



ARGENTINA

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# TUCUMÁN

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## NDPBA PROVINCE PROFILE

# ARGENTINA TUCUMÁN

## CAPITAL: SAN MIGUEL DE TUCUMÁN

Area: 22,539 km<sup>2</sup>

Tucumán Province is located in the Noroeste Argentino (NOA) region of Argentina. This Province is divided into 17 Provinces, the Capital being Tucumán. The Province borders the Provinces of Salta, Santiago del Estero and Catamarca. The main economic sources are agriculture, livestock, manufacturing and tourism.



## RISK AND VULNERABILITY COMPONENT SCORE



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

Score: 0.612 • Rank: 2/24



### RESILIENCE (R) - Low

Score: 0.448 • Rank: 15/24



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

Score: 0.734 • Rank: 5/24



### VULNERABILITY (V) - Moderate

Score: 0.546 • Rank: 10/24



### COPING CAPACITY (CC) - Low

Score: 0.443 • Rank: 15/24



Population (2018)

**164,944**



Population in Poverty

**32.2%**



Illiterate population

**2.5%**



Access to improved water

**88.8%**



Average life expectancy

**75.1 years**

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



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 5 / 24 PROVINCES  
SCORE: 0.734

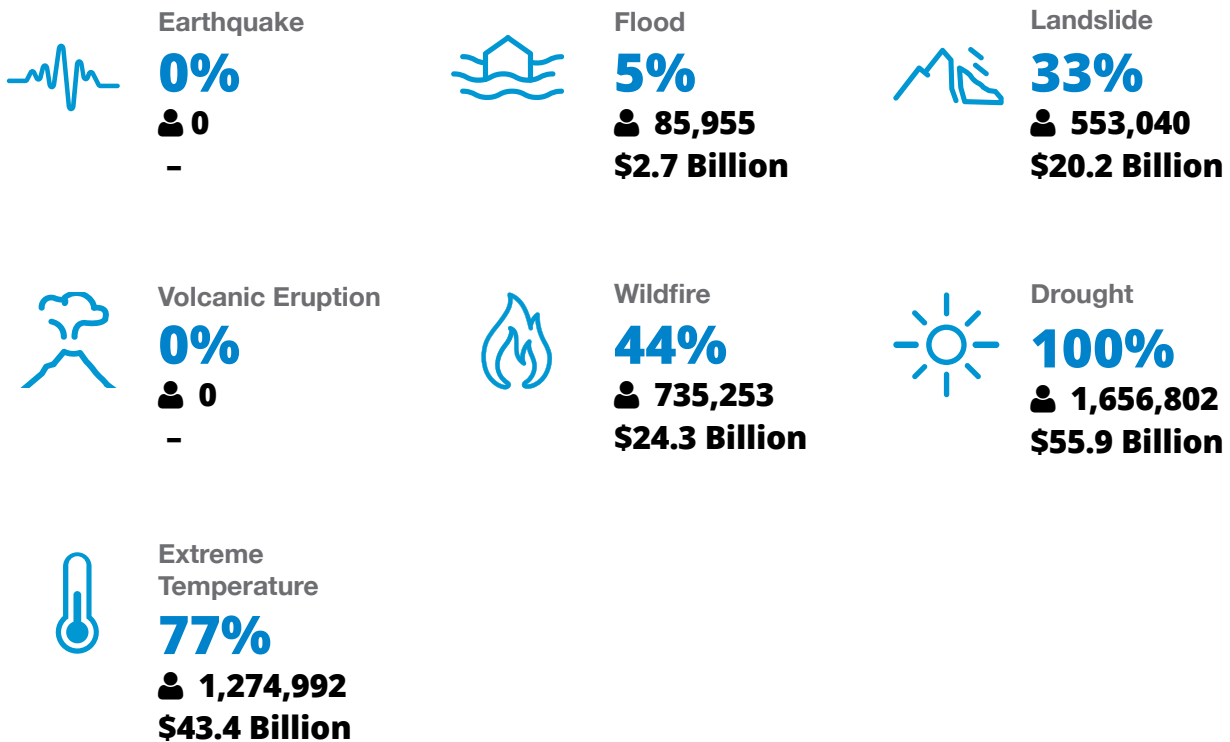


MHE  
0.734

Raw MHE  
0.579

Relative MHE  
0.889

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





## VULNERABILITY (V)

**RANK: 10 / 24 PROVINCES ASSESSED**  
**SCORE: 0.546**

Vulnerability in Tucumán is primarily driven by Economic Constraints and Population Pressures. The bar chart indicates the socioeconomic themes contributing to the province's overall Vulnerability score.



### Environmental Stress

**SCORE: 0.464 RANK: 15/24 PROVINCES ASSESSED**

**4.3%** **7.9**  
Land degradation Land affected by wildfire (per 100k ha)



### Vulnerable Health Status

**SCORE: 0.442 RANK: 10/24 PROVINCES ASSESSED**

**75.1** **11** **2.8** **14.3%** **15.7** **11.2**  
Life expectancy (years) Infant mortality rate (per 1,000 live births) Maternal mortality ratio Disability HIV incidence Tuberculosis incidence



### Clean Water Vulnerability

**SCORE: 0.519 RANK: 8/24 PROVINCES ASSESSED**

**11.2%** **53.4%**  
Households without piped water Households without sewage services



