



**THE PHILIPPINES**

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**LAGUNA**

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**NDPBA PROVINCE PROFILE**

# THE PHILIPPINES

## LAGUNA

### CAPITAL: SANTA CRUZ

Area: 1,928 km<sup>2</sup>

Laguna is a province in the Philippines located in the Calabarzon region in Luzon. Laguna is southeast of Metro Manila, south of the province of Rizal, west of Quezon, north of Batangas and east of Cavite. Laguna hugs the southern shores of Laguna de Bay, the largest lake in the country. The province is home to 24 mountains most of which are inactive volcanoes. The economy is based on a mix of tourism and agriculture with the main goods being coconuts, rice, sugar, citrus fruits, and various other products.



## RISK AND VULNERABILITY COMPONENT SCORE



**MULTI-HAZARD RISK (MHR) - Low**  
Score: 0.486 • Rank: 51/84



**RESILIENCE (R) - Very High**  
Score: 0.644 • Rank: 10/84



**MULTI-HAZARD EXPOSURE (MHE) - High**  
Score: 0.747 • Rank: 17/84



**VULNERABILITY (V) - Very Low**  
Score: 0.311 • Rank: 79/84



**COPING CAPACITY (CC) - High**  
Score: 0.599 • Rank: 19/84



Population (2018)  
**3,038,118**



Population in Poverty  
**2.7%**



Literate population  
**99.6%**



Access to improved water  
**90.3%**



Average life expectancy  
**70.2 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 17 / 84 PROVINCES  
SCORE: 0.747



MHE  
0.747

Raw MHE  
0.795

Relative MHE  
0.698

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



Earthquake

**100%**

**3,038,118**  
**\$7.1 Billion**



Tsunami

-

-

-



Flood

**73%**

**2,207,084**  
**\$6 Billion**



Liquefaction

**56%**

**1,698,107**  
**\$4.3 Billion**



Landslide

**2%**

**58,969**  
**\$107.9 Million**



Volcano

**3%**

**102,316**  
**\$148.4 Million**



Drought

-

-

-



Wildfire

**15%**

**453,775**  
**\$1 Billion**



Storm Surge

-

-

-



Typhoon Winds

**100%**

**3,038,118**  
**\$7.1 Billion**




## VULNERABILITY (V)

**RANK: 79 / 84 PROVINCES ASSESSED**  
**SCORE: 0.311**

Vulnerability in Laguna 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: 0.456** **RANK: 48/84** PROVINCES ASSESSED

**3.93** Livestock density  
**2.81** Barren land (per 10k hectares)  
**1.70%** Forest cover change



### Vulnerable Health Status

0  1 **SCORE: 0.301** **RANK: 73/84** PROVINCES ASSESSED

**7.7%** Malnutrition among children (0 to 5 years old)  
**9** Infant mortality rate (per 1k live births)  
**33.85** Maternal mortality rate (per 100k live births)  
**70.19** Life expectancy  
**76** Disability (per 100k persons)

**33.3** Tuberculosis mortality rate (per 100k persons)  
**0** HIV mortality rate (per 100k persons)  
**3.7** Intestinal disease mortality rate (per 100k persons)  
**1.5** Other arthropod-borne viral fevers and viral hemorrhagic fever mortality rate (per 100k persons)



### Clean Water Vulnerability

0  1 **SCORE: 0.393** **RANK: 46/84** PROVINCES ASSESSED

**90.3%** Households with improved safe water source  
**91.0%** Households with sanitary toilet facility




### Information Access Vulnerability

0  1 **SCORE: 0.233** **RANK: 78/84** PROVINCES ASSESSED

**99.64%** Literacy rate (age 10 and older)  
**108.30%** Gross primary school enrollment rate  
**12.48%** Internet Access  
**66.48%** Households with radio  
**90.19%** Households with television



### Economic Constraints

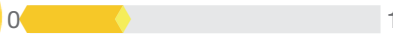
0  1 **SCORE: 0.063** **RANK: 83/84** PROVINCES ASSESSED

**0.49**  
Economic  
dependency  
ratio

**2.70%**  
Poverty  
incidence



### Gender Inequality


0  1 **SCORE: 0.279** **RANK: 72/84** PROVINCES ASSESSED

**1.08**  
Female to male  
secondary school  
enrollment Rate

**0.63**  
Labor force  
participation ratio



### Population Pressures

0  1 **SCORE: 0.453** **RANK: 26/84** PROVINCES ASSESSED

**2.47**  
Population  
growth rate  
(2010-2015)

**3.68**  
Average annual  
urban population  
growth rate

**1.6%**  
Informal settlers



# COPING CAPACITY (CC)

**RANK: 19 / 84 PROVINCES ASSESSED**  
**SCORE: 0.599**

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



## Economic Capacity



**SCORE: 0.536** **RANK: 35/84 PROVINCES ASSESSED**

**0.91**

Purchasing power of the peso

**67.14%**

Labor force participation rate

**872.48**

Local government annual regular income per capita (Philippine Peso)



## Governance



**SCORE: 0.598** **RANK: 53/84 PROVINCES ASSESSED**

**77.4%**

Voter participation

**10.1**

Organized violence (per 100k persons)

