



# MADAGASCAR

---

# DIANA

---

## NDPBA REGION PROFILE

# MADAGASCAR

## REGION: DIANA



### RISK AND VULNERABILITY COMPONENT SCORES



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

**Very Low**

Score: 0.34 • Rank: 22/23



#### RESILIENCE (R) -

**Very High**

Score: 0.686 • Rank: 2/23



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

**Low**

Score: 0.391 • Rank: 14/23



#### VULNERABILITY (V) -

**Very Low**

Score: 0.213 • Rank: 22/23



#### COPING CAPACITY (CC) -

**Very High**

Score: 0.584 • Rank: 2/23

### REGION HIGHLIGHTS



Population (2018 Census)

**889,962**



Extreme Poverty Rate

**32.5%**



Household Access to Drinking Water

**55.2%**



Literacy Rate

**83.2%**



Household Access to Electricity

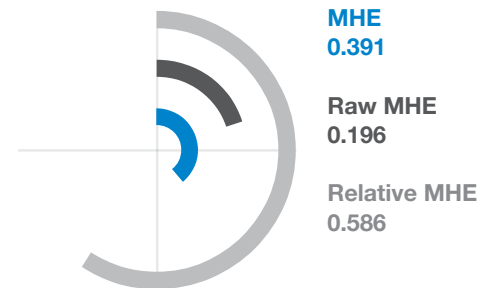
**55.2%**



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 14 / 23 REGIONS

SCORE: 0.391



### ESTIMATED EXPOSURE TO EACH HAZARD:



#### Sea Level Rise

**1%** (3,610)

Buildings Exposed: **1%**

Critical Infrastructure Exposed: **8%**



#### Landslide

**26%** (139,000)

Buildings Exposed: **26%**

Critical Infrastructure Exposed: **22%**



#### Coastal Flooding

**4%** (21,200)

Buildings Exposed: **6%**

Critical Infrastructure Exposed: **15%**



#### Extreme Heat

**58%** (305,000)

Buildings Exposed: **70%**

Critical Infrastructure Exposed: **80%**



#### Riverine Flooding

**9%** (45,900)

Buildings Exposed: **11%**

Critical Infrastructure Exposed: **17%**



#### Wildfire

**<1%** (994)

Buildings Exposed: **<1%**

Critical Infrastructure Exposed: **1%**



#### Tsunami

**<1%** (488)

Buildings Exposed: **<1%**

Critical Infrastructure Exposed: **5%**



#### Malaria

**23%** (119,000)

Buildings Exposed: **35%**

Critical Infrastructure Exposed: **32%**



#### Tropical Cyclone Wind

**100%** (526,000)

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



#### Locust

Cropland Exposed: **2%**



#### Earthquake

**0%** (0)

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**

NOTE: Population exposure values are estimated using PDC's All-hazard Impact Model (AIM). Values may differ from Census population.



## VULNERABILITY (V)

**RANK: 22 / 23 REGIONS ASSESSED**  
**SCORE: 0.213**

Below is a summary of the regional Vulnerability Assessment within Diana. Detailed region-level results, including all indicators used to assess vulnerability, are available in DisasterAWARE.



### Information Access Vulnerability



**SCORE: 0.360**

**RANK: 22/23 REGIONS ASSESSED**



### Clean Water Access Vulnerability

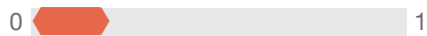


**SCORE: 0.472**

**RANK: 19/23 REGIONS ASSESSED**



### Economic Constraints

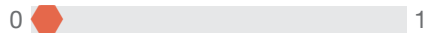


**SCORE: 0.168**

**RANK: 22/23 REGIONS ASSESSED**



### Gender Disparity

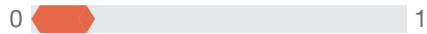


**SCORE: 0.042**

**RANK: 23/23 REGIONS ASSESSED**



### Vulnerable Health Status

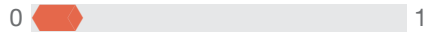


**SCORE: 0.128**

**RANK: 23/23 REGIONS ASSESSED**



### Housing Vulnerability



**SCORE: 0.108**

**RANK: 23/23 REGIONS ASSESSED**

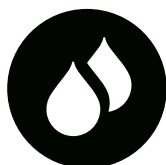


## VULNERABILITY (V)

RANK: 22 / 23 REGIONS ASSESSED

SCORE: 0.213

### KEY FACTORS INFLUENCING VULNERABILITY



#### Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



#### Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.



