



SIERRA LEONE

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# TONKOLILI

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## NDPBA DISTRICT PROFILE

# SIERRA LEONE

## TONKOLILI

**CAPITAL: MAGBURAKA**

Area: 7,003 km<sup>2</sup>

Tonkolili District lies at the centermost part of Sierra Leone, sharing boundaries with seven other districts. Tonkolili is strategically located in the center of Sierra Leone and the land is well drained by the Rokel River, the longest in Sierra Leone, and the Pampana - Taia River - two of the main rivers in the country. The Bumbuna waterfalls and main national Hydro Electric Power lie on the Rokel River. Agriculture also plays a significant role in the economy. The largest bio-energy company in Africa, Addax Petroleum, is found in the district. There is also a significant agricultural activity at the Magbass sugar production facility. Economically, there is significant potential for an extractive economy. Tonkolili is the site of iron ore mine, including a railway between the mine and Port Pepel.



## RISK AND VULNERABILITY

### COMPONENT SCORE



**MULTI-HAZARD RISK (MHR) - High**

Score: 0.574 • Rank: 4/14



**RESILIENCE (R) - Very Low**

Score: 0.349 • Rank: 13/14



**MULTI-HAZARD EXPOSURE (MHE) - Moderate**

Score: 0.422 • Rank: 7/14



**VULNERABILITY (V) - Very High**

Score: 0.715 • Rank: 1/14



**COPING CAPACITY (CC) - Moderate**

Score: 0.354 • Rank: 12/14



Population (2015)

**531,435**



Infant Mortality Rate

**36**



Illiterate population

**60.0%**



Access to improved water

**35.3%**



Average life expectancy

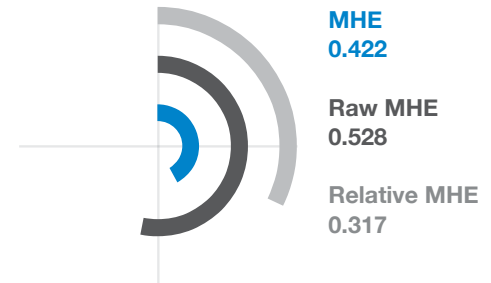
**51 years**

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

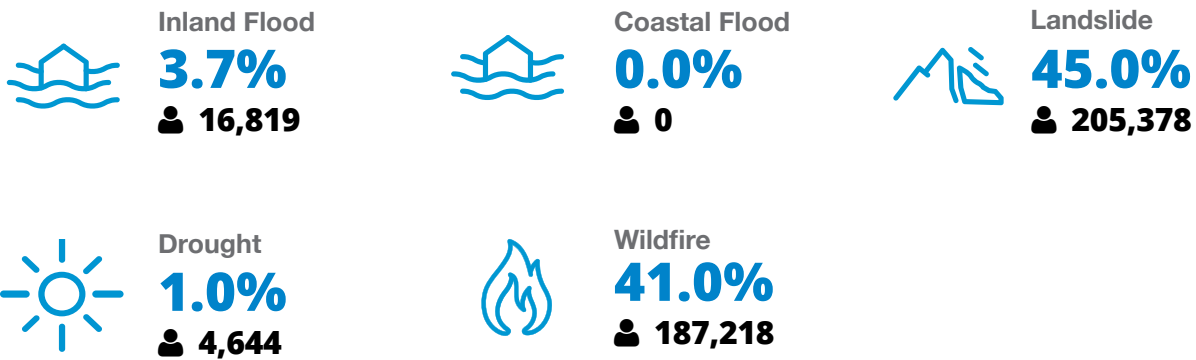


## MULTI-HAZARD EXPOSURE (MHE)

**RANK: 7 / 14 DISTRICTS**  
**SCORE: 0.422**



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







## VULNERABILITY (V)

**RANK: 1 / 14 DISTRICTS ASSESSED**  
**SCORE: 0.715**

Vulnerability in Tonkolili is primarily driven by Clean Water Access Vulnerability and Information Access Vulnerability. The bar chart indicates the socioeconomic themes contributing to the district's overall Vulnerability score.



