



**MADAGASCAR**

# **VAKINANKARATRA**

**NDPBA REGION PROFILE**

# MADAGASCAR

## REGION: VAKINANKARATRA



### RISK AND VULNERABILITY COMPONENT SCORES



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

**Very Low**

Score: 0.392 • Rank: 19/23



#### RESILIENCE (R) -

**High**

Score: 0.531 • Rank: 7/23



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

**Low**

Score: 0.238 • Rank: 16/23



#### VULNERABILITY (V) -

**Low**

Score: 0.39 • Rank: 16/23



#### COPING CAPACITY (CC) -

**High**

Score: 0.452 • Rank: 5/23

### REGION HIGHLIGHTS



Population (2018 Census)

**2,079,659**



Extreme Poverty Rate

**50.1%**



Household Access to Drinking Water

**42.3%**



Literacy Rate

**89.1%**



Household Access to Electricity

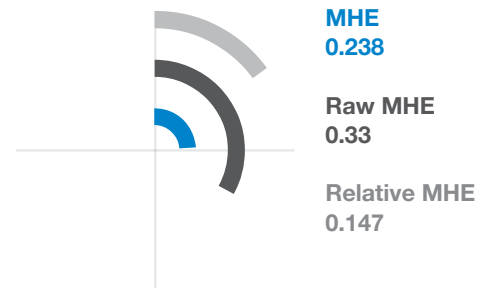
**42.3%**



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 16 / 23 REGIONS

SCORE: 0.238



### ESTIMATED EXPOSURE TO EACH HAZARD:



#### Sea Level Rise

**0%** (0)

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



#### Landslide

**43%** (1,170,000)

Buildings Exposed: **38%**

Critical Infrastructure Exposed: **28%**



#### Coastal Flooding

**0%** (0)

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



#### Extreme Heat

**<1%** (28)

Buildings Exposed: **<1%**

Critical Infrastructure Exposed: **<1%**



#### Riverine Flooding

**<1%** (13,200)

Buildings Exposed: **1%**

Critical Infrastructure Exposed: **2%**



#### Wildfire

**0%** (0)

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



#### Tsunami

**0%** (0)

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



#### Malaria

**20%** (536,000)

Buildings Exposed: **4%**

Critical Infrastructure Exposed: **10%**



#### Tropical Cyclone Wind

**100%** (2,730,000)

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



#### Locust

Cropland Exposed: **98%**



#### 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: 16 / 23 REGIONS ASSESSED**  
**SCORE: 0.39**

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



### Information Access Vulnerability



**SCORE: 0.455**

**RANK: 21/23 REGIONS ASSESSED**



### Clean Water Access Vulnerability

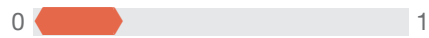


**SCORE: 0.520**

**RANK: 18/23 REGIONS ASSESSED**



### Economic Constraints

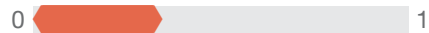


**SCORE: 0.200**

**RANK: 19/23 REGIONS ASSESSED**



### Gender Disparity

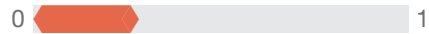


**SCORE: 0.320**

**RANK: 12/23 REGIONS ASSESSED**



### Vulnerable Health Status



**SCORE: 0.243**

**RANK: 20/23 REGIONS ASSESSED**



### Housing Vulnerability



**SCORE: 0.603**

**RANK: 12/23 REGIONS ASSESSED**



## VULNERABILITY (V)

RANK: 16 / 23 REGIONS ASSESSED

SCORE: 0.39

### KEY FACTORS INFLUENCING VULNERABILITY



#### 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.



## COPING CAPACITY (CC)

**RANK: 5 / 23 REGIONS ASSESSED**

**SCORE: 0.452**

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



### Economic Capacity



**SCORE: 0.466**

**RANK: 8/23 REGIONS ASSESSED**



### Health Care Capacity

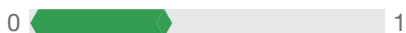


**SCORE: 0.528**

**RANK: 4/23 REGIONS ASSESSED**



### Energy and Communications Capacity



**SCORE: 0.372**

**RANK: 9/23 REGIONS ASSESSED**



### Transportation Capacity



**SCORE: 0.441**

**RANK: 15/23 REGIONS ASSESSED**

## KEY FACTORS INFLUENCING COPING CAPACITY



### 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.



### Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



## RESILIENCE (R)

**RANK: 7 / 23 REGIONS ASSESSED**

**SCORE: 0.531**

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

### KEY FACTORS INFLUENCING RESILIENCE



#### 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.



#### 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.



#### Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



#### 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.



## HAZARD-SPECIFIC RISK (HSR)



**Sea Level Rise**

**RANK: 15 / 23 REGIONS ASSESSED**

**SCORE: 0.000**



**Coastal Flooding**

**RANK: 15 / 23 REGIONS ASSESSED**

**SCORE: 0.000**



**Riverine Flooding**

**RANK: 21 / 23 REGIONS ASSESSED**

**SCORE: 0.096**



**Tsunami**

**RANK: 15 / 23 REGIONS ASSESSED**

**SCORE: 0.000**



**Tropical Cyclone Wind**

**RANK: 15 / 23 REGIONS ASSESSED**

**SCORE: 0.616**



**Earthquake**

**RANK: 7 / 23 REGIONS ASSESSED**

**SCORE: 0.000**



**Landslide**

**RANK: 9 / 23 REGIONS ASSESSED**

**SCORE: 0.494**



**Extreme Heat**

**RANK: 19 / 23 REGIONS ASSESSED**

**SCORE: 0.005**



**Wildfire**

**RANK: 19 / 23 REGIONS ASSESSED**

**SCORE: 0.000**



**Malaria**

**RANK: 13 / 23 REGIONS ASSESSED**

**SCORE: 0.246**



**Locust**

**RANK: 6 / 23 REGIONS ASSESSED**

**SCORE: 0.680**



## MULTI-HAZARD RISK (MHR)

**19 / 23**

RANK AMONG REGIONS  
SCORE: 0.392

The Multi-Hazard Risk score and ranking represent a combination of multi-hazard exposure, vulnerability, and coping capacity. Below is a summary of the Vakinankaratra 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:

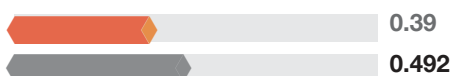
— COUNTRY SCORE  
— VAKINANKARATRA SCORE



#### Multi-Hazard Exposure



#### Vulnerability



#### Coping Capacity



**Better solutions.  
Fewer disasters.**

# Safer world.

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