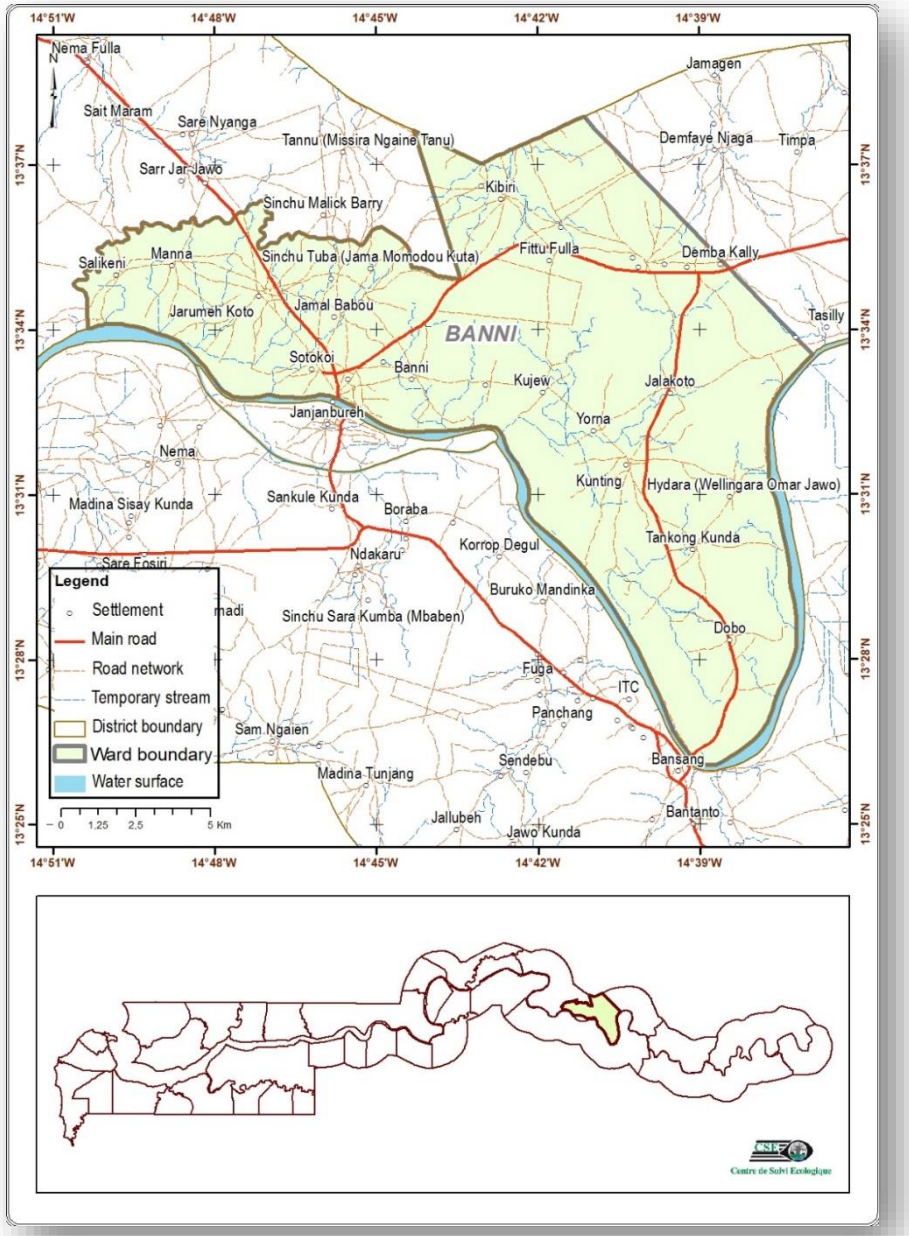
Banni


14°51'W
14°48'W
14°45'W
14°42'W
14°39'W
13°37'N
13°34'N
13°31'N
13°28'N
13°25'N
N
Nema Fulla
Sait Maram
Sare Nyanga
Tannu (Missira Ngaine Tanu)
Sarr Jar Jawo
Sinchu Malick Barry
Kibiri
Jamagen
Demfaye Njaga
Timpa
Salikeni
Manna
Sinchu Tuba (Jama Momodou Kuta)
Fittu Fulla
Demba Kally
Jarumeh Koto
Jamal Babou
BANNI
Tasilly
Sotokoi
Banni
Kujew
Jalakoto
Janjanbureh
Yorna
Nema
Kunting
Hydara (Wellingara Omar Jawo)
Madina Sisay Kunda
Sankule Kunda
Boraba
Tankong Kunda
Korrop Degul
Ndakaru
Sare Fosiri
Buruko Mandinka
Sinchu Sara Kumba (Mbaben)
Dobo
Fuga
ITC
Panchang
Sam Ngaien
Sendebu
Bansang
Madina Tunjang
Jallubeh
Bantanto
Jawo Kunda
Legend
Settlement
Main road
Road network
Temporary stream
District boundary
Ward boundary
Water surface
0 1,25 2,5 5 Km
Centre de Suivi Ecologique

