



CABO VERDE

TARRAFAL

NDPBA MUNICIPAL PROFILE

CABO VERDE TARRAFAL



ISLAND: SANTIAGO

Area: 121 km²

The municipality of Tarrafal is located in the northern tip of Santiago Island. The municipalities of Santa Catarina and São Miguel lie to Tarrafal's south. Tarrafal consists of one parish, Santo Amaro Abade, subdivided into 19 settlements. Agriculture, livestock, and fishing are income-generating activities of the municipal population. Tarrafal has the highest numbers of sheep on Santiago Island. Livestock farming is a complementary and integrated activity in agriculture as is the case throughout Santiago Island. Artisanal fishing with small boats yields fish that are marketed domestically. Industrial activity is limited in Tarrafal but includes some small private enterprises such as carpentry and metal shops, bakeries, block shipyards, auto mechanics, and auto-body repair shops. While the diverse landscape, flora, and fauna especially in the Serra Malagueta Nature Park, and the existence of hotels and restaurants provide room for tourism, Tarrafal remains less developed in this sector than the Boa Vista and Sal islands.

RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.498 • Rank: 9/22



RESILIENCE (R) - Low

Score: 0.463 • Rank: 14/22



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.422 • Rank: 9/22



VULNERABILITY (V) - Moderate

Score: 0.478 • Rank: 10/22



COPING CAPACITY (CC) - Low

Score: 0.404 • Rank: 15/22



Population (2020 projected)

18,085



Infant mortality rate
(per 1,000 live births)

2.8



Poverty rate

26.8%



Population with access
to improved water

90.7%



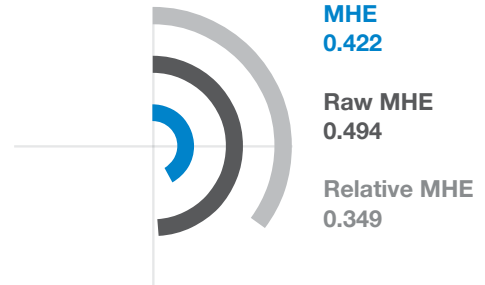
Average years of schooling

6.9



MULTI-HAZARD EXPOSURE (MHE)

RANK: 9 / 22 MUNICIPALITIES
SCORE: 0.422



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Drought

95.9%

17,985

\$133.1 Million

Critical Infrastructure Exposed:
100.0%



Flood

0.3%

53

-

Critical Infrastructure Exposed:
3.0%



Earthquake Induced Landslide

2.2%

418

-

Critical Infrastructure Exposed:
3.0%



Precipitation Induced Landslide

10.7%

2,009

\$84.2 Million

Critical Infrastructure Exposed:
4.0%



Volcano

0.0%

0

-

Critical Infrastructure Exposed:
0.0%



Forest Fire

52.1%

9,780

\$54.9 Million

Critical Infrastructure Exposed:
18.0%



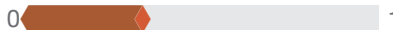
VULNERABILITY (V)

RANK: 10 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.478

Vulnerability in Tarrafal is primarily driven by Information Access Vulnerability and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.




Environmental Stress

0  1 **SCORE: 0.331** **RANK: 11/22 MUNICIPALITIES ASSESSED**

1.02 Livestock Density per Hectare	36.5% Households Using Firewood as Cooking Fuel	0.0% Loss in Tree Cover (2001 to 2020)
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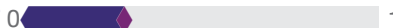
Vulnerable Health Status

0  1 **SCORE: 0.528** **RANK: 9/22 MUNICIPALITIES ASSESSED**

2.8 Infant Mortality Rate (per 1,000 live births)	15.1% Disabled Population	28.0 TB Prevalence per 100k Persons	99.1 HIV Incidence per 100K Persons
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Clean Water Vulnerability

0  1 **SCORE: 0.278** **RANK: 14/22 MUNICIPALITIES ASSESSED**

5.3 Average Time to Collect Water for Household Use	78.2% Households with Access to Wastewater Services	90.7% Population with Access to Improved Water
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Information Access Vulnerability

