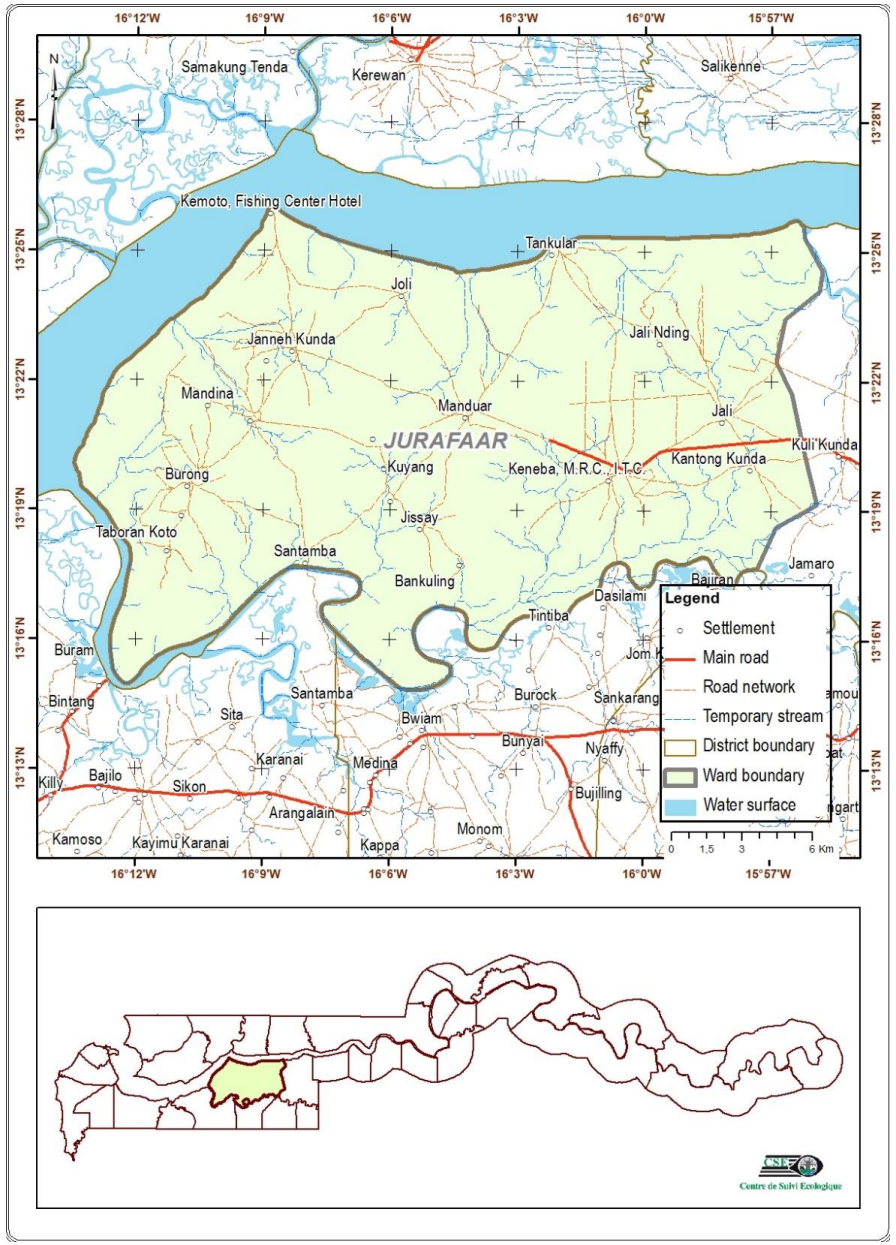
Julafar


16°12'W
16°9'W
16°6'W
16°3'W
16°0'W
15°57'W
13°28'N
13°25'N
13°22'N
13°19'N
13°16'N
13°13'N
N
Samakung Tenda
Kerewan
Salikenne
Kemoto, Fishing Center Hotel
Tankular
Joli
Jali Nding
Janneh Kunda
Mandina
Manduar
Jali
JURAFAAR
Kuli Kunda
Kantong Kunda
Keneba, M.R.C., I.T.C.
Kuyang
Burong
Jissay
Taboran Koto
Santamba
Bankuling
Jamaro
Bajiran
Dasilami
Tintiba
Legend
Settlement
Main road
Road network
Temporary stream
District boundary
Ward boundary
Water surface
0 1,5 3 6 Km
Buram
Bintang
Sita
Santamba
Bwiam
Burock
Sankarang
Bunyai
Nyaffy
Karanai
Medina
Killy
Bajilo
Sikon
Bujilling
Arangalain
Monom
Kamoso
Kayimu Karanai
Kappa
Centre de Suivi Ecologique

