



**THE PHILIPPINES**

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**MARINDUQUE**

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**NDPBA PROVINCE PROFILE**

# THE PHILIPPINES

## MARINDUQUE

### CAPITAL: BOAC

Area: 953 km<sup>2</sup>

Marinduque is an island province in the Philippines located in Southwestern Tagalog Region. Marinduque lies between Tayabas Bay to the north and Sibuyan Sea to the south. It is west of the Bondoc Peninsula of Quezon province; east of Mindoro Island; and north of the island province of Romblon. Some parts of the Verde Island Passage, the center of the center of world's marine biodiversity and a protected marine area, are also within Marinduque's provincial waters. Marinduque is considered as the geographical center of the Philippine archipelago. The economy is largely agricultural primarily focused on rice and coconuts.



## RISK AND VULNERABILITY COMPONENT SCORE



**MULTI-HAZARD RISK (MHR) - Very Low**  
Score: 0.459 • Rank: 70/84



**RESILIENCE (R) - High**  
Score: 0.578 • Rank: 33/84



**MULTI-HAZARD EXPOSURE (MHE) - Low**  
Score: 0.533 • Rank: 61/84



**VULNERABILITY (V) - Medium**  
Score: 0.46 • Rank: 36/84



**COPING CAPACITY (CC) - Very High**  
Score: 0.616 • Rank: 15/84



Population (2018)  
**225,159**



Population in Poverty  
**10.0%**



Literate population  
**99.3%**



Access to improved water  
**93.8%**



Average life expectancy  
**66.2 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 62 / 84 PROVINCES  
SCORE: 0.533



MHE  
0.533

Raw MHE  
0.351

Relative MHE  
0.715

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



Earthquake

**65%**

147,136  
\$463.1 Million



Tsunami

**<1%**

304  
-



Flood

**73%**

165,112  
\$483.7 Million



Liquefaction

**31%**

68,866  
\$172.3 Million



Landslide

**19%**

42,007  
\$93.9 Million



Volcano

**<1%**

542  
\$1.4 Million



Drought

**40%**

90,406  
\$328.9 Million



Wildfire

-  
-  
-



Storm Surge

**24%**

53,111  
\$102.1 Million



Typhoon Winds

**100%**

225,159  
\$599.9 Million






## VULNERABILITY (V)

**RANK: 36 / 84 PROVINCES ASSESSED**  
**SCORE: 0.46**

Vulnerability in Marinduque is primarily driven by Environmental Stress and Vulnerable Health Status. The bar chart indicates the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress

0  1 **SCORE: 0.591** **RANK: 20/84 PROVINCES ASSESSED**

**2.78** Livestock density  
**142.5** Barren land (per 10k hectares)  
**3.89%** Forest cover change



### Vulnerable Health Status

0  1 **SCORE: 0.586** **RANK: 9/84 PROVINCES ASSESSED**

**13.8%** Malnutrition among children (0 to 5 years old)  
**10.94** Infant mortality rate (per 1k live births)  
**56.12** Maternal mortality rate (per 100k live births)  
**66.19** Life expectancy  
**453** Disability (per 100k persons)

**34.7** Tuberculosis mortality rate (per 100k persons)  
**0** HIV mortality rate (per 100k persons)  
**3** Intestinal disease mortality rate (per 100k persons)  
**2.1** Other arthropod-borne viral fevers and viral hemorrhagic fever mortality rate (per 100k persons)



### Clean Water Vulnerability

0  1 **SCORE: 0.317** **RANK: 59/84 PROVINCES ASSESSED**

**93.8%** Households with improved safe water source  
**92.6%** Households with sanitary toilet facility



### Information Access Vulnerability

0  1 **SCORE: 0.474** **RANK: 41/84 PROVINCES ASSESSED**

**99.25%** Literacy rate (age 10 and older)  
**113.21%** Gross primary school enrollment rate  
**3.44%** Internet Access  
**54.16%** Households with radio  
**60.56%** Households with television



### Economic Constraints



**SCORE: 0.434** **RANK: 36/84** PROVINCES ASSESSED

**0.7**

Economic  
dependency  
ratio

**9.95%**

Poverty  
incidence



### Gender Inequality



**SCORE: 0.334** **RANK: 64/84** PROVINCES ASSESSED

**1.06**

Female to male  
secondary school  
enrollment Rate

**0.53**

Labor force  
participation ratio



### Population Pressures



**SCORE: 0.485** **RANK: 18/84** PROVINCES ASSESSED

**0.55**

Population  
growth rate  
(2010-2015)

**41.7**

Average annual  
urban population  
growth rate

**1.4%**

Informal settlers




# COPING CAPACITY (CC)

**RANK: 15 / 84 PROVINCES ASSESSED**  
**SCORE: 0.616**

Marinduque exhibits weaker Coping Capacity in the areas of Transportation 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: 0.605** **RANK: 23/84 PROVINCES ASSESSED**

**0.9**

Purchasing power of the peso

**64.02%**


Labor force participation rate

**2435.13**

Local government annual regular income per capita (Philippine Peso)



## Governance

0  1 **SCORE: 0.727** **RANK: 14/84 PROVINCES ASSESSED**

**86.7%**

Voter participation

**0**


Organized violence (per 100k persons)

**9.35%**

Garbage pickup



## Environmental Capacity

0  1 **SCORE: 0.478** **RANK: 28/84 PROVINCES ASSESSED**

**0**

Protected areas (per 1k ha)

