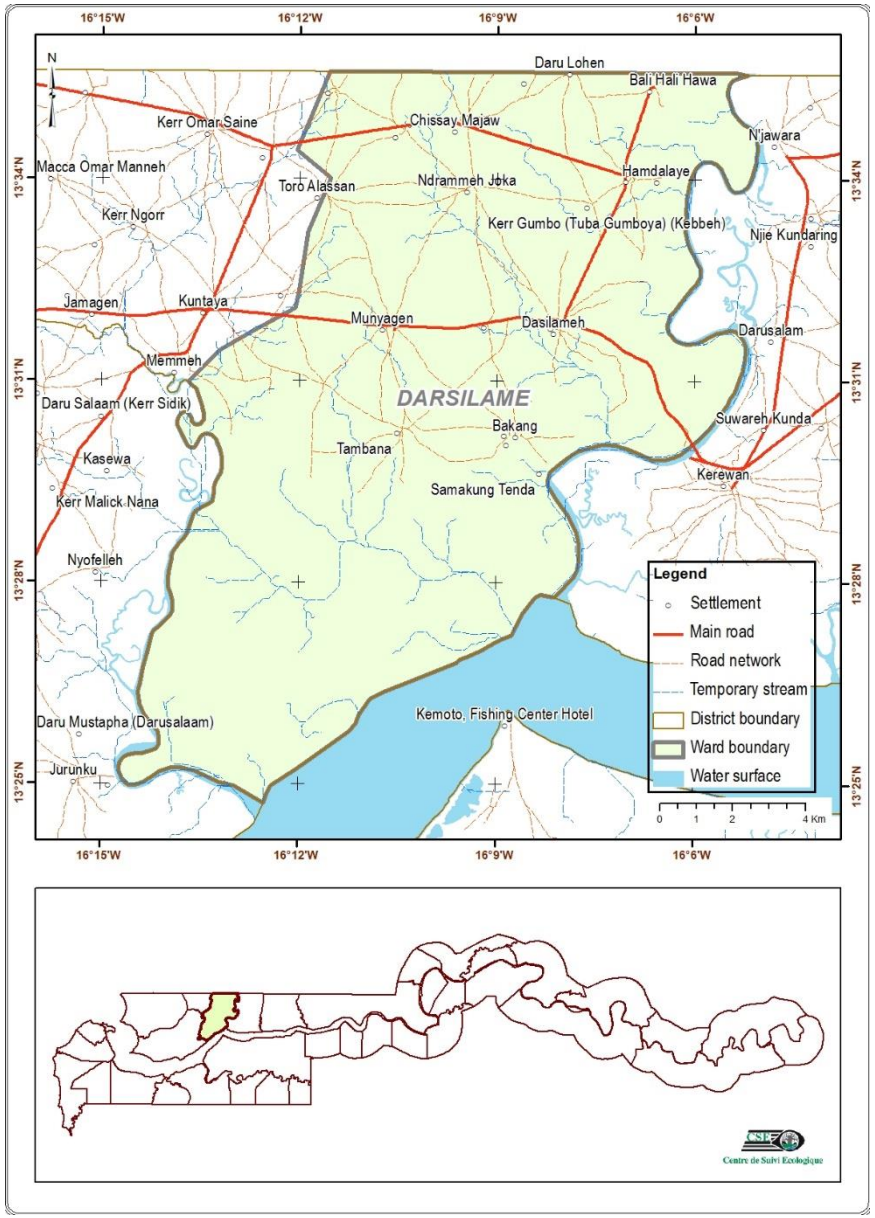
Darsilame


16°15'W
16°12'W
16°9'W
16°6'W
13°34'N
13°31'N
13°28'N
13°25'N
N
Daru Lohen
Bali Hali Hawa
Kerr Oman Saine
Chissay Majaw
N'jawara
Macca Omar Manneh
Toro Alassan
Ndrammeh Joka
Hamdalaye
Kerr Ngorr
Kerr Gumbo (Tuba Gumboya) (Kebbeh)
Njie Kundaring
Jamagen
Kuntaya
Munyagen
Dasilameh
Darusalam
Memmeh
DARSILAME
Daru Salaam (Kerr Sidik)
Bakang
Suwareh Kunda
Tambana
Kasewa
Kerewan
Samakung Tenda
Kerr Malick Nana
Nyofelleh
Kemoto, Fishing Center Hotel
Daru Mustapha (Darusalaam)
Jurunku
Legend
Settlement
Main road
Road network
Temporary stream
District boundary
Ward boundary
Water surface
0 1 2 4 Km
CSE
Centre de Suivi Ecologique