Julafar

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	Good Road	Skills	Grants	CBOs
2nd	Forest	School	Multi-purpose skills centre	Asusu Group	Cash for work / Cash transfers
3rd	Fresh Water	Health Post	Micro-finance	Visaca Micro-finance	Partnership

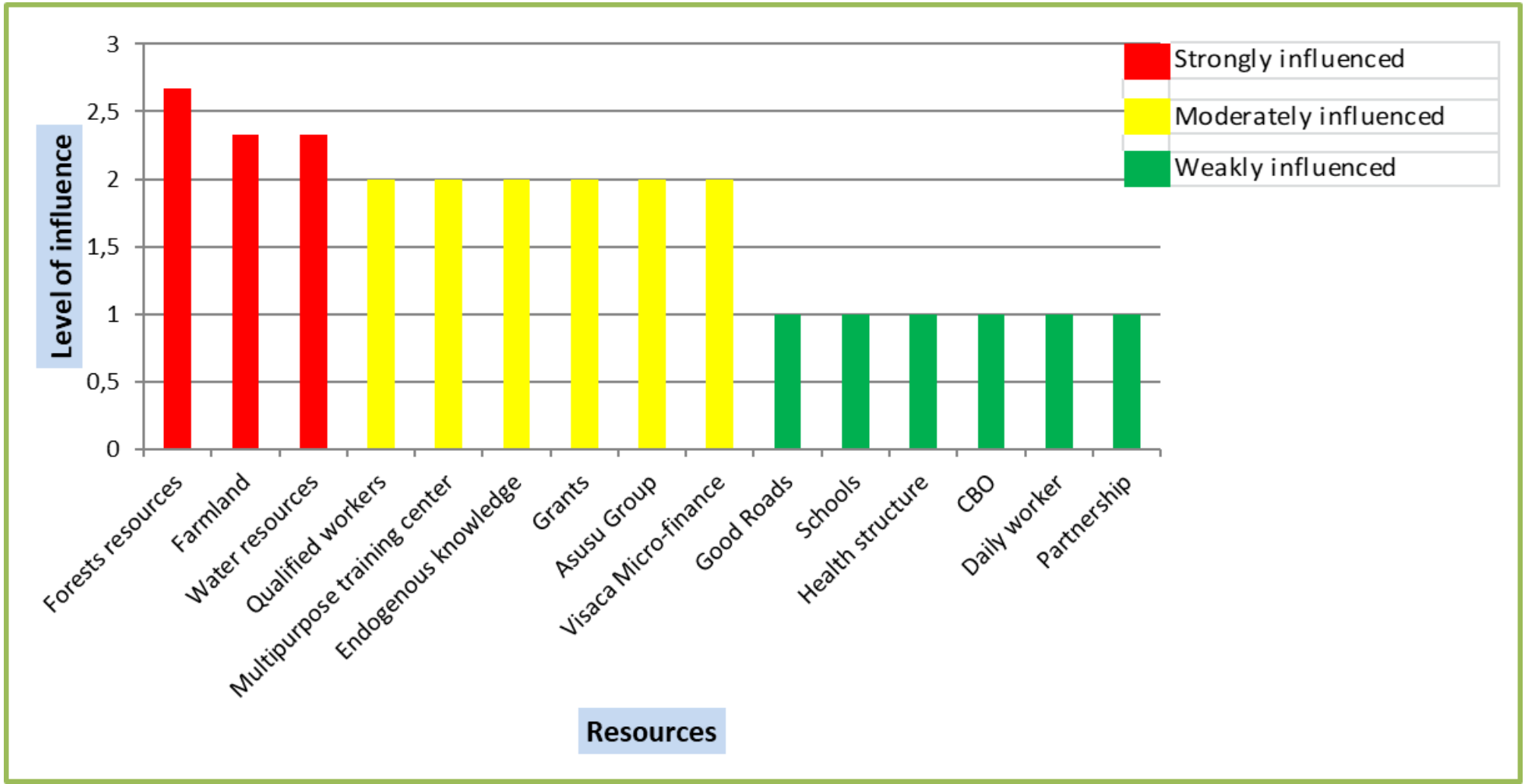
Julafar

The most influential hazards

Hazards	Level of influence (scale from 0 to 3)	Observations
Dry Spell	1,73	Medium influence
Salt Intrusion	1,73	Medium influence
Windstorm	1,67	Medium influence

