



THE PHILIPPINES

AURORA

NDPBA PROVINCE PROFILE

THE PHILIPPINES

AURORA

CAPITAL: BALER

Area: 3,133 km²

Aurora is located on the central side of Luzon, on the Pacific Ocean, leaving it exposed to significant cyclones that develop. Most of Aurora is generally mountainous with some flat areas surrounding the many rivers that run through it. The climate is defined by the even rainfall throughout the year. The population is mostly rural and is ranked as the 5th lowest population density in the country. Agriculture is the primary driver of the economy in Aurora, employing about half of the population. The primary crops include rice, coconut, coffee, bananas, and root crops among others.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Medium

Score: 0.512 • Rank: 36/84



RESILIENCE (R) - Medium

Score: 0.554 • Rank: 50/84



MULTI-HAZARD EXPOSURE (MHE) - High

Score: 0.644 • Rank: 33/84



VULNERABILITY (V) - Medium

Score: 0.456 • Rank: 37/84



COPING CAPACITY (CC) - Medium

Score: 0.563 • Rank: 38/84



Population (2018)

216,655



Population in Poverty

11.5%



Literate population

99.1%



Access to improved water

95.2%



Average life expectancy

69.1 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 33 / 84 PROVINCES
SCORE: 0.644



MHE
0.644

Raw MHE
0.376

Relative MHE
0.912

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

95%

206,228

\$524.2 Million



Tsunami

<1%

92

-



Flood

41%

87,822

\$224.6 Million



Liquefaction

53%

114,910

\$331.8 Million



Landslide

39%

84,871

\$228.7 Million



Volcano

-

-

-



Drought

97%

210,831

\$528.1 Million



Wildfire

-

-

-



Storm Surge

23%

49,984

\$74.6 Million



Typhoon Winds

100%

216,337

\$551.3 Million




VULNERABILITY (V)

RANK: 37 / 84 PROVINCES ASSESSED
SCORE: 0.456

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



Environmental Stress

0  1 **SCORE: 0.646** **RANK: 8/84 PROVINCES ASSESSED**

| | | |
|----------------------------------|--|--------------------------------------|
| 1.06 Livestock density | 76.97 Barren land (per 10k hectares) | -4.06% Forest cover change |
|----------------------------------|--|--------------------------------------|



Vulnerable Health Status

0  1 **SCORE: 0.42** **RANK: 53/84 PROVINCES ASSESSED**

| | | | | |
|--|---|--|--|---|
| 17.3% Malnutrition among children (0 to 5 years old) | 2.16 Infant mortality rate (per 1k live births) | 23.95 Maternal mortality rate (per 100k live births) | 69.07 Life expectancy | 407 Disability (per 100k persons) |
| 22.8 Tuberculosis mortality rate (per 100k persons) | 0.5 HIV mortality rate (per 100k persons) | 1.4 Intestinal disease mortality rate (per 100k persons) | 0 Other arthropod-borne viral fevers and viral hemorrhagic fever mortality rate (per 100k persons) | |



Clean Water Vulnerability

0  1 **SCORE: 0.392** **RANK: 47/84 PROVINCES ASSESSED**

| | |
|--|--|
| 95.2% Households with improved safe water source | 86.0% Households with sanitary toilet facility |
|--|--|



Information Access Vulnerability

0  1 **SCORE: 0.498** **RANK: 36/84 PROVINCES ASSESSED**

| | | | | |
|---|--|---------------------------------|--|---|
| 99.13% Literacy rate (age 10 and older) | 118.20% Gross primary school enrollment rate | 2.32% Internet Access | 43.43% Households with radio | 62.20% Households with television |
|---|--|---------------------------------|--|---|



Economic Constraints



SCORE: 0.386

RANK: 46/84 PROVINCES ASSESSED

0.65

Economic
dependency
ratio

11.50%

Poverty
incidence



Gender Inequality



SCORE: 0.486

RANK: 33/84 PROVINCES ASSESSED

1.09

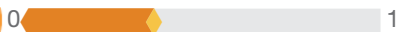
Female to male
secondary school
enrollment Rate

0.46

Labor force
participation ratio



Population Pressures



SCORE: 0.365

RANK: 57/84 PROVINCES ASSESSED

1.21

Population
growth rate
(2010-2015)

11.45

Average annual
urban population
growth rate

1.2%

Informal settlers



COPING CAPACITY (CC)

RANK: 38 / 84 PROVINCES ASSESSED

SCORE: 0.563

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



Economic Capacity



SCORE: 0.554 **RANK: 30/84 PROVINCES ASSESSED**

0.87

Purchasing power of the peso

62.25%

Labor force participation rate

3354.39

Local government annual regular income per capita (Philippine Peso)



Governance



SCORE: 0.569 **RANK: 64/84 PROVINCES ASSESSED**

81.5%

Voter participation

3.15

Organized violence (per 100k persons)

8.30%

Garbage pickup



Environmental Capacity



SCORE: 0.628 **RANK: 8/84 PROVINCES ASSESSED**

13.83

Protected areas (per 1k ha)

44.2%

Forest reserves



Infrastructure Capacity

0 1 **SCORE: 0.545** **RANK: 47/84** PROVINCES ASSESSED



Health Care Capacity **SCORE: 0.379** **RANK: 65/84** PROVINCES ASSESSED

| | | | |
|----------------------------------|---------------------------------|-------------------------|--|
| 6.7 | 0.64 | 69.46% | 9.91 |
| Hopital beds (per 10k people) | Physicians per 10,000 people | Vaccination coverage | Average distance to nearest hospital (km) |



