



OFF-FARM LIVELIHOOD DIVERSIFICATION ENHANCES FOOD SECURITY AMONG COCOA FARMERS IN GHANA

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1. INTRODUCTION

- Cocoa farming is a primary income source for Ghanaian farmers but has many challenges.
- These challenges can lead to household food insecurity.
- Off-farm activities are a strategy to combat these challenges.
- Diversification includes crop-livestock integrations and off-farm agricultural endeavors.
- The study aims to highlight how these strategies can improve food security and livelihoods in Ghana.



Cocoa Smallholder farmer in Ghana (Starrfm 2018)

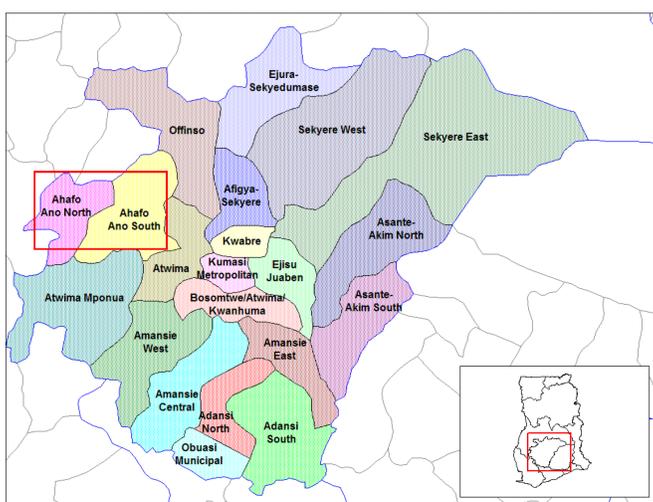
2. STUDY AIMS

The main objective of the study was to **investigate** the **factors that lead to off-farm livelihood diversification** from cocoa farmers in the Ahafo Ano District.

SPECIFIC OBJECTIVES

- To **determine** the socioeconomic factors affecting off-farm income among cocoa farmers
- To **determine** the influence of off-farm jobs on income diversification and output
- To **investigate** factors that limit cocoa production in the study area

3. STUDY AREA



Study Area (Frimpong and Ofori-Kwakye 2016)

- The Ahafo Ano District Council is in the Ashanti Region of Ghana, covering about 1,493 square kilometers with an estimated population of 114,581.
- The district is positioned in the north-western portion of the area and experiences a rainy semi-arid climate, with average temperatures around 26°C.
- The district's climate features two rainy seasons: the main one from March to July and a minor one from late September to November (1500 - 1700mm).
- The district boasts abundant agricultural land, with 80% suitable for crop production. Major crops include maize, rice, cassava, yams, and cocoa.

4. METHODOLOGY

- Data collection took place between the 20th and 27th of November 2022 using Google Forms.
- Utilizing a **stratified multistage sampling methodology**, local governmental areas with the predominant cocoa cultivators were **purposely selected**.
- Two communities from each of these areas were randomly selected.
- From each community, 50 individuals were **randomly chosen** for interviews.
- All the gathered information was organized and recorded in **Microsoft Excel** from 20th November 2022 to 15th February 2023.

5. DATA ANALYSIS

Analysis was done using **Microsoft Excel** and the Statistical Package for the Social Sciences (**SPSS**).

1. **Descriptive statistics** and **regression analysis** were utilized to determine the central tendencies and relationships within the data, respectively.
2. The **Mann-Whitney U test** and the **Wilcoxon test** were employed to assess differences in income and output variables.

6. RESULTS

OBJECTIVE 1: Regression Model (n = 50)

	B	S.E.	Wald	df	Sig.	Exp(B)
Age	0.064	0.035	3.384	1	0.066	1.066
Gender	-0.865	0.940	0.846	1	0.358	0.421
Years of education	0.012	0.054	0.046	1	0.830	1.012
Farming experience	-0.115	0.041	7.745	1	0.005	0.892
Farm size Ha	-0.199	0.175	1.303	1	0.254	0.819
Land ownership	1.834	0.715	6.583	1	0.010	6.257
Farming groups	23.197	7247.586	0.000	1	0.997	1.186E+10
Constant	-23.198	7247.586	0.000	1	0.997	0.000

OBJECTIVE 2: Mann-Whitney U and Wilcoxon Test

	Income	Output
Mann-Whitney U	687.000	673.000
Wilcoxon W	1962.000	1948.000
Asyp. tailed)	Sig. (2- 0.000	0.000

Grouping Variable: Off-farm Job

Results show that there is a significant difference between the income levels of people with and without an off-farm job (**U = 687.000, p < 0.000**).

The same applies to agricultural output levels for people with and without an off-farm job (**W = 1948.000, p < 0.000**)



OBJECTIVE 3: Factors Limiting Cocoa Production

7. CONCLUSION

1. The cocoa industry in Ghana faces multifaceted challenges, from climate change impacts and aging plantations to socio-economic barriers such as unfavorable land tenure systems and financial limitations.
2. Addressing these requires an integrated approach, focusing on sustainable agricultural practices, improved financial access, and enhanced socio-economic policies to ensure a prosperous future for Ghana's cocoa farmers.
3. Further research with broader representation is essential for holistic insights into cocoa farming in Ahafo Ano District.

8. IMPLICATIONS

- Implement periodic reviews of market and policy impacts on cocoa farming to guide timely interventions.
- Launch farmer training initiatives on modern techniques and financial literacy to ensure a sustainable and prosperous cocoa sector in the region.

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