

Determinants of the adoption of good cocoa farming practices and opportunities for increasing their uptake in the Centre region of Cameroon

Urcil-Papito Kenfack Essougong^{1,2}; Tata Ngome Precillia Ijang³, Divine Foundjem-Tita⁴, Ann Degrande⁴, Maja Slingerland¹

¹International Institute of Tropical Agriculture, Yaounde, Cameroon

² Plant Production Systems Group, Wageningen University and Research

³ Institute for Agricultural Research and Development (IRAD), Yaounde Cameroon

⁴CIFOR-ICRAF, Yaounde, Cameroon

INTRODUCTION

- ❖ Achieving sustainable cocoa production systems requires farmers to adopt good agricultural practices (GAP).
- ❖ Understanding the factors that influence farmers' adoption of these practices is essential to design better interventions.

In this research, we aimed at:

1. Estimating the scale and extent of GAP adoption,
2. Assessing the factors influencing GAP adoption, and
3. Investigating the barriers to adoption and options to overcome them as perceived by farmers.

METHODOLOGY

- Semi-structured questionnaire administered to 120 farmers in the central region of Cameroon.
- Adoption quotients computed and used to group farmers under low, medium or high adoption categories.
 - ✓ Adoption quotient (AQ) = $\frac{\text{Number of practices used}}{\text{Number of recommended practices}} \times 100$
 - ✓ Low : AQ ≤ (Mean - 1SD); Medium : Mean - 1SD < AQ < Mean + 1SD, and High : AQ ≥ (Mean + 1SD).
- Score of 4, 3, 2, 1 assigned to each barrier and solutions listed and ranked as first, second, third or fourth most important by farmers
- Ordinal logistic regression run in SPSS.25.

RESULTS

The extent of GAP adoption by cocoa farmers and its Determinants

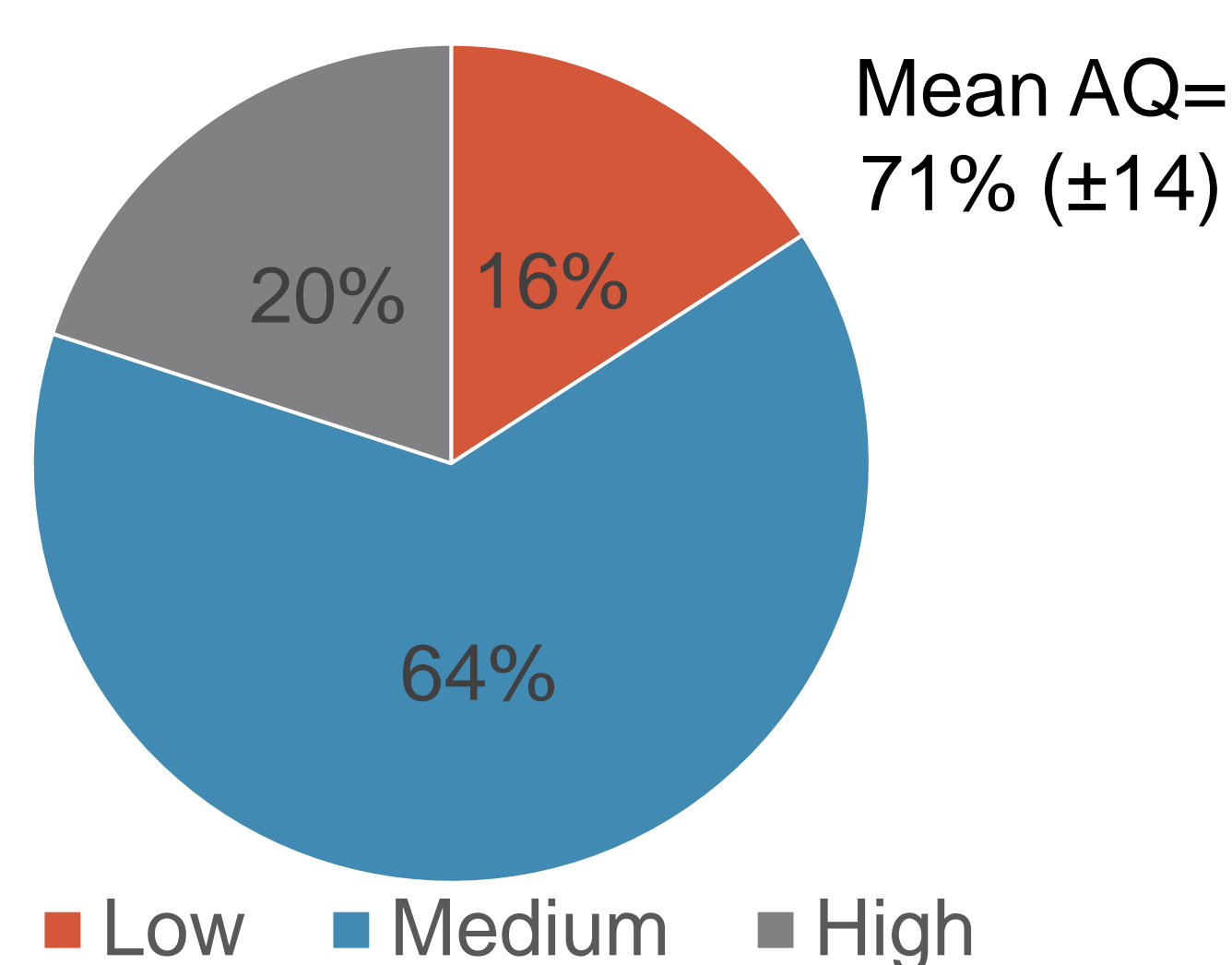


Fig 1. Respondent distribution according to the adoption categories

Table 1: Determinant extent GAP adoption (Estimate Ordinal Logistic Regression)