Transportation Capacity **SCORE: 0.459** **RANK: 50/84** PROVINCES ASSESSED

| | |
|---------------------------------|--|
| 0.42 | 12.59 |
| Road density (km per sq. km) | Average distance to nearest port (km) |



Communications Capacity **SCORE: 0.501** **RANK: 67/84** PROVINCES ASSESSED

| | |
|----------------------------|-----------------|
| 0.3% | 95.4% |
| Households with a landline | Mobile coverage |



Energy Capacity **SCORE: 0.607** **RANK: 47/84** PROVINCES ASSESSED

| | |
|-----------------------------|---------------------|
| 74.2% | 18.1% |
| Households with electricity | Households with gas |



Emergency Services Capacity **SCORE: 0.781** **RANK: 9/84** PROVINCES ASSESSED

| | | |
|--|-------------------------------------|-----------------------------------|
| 162.07 | 3.18 | 5 |
| Evacuation centers (per 100k persons) | Fire Stations (per 100k persons) | Fire Trucks (per 100k persons) |



RESILIENCE (R)

RANK: 50 / 84 PROVINCES ASSESSED
SCORE: 0.554

Aurora's score and ranking are due to Medium Vulnerability combined with Medium Coping Capacity scores.

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



Environmental Stress



Information Access Vulnerability



Health Care Capacity



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 54 / 84 PROVINCES ASSESSED
SCORE: 0.234



Tsunami

RANK: 50 / 84 PROVINCES ASSESSED
SCORE: 0.041



Flood

RANK: 56 / 84 PROVINCES ASSESSED
SCORE: 0.127



Liquefaction

RANK: 42 / 84 PROVINCES ASSESSED
SCORE: 0.187



Landslide

RANK: 18 / 84 PROVINCES ASSESSED
SCORE: 0.278



Volcano

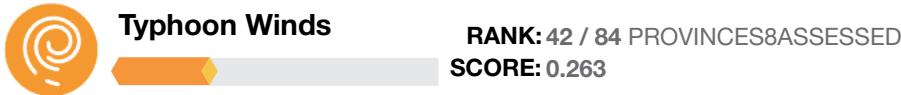
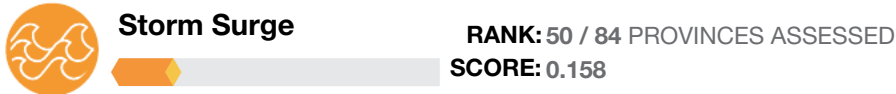
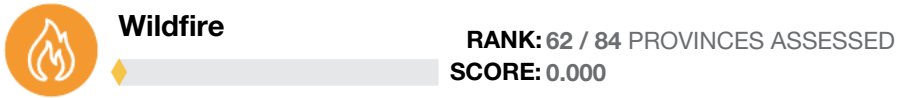
RANK: 68 / 84 PROVINCES ASSESSED
SCORE: 0



Drought

RANK: 17 / 84 PROVINCES ASSESSED
SCORE: 0.382

(HAZARD-SPECIFIC RISK CONTINUED)



MULTI-HAZARD RISK (MHR)

36 / 84

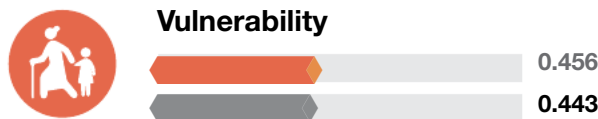
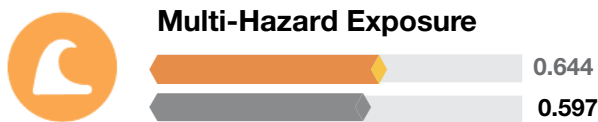
RANK WITHIN PROVINCES
Score: 0.512



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

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

PROVINCE SCORE
COUNTRY SCORE



AURORA RECOMMENDATIONS

1

Environmental Stress

- Aurora is ranked 3rd in forest cover change vulnerability. The data show that between 2010 and 2015, total forest cover decreased by 4.06%. Focus efforts on promoting sustainable forestry practices and reforestation projects.
- Continue to work stakeholders and partners to make strides in the agricultural sector. Investments in sustainable agriculture will help reduce the local carbon footprint and ensure conservation of natural resources.

2

Information Access Vulnerability

- While results show that Aurora has relatively high information access, efforts should be made to improve community access to information. Investments in education and distribution of household communication devices will enhance public dissemination of information, as well as ensure communities are able to understand and respond appropriately.
- Aurora is often impacted by floods and typhoons, which can be forecasted ahead of time. With increased information access, the constituents of Aurora can be properly warned and updated to take appropriate action to protect their lives and homes.

3

Health Care Capacity

- Aurora has 0.64 physicians per 10,000 persons, which is the 8th lowest in the Philippines. 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.

4

Transportation Capacity

- Although transportation capacity in Aurora ranked relatively high, road density is the 9th lowest in the Philippines (0.42 kilometers per square kilometer). Continue seaport, 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, increase access to markets and enhance 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.

**Better solutions.
Fewer disasters.**

Safer world.

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