

# PROFITABILITY ANALYSIS OF COWPEAS PRODUCTION AMONG THE SMALL HOLDER FARMERS IN ARAPAI SUB COUNTY, SOROTI DISTRICT.

 $\mathbf{BY}$ 

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**OCTOBER 2024** 

# DECLARATION

I, Ariong Tadeo, hereby declare that the information presented in this propos	al is my original
work and has not been submitted to any other university for any academic av	
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## APPROVAL

This special proje	ct report has been submitted to the Department of Agribusiness and Extension
with the endorsen	nent of the university supervisor.
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Ms. AKIDI LYNETTE IRENE

## **DEDICATION**

This paper is dedicated to my family and friends who have consistently supported me in all my academic endeavors.

A special dedication goes to my parents, Omachar Peter and Natunme Tereza

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I would first like to express my gratitude to God for granting me the strength, knowledge, and wisdom to pursue this bachelor's degree in Agribusiness Management and Extension, as well as the endurance to overcome the challenges I encountered along the way.

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# LIST OF ABBREVIATIONS

TLU Tropical Livestock Unit

UBOS Uganda Bureau of standards

CRFS Global Collaboration for Resilient Food Systems

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#### **ABSTRACT**

Cowpea (Vigna unguiculata L. Walp) is a key indigenous legume found in tropical and subtropical regions, significantly contributing to food security and income generation for smallholder farmers. This study investigates the profitability of cowpea cultivation. The small holder farmers in Arapai sub county Soroti district where 100 small holder farmers from Dakabela, Arabaka, Odudui, and Agirigiloi parishes were sampled using pre tested researcher administered questionnaire. Descriptive statistics and a multiple linear regression model were employed to analyze the socioeconomic characteristics of cowpea farmers and the factors influencing cowpea profitability. The findings indicated that male farmers comprised 56% of the sample, while female farmers made up 44%. The average age of the respondents was 42 years, with 83% being married most farmers had completed primary education, and they averaged 23 years of farming experience. Typically, the respondents lived in households consisting of around 8 members and owned approximately 3.65 acres of land in total, with about 1.29 acres dedicated to cowpea cultivation. The average profit generated by smallholder farmers from cowpea production was 123,194.22 UGX per acre. Factors such as price per kilogram, farming experience, pesticide costs, quantity sold (in kg), and land preparation expenses positively and significantly impacted cowpea profitability. In contrast, age and seed costs had a negative significant effect on profitability. Recommendations include encouraging farmers to treat cowpeas not merely as a subsistence crop but also as a cash crop, strengthening agricultural extension services to aid smallholder farmers, and developing policies that enhance market access, support, and fair pricing for cowpea farmers.

### **CHAPTER ONE**

## 1.0 Background

Uganda's economy continues to be predominantly dependent on agriculture. This sector is responsible for approximately 90 percent of total export income, contributes around 23.7 percent to the overall Gross Domestic Product (GDP), and supports the livelihoods of nearly 90 percent of the population, whether directly or indirectly.

The cowpea originated and was domesticated in Southern Africa before being distributed to East and West Africa, as well as Asia. (Horn et al., 2022)

Cowpea (Vigna ungiculata) is a significant legume crop in tropical regions. In many developing countries, the diet primarily consists of processed cereal grains, roots, and fruits, which serve as a source of starch for consumers. Although these foods are consumed in large amounts and contribute a substantial amount of protein, the quality of that protein is often inadequate, especially for vulnerable groups such as children, pregnant women, and lactating mothers. (Osipitan et al., 2021)

The grain is composed of 25% protein and is rich in various vitamins and minerals. The plant is drought-tolerant, thrives in diverse soil types, and contributes to improving soil fertility when its roots are allowed to decompose. (Gonçalves et al., 2016). It is primarily cultivated by small-scale farmers in developing areas, where it is frequently intercropped with other plants due to its ability to thrive in shaded conditions. Additionally, it grows rapidly and establishes ground cover, which helps to prevent soil erosion.(Srinivasan et al., 2021)

In terms of economics, cowpea holds significant value in international trade within the country, facilitating commerce between regions where it is produced and those where it is not. Furthermore, it acts as a source of income for intermediaries involved in its distribution..(Nafiu et al., 2016) In 2017, global production of dried cowpeas exceeded 7.4 million tons, with Africa contributing nearly 7.1 million tons. Nigeria, the leading producer and consumer, represents 48% of Africa's production and 46% of global production. Meanwhile, Africa's exports and imports of cowpeas are minimal.(Srinivasan et al., 2021)

Cowpea is cultivated worldwide on approximately 14.5 million hectares each year, yielding a total annual production of 6.2 million metric tons. Over the past thirty years, global cowpea production has increased at an average rate of 5%.(Kebede & Bekeko, 2020). In Uganda, cowpea yields

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