Global FFS Platform
Webinar series on Climate change and Farmers Field School

Self-evaluation and Holistic Assessment of Climate Resilience of Farmers and Pastoralists

Using the SHARP+ tool for vulnerability assessment for FFS planification

Sirine Johnston (FAO OIN)
SHARP+ coordinator, resilience assessment and data analyst specialist

8th April 2025

Overview of the session

1. What is SHARP+?
2. How does it work?
3. Why using SHARP+?
4. Use of SHARP+ with FFS – two examples

What is the

Self-evaluation and
Holistic
Assessment of Climate
Resilience of Farmers and
Pastoralists

Resilience assessment with a **holistic understanding**

Data collected **at the household level** through a digital survey

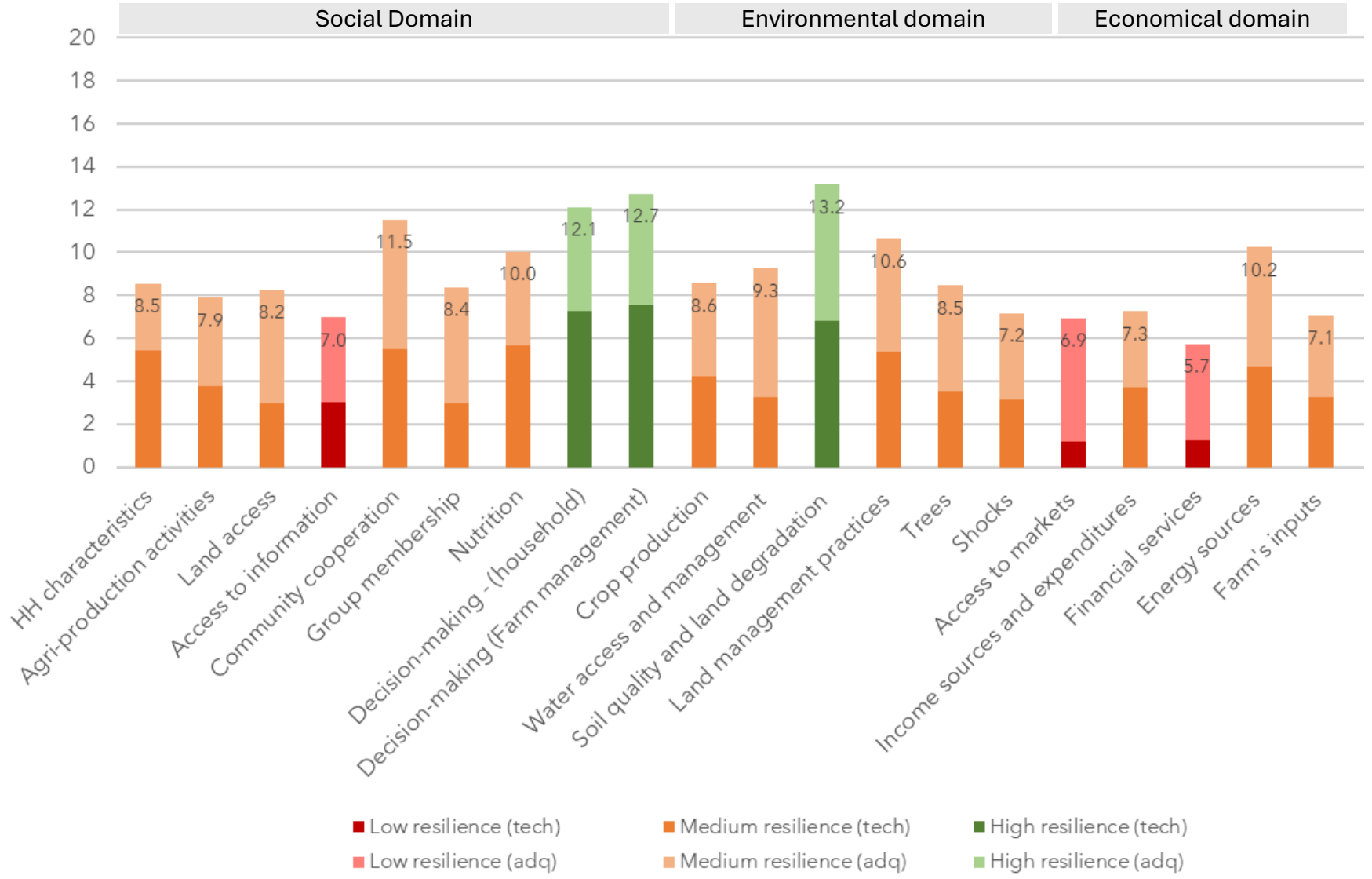
Analysis and **automatic calculation of scores**

Understand the **vulnerability factors**

Understand **adaptive capacities** of farmers

Identifies **prioritized actions** to support resilience

How does it work?

