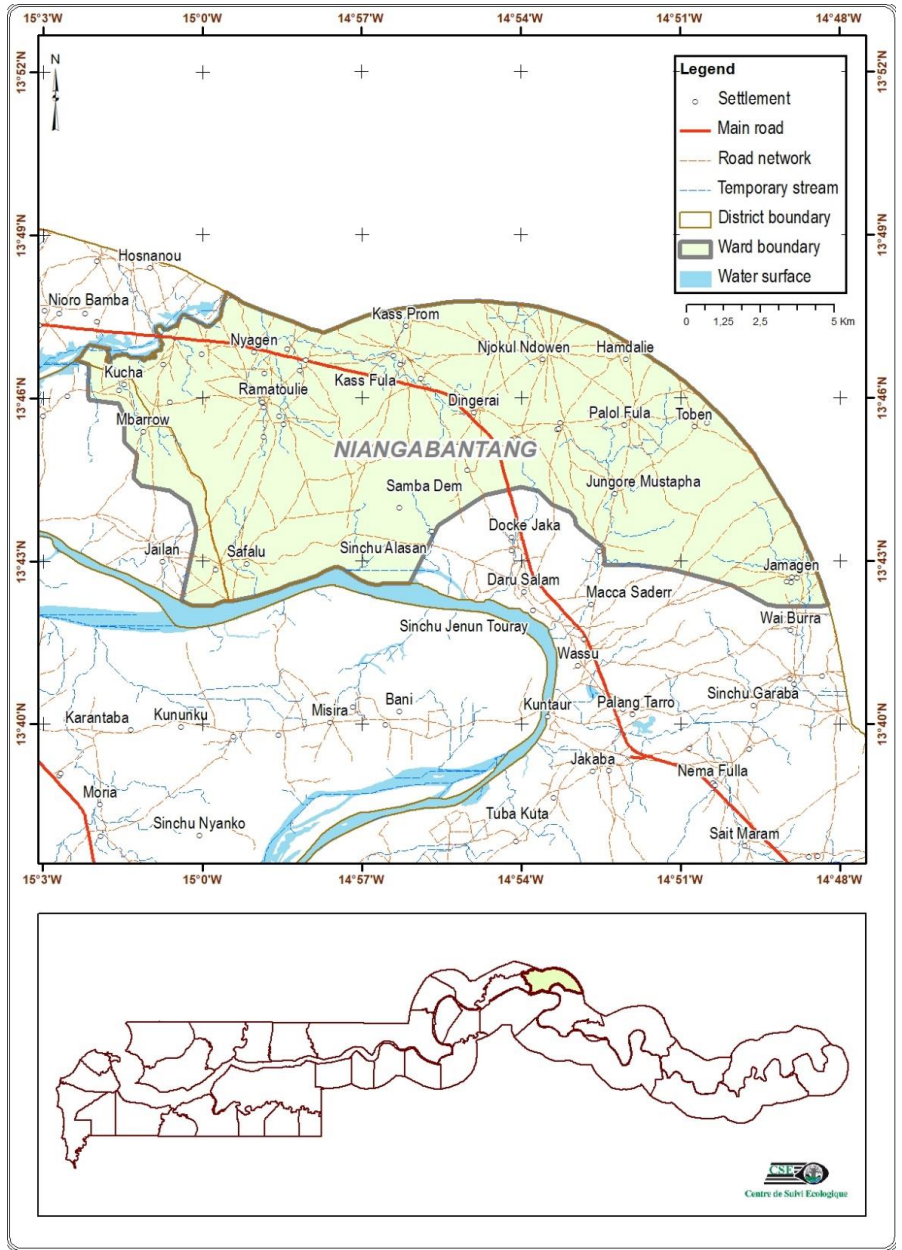
Nyanga Batang



Nyanga Batang

Resources available in the Ward by category

Rank	Natural Resources (NR)	Physical Resources (PR)	Human Resources (HR)	Financial Resources (FR)	Social Resources (SR)
1st	Farmland	Health infrastructure	Nurses	Asusu group	Mother's club
2nd	Fresh Water	School	Teachers	Milling machine	CBO
3rd	Forest	Good roads	Skilled labour	Reliance Financial Services	Youth Association