Banni

Resources available in the Ward by category

Rank	Natural Resources (NR)	Physical Resources (PR)	Human Resources (HR)	Financial Resources (FR)	Social Resources (SR)
1st	Fresh Water	Good Roads	Farming Skills	Remittances	NGO's
2nd	Farmland	Phone Network	Manpower	Reliance Bank Loans	Local Kafoos
3rd	Forest	Health Centre	Masonry	Asusu Groups	CBOs

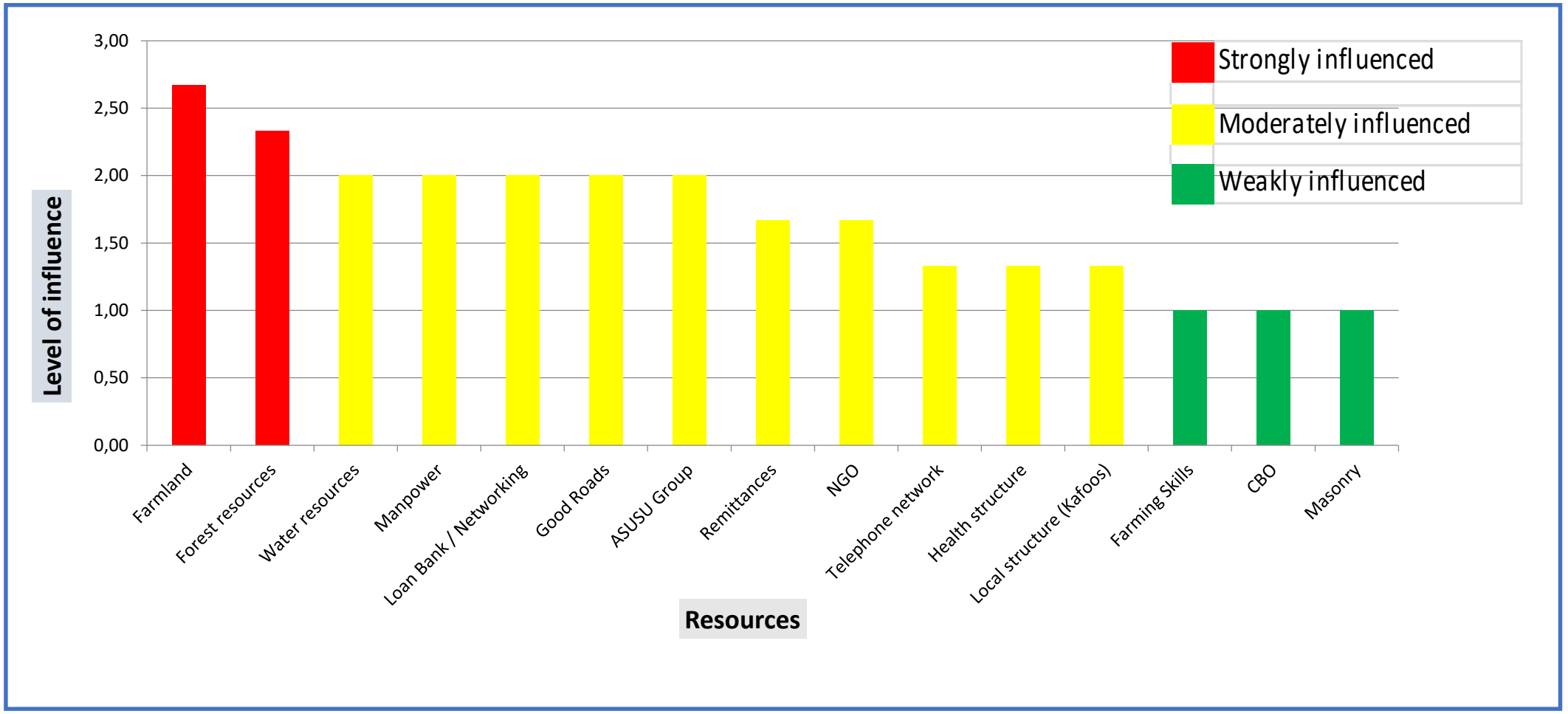
Banni

The most influential hazards

Hazards	Level of influence (scale from 0 to 3)	Observations
Drought	1,80	Strong influence
Forest Fire	1,73	Medium influence
Windstorm	1,67	Medium influence