### Environmental Stress

**Rank: 1/14 Districts Assessed**

<b>2.0%</b>	<b>6.7</b>	<b>50.1%</b>	<b>-0.12</b>	<b>27.3%</b>
Average Annual Forest Loss	Livestock Density (per sq km)	Erosion Potential	Ecological Change	Area Affected by Mining



### Vulnerable Health Status

**Rank: 6/14 Districts Assessed**

<b>51</b>	<b>36</b>	<b>355</b>	<b>3.1%</b>	<b>8.2%</b>	<b>204.9</b>	<b>55.7%</b>	<b>0.7%</b>
Life Expectancy (years)	Infant Mortality Rate (per 1,000 live births)	Maternal Mortality Ratio	Acute Malnutrition (Children <5)	Population with Disability	Tuberculosis Incidence (per 100,000 persons)	Malaria Prevalance (per 100,000 persons)	HIV Prevalance (per 100,000 persons)



### Clean Water Vulnerability

**Rank: 1/14 Districts Assessed**

<b>35.3%</b>	<b>22.2%</b>	<b>96.1%</b>	<b>16.4%</b>
Households with Improved Water Source	Households with Improved Sanitation	Population at High Risk of Fecal Contamination	Water Source > 30 minutes from Home



### Information Access Vulnerability

**Rank: 1/14 Districts Assessed**

<b>60.0%</b>	<b>79.4%</b>	<b>7.8%</b>	<b>3.2%</b>	<b>0.9%</b>	<b>37.6%</b>
Illiteracy Rate (Age 10+)	Primary School Attendance Ratio	Upper Secondary Completion Rate	Households with Internet	Households with Television	Households with Internet



### Economic Constraints

**Rank: 3/14 Districts Assessed**

<b>84.35</b>	<b>4.7%</b>	<b>0.24</b>	<b>26.0%</b>
Economic Dependency Ratio	Population in Poorest Wealth Quintile	Income Inequality (GINI)	Child Labor Participation (Age 10-14)



### Gender Inequality

**Rank: 6/14 Districts Assessed**

<b>0.58</b>	<b>0.58</b>	<b>0.97</b>	<b>1.26</b>	<b>6.9%</b>
Female to Male Land Ownership*	Female to Male Home Ownership*	Female to Male Labor Participation*	Female to Male Secondary Education*	Female Seats in Local Council

\*Values closer to 1 represent greater gender parity.



### Population Pressures

**Rank: 2/14 Districts Assessed**

<b>3.9%</b>	<b>8.9%</b>	<b>16.21</b>	<b>62.7%</b>	<b>36.5%</b>
Average Annual Population Change	Average Annual Urban Population Change	Net Migration Rate	Population that is Food Insecure	Ratio of Youth (15-24) to Adult (15+)



## COPING CAPACITY (CC)

**RANK: 12 / 14 DISTRICTS ASSESSED**  
**SCORE: 0.354**

Tonkolili exhibits weaker Coping Capacity in the areas of Emergency Service Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the district's overall Coping Capacity score.



### Economic Capacity



**Rank: 14/14 Districts Assessed**

**3.8%**

Households with Bank Account

**97.2%**

Income per Capita

**1.3%**

Population in Highest Wealth Quintile

**1.2**

Financial Institutions per 100k Persons



### Governance



**Rank: 1/14 Districts Assessed**

**0.38**

Conflict Events per 100k Persons

**82.3%**

Voter Participation



### Environmental Capacity



**Rank: 9/14 Districts Assessed**

**2.6%**

Protected Area



### Infrastructure Capacity



**Rank: 14/14 Districts Assessed**



### Health Care Capacity

**Rank: 12/14 Districts Assessed**

**14**

Hospital Beds per 10,000 People

**0.17**

Physicians per 10,000 People

**1.89**

Nurses per 10,000 People

**24.72**

Average Distance to Nearest Hospital (km<sup>2</sup>)

**58.1%**

Vaccination Coverage



### Transportation Capacity

**Rank: 13/14 Districts Assessed**

**0.55**

Road Density (km per sq. km)

**71.12**

Distance to Airport or Seaport (km)



### Communications Capacity

**Rank: 14/14 Districts Assessed**

**48.1%**

Households with Mobile Phone

**6.75**

Cellular Towers per 100k Persons



### Energy Capacity

**Rank: 10/14 Districts Assessed**

**2.8%**

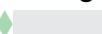
Households Connected to Electric Grid

**0.16**

Fuel Stations per 100k Persons



### Emergency Service Capacity



**Rank: 10/14 Districts Assessed**

**0**

Firefighters per 100k Persons

**0**

Search and Rescue Teams per 100k Persons

**0**

Fire Vehicles per 100k Persons



## RESILIENCE (R)

**RANK: 13 / 14 DISTRICTS****SCORE: 0.349**

Tonkolili's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity scores.