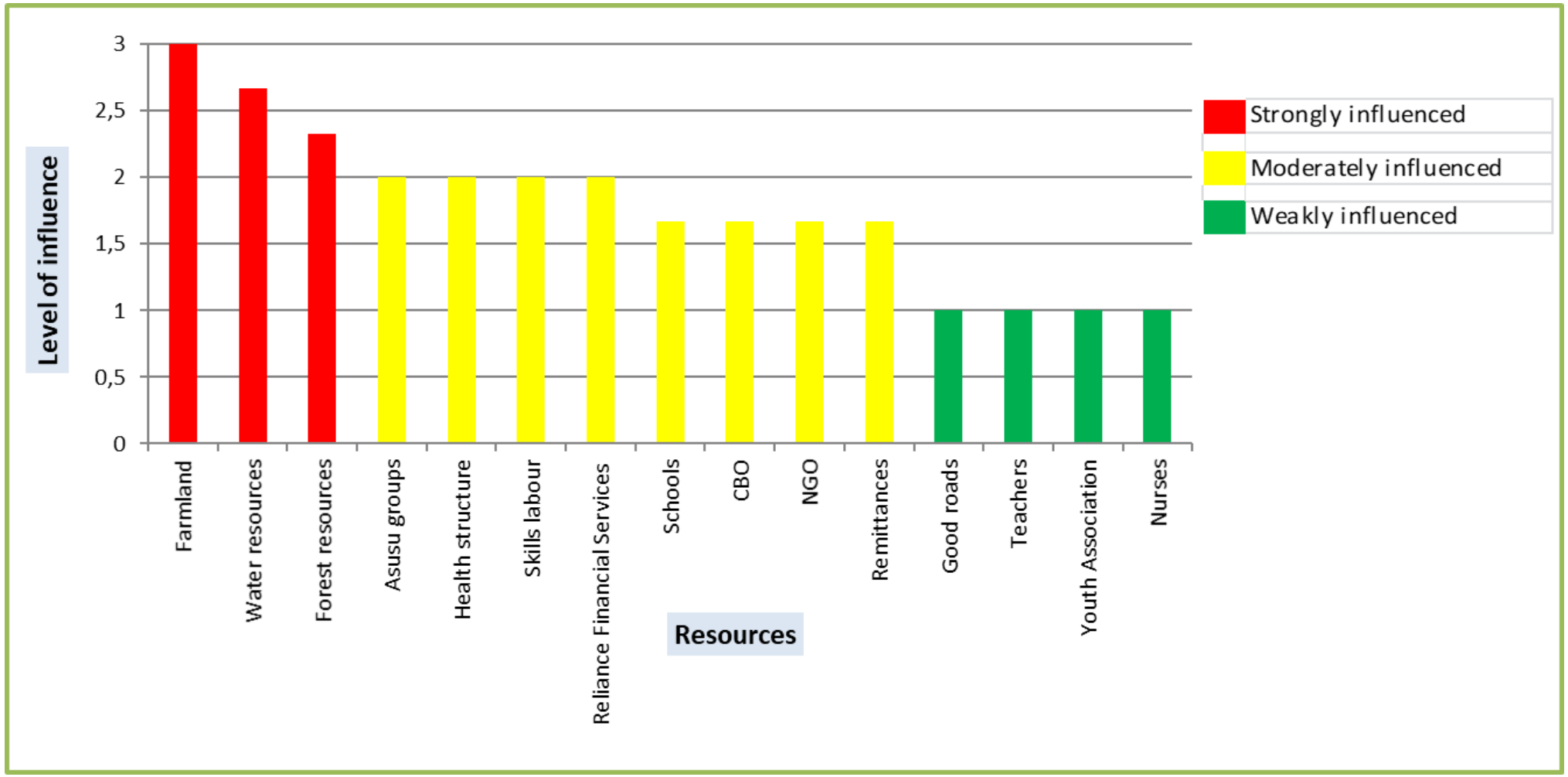
Nyanga Batang

The most influential hazards

Hazards	Level of influence (scale from 0 to 3)	Observations
Dry spell	1,87	Strong influence
Windstorm	1,73	Medium influence
Flooding	1,73	Medium influence

