

Perception and adaptation strategies to precipitation change : case of farmers in Burkina Faso

Communication to
AGRODEP Members' Meeting and Workshop

June 6-8, 2011; Dakar, Senegal

Mathieu Ouedraogo

*Institut de l'Environnement et de Recherches Agricoles (INERA),
Station de recherches de Farako-Bâ, 01 BP 910 Bobo-Dioulasso 01,
Burkina Faso, e-mail : oued_mathieu@yahoo.fr*

Objective & methodology

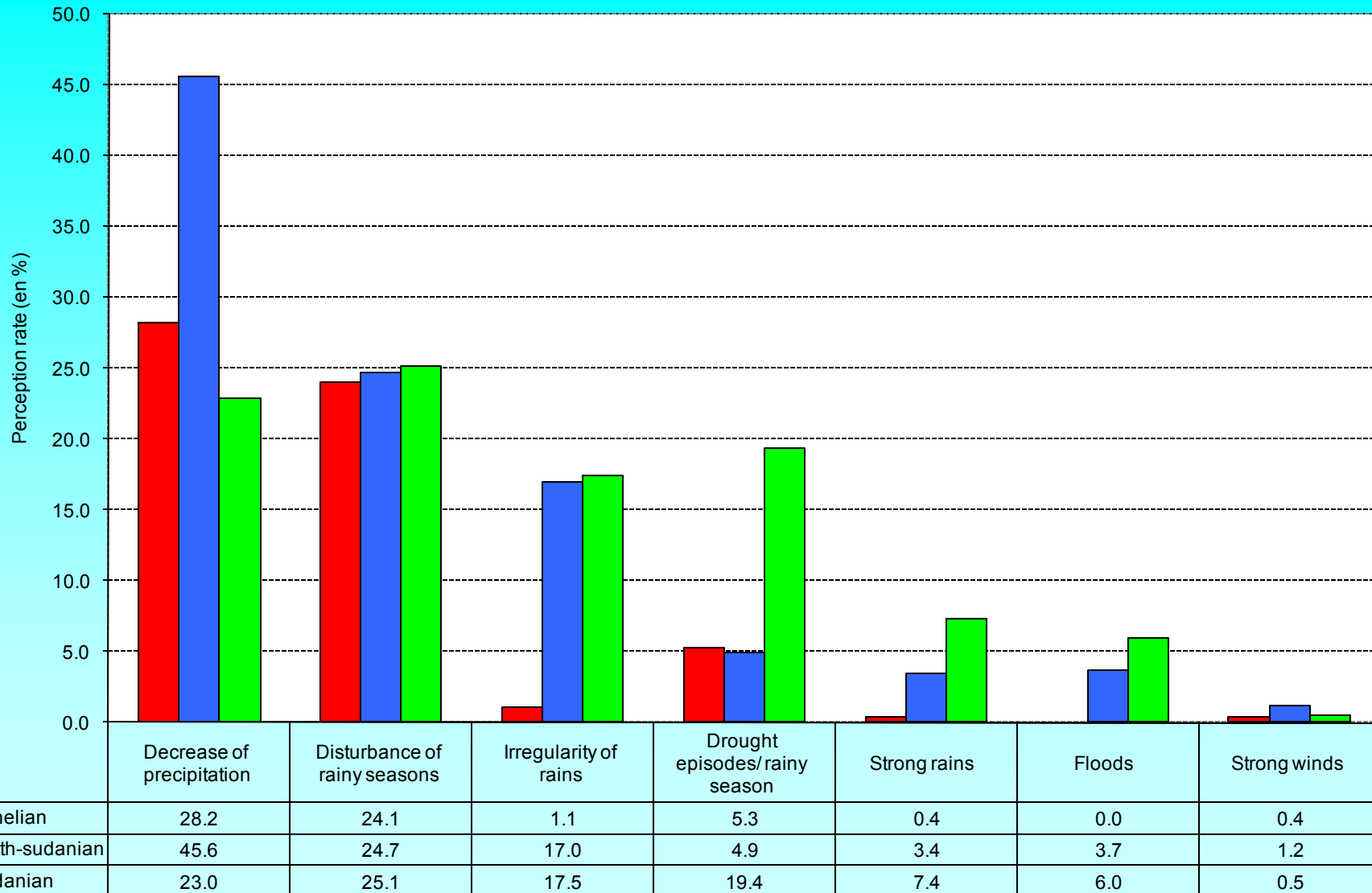
■ Objective

- ❑ To understand farmer's perception on precipitation change and,
- ❑ Identify and analyse adaptation strategies adopted by farmers towards rainfall change in Burkina Faso.

■ Methodology

- Household (hh) survey : 1530 hh in 51 districts; 30 hh/district.
- Descriptive statistics and logistic modeling using Spss & Stata.

Farmers' perception on rainfall change in BF



■ Sahelian ■ North-sudanien ■ Sudanien

Main adaptation strategies to change in precipitation in BF (% of respondents)

Adaptation	Agroclimatic zone			BF
	Sahelian	North-Sudanian	Sudanian	
All adaptation options	94.74	89.82	81.50	88.86
Use of new varieties	38.60	47.27	35.83	42.54
Use of SWC techniques	38.60	36.91	19.69	33.04
Use of organic manure	39.04	27.82	12.99	26.65
The shift in sowing dates	17.98	20.73	22.83	20.64
Trees planting	7.02	4.91	15.35	7.95
Ploughing before sowing	17.11	2.73	5.51	6.59
Use of lowland	1.32	6.91	6.30	5.52

Adoption rate increases with the vulnerability of agro-climatic zone

Example of SWC techniques in Burkina Faso

Stone rows



Planting pit « Zai »



Dike



Half moons



SWC techniques were more adopted in Sahelian and Sudan-sahelian zones than in Sudanian zone where the climate is more clement

Barriers to adaptation to climate change in BF

■ Financial and materiel constraints

- ❑ Lack of money and saving (poverty),
- ❑ Lack of credit ,
- ❑ Lack of specific inputs such as :
 - ▶ Improved seeds for new varieties use ,
- ❑ Lack of materials and equipments
 - ▶ Transportation of stones for SWC techniques,

■ Technical and information constraints

- ❑ Lack of information about new strategies,
- ❑ Lack of practical knowledge on adaptation strategies.

Implications for policy

- Policy-makers should :
 - **ensure** a good dissemination of information on the issue and on the different adaptation options available;
 - **promote** the adoption of adaptation by reinforcing the financial and technical capacities of farmers.
- Research should be encouraged to:
 - have a **good knowledge** of the climate change in BF,
 - **develop new adaptation** strategies.
 - improve **endogenous adaptation strategies** developed with success during the last dramatic droughts in the Sahel region during the 1970 and the 1980.



Thank you for your attention