0  1 **SCORE: 0.681** **RANK: 3/22 MUNICIPALITIES ASSESSED**

82.9% Adult Literacy Rate	6.9 Average Years of Schooling	68.4% Households with Television	34.7% Households with radio	69.1% Households with Internet access
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Economic Constraints

0  1 **SCORE: 0.565** **RANK: 10/22 MUNICIPALITIES ASSESSED**

0.54 Age dependency ratio	0.37 Gini index	9.5% Unemployment Rate	26.8% Poverty rate	2.5% Households owning a vehicle
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Gender Inequality

0  1 **SCORE: 0.352** **RANK: 15/22 MUNICIPALITIES ASSESSED**


35.3%
Female Seats
Municipal City
Council

0.91
Female to male labor
participants

0.99
Parity in Secondary
Education Enrollment



Population Pressures

0  1 **SCORE: 0.607** **RANK: 3/22 MUNICIPALITIES ASSESSED**

-0.26%
Average annual
population
change

-69
Net Migration
Rate (per 1,000
persons)

27.4
Youth Bulge



COPING CAPACITY (CC)

RANK: 15 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.404

Tarrafal exhibits weaker Coping Capacity in the areas of Transportation Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



Economic Capacity

0 1 **SCORE: 0.344** **RANK: 12/22 MUNICIPALITIES ASSESSED**

52.35% **2.21** **141,532**
Economic Activity Rate Financial Service Locations per 10k Persons Avg Annual Expenditures per Capita CVE



Governance

0 1 **SCORE: 0.558** **RANK: 14/22 MUNICIPALITIES ASSESSED**

54% **274.61** **67.0%**
Population Properly Disposing Waste Crimes Reported per 10k persons Voter Participation Rate in Local Elections



Environmental Capacity

0 1 **SCORE: 0.218** **RANK: 12/22 MUNICIPALITIES ASSESSED**

0.31%
Protected Area



Infrastructure Capacity

0 1 **SCORE: 0.372** **RANK: 19/22 MUNICIPALITIES ASSESSED**



Health Care Capacity

SCORE: 0.403 **RANK: 12/22 MUNICIPALITIES ASSESSED**

2.19 **6.57** **90.9%** **0.55**
Physicians per 10k Persons Nurses per 10k Persons Pct Under 1yr Fully Vaccinated Hospitals per 10k persons



Transportation Capacity

SCORE: 0.226 **RANK: 22/22 MUNICIPALITIES ASSESSED**

2.46 **45.55**
Road density (km per sq. km) Average Distance to Port Facility (km)



Communications Capacity

SCORE: 0.276 **RANK: 16/22 MUNICIPALITIES ASSESSED**

9.8% **63.5%**
Households with Fixed Phones Population with Mobile Phone



Energy Capacity

SCORE: 0.273 **RANK: 20/22 MUNICIPALITIES ASSESSED**

81.4% **61.4%**
Households with Access to Electricity Households with Access to Gas



Emergency Services Capacity

SCORE: 0.681 **RANK: 7/22 MUNICIPALITIES ASSESSED**

3.54 **3.84** **5.53**
Average Distance to Hospital (km) Average Distance to Police Station (km) Firefighters per 10,000 Persons



RESILIENCE (R)

RANK: 14 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.463

Tarrafal's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity scores.

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



**Information
Access
Vulnerability**



**Population
Pressures**



**Transportation
Capacity**



Energy Capacity



HAZARD-SPECIFIC RISK (HSR)



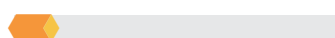
Drought



RANK: 2 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.457



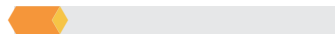
Flood



RANK: 12 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.102



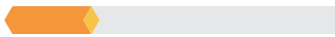
**Earthquake Induced
Landslide**



RANK: 11/22 MUNICIPALITIES ASSESSED
SCORE: 0.127



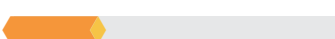
**Precipitation Induced
Landslide**



RANK: 7/22 MUNICIPALITIES ASSESSED
SCORE: 0.229



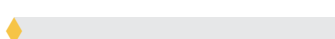
Forest Fire



RANK: 7 / 22 MUNICIPALITIES ASSESSED
SCORE: 0.254



Volcano



RANK: 6/ 22 MUNICIPALITIES ASSESSED
SCORE: 0



MULTI-HAZARD RISK (MHR)

