



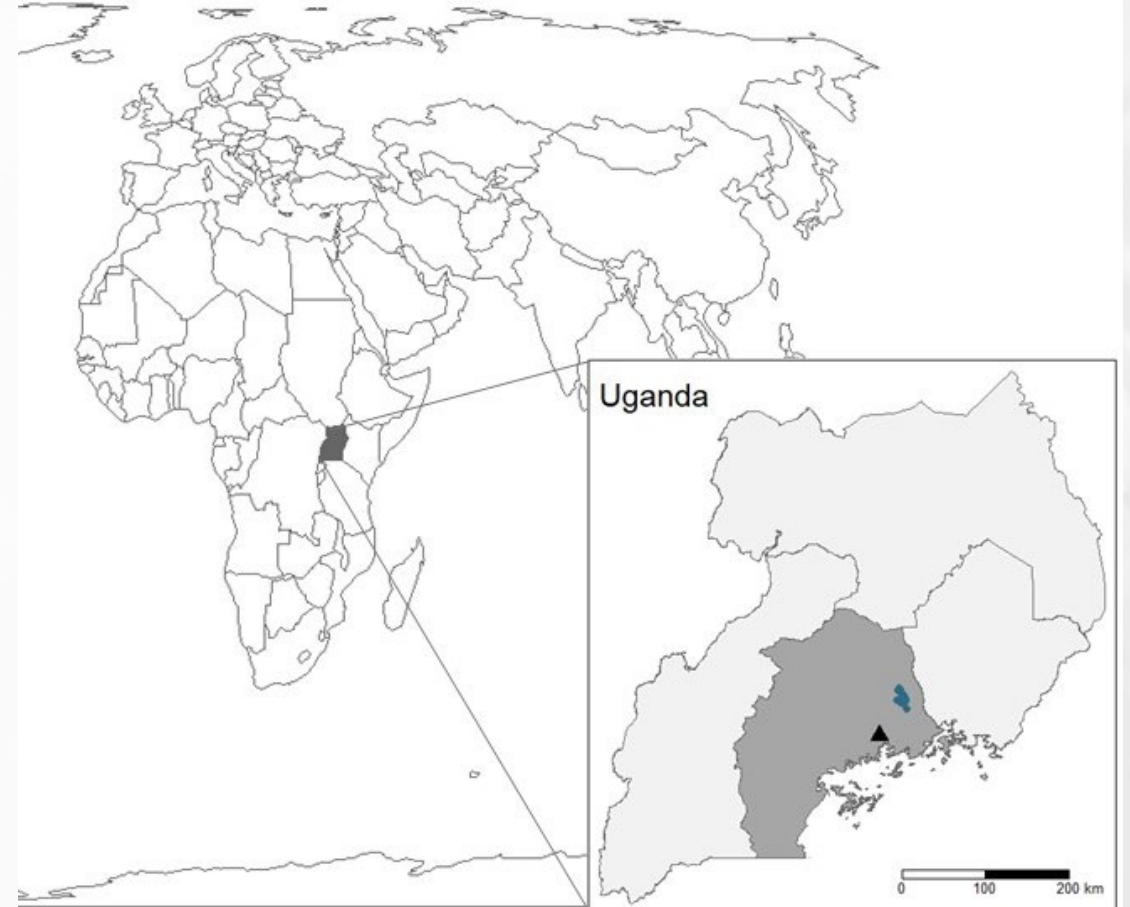
A Gendered Analysis of Small-Scale Cocoa Production in Uganda

Michaela Kuhn - 15.12.2021 - SFIAR Award
M.Sc. International Agribusiness and Rural Development Economics



Empirical Data

- **SusChain research project:** Enhancing supply chain stability, resilience and sustainability through improved sub-supplier management in the chocolate sector.
- **205 cocoa farmers** in Mukono district in **Uganda**.
- **Random sample** of the **future supplier base** of a Swiss export company.



Value Chain Cocoa



Producing Countries

Europe/Switzerland

- Production is primarily carried out in **developing countries** (Voora et al., 2019).
- Generates **revenue for 40 to 50 million people** (Voora et al., 2019).
- **70% of cocoa farmers live below** the World Bank extreme poverty threshold of **1.90 USD** (Voora et al., 2019; World Bank, 2016a).

- Importance lies most notably in the **confectionery industry** (Nair, 2010).
- Switzerland imported about **49 thousand tonnes of cocoa beans in 2020** (Aussenhandelstatistik der Eidg. Zollverwaltung 2021)
- **9.9 kg per capita consumption** of chocolate in Switzerland in 2020 (Statista 2020)

In Uganda, women make up 80% of the employees in the agricultural sector (FAO & UNDP, 2017).

Limited ability to access and control key productive resources (Johnson et al., 2018).

Face disadvantages based on cultural, institutional, and social norms (Johnson et al., 2018).

