

Maize farmers' willingness to pay (WTP) for agricultural insurance (AI) in the plateau region of Togo

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Introduction

- Maize producers in Togo experience significant losses due to unpredictable rainfall, floods, pest attacks, and technical failures, leading to increased vulnerability and reluctance to invest in production-enhancing technologies
- Thus, in order to trigger the establishment of agricultural insurance, this study investigates the perception of maize producers in the Plateau region regarding agricultural insurance, assess their willingness to pay (WTP) for such services, and identify factors influencing their WTP.

Materials and Methods

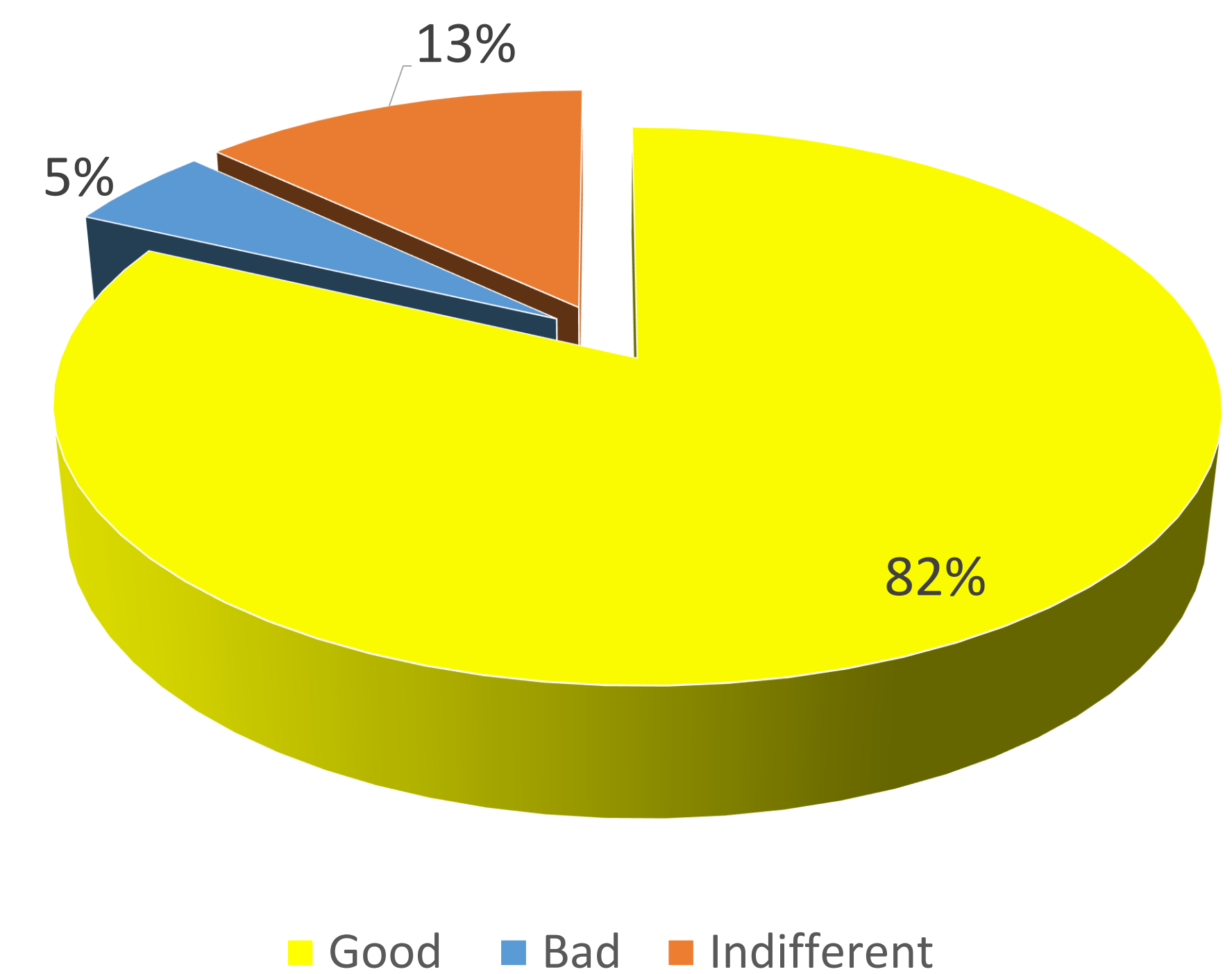
- The primary data which served as the main analysis data were collected from 385 maize producers in the Plateau region
- Data were analyzed using the Heckman two-stage selection model.

Factors Affecting the WTP for AI

Selection equation (Acceptance of agricultural insurance)		
Variables	Coefficient	Probabilité
Marital status	-0.2001903	0.285
Membership of a farmers' organization	2.776987***	0.000
Years of experience	-0.0130048	0.237
Access to credit	-0.6520554 ***	0.005
Knowledge of agricultural insurance	1.062983***	0.000
Perception of agricultural insurance	1.111324***	0.000
Use of improved seed	-0.1414912	0.568
Constance	-2.667364***	0.000
Willingness to pay (WTP)		
Variables	Coefficient	Probabilité
Age	-99.5124***	0.001
Gender	605.5285	0.408
Level of education	1069.387 ***	0.000
Farm size	1146.651	0.111
Use of mineral fertiliser	2257.583**	0.013
Income	0.0029165 ***	0.000
Existence of other sources of income	3200.356***	0.006
Constance	3613.728*	0.075
Mills	-801.8274	0,614
rho = -0.13800		Prob > chi2= 0.0000
sigma = 5810.3165		
Wald chi2(12)= 93.03		

Results

Perception of agricultural insurance



Producers' declared willingness to pay

Variable	Mean	Median	Min	Max
WTP (FCFA)	9155	9500	500	35000

- Producers' willingness to take out agricultural insurance is influenced by membership of a farmers' organization, access to credit, knowledge of agricultural insurance and perception of agricultural insurance.
- Age, level of education, use of mineral fertiliser, income and existence of other sources of income are the factors that explain the amounts of WTP declared by producers

Conclusion

- Maize farmers in the Plateau region of Togo are in favor of introducing agricultural insurance.
- Agricultural insurance is not a panacea capable of addressing all the risks and constraints in agricultural value chains.
- The introduction of agricultural insurance must be coupled with the timely provision of suitable inputs, the organization of producers into cooperatives, farm mechanization and the development of irrigation infrastructures...