Julafar

Resources most influenced by hazards



Julafar

Levels of influence of hazards on resources

Resource Category	Level of influence	Observations
Natural resources	2,4	Strong influence
Financial Resources	2,0	Medium influence
Human Resources	2,2	Strong influence
Social Resources	1,0	Medium influence
Physical resources	0,9	Medium influence

Julafar

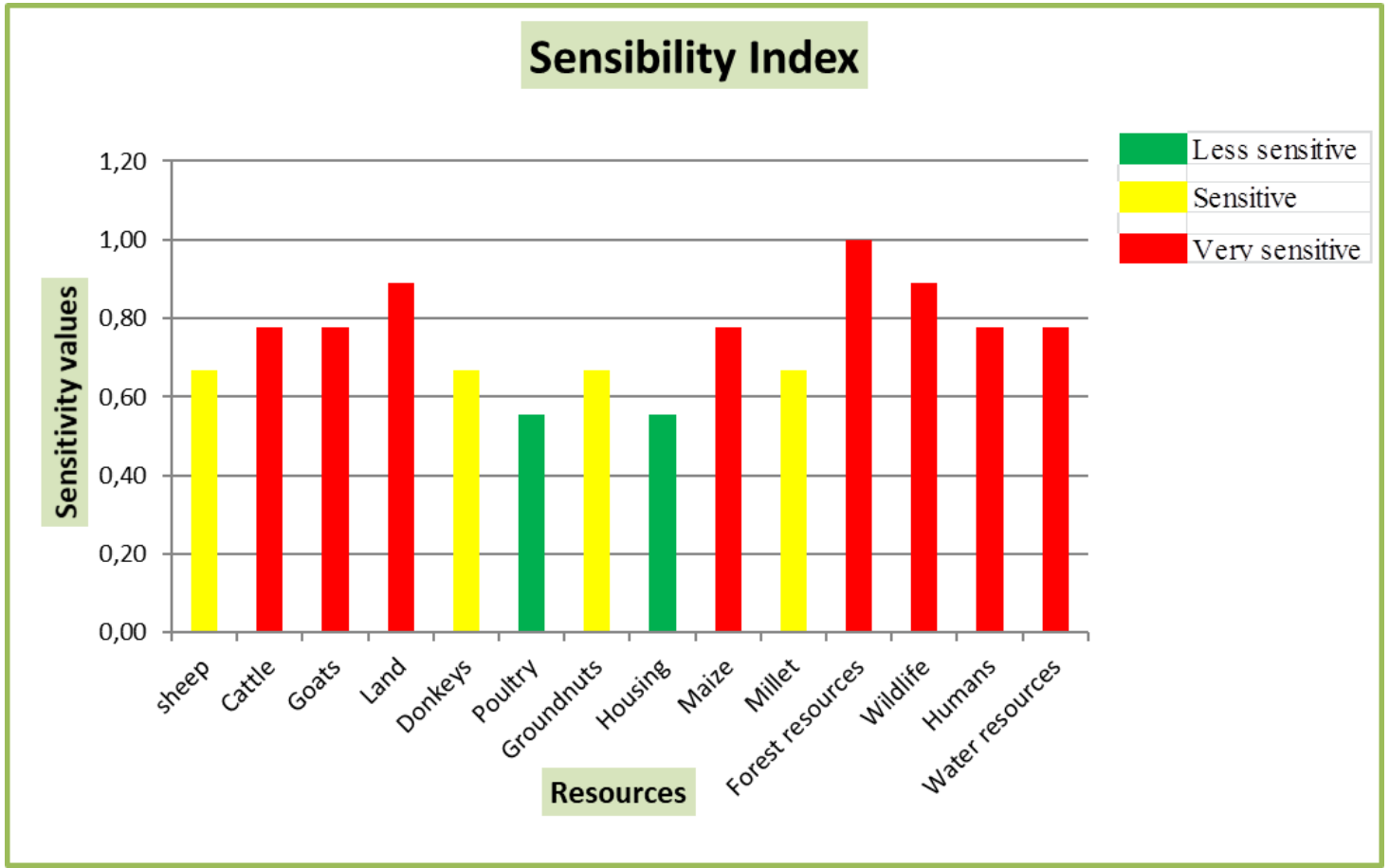
Consequences and impacts of climate change