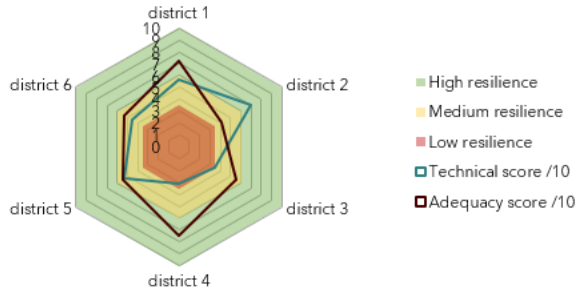


Summary of the module

Description of the module

This module assesses farmers' capacity to market their products effectively, taking into account various factors such as physical access, organization for favourable sales conditions and pricing, access to diverse sales channels, and progress towards obtaining certification. Farmers organized within grassroots systems are considered more resilient due to their collective bargaining power, pooling of resources and knowledge, and risk-sharing capabilities. The objective is also to be well-connected, meaning to have multiple sales channels to avoid dependence on a single external force. Ultimately, as agricultural households rely on farming as their primary source of income, these activities must be reasonably profitable so that farmers do not solely depend on subsidies or assistance.

Technical and adequacy scores per geographical unit



	district 1	district 2	district 3	district 4	district 5	district 6	Grand Total
Technical score /10	4.1	2.5	0.8	1.8	3.5	0.4	1.2
Adequacy score /10	6.6	7.5	6.3	3.9	5.8	5.0	5.7
Compound score (Tech + Adq) /20	10.7	10.0	7.1	5.7	9.2	5.4	6.9

* Colors represent the differences between the geographical units per type of score, from yellow (lowest) to green (highest)
A green circle represent a high resilience score, yellow medium and red low

Description of the resilience scores for the total sample

- **Total score :**

Overall low resilience of the module

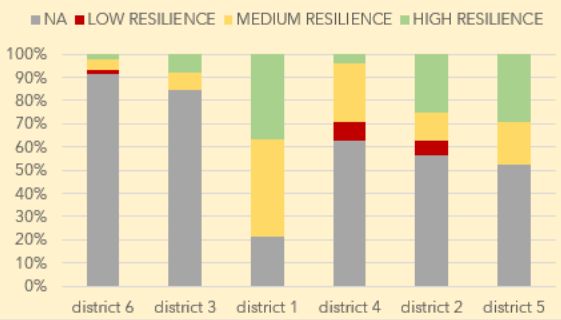
- **Technical score :**

Medium resilience score according to the calculated indicators

- **Adequacy score :**

Respondents' high perception of the adequacy between needs and reality

Share of households per level of resilience



Key findings for total sample

- **Ability to sell farming products :**

When desired, most farmers are not able and/or are not organized to sell their products

- **Farming products selling organization :**

Most farmers sell their products alone

- **Community-organized selling activities :**

Most farmers sell their products to intermediaries, dealers or in the street, rather than selling in local markets, through cooperative/farmer organizations, other types of group selling or farmer fairs

- **Direct selling :**

For farmers selling through intermediaries or on the street, most of them don't have other sources of selling

- **Price setting :**

The selling prices of most farmers' products are directly set by the dealers or set at the market price, as farmers do not have the freedom or information to set the prices themselves

- **Prices levels :**

Prices at which most farmers sell their products are too low or too fluctuating to make a profit

- **Certification :**

Most farmers are not involved in any certifications schemes to increase their production value

Explanation of the modules

Overall Resilience scores

Scores disaggregated per district, farm typology. FFPO, etc.

Key findings

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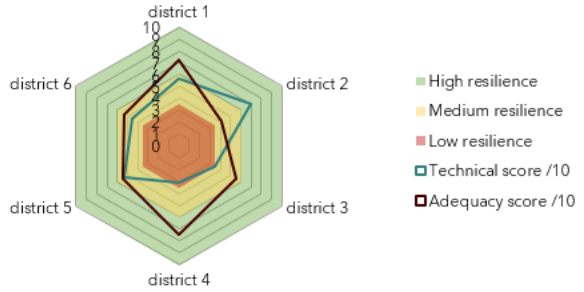

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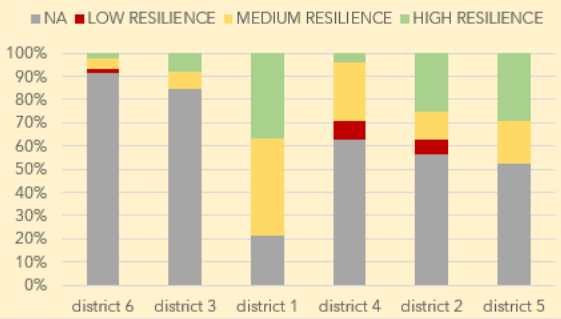

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Scores disaggregated per district, farm typology. FFPO, etc.

