



SIERRA LEONE

KOINADUGU

NDPBA DISTRICT PROFILE

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KOINADUGU

CAPITAL: KABALA

Area: 12,121 km²

Koinadugu District is in the Northern Province, and borders Bombali district to the west, Tonkolili district to the south-west, Kono district to the south and the Republic of Guinea to the North East. It is the largest district in terms of geographical area, with the least population density in the country. The district capital is Kabala, which is among one of the major cities in northern Sierra Leone and is set in a rural landscape, surrounded by mountains. Lake Sonfon is found in the Diang Chiefdom in Koinadugu District and it is surrounded by hills with vegetation comprising open grassland, wooded savanna and fringing forest with occasional farm bush. Agriculture is the main livelihood in the district with a high population involved in cash crop production such as cocoa and coffee, pineapples, rice and vegetables. The temperate climate and fertile soil make the district of Koinadugu ideal for agriculture. Livestock is also reared in Folosaba Dembelia Chiefdom.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High

Score: 0.722 • Rank: 1/14



RESILIENCE (R) - Very Low

Score: 0.346 • Rank: 14/14



MULTI-HAZARD EXPOSURE (MHE) - Very High

Score: 0.858 • Rank: 1/14



VULNERABILITY (V) - Very High

Score: 0.618 • Rank: 2/14



COPING CAPACITY (CC) - Very Low

Score: 0.506 • Rank: 6/14



Population (2015)

409,372



Infant Mortality Rate

37



Illiterate population

59.6%



Access to improved water

46.9%



Average life expectancy

66 years

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



MULTI-HAZARD EXPOSURE (MHE)


RANK: 1 / 14 DISTRICTS
SCORE: 0.858





MHE
0.858
Raw MHE
0.716
Relative MHE
1

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

 Inland Flood
3.0%
👤 10,148

 Coastal Flood
0.0%
👤 0

 Landslide
34.8%
👤 118,174

 Drought
96.5%
👤 327,716

 Wildfire
78.4%
👤 266,370



VULNERABILITY (V)

RANK: 2 / 14 DISTRICTS ASSESSED
SCORE: 0.618

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



Environmental Stress

Rank: 3/14 Districts Assessed

1.2% Average Annual Forest Loss	91.57 Livestock Density (per sq km)	63.9% Erosion Potential	0.03 Ecological Change	14.1% Area Affected by Mining
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Vulnerable Health Status

Rank: 13/14 Districts Assessed

66 Life Expectancy (years)	37 Infant Mortality Rate (per 1,000 live births)	333 Maternal Mortality Ratio	2.0% Acute Malnutrition (Children <5)	3.2% Population with Disability	77.9 Tuberculosis Incidence (per 100,000 persons)	57.9% Malaria Prevalance (per 100,000 persons)	1.0% HIV Prevalance (per 100,000 persons)
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Clean Water Vulnerability

Rank: 5/14 Districts Assessed

46.9% Households with Improved Water Source	37.5% Households with Improved Sanitation	87.9% Population at High Risk of Fecal Contamination	8.8% Water Source > 30 minutes from Home
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Information Access Vulnerability

Rank: 4/14 Districts Assessed

59.6% Illiteracy Rate (Age 10+)	69.5% Primary School Attendance Ratio	11.5% Upper Secondary Completion Rate	7.2% Households with Internet	1.0% Households with Television	47.6% Households with Internet
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Economic Constraints

Rank: 4/14 Districts Assessed

83.85 Economic Dependency Ratio	8.6% Population in Poorest Wealth Quintile	0.22 Income Inequality (GINI)	36.5% Child Labor Participation (Age 10-14)
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Gender Inequality

Rank: 10/14 Districts Assessed

0.61 Female to Male Land Ownership*	0.88 Female to Male Home Ownership*	1.01 Female to Male Labor Participation*	0.68 Female to Male Secondary Education*	11.1% Female Seats in Local Council
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*Values closer to 1 represent greater gender parity.



Population Pressures

Rank: 1/14 Districts Assessed

3.9% Average Annual Population Change	19.5% Average Annual Urban Population Change	17.36 Net Migration Rate	62.5% Population that is Food Insecure	40.6% Ratio of Youth (15-24) to Adult (15+)
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COPING CAPACITY (CC)

RANK: 6 / 14 DISTRICTS ASSESSED
SCORE: 0.506

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



Economic Capacity

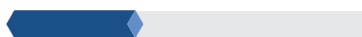


Rank: 10/14 Districts Assessed

9.4% Households with Bank Account	99.0% Income per Capita	1.7% Population in Highest Wealth Quintile	0.38 Financial Institutions per 100k Persons
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Governance



Rank: 12/14 Districts Assessed

1.22 Conflict Events per 100k Persons	67.6% Voter Participation
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Environmental Capacity