**80.6%**

Forest reserves



### Infrastructure Capacity

0 1 **SCORE: 0.561** **RANK: 42/84** PROVINCES ASSESSED



### Health Care Capacity **SCORE: 0.29** **RANK: 77/84** PROVINCES ASSESSED

<b>1.58</b>	<b>0.8</b>	<b>66.44%</b>	<b>9.68</b>
Hopital beds (per 10k people)	Physicians per 10,000 people	Vaccination coverage	Average distance to nearest hospital (km)



### Transportation Capacity **SCORE: 0.396** **RANK: 64/84** PROVINCES ASSESSED

<b>0.92</b>	<b>31.63</b>
Road density (km per sq. km)	Average distance to nearest port (km)



### Communications Capacity **SCORE: 0.766** **RANK: 28/84** PROVINCES ASSESSED

<b>2.6%</b>	<b>100.0%</b>
Households with a landline	Mobile coverage



### Energy Capacity **SCORE: 0.592** **RANK: 49/84** PROVINCES ASSESSED

<b>75.9%</b>	<b>14.4%</b>
Households with electricity	Households with gas



### Emergency Services Capacity **SCORE: 0.635** **RANK: 20/84** PROVINCES ASSESSED

<b>50.77</b>	<b>2.53</b>	<b>4.22</b>
Evacuation centers (per 100k persons)	Fire Stations (per 100k persons)	Fire Trucks (per 100k persons)



## RESILIENCE (R)

**RANK: 33 / 84 PROVINCES ASSESSED**  
**SCORE: 0.578**

Marinduque’s score and ranking are due to Medium Vulnerability combined with Very High Coping Capacity scores.

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



**Environmental Stress**



**Vulnerable Health Status**



**Transportation Capacity**



**Health Care Capacity**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 76 / 84 PROVINCES ASSESSED**  
**SCORE: 0.119**



**Tsunami**

**RANK: 47 / 84 PROVINCES ASSESSED**  
**SCORE: 0.05**



**Flood**

**RANK: 34 / 84 PROVINCES ASSESSED**  
**SCORE: 0.211**



**Liquefaction**

**RANK: 62 / 84 PROVINCES ASSESSED**  
**SCORE: 0.108**



**Landslide**

**RANK: 51 / 84 PROVINCES ASSESSED**  
**SCORE: 0.196**



**Volcano**

**RANK: 57 / 84 PROVINCES ASSESSED**  
**SCORE: 0.068**

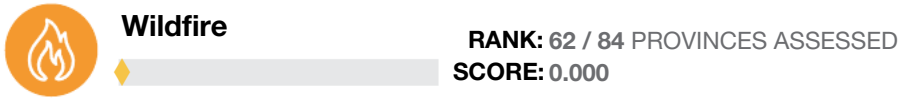


**Drought**

**RANK: 34 / 84 PROVINCES ASSESSED**  
**SCORE: 0.246**



**(HAZARD-SPECIFIC RISK CONTINUED)**



**MULTI-HAZARD RISK (MHR)**

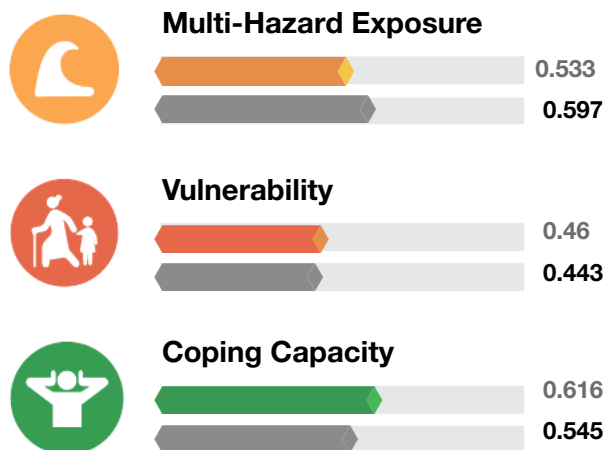
**70 / 84**  
RANK WITHIN PROVINCES  
Score: 0.459



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

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

PROVINCE SCORE  
COUNTRY SCORE



# MARINDUQUE RECOMMENDATIONS

1

## Environmental Stress

- Vulnerable health status is also a major driver of vulnerabilities in Marinduque. Efforts to enhance the natural and built environment can improve health outcomes by decreasing runoff, mitigating the impacts of climate change and enhancing other ecosystem services. Focus efforts on increasing forest cover, decreasing areas classified as bar en land and promoting sustainable agriculture.

2

## Vulnerable Health Status

- Findings show that Marinduque is ranked 9th highest in the Philippines for vulnerable health status. Work toward increasing the health of the population through community outreach, increased access to health care and other public health interventions. Continue monitoring for and providing care for those suffering from communicable diseases.

3

## Transportation Capacity

- Continue airport and road enhancement projects through private-public partnerships. Advocate for transportation network projects through the Department of Public Works to increase evacuation and resource distribution routes, increased access to markets and enhanced social connectivity.
- Civil planners should work with risk assessors to establish resilient transportation network plans. Incorporating environmental mitigation plans, equitable access for the population and hazard exposures.
- Ensure that emergency evacuation routes and plans include all transportation projects. Work with partners including HOTOSM and others to ensure mapping of new routes and resources are readily available in the event of a disaster.

# 4

## Health Care Capacity

- Increases in Marinduque's health care capacity should be focused on increasing child and maternal health services. In Marinduque, immunization coverage is 57.3%, which is relatively low compared to the rest of the country. 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.

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