### Information Access Vulnerability

**SCORE: 0.539 RANK: 10/24 PROVINCES ASSESSED**

**2.5%** **80.4%** **87.0%** **2.7**  
Illiteracy Rate (Age 10+) Secondary education completion rate School enrollment Education investment per capita (million pesos)



### Economic Constraints

**SCORE: 0.745 RANK: 3/24 PROVINCES ASSESSED**

**55.8** **7.9%** **32.2%**  
Economic dependency ratio Unemployment rate Poverty rate



### Gender Inequality

**SCORE: 0.556 RANK: 13/24 PROVINCES ASSESSED**

**1.89** **45**  
Female to male unemployment Female judiciary seats



### Population Pressures

**SCORE: 0.558 RANK: 9/24 PROVINCES ASSESSED**

**1.3%**  
Average Annual population change



## COPING CAPACITY (CC)

**RANK: 15 / 24 PROVINCES ASSESSED**  
**SCORE: 0.443**

Tucumán exhibits weaker Coping Capacity in the areas of Communications Capacity and Disaster Management Capabilities. The bar chart indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.



### Economic Capacity

**SCORE: 0.405** **RANK: 15/24 PROVINCES ASSESSED**

<b>697.9</b> Exports per capita (USD)	<b>2.0%</b> Work insurance coverage	<b>20.8</b> Tax distribution
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### Governance

**SCORE: 0.434** **RANK: 21/24 PROVINCES ASSESSED**

<b>26.1</b> Crime prevalence	<b>82.8%</b> Voter participation
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### Environmental Capacity

**SCORE: 0,608** **RANK: 4/24 PROVINCES ASSESSED**

<b>21.9%</b> Protected area	<b>40.4%</b> Forest cover
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### Infrastructure Capacity

**SCORE: 0.504** **RANK: 11/24 PROVINCES ASSESSED**



### Health Care Capacity

**SCORE: 0.575** **RANK: 6/24 PROVINCES ASSESSED**

<b>33.7</b> Hospital beds per 10,000 people	<b>36.5</b> Physicians per 10,000 people	<b>63.5%</b> Health insurance coverage	<b>9.7</b> Average distance to nearest hospital (km <sup>2</sup> )
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### Transportation Capacity

**SCORE: 0.671** **RANK: 5/24 PROVINCES ASSESSED**

<b>0.47</b> Road density (km per sq. km)	<b>16</b> Average distance to port (km)	<b>93.1%</b> Proportion of roads improved
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### Communications Capacity