Key findings

23. Access to markets ⏎ Return summary ⏎ Return main resilience page

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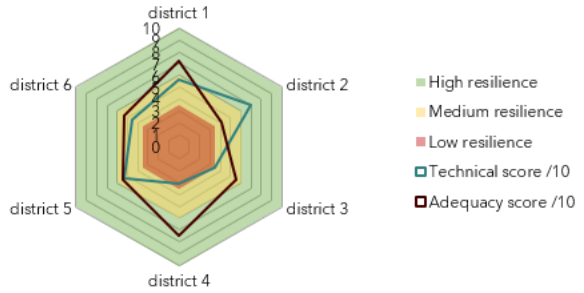

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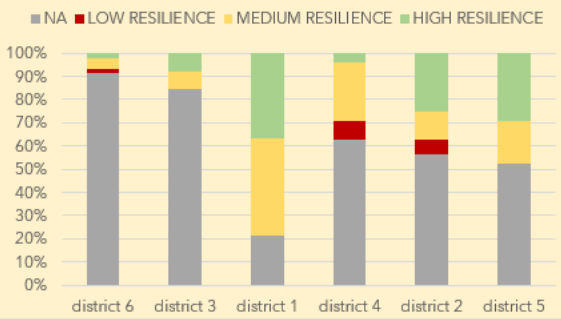

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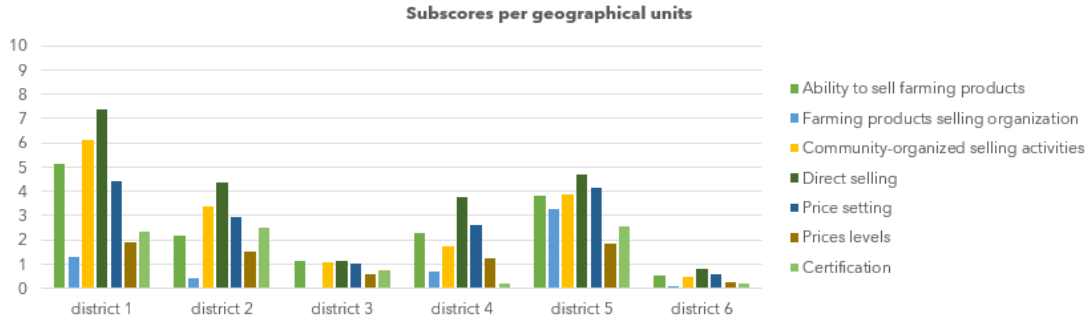
Key findings

Detail of technical scores

Detail of technical score	Ability to sell farming products	Farming products selling organization	Community-organized selling activities	Direct selling	Price setting	Prices levels	Certification
district 1	5.1	1.3	6.1	7.4	4.4	1.9	2.4
district 2	2.2	0.4	3.4	4.4	2.9	1.5	2.5
district 3	1.2	0.0	1.1	1.2	1.0	0.6	0.8
district 4	2.3	0.7	1.8	3.8	2.6	1.3	0.2
district 5	3.8	3.3	3.9	4.7	4.1	1.9	2.6
district 6	0.5	0.1	0.5	0.8	0.6	0.2	0.2
Grand Total	1.4	0.7	1.5	2.0	1.5	0.7	0.7

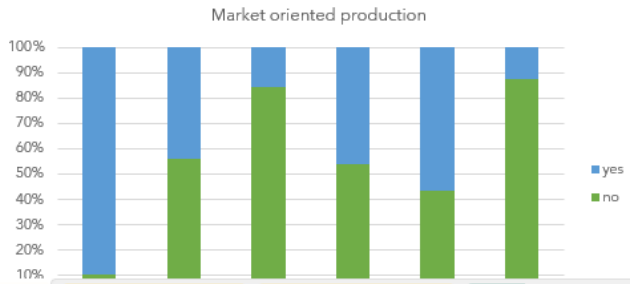
* The technical indicators are averaged to calculate the technical resilience score



Details of the subscores

Module's descriptive analysis

Market oriented production (for financial incom	no	yes
district 1	10.5%	89.5%
district 2	56.3%	43.8%
district 3	84.6%	15.4%
district 4	54.2%	45.8%
district 5	43.4%	56.6%
district 6	87.5%	12.5%
Grand Total	73.9%	26.1%



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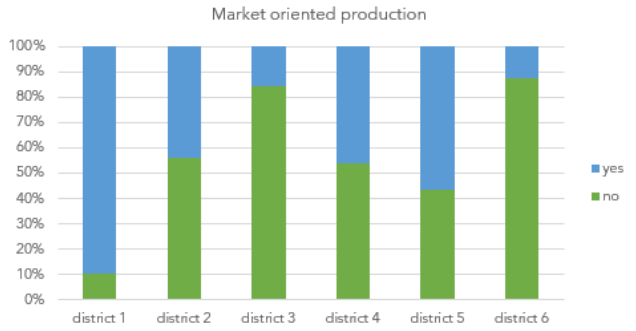
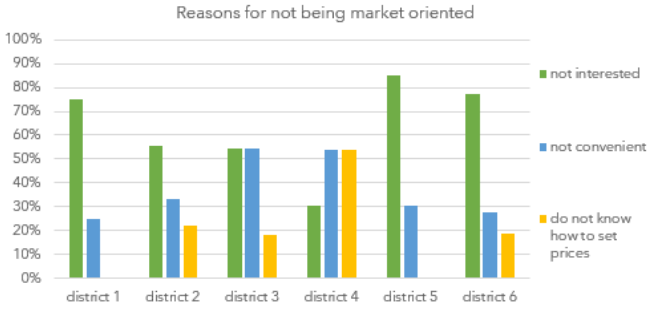
district 6	87.5%	12.5%
Grand Total	73.9%	26.1%



