



**THE PHILIPPINES**

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**RIZAL**

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**NDPBA PROVINCE PROFILE**

# THE PHILIPPINES

## RIZAL

### CAPITAL: CITY OF ANTIPOLO

Area: 1,183 km<sup>2</sup>

Rizal is a province in the Philippines located in the Calabarzon region in Luzon and is approximately 10 miles east of Manila. It also lies on the northern shores of Laguna de Bay-the largest lake in the Philippines. It is a mountainous province located along the southern portion of the Sierra Madre mountain range covering approximately 1,200 square kilometers. Due to its proximity to metro Manila the province has a low poverty rate and is largely urban based.



### RISK AND VULNERABILITY COMPONENT SCORE



**MULTI-HAZARD RISK (MHR) - High**  
Score: 0.5326 • Rank: 22/84



**RESILIENCE (R) - High**  
Score: 0.602 • Rank: 22/84



**MULTI-HAZARD EXPOSURE (MHE) - Very High**  
Score: 0.812 • Rank: 8/84



**VULNERABILITY (V) - Very Low**  
Score: 0.355 • Rank: 69/84



**COPING CAPACITY (CC) - Medium**  
Score: 0.559 • Rank: 42/84



Population (2018)  
**2,811,239**



Population in Poverty  
**3.3%**



Literate population  
**99.7%**



Access to improved water  
**96.8%**



Average life expectancy  
**70.5 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 8 / 84 PROVINCES  
SCORE: 0.812



MHE  
0.812

Raw MHE  
0.858

Relative MHE  
0.766

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



Earthquake

**100%**

2,811,239  
\$12.6 Billion



Tsunami

-

-

-



Flood

**44%**

1,242,672  
\$9.5 Billion



Liquefaction

**41%**

1,146,852  
\$7.7 Billion



Landslide

**10%**

285,629  
\$346.5 Million



Volcano

**<1%**

8,444  
\$37.8 Million



Drought

**10%**

277,644  
\$62.8 Million



Wildfire

**58%**

1,621,368  
\$8.5 Billion



Storm Surge

-

-

-



Typhoon Winds

**100%**

2,811,239  
\$12.6 Billion






## VULNERABILITY (V)

**RANK: 69 / 84 PROVINCES ASSESSED**  
**SCORE: 0.355**

Vulnerability in Rizal is primarily driven by Environmental Stress and Population Pressures. The bar chart indicates the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress

0  1 **SCORE: 0.717** **RANK: 2/84 PROVINCES ASSESSED**

**15.76** **43.73** **2.44%**  
 Livestock density      Barren land (per 10k hectares)      Forest cover change



### Vulnerable Health Status

0  1 **SCORE: 0.348** **RANK: 69/84 PROVINCES ASSESSED**

**9.0%** **7.92** **60.34** **70.45** **60**  
 Malnutrition among children (0 to 5 years old)      Infant mortality rate (per 1k live births)      Maternal mortality rate (per 100k live births)      Life expectancy      Disability (per 100k persons)

**33.4** **0.6** **2.7** **1.7**  
 Tuberculosis mortality rate (per 100k persons)      HIV mortality rate (per 100k persons)      Intestinal disease mortality rate (per 100k persons)      Other arthropod-borne viral fevers and viral hemorrhagic fever mortality rate (per 100k persons)



### Clean Water Vulnerability

0  1 **SCORE: 0.288** **RANK: 64/84 PROVINCES ASSESSED**

**96.8%** **90.8%**  
 Households with improved safe water source      Households with sanitary toilet facility




### Information Access Vulnerability

0  1 **SCORE: 0.195** **RANK: 83/84 PROVINCES ASSESSED**

**99.73%** **106.57%** **14.91%** **71.57%** **88.45%**  
 Literacy rate (age 10 and older)      Gross primary school enrollment rate      Internet Access      Households with radio      Households with television