9 / 22

RANK WITHIN MUNICIPALITIES
Score: 0.498



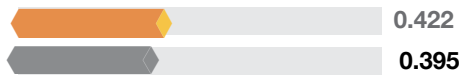
Tarrafal's score and ranking are due to Moderate Multi-hazard Exposure combined with Moderate Vulnerability and Low Coping Capacity scores.

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

TARRAFAL SCORE
COUNTRY SCORE



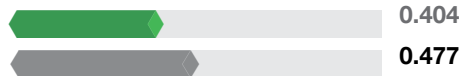
Multi-Hazard Exposure



Vulnerability



Coping Capacity



TARRAFAL RECOMMENDATIONS

1

Information Access Vulnerability

Tarrafal ranks 3rd highest for overall Information Access Vulnerability, with the 4th lowest percentage of households with television access (68.4%) and the 5th lowest average years of schooling (6.9 years).

Focus efforts on providing programs to increase school attendance and completion of secondary education. Work with communities to better understand the underlying factors that represent barriers to education. Economic constraints, in particular, may contribute to disparities in the municipality.

Implement community outreach and education programs focused on hazard awareness, disaster preparedness, and health and safety practices to build community resilience. Include information and resources for audiences requiring special considerations such as the very young, elderly, and disabled populations. Boost public-private collaboration and coordination to ensure that hazard warning information is accessible and disseminated as broadly as possible through multiple communications channels.

2

Population Pressures

Ranking 3rd highest for overall Population Pressures, Tarrafal has a net migration rate of -69 per 1,000 persons. A declining population can leave gaps in social support systems and contribute to a loss of intellectual capital and skilled labor, affecting the economy and its growth potential.

Strengthen planning efforts to identify vulnerabilities related to the changing population and implement programs and support systems to address them, which may include vocational, technical, or entrepreneurial training programs, services to alleviate poverty, and enhanced policing in areas susceptible to criminal activity.

TARRAFAL RECOMMENDATIONS

3

Transportation Capacity

Tarrafal has the lowest overall Transportation Capacity in the country, driven by an average distance to port facility of nearly 46 km, the greatest among all municipalities. Road density in Tarrafal is 2.46 km.

Tarrafal ranks 9th highest in Cabo Verde for overall Multi-hazard Exposure, with significant exposure to drought and forest fires. Limited transportation networks hamper timely evacuations and delay response and recovery activities. Damaged roads, seaports and airports can further postpone delivery and transport of much needed relief supplies and delay recovery processes.

Secure investments for continued expansion and maintenance of transportation networks, particularly in underserved areas to meet transportation needs and improve response times and access to emergency services. Explore public-private partnerships to maintain the quality of existing transportation infrastructure and increase connectivity between islands and municipalities. By bolstering transportation capacity, Tarrafal will have the added benefit of supporting sustainable economic growth through greater accessibility of goods and services. Protect investments and service provision by implementing mitigation strategies (e.g., storm water drainage, erosion prevention) to reduce hazard impacts. Evacuation routes and emergency response plans should be adapted as construction and maintenance is planned and implemented.

4

Energy Capacity

With the 3rd lowest Energy Capacity ranking in Cabo Verde, Tarrafal has the 2nd lowest percentage of households with electricity access (81.4%). 61.4% of households have access to gas fuel for cooking purposes.

Focus development programs on increasing energy capacity by establishing sustainable power generation in underserved communities and extending the existing transmission and distribution network. Continue to expand private-public partnerships to ensure energy expansion projects provide affordable and equitable access across the municipality.

Power and gas lines should be carefully engineered to be resilient against impacts from natural hazards, with backup mechanisms to increase safety and redundancy in the energy network.

**Better solutions.
Fewer disasters.**

Safer world.

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