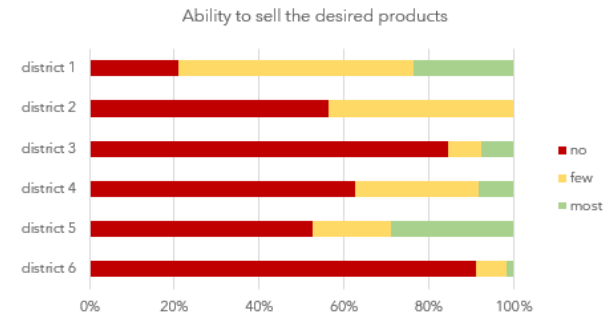
Reasons for not being market oriented	not interested	not convenient	do not know how to set prices
district 1	75.0%	25.0%	0.0%
district 2	55.6%	33.3%	22.2%
district 3	54.5%	54.5%	18.2%
district 4	30.8%	53.8%	53.8%
district 5	84.8%	30.3%	0.0%
district 6	77.0%	28.0%	18.7%
Grand Total	75.1%	29.8%	18.2%

*Only for subsistence farmers (not market oriented)



Ability to sell the desired produc	no	few	most
district 1	21.1%	55.3%	23.7%
district 2	56.3%	43.8%	0.0%
district 3	84.6%	7.7%	7.7%
district 4	62.5%	29.2%	8.3%
district 5	52.6%	18.4%	28.9%
district 6	91.3%	7.1%	1.5%
Grand Total	78.9%	14.0%	7.2%

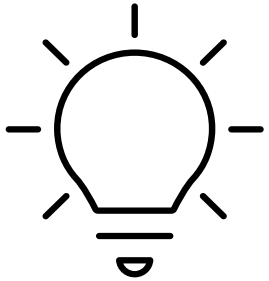
*Only for market oriented farmers



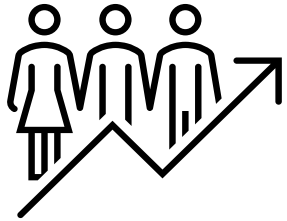
Descriptive analysis

Why using SHARP+?

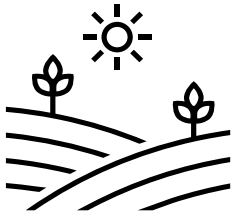
identify the aspects of the farming system in need of intervention



inform the design of projects activities



monitor and evaluate the resilience and adaptive capacities of the targeted population



design inclusive and holistic solutions for enhancing farmer's livelihoods and climate resilience.

Use of SHARP+ for FFS

Support for sustainable production and improvement of food security and climate resilience in the highlands of Burundi

- Adaptation of the questionnaire
- Training of enumerators
- 402 household surveyed
- Data analysis

Resilience scores + Identification of vulnerabilities: 1) Group membership, 2) Animal production and, 3) Livestock breeding practices, 4) Livestock health and nutrition, 5) Tree cover and access to forest, 6) Source of income, expenditure and savings

Baseline 2016

Project Launch workshop 2017

Project interventions 2018-2022

Endline 2023

- Integration of main vulnerabilities in project formulation and interventions

- Adaptation of the questionnaire
- Training of enumerators
- 341 household surveyed
- Data analysis

