

SUPPLEMENTARY MATERIAL

Table S1. Multicollinearity detection in a multinomial logistic regression model.

Generalized variance Inflation Factor (GVIF) showing multicollinearity (adjusted generalized variance inflation factors (AGVIF) > 2.5) between the independent variables in a logistic regression model with agroforestry adoption as the dependent variable. This was developed using the car package [1] in the R platform 3.6.0 [2].

Variables	GVIF	df	AGVIF
Age	2.116828	1	1.454932
Gender	2.862869	1	1.692001
Household size	1.762694	1	1.327665
Marital status	1.592504	3	1.080638
Education	1.465888	4	1.048969
Migration status	1.864452	2	1.168524
Residence time	1.952745	1	1.397406
Number of rooms	1.598668	1	1.264385
Source of energy	1.000001	3	1.000000
Land tenure status	1.143212	1	1.069211
Quality of the respondent	1.133029	5	1.012568
Size of cocoa farm	1.406035	1	1.185764
Existence of shade tree	1.048468	1	1.023947

$$AGVIF = GVIF^{1/(2*df)}.$$

Table S1 References

1. Fox J. Weisberg S (2019) An R Companion to Applied Regression. Third. Sage. Thousand Oaks CA. USA
2. R Core Team (2019) R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna. Austria

Table S2. Other socioeconomic characteristics of the household.

Socioeconomic attributes		NAF	AF	Nawa region	χ^2 (p-value)
Mobile telephone	No	27.08	12.41	13.19	7.3145 (0.007)
	Yes	72.92	87.59	86.81	
Wall construction materials	Mud house	85.42	85.50	85.49	0.480 (0.923)
	Brick house	14.58	13.57	13.63	
	Wooden house	0.00	0.58	0.55	
	Other type	0.00	0.35	0.33	
Roof construction materials	Plastic tarpaulin	12.50	16.13	15.93	0.693 (0.707)
	Straw	20.83	22.85	22.75	
	Corrugated sheet	66.67	61.02	61.32	
Principal source of energy (%)	Firewood	97.92	99.07	99.01	5.067 (0.167)
	Charcoal	0.00	0.58	0.55	
	Butane gas	2.08	0.23	0.33	
	Other	0.00	0.12	0.11	
Water supplying source	Well	70.83	61.37	61.87	3.419 (0.490)
	River and marigot	4.17	6.26	6.15	
	Tapwater	16.67	14.73	14.84	
	Rainwater	0.00	0.23	0.22	
	Other	8.33	17.40	16.92	

Light source	Electric power	58.33	43.50	44.29	9.831 (0.043)
	Solar energy	8.33	7.31	7.36	
	Paraffin lamp	0.00	6.73	6.37	
	Pocket torch	29.17	41.18	40.55	
	Other	4.17	1.28	1.43	

AF: Agroforestry farmers; NAF: non-agroforestry farmers.

Table S3. Land tenure status and farmer quality.

Land tenure attributes		NAF	AF	Nawa region	χ^2 (<i>p-value</i>)
Land tenure status	Tenant	0.00	3.71	3.52	2.635 (0.268)
	Owner with land title	6.25	9.74	9.56	
	Owner with local contract	93.75	86.54	86.92	
Respondent quality vis-à-vis to the farm	Owner	97.92	96.17	96.26	3.799 (0.579)
	Manager	0.00	1.39	1.32	
	Family labor	0.00	1.62	1.54	
	Salaried labor	0.00	0.12	0.11	
	Sharecropper	2.08	0.46	0.55	
	Other	0.00	0.23	0.22	

AF: Agroforestry farmers; NAF: non-agroforestry farmers.