		Estimate	S.E
Threshold	[AQ2_Range = 1]	1.319	1.495
	[AQ2_Range = 2]	5.645***	1.622
Predictors	Experience cocoa farming	-.040	.025
	Total size cocoa farms	.047	.110
	Household Size	.129**	.062
	Years formal education	-.006	.073
	Age	.034	.022
	Location	1.335***	.487
	Access to training	1.321***	.457
	Membership FOs	-.312	.477
	Access to credit	2.136***	.660
	Gender	1.679***	.569
	Earning non-Cocoa income	-.779	.568
Average_agePlots	-.014	.011	

Nagelkerke: 0,39; Chi Square: 46.98***

*p < .1, **p < .05, ***p < .01

Barriers to GAP adoption by Cocoa farmers



Fig 3. Farmers' perceptions of the barriers to the use of best cocoa farming practices and ranking and according to their importance

Suggested Options for increasing GAP uptake

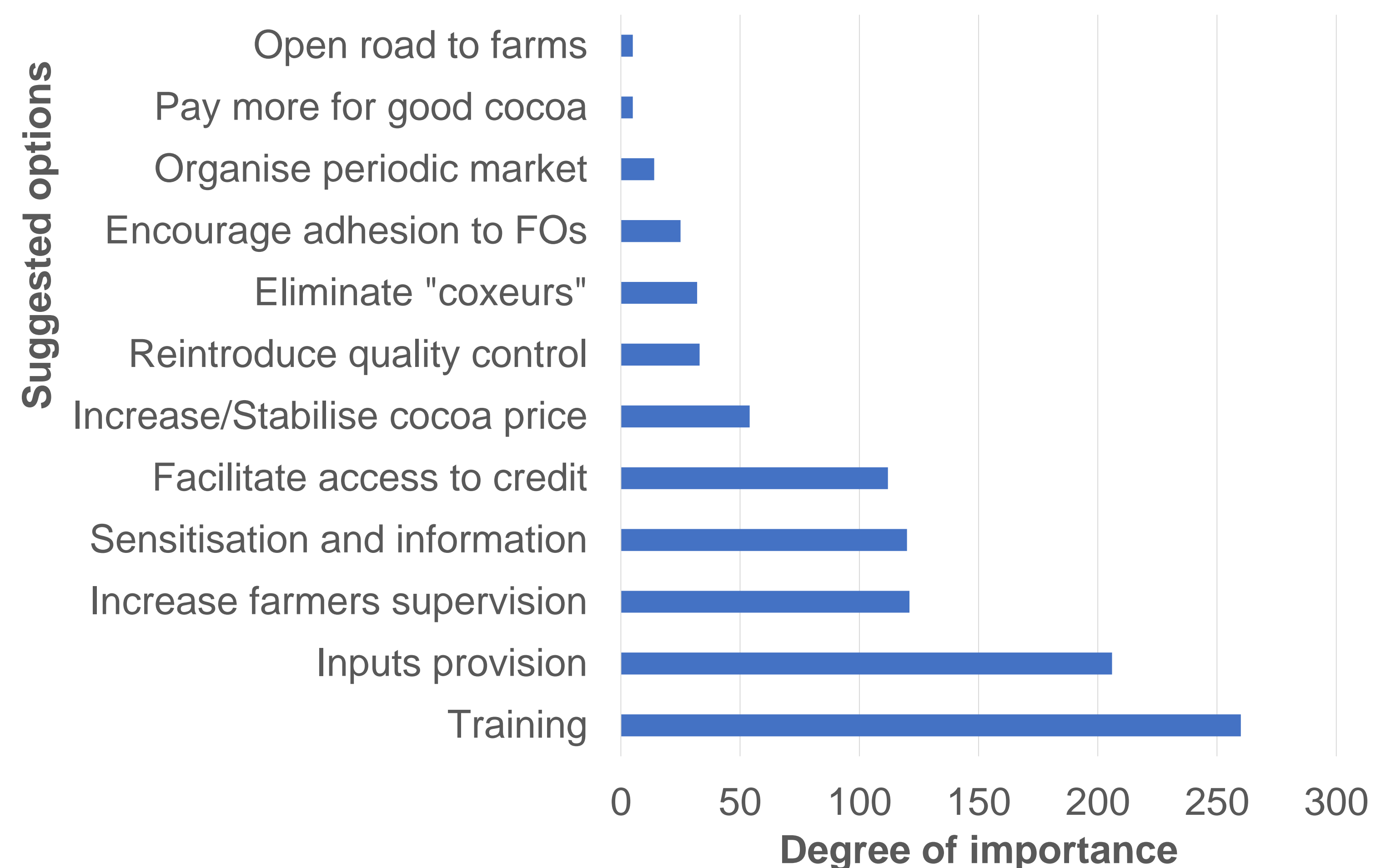


Fig 3. farmers recommendations to increase uptake of best cocoa farming practices according to their importance

HIGHLIGHTS

- ❖ Farmer location, gender, household size, and access to training and credit are statistically significantly correlated with the extent of GAP adoption.
- ❖ From farmers' perspectives, barriers to GAP adoption are related to insufficient mastering of production techniques, lack of motivation and productive resources.
- ❖ Raising farmers' awareness on GAP importance through sufficient access to training and coaching; improving market conditions, ensuring farmers receive a fair price, rewarding good cocoa quality, and facilitating farmers' access to finance can enhance GAP adoption and financial returns from cocoa production.