**SCORE: 0.122** **RANK: 23/24 PROVINCES ASSESSED**

<b>29.2%</b> Households with Internet	<b>7.0%</b> Television subscriptions per 100 people
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### Energy Capacity

**SCORE: 0.65** **RANK: 12/24 PROVINCES ASSESSED**

<b>98.5%</b> Households with electricity	<b>40.2%</b> Households with gas
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### Disaster Management Capabilities

**SCORE: 0.354** **RANK: 16/24 PROVINCES ASSESSED**

<b>31.7</b> Distance to fire station (km)	<b>0</b> Shelters per 100k persons	<b>45.4%</b> Radiobase access
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## RESILIENCE (R)

**RANK: 15 / 24 PROVINCES**  
**SCORE: 0.448**

Tucumán'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:**



**Economic Constraints**



**Population Pressures**



**Communications Capacity**



**Disaster Management Capabilities**



## HAZARD-SPECIFIC RISK (HSR)



**Earthquake**

**RANK: 13 / 24 PROVINCES ASSESSED**  
**SCORE: 0.000**



**Wildfire**

**RANK: 3 / 24 PROVINCES ASSESSED**  
**SCORE: 0.418**



**Volcano**

**RANK: 9 / 24 PROVINCES ASSESSED**  
**SCORE: 0.000**



**Flood**

**RANK: 13 / 24 PROVINCES ASSESSED**  
**SCORE: 0.196**



**Landslide**

**RANK: 2 / 24 PROVINCES ASSESSED**  
**SCORE: 0.344**



**Drought**

**RANK: 6 / 24 PROVINCES ASSESSED**  
**SCORE: 0.508**



**Extreme Temperature**

**RANK: 5 / 24 PROVINCES ASSESSED**  
**SCORE: 0.44**



## MULTI-HAZARD RISK (MHR)

**2 / 24**

RANK WITHIN PROVINCES  
Score: 0.612



Tucumán’s score and ranking are due to High Multi-hazard exposure combined with Moderate Vulnerability and Low Coping Capacity scores.

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



#### Multi-Hazard Exposure



DISTRICT SCORE  
COUNTRY SCORE



#### Vulnerability



#### Coping Capacity



# TUCUMÁN RECOMMENDATIONS

## 1

### Economic Constraints

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Findings show that Tucumán Province has the highest unemployment rate in Argentina (7.9%), with the 3rd highest overall Economic Constraints.

Continue to support new business opportunities to diversify livelihoods and generate prospects for employment, and equitable distribution of property and economic assets in the Province.

Promote educational programs that build the skillsets required to enter the workforce. Develop school-to-work programs in addition to preparatory instruction for higher education.

## 2

### Population Pressures

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Tucumán Province experienced the 9th largest average annual population increase between 2010 and 2019 (1.3%). As population growth steadily increases, closely monitor development to prevent environmental stress and ensure that resource and infrastructure needs are met.

Incorporate multi-hazard mapping and risk assessment into land-use plans and zoning regulations to reduce and prevent development in hazard-prone areas of the Province.



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# TUCUMÁN RECOMMENDATIONS

## 3

### Communications Capacity

Findings show that Tucumán Province ranks 23rd in the country in overall Communication Capacity. Just 29% of households have access to the internet, and there are 7 television subscriptions per 100 people. Pursue public-private partnerships to increase availability and affordability of internet and television communications.

While investing to diversify access to communication technology, officials should broadcast critical information and disaster warnings primarily via alternate media (such as radio) to keep the population informed and ensure that appropriate actions are taken. Tucumán Province is exposed to drought, extreme temperature, wildfire, landslide and flood hazards.

## 4

### Disaster Management Capabilities

Pursue public-private partnerships to increase radiobase access to increase availability, security, and resilience of disaster communications.

Establish designated emergency shelters. Coordinate with the Argentine Red Cross to provide shelter management training for community volunteer and provincial staff.

**Better solutions.  
Fewer disasters.**

# Safer world.

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