Banni

Resources most influenced by hazards



Banni

Levels of influence of hazards on resources

Resource Category	Level of influence	Observations
Natural resources	2,3	Strong influence
Financial Resources	1,9	Medium influence
Human Resources	1,6	Medium influence
Social Resources	1,4	Medium influence
Physical resources	1,4	Medium influence

Banni

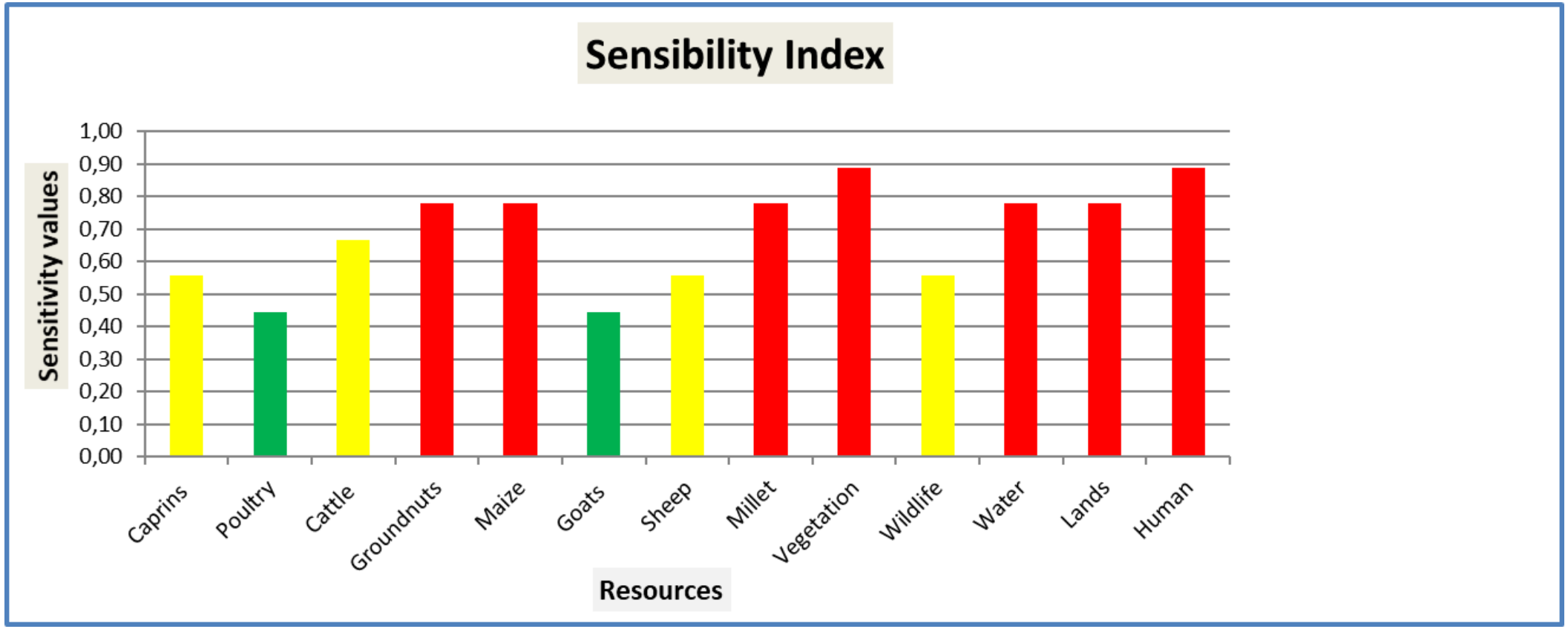
Consequences and impacts of climate change

Hazards	Consequences and impacts
Drought	Low yields, livestock diseases, drying up of wells, Falling of the pasture reserve, deforestation, insufficient water resources for irrigation and domestic uses, salinization.
Bush fires	Low yields, water contamination, death of livestock, loss of plants, wildlife and fertile soil
Windstorm	Destruction of crops, death of livestock, loss of plants and wild animals, contamination of well water.

Analysis of vulnerability to climate change

1. The sensibility

It is determined by the factors that directly influence the consequences of a hazard. In the Ward of Banni, the sensitivity levels (on a scale of 0 to 1) of resources to climatic hazards are represented by the graph below.



Analysis of vulnerability to climate change

2. Adaptability

In the context of vulnerability assessment, adaptive capacity refers to the ability of societies and communities to prepare for and respond to climate impacts. As part of this study, the adaptive capacity of the inhabitants of the Ward was determined for each hazard.

Hazards	Indices of adaptability	Observations
Drought	0,67	Average adaptability
Forest Fire	0,57	Average adaptability
Windstorm	0,43	Low adaptability

Analysis of vulnerability to climate change

3. Vulnerability indices

Vulnerability indices are obtained after aggregation of the sensitivity (SI) and adaptive capacity (CI) indices. Note that when sensitivity is high and adaptive capacity is low, vulnerability is high and vice versa.

