



**INDONESIA**

**DI YOGYAKARTA**

**NDPBA PROVINCE PROFILE**

# DI YOGYAKARTA

## CAPITAL: YOGYAKARTA

Area: 3,133 km<sup>2</sup>

Located in southern Java and governed by the Yogyakarta Sultanate, the Special Region of Yogyakarta (Indonesian: Daerah Istimewa Yogyakarta) has lower

levels of overall risk, exposure and vulnerability and higher levels of coping capacity and disaster management capabilities. Due to its primacy as an industrial and cultural hub, Yogyakarta in 2012 convened the Fifth Asian Ministerial Conference on Disaster Risk Reduction and has worked closely with UNDRR, UNDP and others to enhance urban community resilience. With a population of nearly 4 million inhabitants, earthquakes, flooding and extreme weather are historic challenges being met with DRR collaboration at the local, provincial, national and international levels.



## RISK AND VULNERABILITY COMPONENT SCORE



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

Score: 0.418 • Rank: 28/34



### RESILIENCE (R) - High

Score: 0.555 • Rank: 8/34



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

Score: 0.336 • Rank: 29/34



### VULNERABILITY (V) - Low

Score: 0.391 • Rank: 26/34



### COPING CAPACITY (CC) - High

Score: 0.530 • Rank: 11/34



### DISASTER MANAGEMENT CAPABILITIES (DMC) - Moderate

Score: 0.525 • Rank: 16/34



Population (2020 Projected)

**3,882,300**



Population in Poverty

**11.4%**



Adult Literacy Rate

**95.0%**



Access to improved water

**94.9%**



Average life expectancy

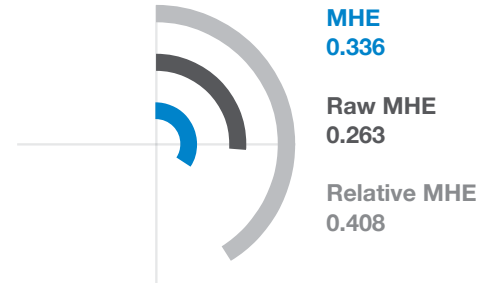
**74.9 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 29 / 34 PROVINCES  
SCORE: 0.336



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



Earthquake

**85%**

**3,148,743**  
**\$14.2 Billion**



Tsunami

**1%**

**26,893**  
**\$101.2 Million**



Flood

**25%**

**925,517**  
**\$4.45 Billion**



Flash Flood

**1%**

**32,307**  
**\$132.2 Million**



Landslide

**2%**

**74,271**  
**\$272.7 Million**



Volcano

**1%**

**45,697**  
**\$188.7 Million**



Drought

**9%**

**351,441**  
**\$1.1 Billion**



Wildfire

**1%**

**34,769**  
**\$111.6 Million**



Extreme Weather

**96%**

**3,542,093**  
**\$15.6 Billion**



## VULNERABILITY (V)

**RANK: 26 / 34 PROVINCES ASSESSED**  
**SCORE: 0.391**

Vulnerability in DI Yogyakarta is primarily driven by Environmental Stress and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress

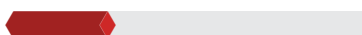


**SCORE: 0.715 RANK: 2/34 PROVINCES ASSESSED**

<b>47.8%</b> Land susceptible to severe erosion	<b>286.45</b> Livestock Density (per sq km)	<b>2.4</b> Net Deforestation (hectares per year)
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### Vulnerable Health Status

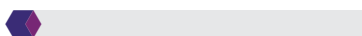


**SCORE: 0.273 RANK: 30/34 PROVINCES ASSESSED**

<b>74.92</b> Life expectancy (years)	<b>25</b> Infant mortality rate (per 1,000 live births)	<b>109.82</b> Maternal mortality ratio	<b>8.4%</b> Children (under 5) Wasting	<b>8.2%</b> Disability	<b>4.3%</b> Unmet health care needs	<b>0.0%</b> Households with limited access to health facility
<b>3.0%</b> Households with catastrophic health expenditure	<b>14.38</b> Dengue incidence per 100,000 population	<b>14.36</b> Measles incidence per 100,000 population	<b>0</b> Malaria incidence per 100,000 population	<b>99</b> TB case notification per 100,000 population	<b>38.37</b> HIV & AIDS incidence per 100,000 population	<b>0.1</b> Prevalence of Leprosy per 10,000 population



