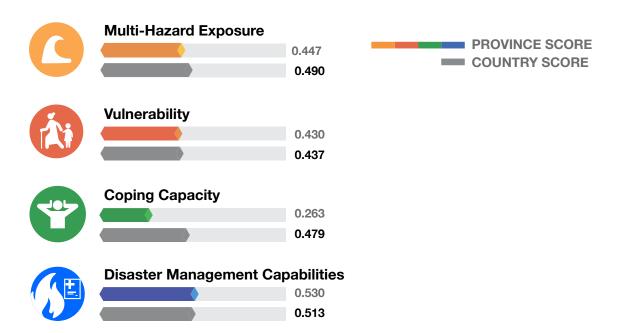
Earthquake	RANK: 11 / 34 PROVINCES ASSESSED SCORE: 0.281
Tsunami	RANK: 1 / 34 PROVINCES ASSESSED SCORE: 0.39
Flood	RANK: 26 / 34 PROVINCES ASSESSED SCORE: 0.162
Flash Flood	RANK: 17 / 34 PROVINCES ASSESSED SCORED.198
Landslide	RANK: 11 / 34 PROVINCES ASSESSED SCORED.250
Volcano	RANK: 9 / 34 PROVINCES ASSESSED SCORE: 0.257
Drought	RANK: 6/34 PROVINCES ASSESSED SCORED.281
Wildfire	RANK: 9 / 34 PROVINCES ASSESSED SCORE: 0.261
Extreme Weather	RANK: 26 / 34 PROVINCES ASSESSED SCORE: 0.207



10 / 34 RANK WITHIN PROVINCES Score: 0.521

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

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



### **MALUKU RECOMMENDATIONS**



#### **Economic Constraints**

Maluku ranks 2nd for overall Economic Constraints, driven by the 2nd highest Age Dependency Ratio (ratio of non-working age population to working age population), the 3rd highest Unemployment Rate, and the 4th highest poverty rate. Consider 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 opportunities to expand participation of women in education and economic activities through the enactment of policies that provide quality, affordable childcare and health care services.



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

Maluku ranks 16th for overall Clean Water Access Vulnerability. Findings show that while the percentage of households with access to improved water is 91%, the percentage of households with access to improved sanitation is only 70%. Continue collaboration and coordination efforts among local government ministries, NGOs and communitybased organizations to implement strategies to expand improvements in clean water, sanitation and hygiene throughout the province. Expand investments in clean water and sanitation infrastructure necessary to deliver services and reduce health risks in remote areas. Findings show a high rate of exposure to drought in Maluku province. Invest in programs that 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 on agriculture.

# **MALUKU RECOMMENDATIONS**



#### Economic Capacity

Maluku has the 2nd lowest overall Economic Capacity ranking in the country, with the 2nd lowest Labor Force Participation rate (63%), and the 3rd lowest GDP per Capita (19.1 million IDR). Despite economic expansion into the energy sector in recent years, with development in crude oil, natural gas and electricity generation, Maluku's economy has not been infused with expansive growth. Agriculture, forestry and fisheries are predominant economic sectors. Implement programs geared toward building the entrepreneurial and technical skills of small business owners and household enterprises. Increase access to financing and support structures (e.g. microfinance services and loans) for poor and vulnerable populations.



#### **Health Care Capacity**

Findings show that Maluku has the lowest Health Care Capacity in the country. Most significant drivers include low Hospital Accreditation (only 44% of hospitals in the province are accredited), Time Required to Reach the Nearest Hospital (42% of households must travel over an hour to reach a hospital), a lack of Health Insurance (60% of the province's population is uninsured), and a shortage of Nurses and Midwives (there are only 12 trained personnel per 10,000 persons).

Multi-faceted initiatives are needed to improve overall Health Care Capacity in the province, including increased access and service provision. Efforts to increase availability and quality of clean water and sanitation services will also improve the overall health status of the population. Continue to advance accreditation of hospitals and puskesmas (public health care centers) to improve the availability and quality of health care infrastructure, resources (personnel and equipment) and services. Prioritize accreditation in remote or underserved areas. Continue to engage NGO partners in efforts to improve access to health care for poor and vulnerable populations. Continue to implement programs that provide health insurance and preventative care to impoverished populations.

# **MALUKU RECOMMENDATIONS**



#### **Emergency Services**

Maluku has the 4th lowest overall Emergency Services ranking in the country, driven by the 2nd lowest score for Average Distance to a Fire Station (671 km away from populated areas). Encourage local initiatives to build community resilience and disaster response capabilities through preparedness activities and increased participation in Citizen Brigades, especially in remote villages.



#### **Mass Care Support**

Finding show that Maluku has the 14th lowest Mass Care Support capabilities. Bolster shelter capacities and disaster equipment supplies to improve mass care support in the province. During and after a disaster Maluku may require targeted mass care support due to the widespread poverty and sanitation issues faced by the province. The constraints in Health Care Capacity evident in the province will be exacerbated during a disaster. Efforts to improve capacity will also strengthen mass care support capabilities.



**Better solutions.** Fewer disasters.

# Scifer

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