Darsilame

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	Skills	Q-Money (Mobile Money)	NGOs
2nd	Farmland	Health Centre	Map power	Bank (RFS)	Social Media access
3rd	Forest	School	Skills Centre	Remittances	Football (Sports)

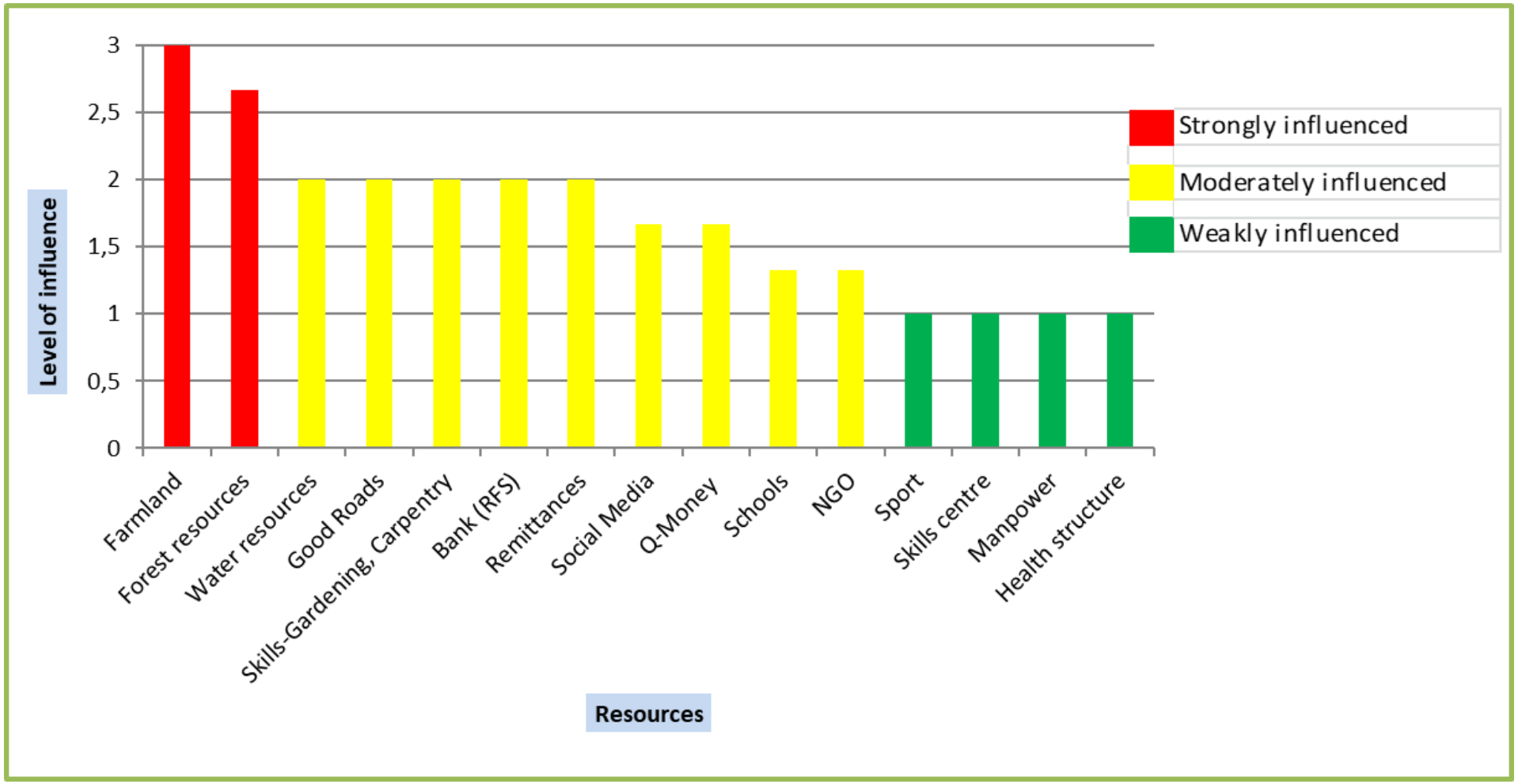
Darsilame

The most influential hazards

Hazards	Level of influence (scale from 0 to 3)	Observations