### Clean Water Vulnerability

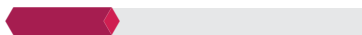


**SCORE: 0.058 RANK: 32/34 PROVINCES ASSESSED**

<b>94.9%</b> Households with improved water	<b>94.7%</b> Households with improved sanitation
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### Information Access Vulnerability



**SCORE: 0.285 RANK: 31/34 PROVINCES ASSESSED**

<b>95.0%</b> Adult literacy rate	<b>99.5%</b> Net primary school enrollment rate	<b>9.38</b> Average years of schooling	<b>83.7%</b> Household using internet
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### Economic Constraints



**SCORE: 0.440 RANK: 12/34 PROVINCES ASSESSED**

<b>3.1%</b> Unemployment rate	<b>45.6</b> Age dependency ratio	<b>11.4%</b> Poverty rate	<b>0.423</b> GINI ratio
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### Gender Inequality



**SCORE: 0.537 RANK: 12/34 PROVINCES ASSESSED**

<b>0.94</b> Female to male literacy rate	<b>0.82</b> Female to male labor ratio	<b>1.13</b> Female to male secondary school enrollment ratio	<b>12.7%</b> Percent female seats in government
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### Population Pressures



**SCORE: 0.428 RANK: 16/34 PROVINCES ASSESSED**

<b>1.2%</b> Average annual total population change	<b>2.6%</b> Average annual urban population change
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## COPING CAPACITY (CC)

**RANK: 11 / 34 PROVINCES ASSESSED**  
**SCORE: 0.530**

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



### Economic Capacity

**SCORE: 0.416 RANK: 12/34 PROVINCES ASSESSED**

**72.9%** **2,311,599** **25.6**  
Labor force participation Average monthly income (IDR) GDP per capita (Million IDR)



### Governance

**SCORE: 0.602 RANK: 18/34 PROVINCES ASSESSED**

**179** **36.9%** **89.7%**  
Crime rate per 100,000 population Crime clearance rate Voter participation



### Environmental Capacity

**SCORE: 0.024 RANK: 32/34 PROVINCES ASSESSED**

**1.1%**  
Protected area



### Infrastructure Capacity

**SCORE: 0.742 RANK: 3/34 PROVINCES ASSESSED**



### Health Care Capacity SCORE: 0.777 RANK: 1/34 PROVINCES ASSESSED

**18.2** **9.42** **14.45** **1.6%** **64.6%** **83.3%** **86.7%**  
Hospital beds per 10,000 people Physicians per 10,000 people Nurses and midwives per 10,000 people Time to public hospital (over 1 hour) Immunization rate (children under 5) Health care accreditation rate Population covered by health insurance



### Transportation Capacity SCORE: 0.888 RANK: 3/34 PROVINCES ASSESSED

**2.40** **19.18**  
Road and rail density Average distance to port or airport



### Communications Capacity SCORE: 0.865 RANK: 4/34 PROVINCES ASSESSED

**67.7%** **4.7%**  
Mobile phone ownership Households with Fixed Phones



### Energy Capacity SCORE: 0.438 RANK: 26/34 PROVINCES ASSESSED

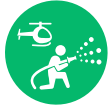
**99.8%** **0.0%** **0** **72.3%**  
Households served by state electricity Percentage of total national electricity generated in province Electricity generation GWh per 100,000 Population Households with gas for cooking



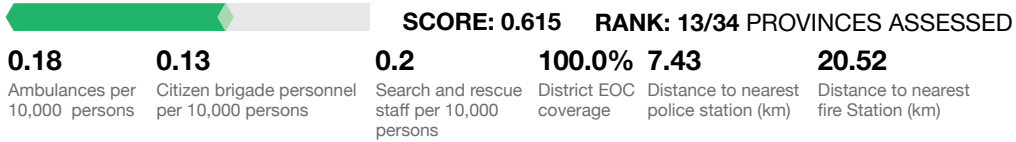
# DISASTER MANAGEMENT CAPABILITIES (DMC)

**RANK: 16 / 34 PROVINCES ASSESSED**  
**SCORE: 0.530**

DI Yogyakarta exhibits weaker Disaster Management Capabilities in the areas of Early Warning and Monitoring and Emergency Services. The bar charts indicate the disaster management themes contributing to the province's overall Disaster Management Capabilities score.



