

# THE BAHAMAS INAGUA

# **NDPBA ISLAND PROFILE**



# THE BAHAMAS INAGUA

**CAPITAL: MATTHEW TOWN** 

Area: 599 sq. mi (1,551.4 sq. km)



#### **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



**MULTI-HAZARD RISK (MHR) - Low** 

Score: 0.345 • Rank: 10/17



**RESILIENCE (R) - Low** 

Score: 0.443 • Rank: 12/17



Population (2010 Census)

913



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

Score: 0.170 • Rank: 14/17



**Population in Poverty** 

21.8%



**VULNERABILITY (V) - Very Low** 

Score: 0.280 • Rank: 17/17



Average Annual Foreign Arrivals Per Capita

1.4



Households with Piped Water

94.7%



Prevalence of Crowded Housing

14.7%



**COPING CAPACITY (CC) - Very Low** 

Score: 0.351 • Rank: 16/17

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



# **MULTI-HAZARD EXPOSURE (MHE)**

**RANK: 14 / 17 ISLANDS** 

**SCORE: 0.170** 



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

Note: Population values from PDC's All-hazard Impact Model (AIM) leverage 2020 estimates for The Bahamas. Values may exceed 2010 Census population.



**Tropical Cyclone Winds** 

100.0%

**&** 898

\$42.2 Million



**Storm Surge** 

40.5%

**å** 364

\$34.5 Million



**Flooding** 

0.0%

**2** 0

n



Wildfire

0.0%

**2** 0

0



Landslide

0.0%

**&** 0

\$60 Thousand



Sea Level Rise

0.0%

**2** 0

0



# **VULNERABILITY (V)**

**RANK: 17 / 17 ISLANDS ASSESSED** 

**RANK: 15/17 ISLANDS ASSESSED** 

**SCORE: 0.280** 

Vulnerability in Inagua is primarily driven by Gender Inequality and Housing and Transport Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Environmental Stress**

1 SCORE: 0.407 RANK: 13/17 ISLANDS ASSESSED

60.9% Coral reef exposed to

local threats

2.0%

Disability

81.2% Coral reef exposed to thermal stress **0.8%**Tree cover loss

**0.68 per mi. (0.42 per km)** Historical hurricane

hits per length of coastline



#### **Household Composition Vulnerability**

0 SCORE: 0.061

**7.3%** Elderly population (65+)



#### **Clean Water Access Vulnerability**

1 SCORE: 0.306 RANK: 15/17 ISLANDS ASSESSED

94.7% Households with piped water 98.4% Households with flush toilets

2.5%
Households with shared toilet facilities



#### **Housing and Transportation Vulnerability**

1 SCORE: 0.428 RANK: 10/17 ISLANDS ASSESSED

14.7% Crowded housing

**28.5%**Population without private vehicle

48.3% Housing built before 1980

1

**(** 

158

#### **Economic Constraints**

**46.9**Economic dependency

ratio

\$91 Government benefits received (Bahamian Dollars) 45.6% Non-wage earning population 21.8% Poverty rate

SCORE: 0.157 RANK: 16/17 ISLANDS ASSESSED



#### **Gender Inequality**

**SCORE: 0.435 RANK: 8/17 ISLANDS ASSESSED** 

0.53

1.05 Ratio female to male avg. years of school Ratio female to male income

Adolescent birth rate (per 1,000)

23

#### **Population Pressures**

Average population change (2000 -2010)

-5.8%

Average annual foreign arrivals per capita

1.4

1.9 2.1

Average annual foreign arrivals per sq. mile Migration per 100 persons

#### **SCORE: 0.167 RANK: 15/17 ISLANDS ASSESSED**



**RANK: 4 / 17 ISLANDS ASSESSED** 

**SCORE: 0.596** 

Inagua exhibits weaker Island Capacity in the areas of Logistics Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



#### **Economic Capacity**

1 SCORE: 0.577

**RANK: 7/17 ISLANDS ASSESSED** 

0.3% Households receiving remittances

\$17,280 Median income, Bahamian dollars

natural habitat



#### **Environmental Capacity**

53.7% **50**% Protected areas Coastline protected by **SCORE: 0.770 RANK: 2/17 ISLANDS ASSESSED** 

0.12 oz. per sq. ft (36.39 g per sq. m) Standing fish stock



#### Infrastructure Capacity

**RANK: 13/17 ISLANDS ASSESSED SCORE: 0.538** 



**Health Care Capacity** SCORE: 0.301 **RANK: 14/17 ISLANDS ASSESSED** 

11.0 Physicians per 10,000

11.0 Nurses & midwives per 10,000

**Transportation Capacity** 

11.0 Clinics per 10,000

50.0% DTP3 Vaccine coverage rate

SCORE: 0.137



0.43 mi per sq. mi (0.27 km per sq. km)

Road density



Communications Capacity

SCORE: 0.500 RANK: 14/17 ISLANDS ASSESSED

RANK: 15/17 ISLANDS ASSESSED

71.5%

7.9%

Internet access

Mobile coverage



**Emergency Services Capacity** 

SCORE: 0.841 RANK: 1/17 ISLANDS ASSESSED

0.6 mi (0.96 km)

0.62 mi (1 km)

38.3 Shelter capacity per 100 persons

Average distance to police station

Average distance to shelter

**Energy Capacity** 

SCORE: 0.911 RANK: 4/17 ISLANDS ASSESSED

98.1%

83.7%

Households with electricity

Households with liquid propane gas

160 **PDC** Global



**RANK: 17 / 18 ISLANDS ASSESSED** 

**SCORE: 0.100** 

Logistics Capacity describes the ability of the island to ensure efficient storage, movement, and delivery of resources key for effective humanitarian assistance and disaster relief operations. Logistics Capacity is driven by distances to a major airport, major seaport, and disaster warehouse.