Resilience scores and M&E

Use of SHARP+ for FFS

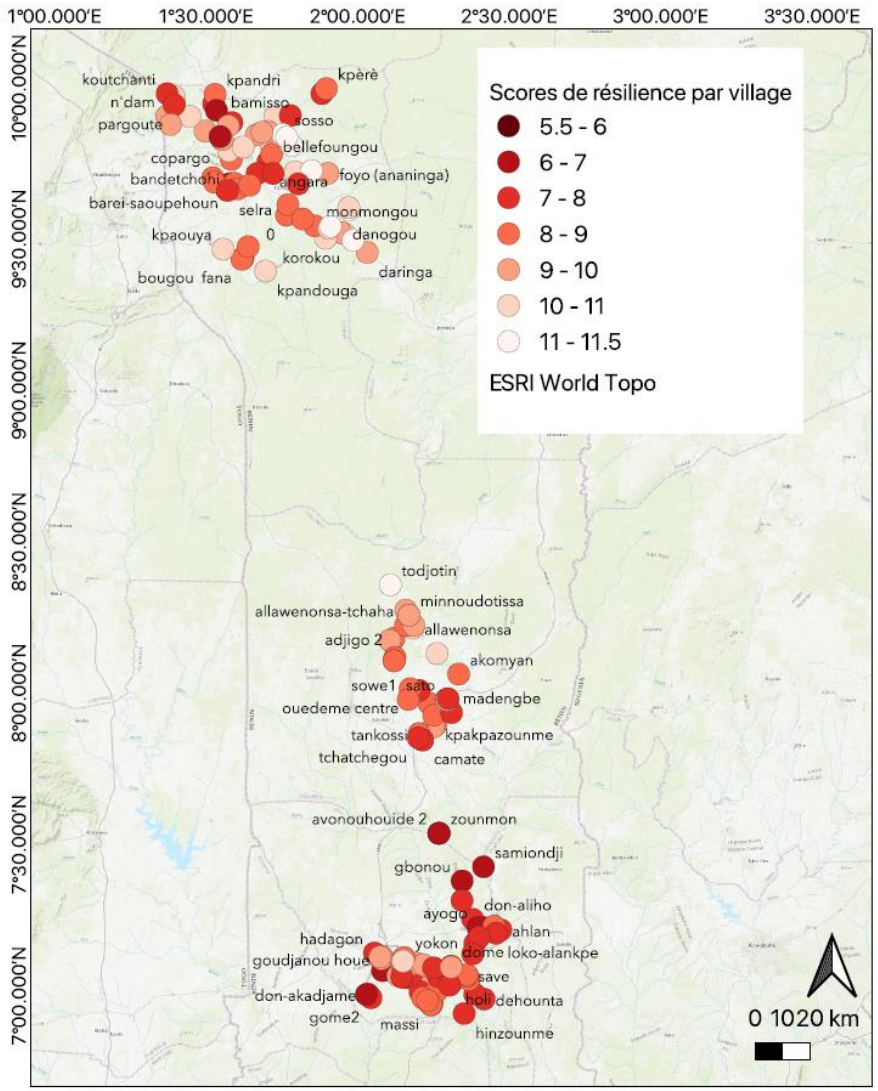
Ouémé climate-resilience initiative in Benin

1076 respondents

5 municipalities

Baseline in 2024:

- Adaptation of the questionnaire
- Training of enumerators
- Data analysis
  - Resilience scores
  - Identification of vulnerabilities and list of most vulnerable villages to identify where to implement FFS (most vulnerable villages)



For more information

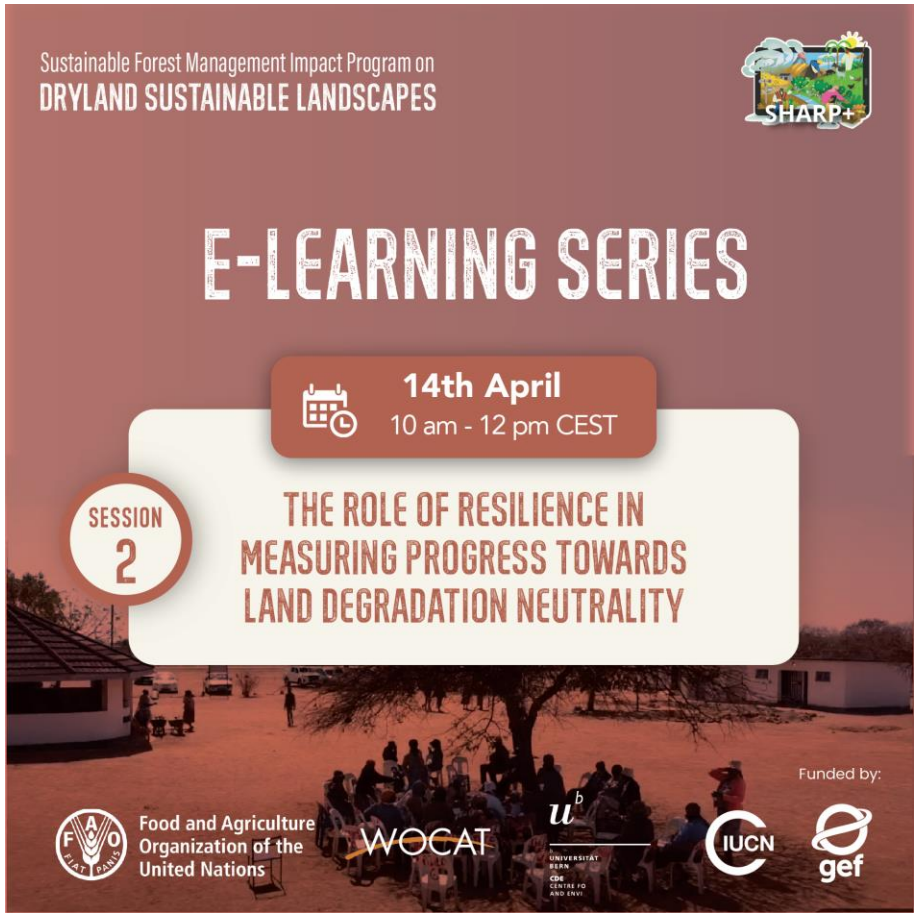
sirine.johnston@fao.org

[New guidance document for practitioners]