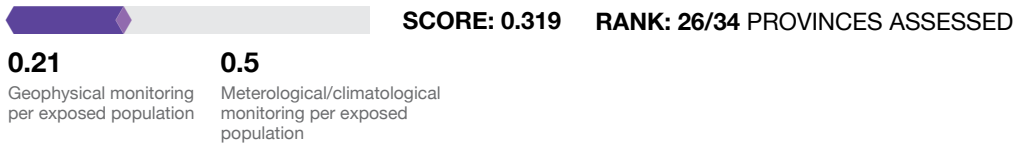
## Emergency Services



## Mass Care Support



## Early Warning and Monitoring







## RESILIENCE (R)

**RANK: 8 / 34 PROVINCES ASSESSED**  
**SCORE: 0.555**

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

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



**Environmental Stress**



**Gender Inequality**



**Economic Capacity**



**Energy Capacity**



**Early Warning and Monitoring**



**Emergency Services**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 18 / 34 PROVINCES ASSESSED**  
**SCORE: 0.243**



**Tsunami**

**RANK: 24 / 34 PROVINCES ASSESSED**  
**SCORE: 0.156**



**Flood**

**RANK: 28 / 34 PROVINCES ASSESSED**  
**SCORE: 0.148**



**Flash Flood**

**RANK: 28 / 34 PROVINCES ASSESSED**  
**SCORE: 0.126**



**Landslide**

**RANK: 26 / 34 PROVINCES ASSESSED**  
**SCORE: 0.161**



**Volcano**

**RANK: 15 / 34 PROVINCES ASSESSED**  
**SCORE: 0.227**



**Drought**

**RANK: 32 / 34 PROVINCES ASSESSED**  
**SCORE: 0.115**



**Wildfire**

**RANK: 33 / 34 PROVINCES ASSESSED**  
**SCORE: 0.121**



**Extreme Weather**

**RANK: 22 / 34 PROVINCES ASSESSED**  
**SCORE: 0.219**



## MULTI-HAZARD RISK (MHR)

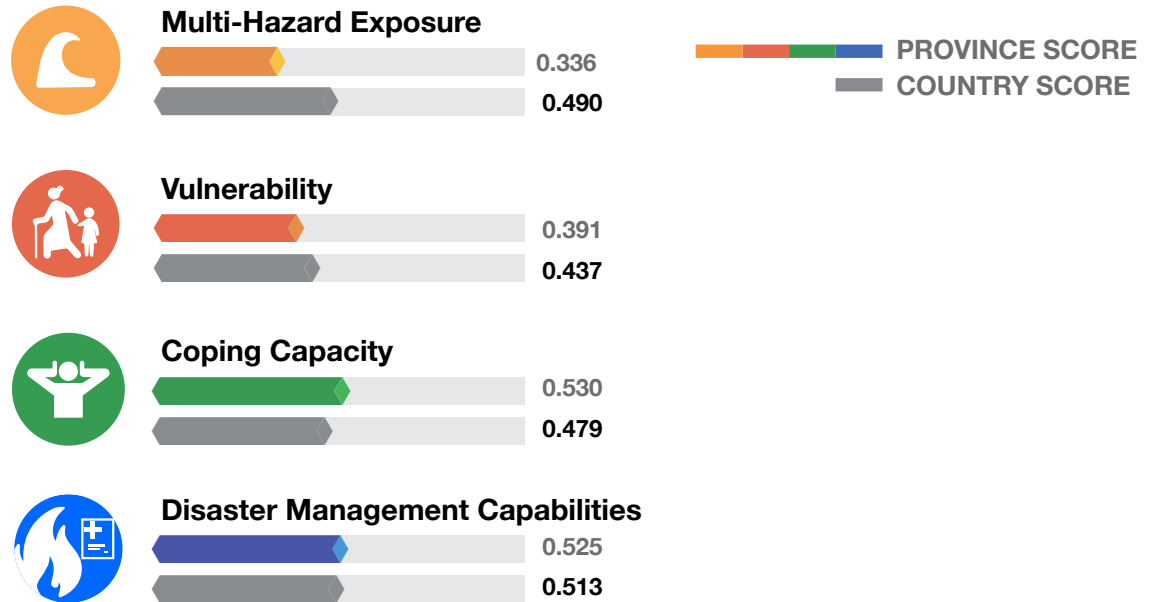
**28 / 34**

RANK WITHIN PROVINCES  
Score: 0.418



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

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





# DI YOGYAKARTA RECOMMENDATIONS

# 1

## Environmental Stress

DI Yogyakarta has the 2nd highest ranking for overall Environmental Stress, driven by the highest Severe Erosion Potential in the country (47.8% of the province is exposed to severe erosion rates of >180 tons per hectare per year), and the 2nd highest Livestock Density (286.45 animals per square km).

DI Yogyakarta's high density of ruminants and other livestock can lead to overgrazing and environmental degradation in a province with already severe erosion rates and significant flood exposure. In addition, manure from high animal concentrations can pollute nearby water sources, rendering them unusable for drinking and household use.

Promote extension programs that educate farmers and build their capacity to implement best practices in agricultural land management and reduce environmental impacts.

# 2

## Gender Inequality

DI Yogyakarta ranks 12th for overall Gender Inequality. Findings reflect gender inequities related to Secondary Enrollment and Literacy. Findings also show that female representation in Parliament (<13%) is considerably lower than the country's target for female representation in government of 30%.