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



**Clean Water  
Access  
Vulnerability**



**Information  
Access  
Vulnerability**



**Emergency Service  
Capacity**



**Communications  
Capacity**



## HAZARD-SPECIFIC RISK

**Coastal Flood****SCORE: 0.00/14****RANK: 8****Inland Flood****SCORE: 0.08****RANK: 13****Drought****SCORE: 0.26/14****RANK: 4****Landslide****SCORE: 0.35/14****RANK: 2****Wildfire****SCORE: 0.37/14****RANK: 2**



## MULTI-HAZARD RISK (MHR)

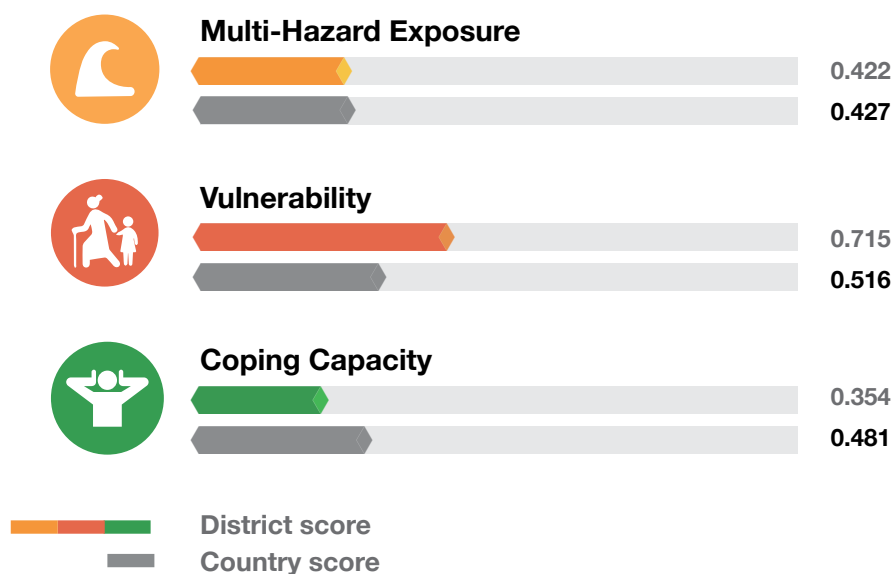
**4 / 14**

Rank within districts  
Score: 0.574



Tonkolili's score and ranking are due to Moderate Multi-hazard exposure combined with Very High Vulnerability and Moderate Coping Capacity scores.

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



# TONKOLILI RECOMMENDATIONS

## 1

### 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 in Tonkolili improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Tonkolili district ranks highest in the country in clean water vulnerability, with just 35% of households having access to improved water, and 22% with improved sanitation. Findings show very high risk of E. Coli contamination in drinking water, and increased burden for water collection. Invest in improved water and sanitation infrastructure to increase access and reduce exposure to disease.

## 2

### Information Access Vulnerability

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the district. Emergency messages presented to the population of Tonkolili must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

Tonkolili district ranks highest in the country in access to information vulnerability, with 60% of the population unable to read and write. Combined with a very low completion rate for secondary education, and major limitations in access to information technology (internet, television, radio).

Focus interventions on building literacy standards at the primary level, and on reducing school dropout rates. Ensure that the district has the schools and human resources to support education through the secondary level. Encourage whole-of-community education to ensure support for education outside of the classroom, including volunteerism, school-to-work programs, and community-based learning projects.

Tonkolili district is exposed to landslides, wildfire, flood, and drought hazards. Invest in information technology (internet, television, radio) and associated sustainable energy programs to support multimodal communications and learning environments in the district. Ensuring access to information during normal operations increases the capacity receive, comprehend, and act on critical information and disaster warnings.



# TONKOLILI RECOMMENDATIONS

## 1

### Emergency Service Capacity

Societies establish capacities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services in Tonkolili will increase the capacity for disaster management and response.

Tonkolili district participated in the Sierra Leone Red Cross Community Disaster Preparedness program, including training, and plan and exercise development. Continue building community and volunteer fire and emergency response corps. In conjunction with Red Cross efforts, develop locally-managed community emergency response teams (CERT).

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## 2

### Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how district- and local-level populations able to facilitate effective and coordinated communication.

Pursue public-private partnerships to increase availability of affordable mobile communications and sustainable power supply.

Incentivize expansion of the existing cellular network by increasing the consumer base for mobile communications.

**Better solutions.  
Fewer disasters.**

# Safer world.

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