[SHARP+ in brief]

Factsheet: [Resilience assessment in Somalia]

For more information

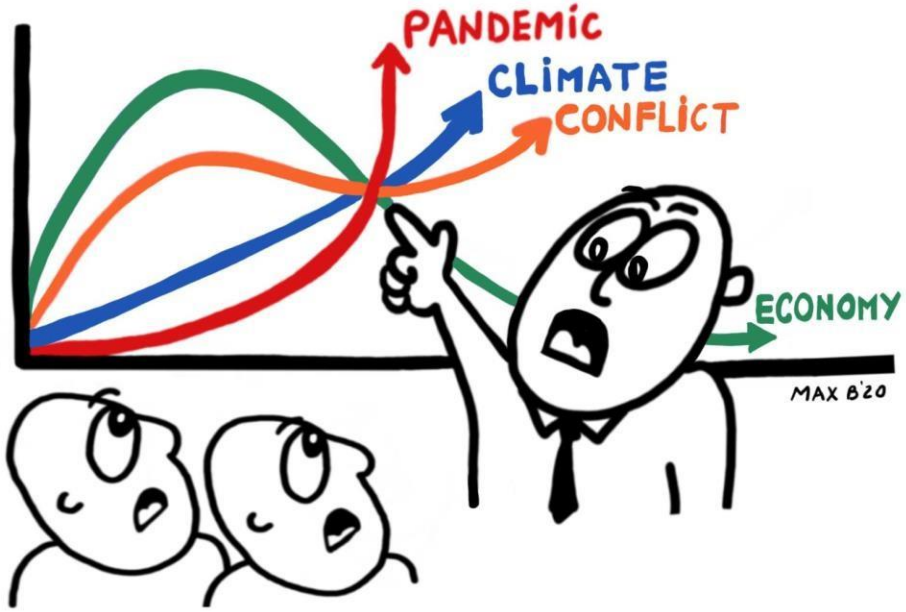


If you want to learn more on the SHARP+ tool and its combination with **behavioural change** analysis, please register here !

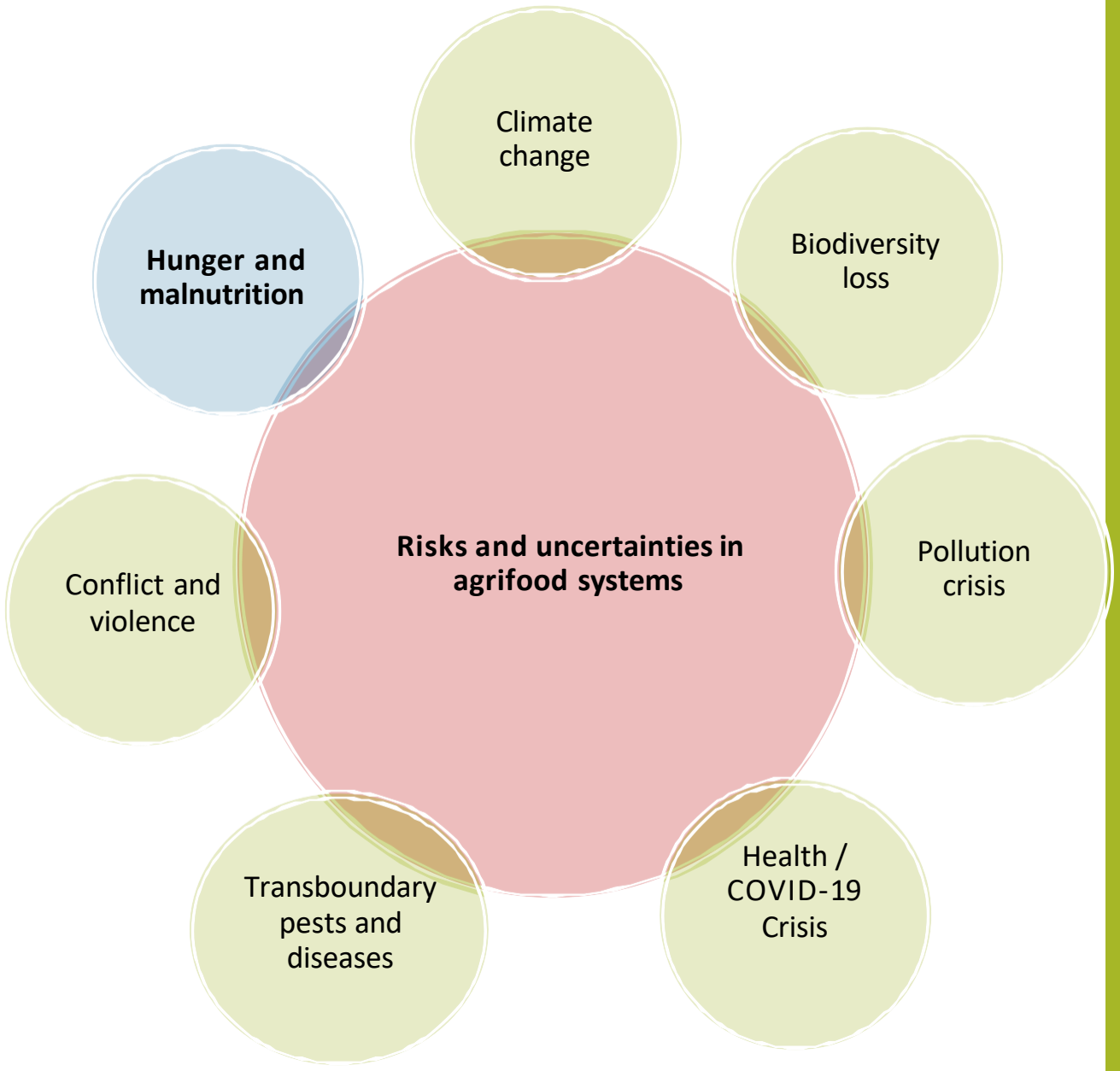
Community Managed Disaster Risk Reduction (CDM RR) Tool