Hazards	Consequences and impacts
Dry spell	Low productivity, Disease incidences, Low productivity, Loss of vegetation, Low water table.
Salt intrusion	Low productivity, Disease outbreak, Loss of plants, wildlife and fertile soil, Water contamination
Windstorm	Little soil nutrients, Cattle death, Loss of wild plants and animals, 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 Julafar, 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
Dry Spell	0,69	Average adaptability
Salt Intrusion	0,59	Average adaptability
Windstorm	0,37	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
Dry Spell	0,55	Medium Vulnerability
Salt Intrusion	0,59	Medium Vulnerability
Windstorm	0,66	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 Julafar, this index **is equal to 0.60**, which indicates that the Ward **has an average vulnerability to climate change.**

2. Exposure

Hazards	Exposure index	Observations
Dry Spell	0,83	Highly exposed resources
Salt Intrusion	0,81	Highly exposed resources
Windstorm	0,78	Highly exposed resources

The aggregation of the different **exposure index** makes it possible to obtain a **composite exposure index** (**CEI**) whose value amounts to **0.81** in the Ward of Julafar.
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	0,58	Medium risk of danger
Salt Intrusion	0,58	Medium risk of danger
Windstorm	0,56	Medium risk of danger

The value of the composite danger index (CDI) is 0.57. 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 0.66 in the Ward of Julafar 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

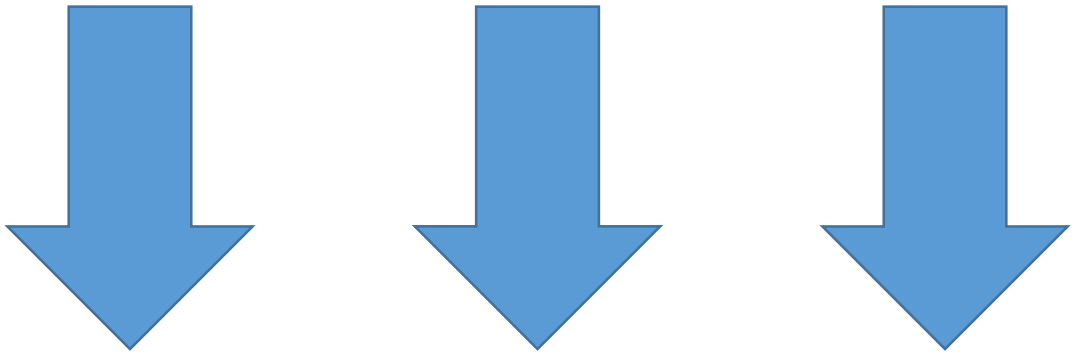
Thus, we note that in the Julafar Ward, **the risk of climate change impacts is high**, hence the urgent need to act by implementing adaptation and mitigation actions likely to reduce the various values of the risk component indices.

CONCLUSION

The composite risk index (CRI) is 0,66.

In the ward of Julafar, 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
Dry spell	Endogenous technique	Yes	Yes
	Intelligent endogenous knowledge about the climate	Yes	Yes
	Crop treatment	Yes	No
	Food bank (reserves)	No	No
	Creation of water points	Yes	Yes
	Reforestation	Yes	Yes
	Deepen drilling	Yes	No
	Use of organic fertilizer	Yes	Yes
	Composting	Yes	Yes
	Use of Insecticide	No	Yes
	Use organic fertilizer	Yes	Yes
	Use of adapted varieties with high yield	Yes	Yes
Salt intrusion	Vaccination	Yes	No
	Deworming	Yes	No
	Food supplements	Yes	No
	Protective barrier / Collective management	Yes	Yes
	Manure spreading	Yes	No
	Livestock processing	Yes	Yes
	Monitoring mechanism for water protection	Yes	No
	Reforestation	Yes	Yes
	Protective barrier	Yes	No
	Reforestation	Yes	No

Adaptation strategies

Hazards	Current strategies	Strategy evaluation	
		Efficient	Durable
Windstorm	Protective barrier	Yes	No
	Creation of enclosures	Yes	No
	Reforestation	Yes	Yes
	Replenishment	Yes	No
	Tree planting	Yes	No