Distance to port

222.13 mi (357.41 km)



222.13 mi (357.41 km) 0 mi (0 km)



warehouse

Distance to

Distance to airport



Coping Capacity measures the systems, means, and abilities of people and societies to absorb and respond to disruptions in normal function. Coping Capacity in The Bahamas was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 16 / 17 ISLANDS ASSESSED

**SCORE: 0.351** 



# **RESILIENCE (R)**

Resilience in The Bahamas was calculated by using a combination of Vulnerability, and Coping Capacity (including both Island Capacity and Logistics Capacity).

RANK: 12 / 17 ISLANDS ASSESSED

**SCORE: 0.443** 



# **HAZARD-SPECIFIC RISK (HSR)**



**Tropical Cyclone Winds** 

RANK: 8 / 17 ISLANDS ASSESSED

SCORE: 0.452



**Storm Surge** 

RANK: 6 / 17 ISLANDS ASSESSED

SCORE: 0.434



Flooding

RANK: 11 / 17 ISLANDS ASSESSED

SCORE: 0.000



Wildfire

RANK: 7 / 17 ISLANDS ASSESSED

SCORE: 0.000



Landslide

RANK: 15 / 17 ISLANDS ASSESSED

SCORE: 0.241



Sea Level Rise

RANK: 10 / 17 ISLANDS ASSESSED

SCORE: 0.310



# **MULTI-HAZARD RISK (MHR)**

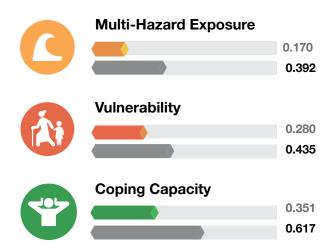


10 / 17 RANK WITHIN ISLANDS Score: 0.345

Inagua's score and ranking are due to Very Low Multi-hazard Exposure combined with Very Low Vulnerability and Very Low Coping Capacity scores.

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







#### **Gender Inequality**

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

Inagua ranks 8th highest in overall Gender Inequality, with the 4th highest adolescent birth rate. Inagua also has the 5th highest disparity in female to male income ratio with women earning just over 50% of what their male counterparts earn, despite females having slightly more years of schooling than males. Populations who are marginalized or less likely to have their needs met under pre-disaster conditions become even more susceptible to harm during times of disaster.

Create targeted interventions to increase school to work opportunities for women that include quality, affordable childcare to boost participation in the labor force and reduce economic dependency. Explore incentive-based initiatives to encourage employers to provide equitable pay.

Increase gender-based inclusion in all phases of disaster management, ensuring implementation at local levels. Courses of action should recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

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#### **Housing and Transport Vulnerability**

Older housing units, constructed prior to modern building codes, are more susceptible to the damaging effects of natural hazards. Crowded housing is linked to both economic constraints and vulnerable health status, which are be exacerbated by hazard exposure. Crowding presents a challenge for disaster response activities including evacuation and sheltering when large numbers of people must relocate from their homes. These challenges are further complicated when households do not have personal means of transportation, relying instead on public or mass transit.

Inagua ranks 10th highest in overall Housing and Transport Vulnerability, mostly attributable to the 48% of houses built prior to 1980. Older homes often lack adequate and modernized safety features and can create increased needs for sheltering and long-term housing due to the damages incurred in disasters.

Identify safety features that can be implemented to upgrade older homes, increase public education about available safety upgrades, and develop low to no cost programs in order to implement these features. Ensure building codes are enforced and safety features incorporated for all future construction.



#### **Logistics Capacity**

Efficient storage, movement and delivery of resources are key to effective humanitarian assistance and disaster relief operations. Ensuring that the supply chain can reach vulnerable and isolated communities can significantly improve the speed and quality of response operations, reducing the negative social and economic impacts of an emergency.

Inagua has the 2nd lowest overall Coping Capacity in The Bahamas and the lowest ranking in the Commonwealth for Logistics Capacity, driven by its distance from large international air and seaports, which can impede disaster response and delay transport of relief supplies. Efficient storage, movement and delivery of resources are key to effective humanitarian assistance and disaster relief operations. Ensuring that the supply chain can reach vulnerable and isolated communities can significantly improve the speed and quality of response operations, reducing the negative social and economic impacts of an emergency.

Increase warehousing capacity and identify storage areas for emergency supplies to lessen the impact of long supply chains. Include pre-positioning of resources in disaster planning and ensure evacuation planning accounts for long transits to available shelters. Annually inspect all stored supplies to ensure material readiness and replace in conjunction with product lifecycles. Hold annual training to identify training gaps in movement and loading of supplies.

Create emergency action plans that include routes for movement of emergency supplies and communications during transit. Include secondary, tertiary, and quaternary movement plans. Review emergency action plans at least yearly to identify and implement changes.



#### **Transportation Capacity**

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access island populations. Improved transportation capacity supports all aspects of Inagua ability to distribute resources before, during, and after a disaster.

Ranking 3rd lowest in Transportation Capacity, Inagua has a limited road network, and therefore relies heavily on maritime (mail boat) and air transportation.

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access island populations. Improved transportation capacity would support all aspects of Inagua's ability to distribute resources before, during, and after a disaster.

Identify potential improvements to transportation capacity through road or port improvements. Continually evaluate mailboat routes and deliveries to ensure an adequate supply of materials, especially during hurricane season and times of approaching storms. With Inagua's high susceptibility to storm surge, ensure supply routes and storage facilities are accessible during and following tropical cyclones.



Better solutions. Fewer disasters.

# Safer World.

1305 N Holopono Street Suite 2, Kihei, HI 9675 3 P: (808) 891-0525 F: (808) 891-0526



@PDC\_Global







ndpba.bah@pdc.org