



**MADAGASCAR**

# **ATSIMO ANDREFANA**

**NDPBA REGION PROFILE**

# MADAGASCAR

## REGION: ATSIMO ANDREFANA



### RISK AND VULNERABILITY COMPONENT SCORES



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

**High**

Score: 0.595 • Rank: 5/23



#### RESILIENCE (R) -

**Low**

Score: 0.340 • Rank: 17/23



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

**Moderate**

Score: 0.465 • Rank: 10/23



#### VULNERABILITY (V) -

**Very High**

Score: 0.685 • Rank: 4/23



#### COPING CAPACITY (CC) -

**Moderate**

Score: 0.365 • Rank: 13/23

### REGION HIGHLIGHTS



Population (2018 Census)

**1,797,894**



Extreme Poverty Rate

**78.2%**



Household Access to Drinking Water

**43.5%**



Literacy Rate

**46.5%**



Household Access to Electricity

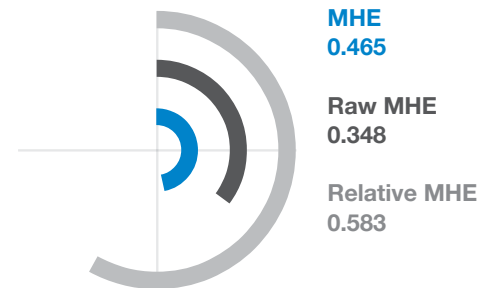
**43.5%**



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 10 / 23 REGIONS

SCORE: 0.465



### ESTIMATED EXPOSURE TO EACH HAZARD:



#### Sea Level Rise

**1%** (2,850)

Buildings Exposed: <1%

Critical Infrastructure Exposed: <1%



#### Landslide

**10%** (54,600)

Buildings Exposed: 4%

Critical Infrastructure Exposed: 7%



#### Coastal Flooding

**2%** (12,600)

Buildings Exposed: 3%

Critical Infrastructure Exposed: 8%



#### Extreme Heat

**98%** (531,000)

Buildings Exposed: 91%

Critical Infrastructure Exposed: 97%



#### Riverine Flooding

**6%** (33,400)

Buildings Exposed: 12%

Critical Infrastructure Exposed: 20%



#### Wildfire

**8%** (44,900)

Buildings Exposed: 3%

Critical Infrastructure Exposed: 3%



#### Tsunami

**1%** (3,170)

Buildings Exposed: 1%

Critical Infrastructure Exposed: 6%



#### Malaria

**21%** (116,000)

Buildings Exposed: 26%

Critical Infrastructure Exposed: 13%



#### Tropical Cyclone Wind

**100%** (542,000)

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



#### Locust

Cropland Exposed: 8%



#### 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: 4 / 23 REGIONS ASSESSED**  
**SCORE: 0.685**

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



### Information Access Vulnerability



**SCORE: 0.835**

**RANK: 3/23 REGIONS ASSESSED**



### Clean Water Access Vulnerability



**SCORE: 0.735**

**RANK: 7/23 REGIONS ASSESSED**



### Economic Constraints



**SCORE: 0.595**

**RANK: 3/23 REGIONS ASSESSED**



### Gender Disparity



**SCORE: 0.585**

**RANK: 5/23 REGIONS ASSESSED**



### Vulnerable Health Status



**SCORE: 0.620**

**RANK: 3/23 REGIONS ASSESSED**



### Housing Vulnerability



**SCORE: 0.742**

**RANK: 7/23 REGIONS ASSESSED**





## VULNERABILITY (V)

**RANK: 4 / 23 REGIONS ASSESSED****SCORE: 0.685**

### KEY FACTORS INFLUENCING VULNERABILITY



#### 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.



#### Housing Vulnerability

Populations living in poorly constructed housing, or homes built prior to the enactment of modern building codes, are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure.



## COPING CAPACITY (CC)

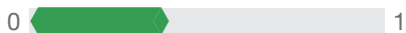
**RANK: 13 / 23 REGIONS ASSESSED**

**SCORE: 0.365**

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



### Economic Capacity

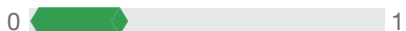


**SCORE: 0.367**

**RANK: 11/23 REGIONS ASSESSED**



### Health Care Capacity

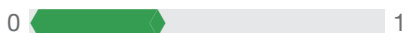


**SCORE: 0.224**

**RANK: 17/23 REGIONS ASSESSED**



### Energy and Communications Capacity



**SCORE: 0.352**

**RANK: 12/23 REGIONS ASSESSED**



### Transportation Capacity



**SCORE: 0.517**

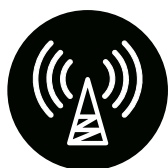
**RANK: 11/23 REGIONS ASSESSED**

## 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.



### Energy and Communications Capacity

Homes, businesses, industry, and government all rely on access to energy resources and communications for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability of internet services will contribute to economic development, facilitate effective and coordinated communication, and increase the speed of recovery processes in the aftermath of a disaster.



## RESILIENCE (R)

**RANK: 17 / 23 REGIONS ASSESSED**

**SCORE: 0.340**

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

### KEY FACTORS INFLUENCING RESILIENCE



#### 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.



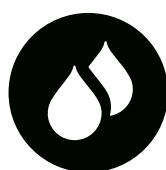
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Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases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



#### Housing Vulnerability

Populations living in poorly constructed housing, or homes built prior to the enactment of modern building codes, are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure.



#### 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.



## HAZARD-SPECIFIC RISK (HSR)



**Sea Level Rise**

**RANK: 3 / 23 REGIONS ASSESSED**  
**SCORE: 0.507**



**Coastal Flooding**

**RANK: 3 / 23 REGIONS ASSESSED**  
**SCORE: 0.572**



**Riverine Flooding**

**RANK: 8 / 23 REGIONS ASSESSED**  
**SCORE: 0.443**



**Tsunami**

**RANK: 7 / 23 REGIONS ASSESSED**  
**SCORE: 0.314**



**Tropical Cyclone Wind**

**RANK: 4 / 23 REGIONS ASSESSED**  
**SCORE: 0.713**



**Earthquake**

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



**Landslide**

**RANK: 19 / 23 REGIONS ASSESSED**  
**SCORE: 0.232**



**Extreme Heat**

**RANK: 1 / 23 REGIONS ASSESSED**  
**SCORE: 0.782**



**Wildfire**

**RANK: 6 / 23 REGIONS ASSESSED**  
**SCORE: 0.318**



**Malaria**

**RANK: 11 / 23 REGIONS ASSESSED**  
**SCORE: 0.340**



**Locust**

**RANK: 12 / 23 REGIONS ASSESSED**  
**SCORE: 0.229**





## MULTI-HAZARD RISK (MHR)

**5 / 23**

RANK AMONG REGIONS  
SCORE: 0.595



The Multi-Hazard Risk score and ranking represent a combination of multi-hazard exposure, vulnerability, and coping capacity. Below is a summary of the Atsimo Andrefana 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  
— ATSIMO ANDREFANA SCORE



#### Multi-Hazard Exposure



#### Vulnerability



#### Coping Capacity



**Better solutions.  
Fewer disasters.**

# Safer world.

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