Global FFS Platform
Webinar series on Climate change and Farmers Field School - 8 April 2025

Sylvie Wabbes Candotti
Agronomist and Resilience Advisor
Office of Emergencies and Resilience (OER)
Food and Agriculture Organization
of the United Nations (FAO)



- The disasters are collaborating better than we are!



Understanding shocks, stresses and stressors

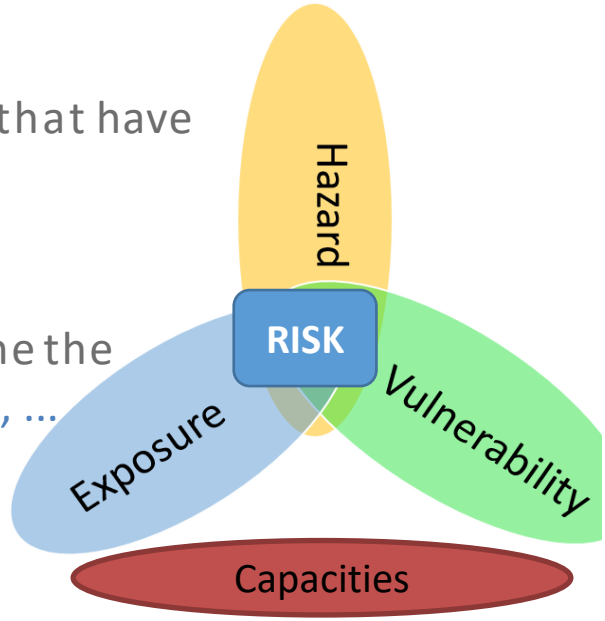
Risk is the potential for consequence of the interaction between a threat or hazard, the characteristics that make people, places and systems exposed and vulnerable to that threat or hazard, and the capacities available to manage the risk

Events: the manifestation of threats and hazards, or a combination thereof, at a given time and location. Threats or hazards include negative consequences on a system level (not individual level). We include as "events" or disasters, crisis, conflicts, or shocks and stresses:

- **Shocks or extreme event:** external short-term deviations from long-term trends that have substantial negative effects on people's current state of well-being, or their ability to withstand future shocks: drought, flood, storm, …

- **Stresses or slow onset event:** long-term, slow and gradual pressures that undermine the stability of a system (including chronic pressures): sea level rise, glacier melting, …

Stressors (*risk drivers*): processes or conditions, often related to development and inequality, that influence the level of risk by contributing to exposure and vulnerability or reducing capacities



Community Managed Disaster Risk Reduction (CMDRR)

Definition: "*a process of bringing people together within the same community to enable them to collectively address common disaster risks, and pursue common disaster risk reduction measures. It is a process that mobilises a group of people in a systematic way towards achieving a safe and resilient community. It envisions a dynamic community that is cohesive in making decisions, deals with conflicts, resolves issues, manages collective and individual tasks, respects the rights of each individual, demands their rights and addresses and bounces back from hazard events*" (Binas, 2010).

Key Idea: Communities proactively manage disaster risks rather than reactively responding after events. See International Institute of Rural Reconstruction (IIRR) CMDRR guidelines https://zenodo.org/records/7766759 and on Prevention web. https://www.preventionweb.net/files/26900_sin476748515mao32kbv21llkaosp9i9k5r.pdf and https://dlci-hoa.org/assets/upload/good-practice-guidance/20200803073110350.pdf,

The Four Basic Minimums of CMDRR

1.Participatory Disaster Risk Assessment & Analysis (PDRA&A): Community-based hazard or event, vulnerability, and capacity assessment to determine risk levels.

2.Developing Disaster Risk Reduction Measures: Community creates Development Plans (addressing shocks and stresses and hazard roots) including means to prevent, anticipate, adapt and transform ahead of multiple risks and impacts as well as Contingency Plans (emergency preparedness and response).

3.Building a Strong Community Organization: Communities form or strengthen organizations to implement, monitor, evaluate, and advocate DRR development and contingency plans.