### Economic Constraints

0  1 **SCORE: 0.119** **RANK: 79/84** PROVINCES ASSESSED

**0.52**  
Economic  
dependency  
ratio

**3.33%**  
Poverty  
incidence



### Gender Inequality

0  1 **SCORE: 0.241** **RANK: 78/84** PROVINCES ASSESSED

**1.04**  
Female to male  
secondary school  
enrollment Rate

**0.58**  
Labor force  
participation ratio



### Population Pressures

0  1 **SCORE: 0.576** **RANK: 8/84** PROVINCES ASSESSED

**2.88**  
Population  
growth rate  
(2010-2015)

**3.22**  
Average annual  
urban population  
growth rate

**2.7%**  
Informal settlers




## COPING CAPACITY (CC)

**RANK: 42 / 84 PROVINCES ASSESSED**  
**SCORE: 0.559**

Rizal exhibits weaker Coping Capacity in the areas of Emergency Services Capacity and Health Care Capacity. The bar chart indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.



### Economic Capacity

0  1 **SCORE: 0.506** **RANK: 42/84 PROVINCES ASSESSED**

**0.91**

Purchasing power of the peso

**63.05%**


Labor force participation rate

**994.81**

Local government annual regular income per capita (Philippine Peso)



### Governance

0  1 **SCORE: 0.56** **RANK: 65/84 PROVINCES ASSESSED**

**72.0%**

Voter participation

**4.44**

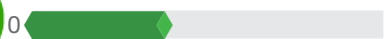
Organized violence (per 100k persons)

**82.75%**

Garbage pickup



### Environmental Capacity

0  1 **SCORE: 0.385** **RANK: 40/84 PROVINCES ASSESSED**

**0**

Protected areas (per 1k ha)

**33.7%**

Forest reserves



**Infrastructure Capacity**



**SCORE: 0.668 RANK: 16/84 PROVINCES ASSESSED**



**Health Care Capacity SCORE: 0.488 RANK: 41/84 PROVINCES ASSESSED**

<b>5.66</b>	<b>1.68</b>	<b>58.52%</b>	<b>2.05</b>
Hopital beds (per 10k people)	Physicians per 10,000 people	Vaccination coverage	Average distance to nearest hospital (km)



**Transportation Capacity SCORE: 0.829 RANK: 2/84 PROVINCES ASSESSED**

<b>4.18</b>	<b>11.89</b>
Road density (km per sq. km)	Average distance to nearest port (km)



**Communications Capacity SCORE: 0.898 RANK: 4/84 PROVINCES ASSESSED**

<b>15.8%</b>	<b>95.7%</b>
Households with a landline	Mobile coverage



**Energy Capacity SCORE: 0.929 RANK: 9/84 PROVINCES ASSESSED**

<b>93.1%</b>	<b>63.1%</b>
Households with electricity	Households with gas



**Emergency Services Capacity SCORE: 0.196 RANK: 77/84 PROVINCES ASSESSED**

<b>11.5</b>	<b>0.66</b>	<b>1.19</b>
Evacuation centers (per 100k persons)	Fire Stations (per 100k persons)	Fire Trucks (per 100k persons)



## RESILIENCE (R)

**RANK: 22 / 84 PROVINCES ASSESSED**  
**SCORE: 0.602**

Rizal's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity scores.

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



**Environmental Stress**



**Population Pressures**



**Emergency Services Capacity**



**Health Care Capacity**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 10 / 84 PROVINCES ASSESSED**  
**SCORE: 0.373**



**Tsunami**

**RANK: 54 / 84 PROVINCES ASSESSED**  
**SCORE: 0**



**Flood**

**RANK: 19 / 84 PROVINCES ASSESSED**  
**SCORE: 0.276**



**Liquefaction**

**RANK: 15 / 84 PROVINCES ASSESSED**  
**SCORE: 0.258**



**Landslide**

**RANK: 47 / 84 PROVINCES ASSESSED**  
**SCORE: 0.204**



**Volcano**

**RANK: 33 / 84 PROVINCES ASSESSED**  
**SCORE: 0.124**

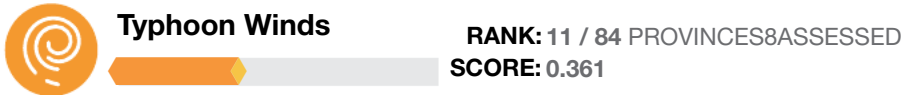
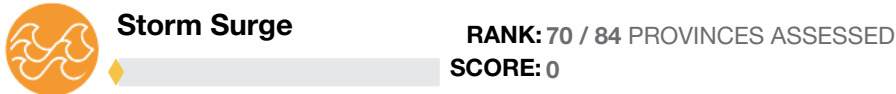
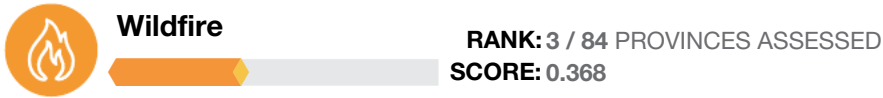