Nyanga Batang

Resources most influenced by hazards



Nyanga Batang

Levels of influence of hazards on resources

Resource Category	Level of influence	Observations
Natural resources	2,7	Influence forte
Financial Resources	1,8	Influence forte
Human Resources	1,4	Influence moyenne
Social Resources	1,6	Influence moyenne
Physical resources	1,4	Influence moyenne

Nyanga Batang

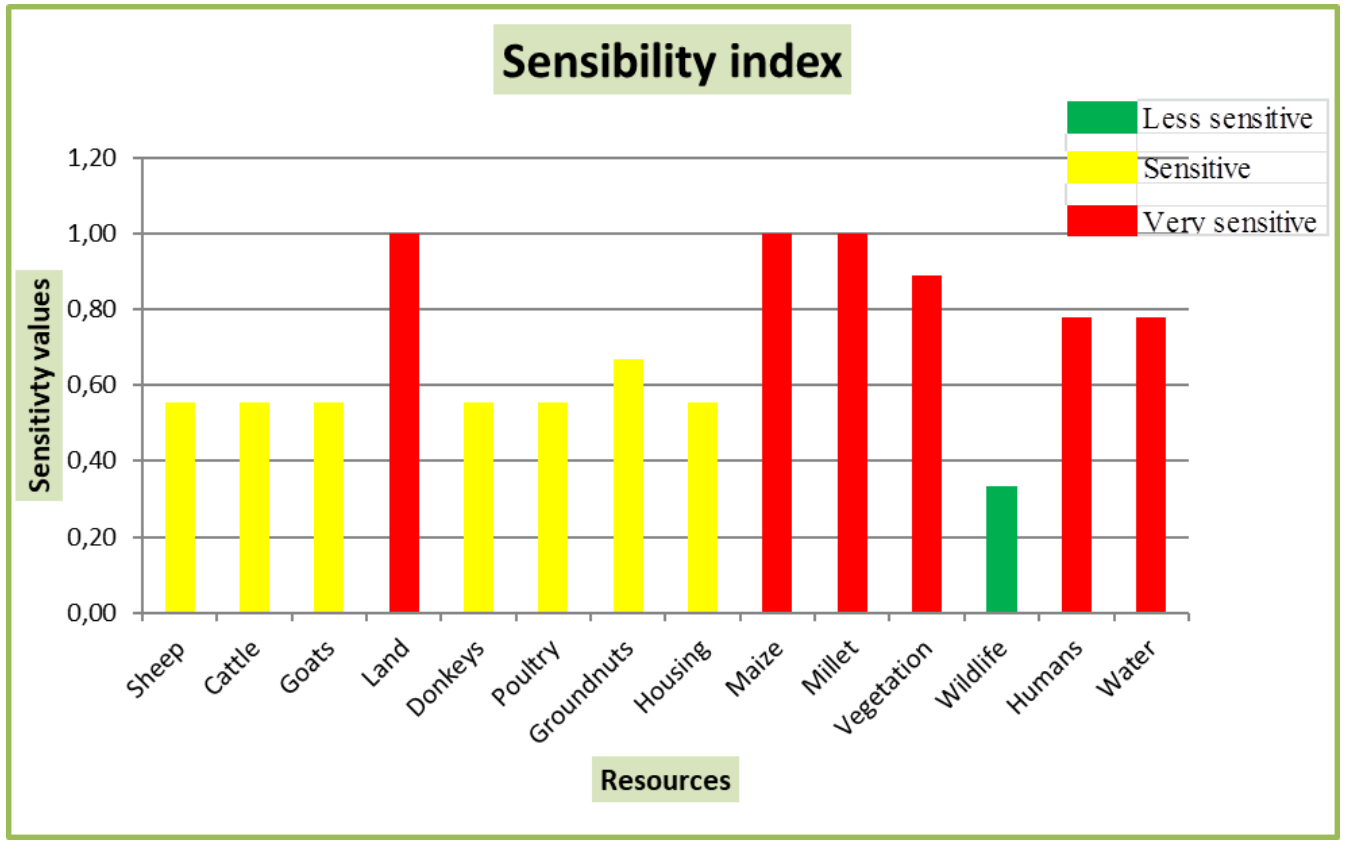
Consequences and impacts of climate change