## COPING CAPACITY (CC)

**RANK: 2 / 23 REGIONS ASSESSED**  
**SCORE: 0.584**

Below is a summary of the regional Coping Capacity Assessment within Diana. Detailed region-level results, including all indicators used to assess coping capacity, are available in DisasterAWARE.



### Economic Capacity

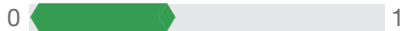


**SCORE: 0.617**

**RANK: 3/23 REGIONS ASSESSED**



### Health Care Capacity



**SCORE: 0.356**

**RANK: 10/23 REGIONS ASSESSED**



### Energy and Communications Capacity



**SCORE: 0.690**

**RANK: 2/23 REGIONS ASSESSED**



### Transportation Capacity



**SCORE: 0.674**

**RANK: 2/23 REGIONS ASSESSED**

## KEY FACTORS INFLUENCING COPING CAPACITY



### Health Care Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



### Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



## RESILIENCE (R)

**RANK: 2 / 23 REGIONS ASSESSED**

**SCORE: 0.686**

Key drivers of Resilience within Diana are summarized below. Detailed region-level results for the RVA are available in DisasterAWARE.

### KEY FACTORS INFLUENCING RESILIENCE



#### Health Care Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



#### Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



#### Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



#### Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.



## HAZARD-SPECIFIC RISK (HSR)



**Sea Level Rise**

**RANK: 5 / 23 REGIONS ASSESSED**  
**SCORE: 0.480**



**Coastal Flooding**

**RANK: 5 / 23 REGIONS ASSESSED**  
**SCORE: 0.511**



**Riverine Flooding**

**RANK: 12 / 23 REGIONS ASSESSED**  
**SCORE: 0.281**



**Tsunami**

**RANK: 10 / 23 REGIONS ASSESSED**  
**SCORE: 0.134**



**Tropical Cyclone Wind**

**RANK: 22 / 23 REGIONS ASSESSED**  
**SCORE: 0.475**



**Earthquake**

**RANK: 7 / 23 REGIONS ASSESSED**  
**SCORE: 0.000**



**Landslide**

**RANK: 17 / 23 REGIONS ASSESSED**  
**SCORE: 0.307**



**Extreme Heat**

**RANK: 10 / 23 REGIONS ASSESSED**  
**SCORE: 0.441**



**Wildfire**

**RANK: 17 / 23 REGIONS ASSESSED**  
**SCORE: 0.059**



**Malaria**

**RANK: 12 / 23 REGIONS ASSESSED**  
**SCORE: 0.277**



**Locust**

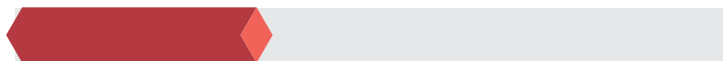
**RANK: 16 / 23 REGIONS ASSESSED**  
**SCORE: 0.088**



## MULTI-HAZARD RISK (MHR)

**22 / 23**

RANK AMONG REGIONS  
SCORE: 0.34



The Multi-Hazard Risk score and ranking represent a combination of multi-hazard exposure, vulnerability, and coping capacity. Below is a summary of the Diana region's RVA results. Detailed region-level results for the RVA are available in DisasterAWARE.

**Multi-Hazard Risk component scores  
compared to overall average country scores:**

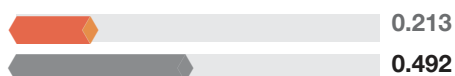
— COUNTRY SCORE  
— DIANA SCORE



### Multi-Hazard Exposure



### Vulnerability



### Coping Capacity



**Better solutions.  
Fewer disasters.**

# Safer world.

**1305 N. Holopono Street | P: (808) 891-0525  
Suite 2, Kihei, HI 96753 | F: (808) 891-0526**



**@PDC\_Global**



**/PDCGlobal**



**[www.pdc.org](http://www.pdc.org)**



**[ndpba@pdc.org](mailto:ndpba@pdc.org)**