**77.35%**

Garbage pickup



## Environmental Capacity



**SCORE: 0.47** **RANK: 31/84 PROVINCES ASSESSED**

**15.28**

Protected areas (per 1k ha)

**8.8%**

Forest reserves



**Infrastructure Capacity**



**SCORE: 0.707 RANK: 6/84 PROVINCES ASSESSED**



**Health Care Capacity**

**SCORE: 0.548 RANK: 30/84 PROVINCES ASSESSED**

**10.59**

Hopital beds  
(per 10k people)

**1.76**

Physicians per  
10,000 people

**67.00%**

Vaccination  
coverage

**4.11**

Average distance to nearest  
hospital (km)



**Transportation Capacity**

**SCORE: 0.836 RANK: 1/84 PROVINCES ASSESSED**

**3.96**

Road density  
(km per sq. km)

**10.23**

Average distance to  
nearest port (km)



**Communications Capacity**

**SCORE: 0.899 RANK: 3/84 PROVINCES ASSESSED**

**11.1%**

Households with a landline

**98.7%**

Mobile coverage



**Energy Capacity**

**SCORE: 0.953 RANK: 6/84 PROVINCES ASSESSED**

**94.7%**

Households with electricity

**68.0%**

Households with gas



**Emergency Services Capacity**

**SCORE: 0.296 RANK: 70/84 PROVINCES ASSESSED**

**16.04**

Evacuation centers  
(per 100k persons)

**0.92**

Fire Stations  
(per 100k persons)

**1.83**

Fire Trucks  
(per 100k persons)



## RESILIENCE (R)

**RANK: 10 / 84 PROVINCES ASSESSED**  
**SCORE: 0.644**

Laguna’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



Economic Capacity



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 30 / 84 PROVINCES ASSESSED**  
**SCORE: 0.303**



**Tsunami**

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



**Flood**

**RANK: 17 / 84 PROVINCES ASSESSED**  
**SCORE: 0.285**



**Liquefaction**

**RANK: 22 / 84 PROVINCES ASSESSED**  
**SCORE: 0.237**



**Landslide**

**RANK: 77 / 84 PROVINCES ASSESSED**  
**SCORE: 0.093**



**Volcano**

**RANK: 19 / 84 PROVINCES ASSESSED**  
**SCORE: 0.17**

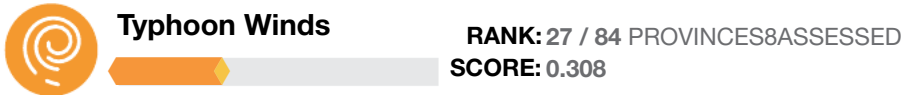
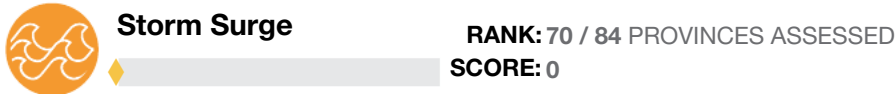
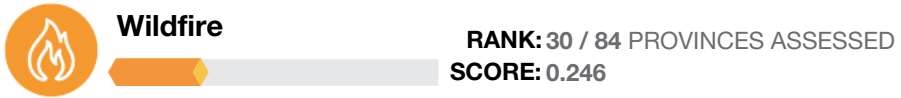


**Drought**

**RANK: 58 / 84 PROVINCES ASSESSED**  
**SCORE: 0.000**



**(HAZARD-SPECIFIC RISK CONTINUED)**



**MULTI-HAZARD RISK (MHR)**

**51 / 84**

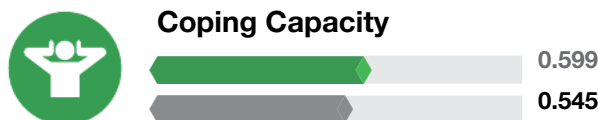
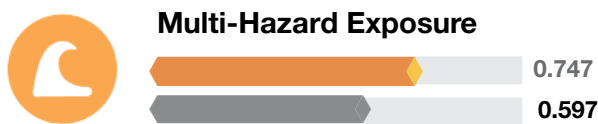
RANK WITHIN PROVINCES  
Score: 0.486



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

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

PROVINCE SCORE  
COUNTRY SCORE



# LAGUNA RECOMMENDATIONS

## 1

### Environmental Stress

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

## 2

### Population Pressures

- 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 Laguna. 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

- In Laguna, there are 0.92 fire stations per 100,000 persons, which is the 8th lowest in the Philippines. Continue work with partners such as the Philippines Red Cross to expand and enhance emergency service capacity. Focus efforts on increasing the number of evacuation centers, fire stations and fire trucks to serve the population and increase emergency service capacity.
- 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

## Economic Capacity

- Laguna ranked 79th out of the 84 territories in annual regular income per capita (872.5 pesos per capita). Continue to encourage programs that diversify the economy in Laguna to generate public revenue and create new job opportunities. Pursue policies that balance inflation rates and create equal opportunities for employment.

**Better solutions.  
Fewer disasters.**

# Safer world.

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