Windstorm	1,87	Strong influence
Bush Fires	1,67	Medium influence
Dry Spells	1,67	Medium influence

Darsilame

Resources most influenced by hazards



Darsilame

Levels of influence of hazards on resources

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

Darsilame

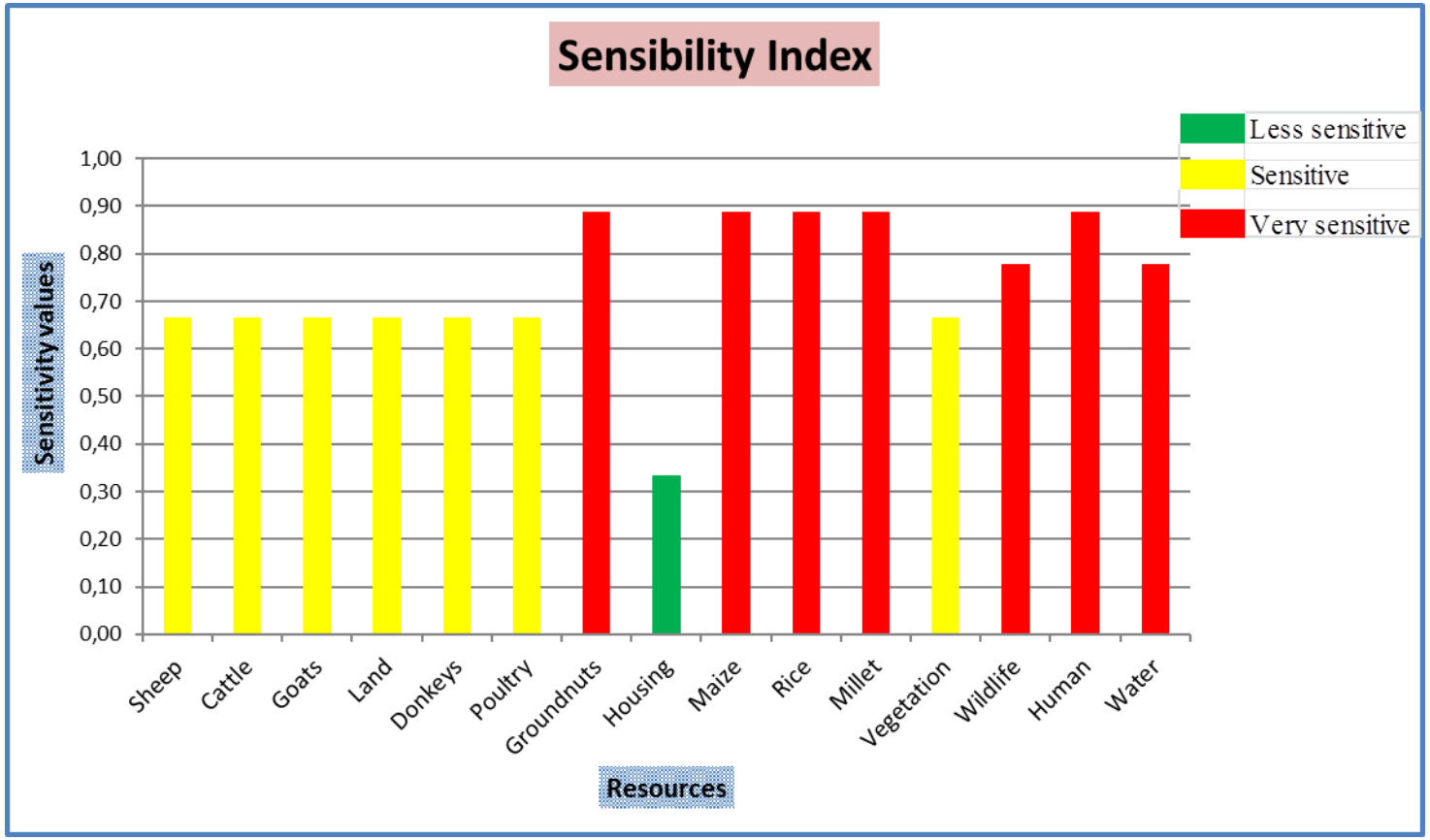
Consequences and impacts of climate change