4.Participatory Monitoring, Evaluation, and Learning (PMEL): Communities measure DRR effectiveness through self-evaluation, critical reflection, and learning.

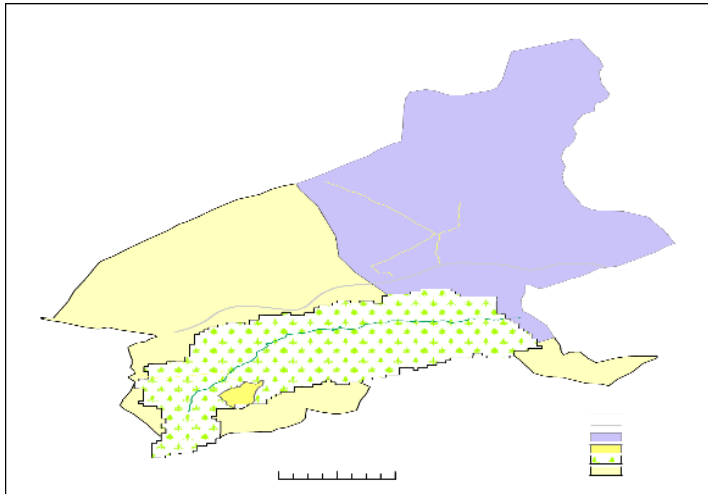
Explore overall Community Managed DRR publication : https://dlci-hoa.org/wp-content/uploads/2023/07/20200804125010418.pdf and also Community Based Disaster Risk Management (CBDRM) valid across sectors in https://www.cadri.net/system/files/2021-09/CADRI%20-%20Good%20Practices%20-%20CBDRM_2020.pdf

Community managed Disaster Risk Reduction (CMDRR)

Structured approach for disaster risk analysis and participatory action planning and implementation

- *Hazard or shock and stress assessment, vulnerability assessment, disaster risk analysis, DRR measures, etc…*

No	main Problem identification	Problem Ranking	Cause of problems	Solution
1	Shortage of Drinking Water	2	Decreases of ground water table	Physical and Biological soil and water mechanism
2	Lack modern irrigation system	7	Lack resource	Require budget
3	Deforestation	3	Lack of fuel wood	Improve Stove ,fast growing plant
4	Lack of animal feed	6	Lack of grazing land	Fast growing plant ,forage
5	Drought	1	Deforestation	Afforestation ,water harvesting technology



Community DRR/Adaptation Investment planning and financing

ACREI project

1. Detailed community **Adaptation Planning** process based on CMDRR approach
2. Establishment of **local institutions**, registered groups, cooperatives etc.
3. Development of **detailed investment proposals**, activities, budgets, stakeholder etc. approved and certified by technical departments.
4. Release of **investment financing** at appr. USD 45,000/community through cash grant & procurement actions hybrid.

ACREI project

Country	Technical scope of community investment proposals
Ethiopia	- Natural Resource Management: Soil and water conservation, roof water harvesting, and water retention mechanisms improved, degraded land rehabilitated in project sites, community ponds construction, soil and water conservation activities including soil bund and stone bund, including gabion check dams. - Support to drought tolerant crop production: Distribution of drought resistant and early maturing locally available crop seeds - Livestock: Supply of forage seed for improved livestock nutrition, distribution of small stock i.e. goats and chicken. Access to different types of farm hand tools (farm implements) and livestock equipment.
Kenya	- Rehabilitation of irrigation infrastructure for expansion to more households - Provision of water tank along with inputs for kitchen gardens - Riverbank protection by check dam construction - Rock water catchment upstream with pipe distribution network for downstream use. - Repair of borehole infrastructure and expansion of water distribution network. - Galla goat distribution - Sunflower and oil pressing machine.
Uganda	- Construction of ferro-cement household water harvesting tanks of 20,000 litre capacity along with community tree, fodder and seedling nurseries. - Construction of underground household water harvesting tanks of 10,000 litre capacity. - Construction for semi-intensive goat production and pasture production - Community poultry incubation and hatchery center with vaccine chain.

Recommendations for CMDRR and climate action Programme and Implementation

Consider CMDRR together with other people centered participatory approaches for programming and training on community led portfolio of solutions for disaster and climate risk reduction and management across different agriculture and food-based livelihoods:

1. Agro-climatic, disaster/crisis risk and food security **information or services**
2. **Early warning systems** with actionable alerts
3. **Emergency preparedness, anticipatory action and response**
4. Multirisk management **decision making** and governance
5. **Risk transfer mechanisms** (social protection and insurance) and contingency measured
6. On site (farm, firm) **resilient good practices**, technologies and innovations, including livelihoods diversification
7. **Risk proofing of infrastructure** including for water and energy and along the food value chains
8. **Nature based solutions** or ecosystem and natural resource managmenent (soil, water, trees, biodiversity,...)
9. **Food loss** (post harvest) and waste reduction
10. Inclusive, resilient and healthy **diets**