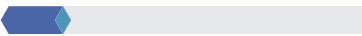


Rank: 7/14 Districts Assessed

5.1% Protected Area



Infrastructure Capacity



Rank: 12/14 Districts Assessed



Health Care Capacity Rank: 14/14 Districts Assessed

9 Hospital Beds per 10,000 People	0.09 Physicians per 10,000 People	1.8 Nurses per 10,000 People	19.14 Average Distance to Nearest Hospital (km ²)	68.4% Vaccination Coverage
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Transportation Capacity Rank: 10/14 Districts Assessed

0.42 Road Density (km per sq. km)	37.85 Distance to Airport or Seaport (km)
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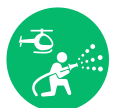
Communications Capacity Rank: 13/14 Districts Assessed

57.2% Households with Mobile Phone	5.99 Cellular Towers per 100k Persons
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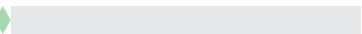


Energy Capacity Rank: 11/14 Districts Assessed

0.1% Households Connected to Electric Grid	0.21 Fuel Stations per 100k Persons
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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
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RESILIENCE (R)

RANK: 14 / 14 DISTRICTS
SCORE: 0.346

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

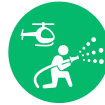
Below are the four thematic areas with the weakest relative scores:



Population Pressures



Information Access Vulnerability



Emergency Service Capacity



Energy Capacity



HAZARD-SPECIFIC RISK



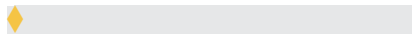
Coastal Flood



SCORE: 0.00/14
RANK: 8



Inland Flood



SCORE: 0.00
RANK: 14



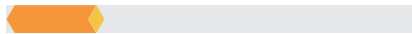
Drought



SCORE: 0.64/14
RANK: 1



Landslide



SCORE: 0.24/14
RANK: 7



Wildfire



SCORE: 0.57/14
RANK: 1



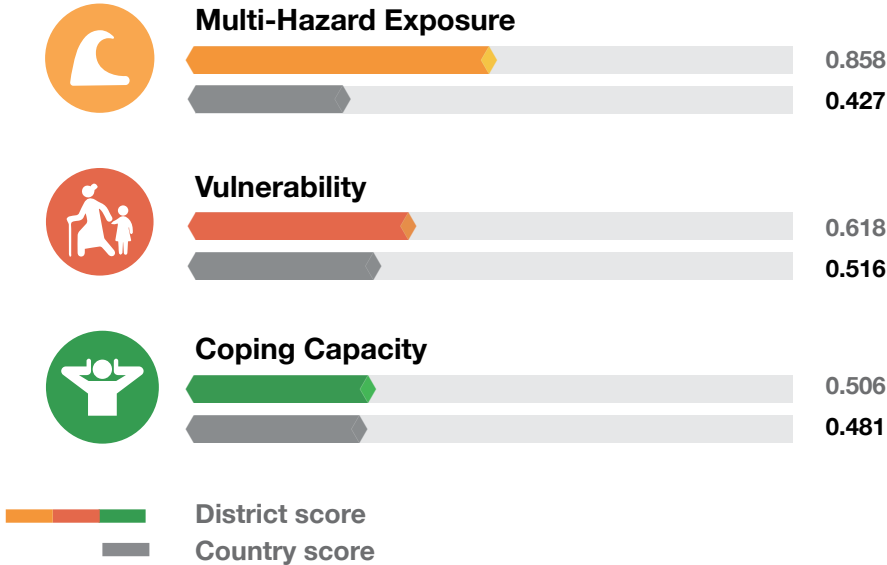
MULTI-HAZARD RISK (MHR)

1 / 14
Rank within districts
Score: 0.722



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

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



KOINADUGU RECOMMENDATIONS

1

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Koinadugu ranks highest in the country in population pressures, with notable increases in average annual population change (4%) and urban population change (20%) from 2004 to 2015. Sixty-two percent of the population is food insecure, and findings show that the country's largest youth bulge (41%) is in Koinadugu.

Closely monitor population changes and implement security measures to anticipate pressures on district resources and infrastructure that could give way to instability or conflict.

Findings show that Koinadugu is highly exposed to drought and wildfire, and moderately exposed to landslides. Establish multi-hazard preparedness and response planning at the district level, and perform regular updates to plans and SOPs to account for increases in total, urban, and youth population.

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 Koinadugu District must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

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.

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 to receive, comprehend, and act on critical information and disaster warnings. Koinadugu district is exposed to drought, wildfire, landslide, and inland flood hazards.

KOINADUGU 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 Koinadugu will increase the capacity for disaster management and response.

Koinadugu 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. Identify government or external resources to conduct emergency services training and conduct district-level exercises on a regular basis.

2

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves in Koinadugu will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Tied with the rural districts of Kambia and Pujehun, Koinadugu district has the lowest access to electricity in Sierra Leone, with just 0.1% of homes connected to the electrical grid. Focus development programs on increasing energy capacity by establishing sustainable power generation within the district and extending the existing transmission and distribution network.

Incentivize construction of gas stations and fuel storage infrastructure to increase fuel capacity and availability.

**Better solutions.
Fewer disasters.**

Safer world.

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