Strengthen efforts to improve gender balance in primary school enrollment and literacy programs.

Promote higher education opportunities for women to provide greater economic opportunities and enhanced quality of life.

# DI YOGYAKARTA RECOMMENDATIONS

## 3

### Economic Capacity

DI Yogyakarta ranks 12th for overall Economic Capacity and has the third highest Labor Force Participation rate in the country (73%). Economic Capacity could be enhanced by bolstering DI Yogyakarta's Average Monthly Income (2.3 million IDR) and GDP per Capita (25.6 million IDR). The province has a fast-growing economy and significant informal sector largely based on agriculture, education, tourism and export-oriented production.

Implement programs geared toward building the entrepreneurial and technical skills of small business owners and household enterprises to boost economic prosperity.

Boost efficiencies of financial sector systems to streamline access to credit and processing of loans for informal sector enterprises.

## 4

### Energy Capacity

DI Yogyakarta has the 9th lowest Energy Capacity ranking in the country, primarily because the province has no electricity generation capacity of its own, making it reliant on energy delivery from other parts of the country. Over 99% of households in the province are served by the state electric company, and just over 72% of households use gas for cooking fuel.

Strengthen energy delivery systems to the province to meet demand and minimize service interruptions.

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## DI YOGYAKARTA RECOMMENDATIONS

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### 5

#### Early Warning and Monitoring

DI Yogyakarta has the 9th lowest Early Warning and Monitoring rank, and the 4th lowest density of Hazard Monitoring Stations per 100,000 persons exposed to geophysical hazards. Findings show that roughly 3.1 million people, or 85% of the provincial population is exposed to areas of moderate to high earthquake hazards. While earthquakes tend to be “no notice” events, increasing instrumentation and capacity to disseminate warning information will benefit DI Yogyakarta for geophysical as well as meteorological-climate hazards.

### 6

#### Emergency Services

DI Yogyakarta ranks 13th for overall Emergency Services, however, increasing the number of ambulances serving the province would enhance capabilities, as would increased numbers of Search and Rescue staff and Citizen Brigade personnel.

**Better solutions.  
Fewer disasters.**

# Safer world.

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