Hazards	Vulnérability index	Observations
Drought	0,58	Medium Vulnerability
Forest Fire	0,56	Medium Vulnerability
Windstorm	0,57	Medium Vulnerability

Climate risk analysis

1. The composite vulnerability index (CVI)

It is the aggregation of the Ward's various **vulnerability index**. It makes it possible to assess the overall vulnerability to climate change in a given area. In Banni, this index **is equal to 0.57**, which indicates that the Ward **has an average vulnerability to climate change.**

2. Exposure

Hazards	Exposure index	Observations
Drought	0,79	Highly exposed resources
Forest Fire	0,68	Exposed resources
Windstorm	0,70	Exposed resources

The aggregation of the different **exposure index** makes it possible to obtain a **composite exposure index** (**CEI**) whose value amounts to **0.72** in the Ward of Banni.
We then deduce that the **Ward is very exposed to climatic hazards**.

Climate risk analysis

1. The danger

. The “danger” component consists of two parts: the climate signal and the direct physical impact. In this study, the results of danger indices are recorded in the following table.

Hazards	Danger index	Observations
Drought	0,60	Medium risk of danger
Forest Fire	0,58	Medium risk of danger
Windstorm	0,56	Medium risk of danger

The value of the composite danger index (CDI) is 0.58. This shows that, overall, the losses and damage linked to climatic hazards would be moderately significant if they occurred at the same time in the municipality.

Climate risk analysis

2. The Risk

The composite risk index (ICR) rose to 0.62 in the Ward of Banni in the absence of weighting of the various composite indices of vulnerability, exposure and danger. The figure below taken as a reference for the interpretation of this result was established by GIZ in 2017.

Metric value in a field from 0 to 1	Category value on a scale of 1 to 5	Description
0 - 0,2	1	Very low
> 0,2 - 0,4	2	Low
> 0,4 - 0,6	3	Intermediate
> 0,6 - 0,8	4	High
> 0,8 - 1	5	Very high

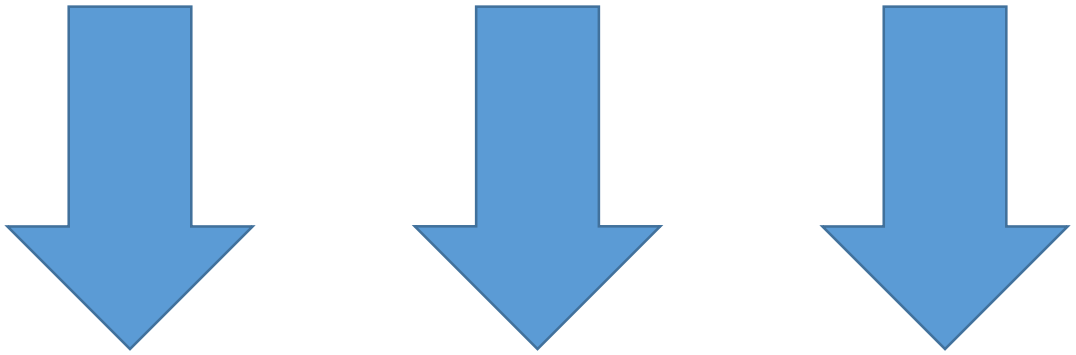
Thus, we note that in the Banni Ward, **the risk of climate change impacts is high**, hence the urgent need to act by implementing adaptation and mitigation actions likely to reduce the various values of the risk component indices.

CONCLUSION

The composite risk index (CRI) is 0,62.

In the ward of Banni, the risk of climate change impacts is high!

EMERGENCY : implement adaptation and mitigation actions likely to reduce the different values of the risk component indices !



Adaptation strategies

Hazards	Current strategies	Strategy evaluation	
		Efficient	Durable
Drought	Vegetable production	Yes	Yes
	Irrigation	Yes	Yes
	Treatment	Yes	No
	Digging of wells	Yes	Yes
	Food banking (reserves) and free-range system	Yes	Yes
	Tree planting and nursery establishment	Yes	Yes
	Drilling of boreholes	Yes	No
	Plant salt tolerant trees	Yes	No
Bush fires	Irrigation/vegetable production	Yes	Yes
	Fire break	Yes	Oui
	Raised housing	Yes	Yes
	Tree planting	Yes	No
	Raising and covering wells	Yes	No
Windstorm	Winter cropping	Yes	No
	Raised housing	Yes	No
	Follow guidelines on construction for livestock	Yes	No
	Tree planting	Yes	No
	Raising and covering wells	Yes	Yes