**Drought**

**RANK: 48 / 84 PROVINCES ASSESSED**  
**SCORE: 0.138**



**(HAZARD-SPECIFIC RISK CONTINUED)**



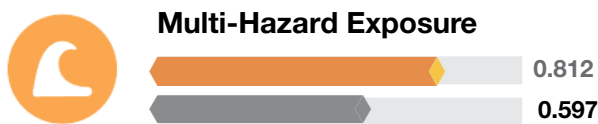
**MULTI-HAZARD RISK (MHR)**

**22 / 84**  
RANK WITHIN PROVINCES  
Score: 0.536

Rizal's score and ranking are due to Very High Multi-hazard exposure combined with Very Low Vulnerability and Medium Coping Capacity scores.

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

PROVINCE SCORE  
COUNTRY SCORE



# RIZAL RECOMMENDATIONS

## 1

### Environmental Stress

- Focus efforts on increasing forest cover, decreasing areas classified as barren land and reduced livestock density.
- Population pressures are a major driver of vulnerability in Rizal. Promoting sustainable agriculture and protection of natural areas will ensure resource production can keep up with increased demands as the population grows.

## 2

### Population Pressures

- Ranked 5th in the Philippines, Rizal's population grew at a rate of 2.88 between 2010 and 2015. Continue to monitor the growth of the population and plan resource allocation appropriately. Work with diverse partners to help stimulate the economy to support increased demands. Ensure equitable distribution of resources and services.
- Environmental stress is already leading to vulnerabilities in Rizal. Enforce building codes and environmental protection laws to ensure expansion is sustainable. Also, focus efforts on bringing in funds and innovations for enhancing the built environment.

## 3

### Emergency Services Capacity

- Rizal is ranked 77th out of the 84 territories for emergency service capacity. Continue work with partners such as the Philippines Red Cross to expand and enhance emergency service capacity. Increase the number of evacuation centers, fire stations and fire trucks to serve the population and increase emergency service capacity.
- In Rizal Wildfires expose 67.7% of the province's capital stock and 57.7% of the population. Findings also show that there are only 0.66 fire stations per 100,000 persons, which is the lowest in the Philippines. Invest in increased fire stations and fire trucks to mitigate Wildfire impacts.
- Continue to support evidence-based preparedness and response coordination, including the provision of emergency equipment and supplies. Additionally, increase efforts to have a central database that makes sub-national data on disaster management capabilities and resources more accessible. Increasing transparency through sharing data will ensure efficient and effective coordination at all levels of government, as well as with partners.

# 4

## Health Care Capacity

- Health care capacity in Rizal is ranked 75th out of the 84 territories in the Philippines. Hospital bed capacity (3.02 per 10,000 persons) and average distance between hospitals and populated places (9.98 kilometers) contributed to the low capacity score. Focus efforts on increasing the number of hospitals and hospital beds to improve access and surge capacity.
- As the population in Rizal increases, the demand on the already limited health care resources will be exacerbated. Continue to work with local and international partners to increase health care capacity. Invest in new and improved infrastructure, as well as the provision of medical supplies and increased skilled care personnel.
- Expand efforts to remove barriers to health care access, such as cost and distance. Importantly, ensure that all efforts reach rural and remote areas.

**Better solutions.  
Fewer disasters.**

# Safer world.

**1305 N Holocono Street  
Suite 2, Kihei, HI 9675 3**

**P: (808) 891-0525  
F: (808) 891-0526**



**@PDC\_Global**



**/PDCGlobal**



**www.pdc.prg**



**ndpba@pdc.org**