Hazards	Consequences and impacts
Windstorm	Low crop yield, pest infestation, Disease incidences, loss of animals, injury, loss of flowers, erosion, water pollution
Bush fires	Poor soils, less yield due to crop damage, Injury to livestock, Loss pasture/feed, loss of vegetation, land degradation
Dry Spell	Low crop yield, low income, water constraints, less feed, pest and Diseases, loss of trees, increased charcoal production, drying of water bodies and wells

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 Darsilame, 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
Windstorm	0,48	Low adaptability
Bush Fires	0,61	Average adaptability
Dry Spells	0,60	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
Windstorm	0,65	Medium Vulnerability
Bush Fires	0,56	Medium Vulnerability
Dry Spells	0,56	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 Darsilame, this index **is equal to 0.59**, which indicates that the Ward **has an average vulnerability to climate change.**

2. Exposure

Hazards	Exposure index	Observations
Windstorm	0,75	Highly exposed resources
Bush Fires	0,73	Exposed resources
Dry Spells	0,80	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 Darsilame.
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
Windstorm	0,62	Hight risk of danger
Bush Fires	0,56	Medium risk of danger
Dry Spells	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 0.64 in the Ward of Darsilame 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

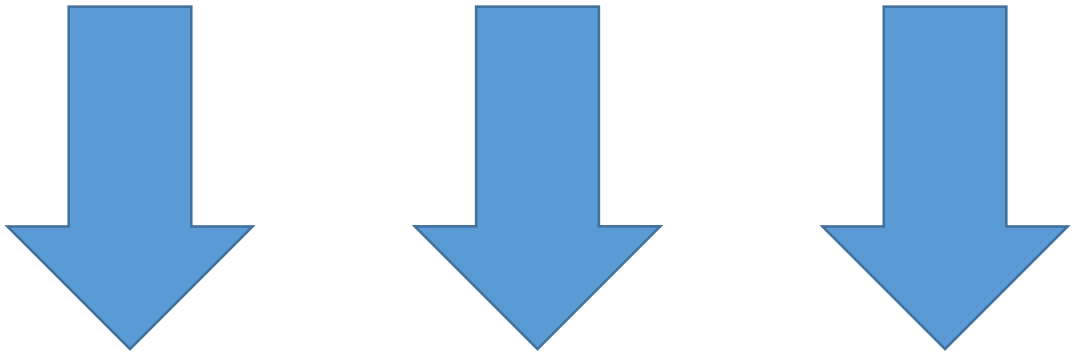
Thus, we note that in the Darsilame Ward, **the risk of climate change impacts is high**, hence the urgent need to act by implementing adaptation and mitigation actions likely to reduce the various values of the risk component indices.

CONCLUSION

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

In the ward of Darsilame, 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
Windstorm	Tree planting	Yes	Yes
	Chemical treatment	Yes	No
	Treatment	Yes	No
	Searching	Yes	No
	Planting more trees	Yes	Yes
	Gully reclamation	Yes	No
Bush fires	Apply fertilizers	Yes	No
	Fire breaks around crop fields	Yes	Yes
	Treatment	Yes	No
	Reserve feed	Yes	No
	Fire breaks	Yes	Yes
	Re-Afforestation	Yes	Yes

Adaptation strategies

Hazards	Current strategies	Strategy evaluation	
		Efficient	Durable
Dry spells	Plant early maturing varieties	Yes	Yes
	Winter cropping	Yes	No
	Construct more water points	Yes	No
	Feed reserves	Yes	No
	Treatment	Yes	No
	Reforestation	Yes	Yes
	Establish tree nursery	Yes	No