

RISK ANALYSIS IN THE PEASANT FRAMEWORK: EMPIRICAL ANALYSIS OF FARMERS IN SOUTH KIVU, DEMOCRATIC REPUBLIC OF CONGO

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Introduction

Farmers in South Kivu are working in an uncertain and unstable environment. This is explained by the problem of access to financial services, the absence of agricultural insurance companies, the problem of access to information about weather forecasts, the lack of basic infrastructure, etc. Farms are exposed to innumerable risks that threaten their development.

Objectif

Analyze the risks that threaten the development of family farms in the territories of Kalehe and Kabare in South Kivu.

Approche méthodologique

- Data from surveys of 150 farmers; - Three localities concerned: Mbinga Sud (Kalehe), Bugorhe and Irhambi (Kabare); - We used the farmers' experiences for risk analysis. A three-point Likert scale (High=3, Medium=2, and Low=1) was used; - Descriptive statistics and z test were used in the data analysis.

Results and discussion

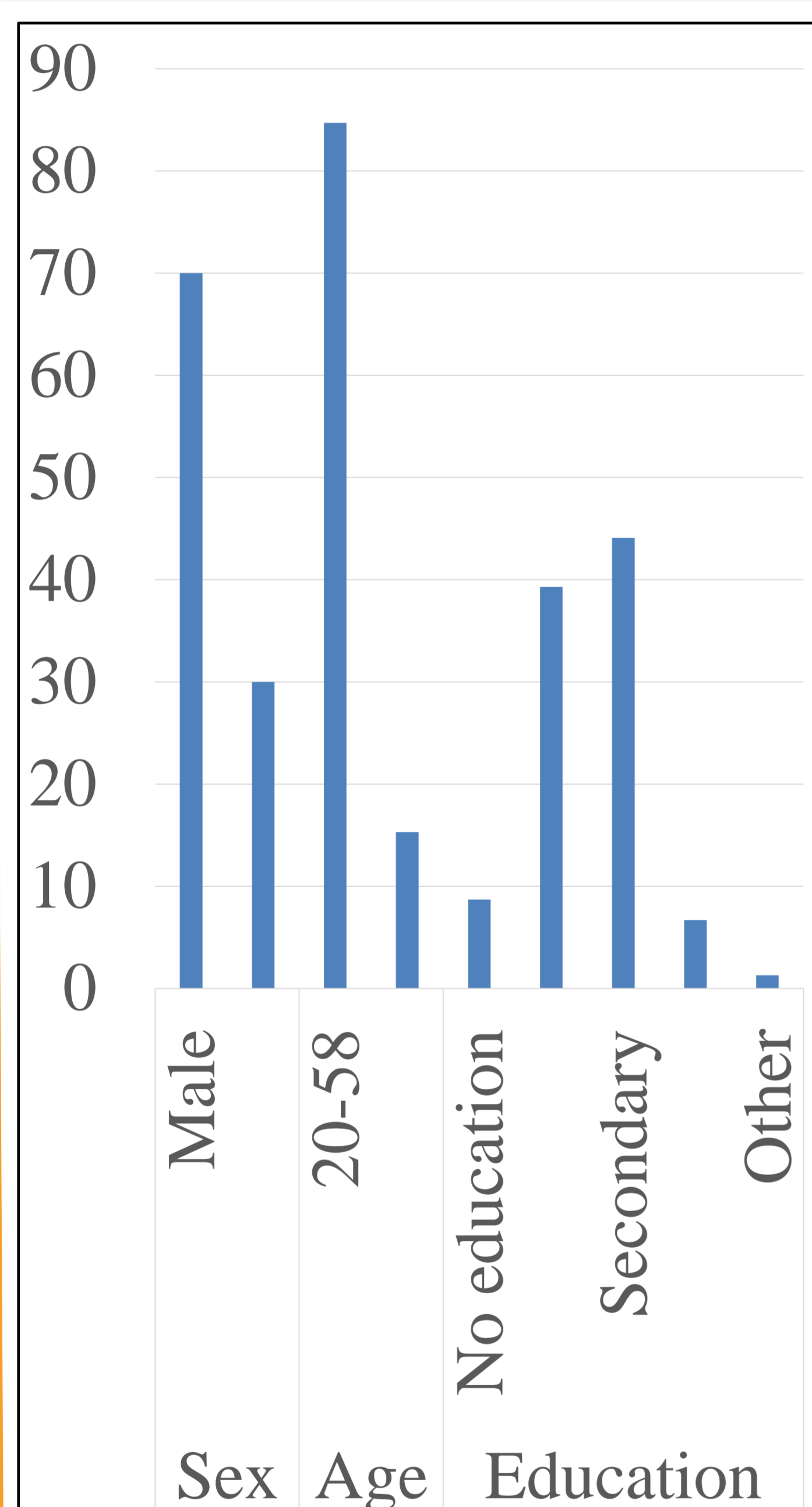


Figure 1. Characteristics of the respondents (values in %)
The mean age of the respondents was 48 years.

Levels of appreciation of the farmers towards the risks related to farm operations in % (N=150)ci

Agricultural risks		High	Medium	Low
Financial risks	Indebtedness	6.7 _a	12.7 _a	80.7 _a
	Availability of capital	21.4 _b	35.3 _a	43.3 _b
	High interest rate	8.7 _a	18.0 _a	73.3 _a
	Financial autonomy	14.0	38.0 _a	48.0 _a
	Short-term liquidity	12.7 _b	37.3 _a	50.0 _b
Natural risks	Climate change	14.7 _a	47.3 _a	38.0 _a
	Plant diseases	14.0 _a	40.7 _a	45.3 _b
	Devastating agents	20.7 _a	45.3 _a	34.0 _a
	Flooding	5.3 _a	21.3 _a	73.3 _a
	Erosion	2.0 _a	20.0 _b	78.0 _a
Price risks	Price fluctuations	36.7 _a	44.0 _a	19.3 _a
	Low prices	60.0 _a	23.3 _b	16.7 _a
Professional risks	Occupational diseases	8.0 _a	38.7 _a	53.3 _a
	Exposure to the harms from pesticides	6.7 _a	14.0 _b	79.3 _b
	Occupational accidents	2.7 _a	18.7 _a	78.6 _b
Miscellaneous risks	Crops theft	23.3 _a	50.0 _b	26.7 _b
	Crops destruction	28.7 _a	42.6 _a	28.7 _a
	Insecurity	3.3 _a	20.0 _a	76.7 _a

Note: The indices "a" and "b" indicate the results of the Z test. "a" means that there is no significant difference between the three study areas (Bugorhe, Irhambi, and Mbinga-Sud) for the scale of the concerned risk, while "b" means that at least one area is significantly different from two others.

- Debt risk and high interest rate were not part of harmful risks; majority do not have access to credit; - Climatic disturbances, crop diseases and devastating agents are threats to farms; - Farmers do not have access to weather forecast information; - Low prices of agricultural commodities is a major threat to farms (60%: risk is high); imposition of selling prices by intermediaries on farmers.

Conclusion

On the basis of these results, we recommend that sustainable environmental management strategies be initiated, that the proximity of agricultural extension services be strengthened, that prices are regulated and that security is maintained and guaranteed on an ongoing basis.