Hazards	Consequences and impacts
Dry spell	Low productivity, Livestock diseases, Limited pasture for animal grazing, deforestation, inadequate water for irrigation and domestic purposes
Windstorm	Low productivity, High mortality, Loss of plants, wildlife and good soils, Contamination of water
Flooding	Low soil nutrients, death of livestock, loss of plants and wildlife, water contamination

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 Nyanga Batang, 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.

Aléas	Indices of adaptability	Observations
Dry spell	0,67	Average adaptability
Flooding	0,57	Average adaptability
Windstorm	0,63	Average 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
Dry spell	0,57	Medium Vulnerability
Flooding	0,60	Medium Vulnerability
Windstorm	0,50	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 Nyanga Batang, this index **is equal to 0.56**, which indicates that the Ward **has an average vulnerability to climate change.**

2. Exposure

Hazards	Exposure index	Observations
Dry spell	0,72	Exposed resources
Flooding	0,81	Highly exposed resources
Windstorm	0,76	Highly exposed resources

The aggregation of the different **exposure index** makes it possible to obtain a **composite exposure index** (**CEI**) whose value amounts to **0.76** in the Ward of Nyanga Batang.
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
Dry spell	0,62	Medium risk of danger
Flooding	0,58	Medium risk of danger
Windstorm	0,58	Medium risk of danger

The value of the composite danger index (CDI) is 0.59. 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 0.64 in the Ward of Nyanga Batang 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

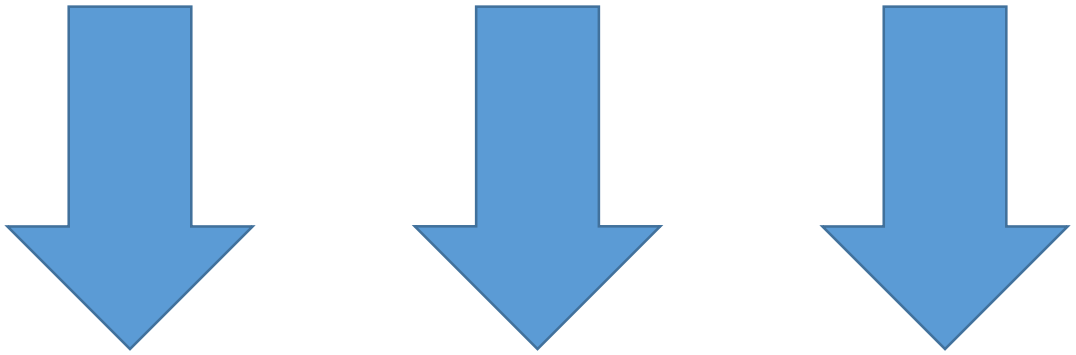
Thus, we note that in the Nyanga Batang Ward, **the risk of climate change impacts is high**, hence the urgent need to act by implementing adaptation and mitigation actions likely to reduce the various values of the risk component indices.

CONCLUSION

The composite risk index (CRI) is 0,64.

In the ward of Nyanga Batang, 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	Planting early maturing varieties	Yes	Yes
	Irrigation/vegetable production	Yes	Yes
	Treatment	Yes	No
	Food banking (reserves) and free-range system	Yes	Yes
	Tree planting	Yes	Yes
	Drilling of boreholes	Yes	Yes
Windstorm	Irrigation/vegetable production	Yes	No
	Dyke construction	Yes	No
	Raised housing	Yes	Yes
	Tree planting	Yes	No
	Raising and covering wells	Yes	No
Flooding	Tree planting	Yes	No
	Raised housing	Yes	No
	Tree planting	Yes	No
	Raising and covering wells	Yes	No