Experience gender gap in agricultural productivity of 13% (FAO & UNDP, 2017).

Cocoa is considered a male crop (Bamwesigye et al., 2020; Osorio et al., 2019).



Gender equality and the empowerment of women in agriculture are central objectives closely linked to

- improved food security,
- nutrition, and
- education, as well as
- reduced rural poverty (Johnson et al., 2018).

Addressed in SDG 1, 2 and 5 (UN Women, 2016).

Research Questions

Research Question 1:

What are the differences between male and female managed farms, if any, in terms of roles and approaches to cocoa-growing and related activities?

Research Question 2:

Does the fact that a farm is managed by a woman influence cocoa revenue?



Hypotheses

Hypothesis 1:

Female cocoa farmers do not have the same prerequisites as male farmers to participate in the agricultural sector and manage their farms.

Hypothesis 2:

Differences exist in roles and approaches to cocoa-growing and related activities between male and female managed farms.

Hypothesis 3:

Female managed farms achieve lower cocoa revenue than male managed farms.

Methods

Descriptive Statistics

- Socio-demographic and farm characteristics of male and female smallholder cocoa farmers

Disaggregated Statistical Analysis

- Gender roles in decision-making and cocoa production activities on the farm

Multiple OLS Regression Models

- Gendered analysis of farm cocoa revenue

Results

Descriptive Statistics



Hypothesis 1

Female cocoa farmers do not have the same prerequisites as male farmers to participate in the agricultural sector and manage their farms.

Significant difference

Female farmers...

- were **less educated**.
- managed **smaller farms**.
- had **smaller cocoa plots**.
- carried out weed management **less frequently**.
- **owned fewer formal** savings accounts.
- **owned more informal** savings accounts.
- received **less training**.
- **generated about a third** of the men's revenue in fresh cocoa (336 USD and 905 USD, respectively).

No significant difference

Female farmers...

- **participated to equal terms** in farmer groups.
- had the **same number of intermediaries**.
- experienced **no gender-related price discrimination**.
- used the **same workforce** as men.

Results

Role Distribution



Hypothesis 2

Differences exist in roles and approaches to cocoa-growing and related activities between male and female managed farms.

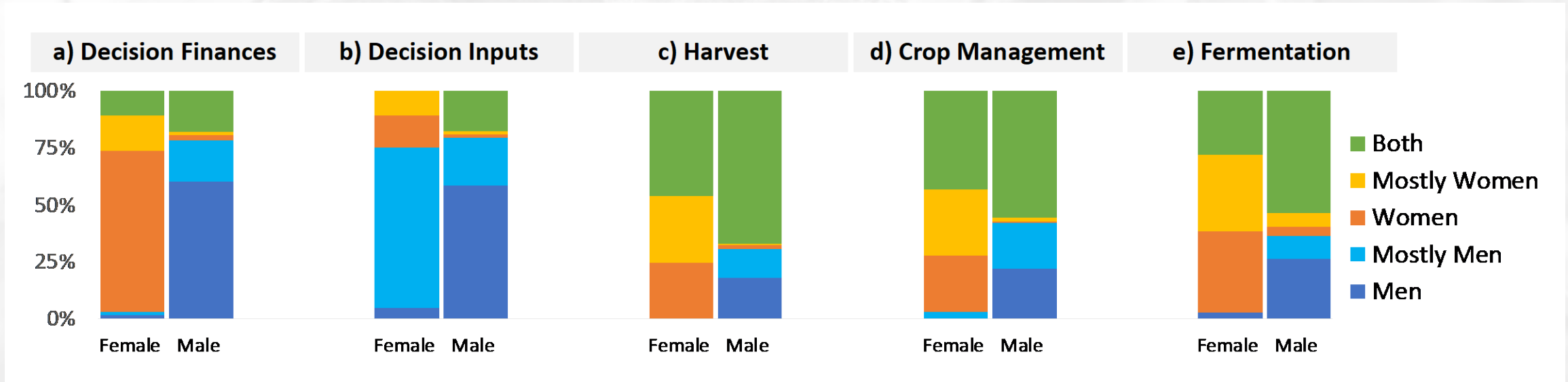


Figure 1: Differences in roles and responsibilities concerning various decisions and activities on farm between male and female managed farms

Results

Regression Models



Hypothesis 3

Female managed farms achieve lower cocoa revenue than male managed farms.

- By adding the explanatory variables that controlled for several mechanisms of female discrimination the **gender gap accounted for -212 USD.**
- A **formal bank account**, the **workforce**, and the **cocoa area** are key determinants that significantly influenced cocoa revenue.



Conclusions

Research Question 1

What are the differences between male and female managed farms, if any, in terms of roles and approaches to cocoa-growing and related activities?

- **Women** are involved in **all processing steps** and **most decisions**.
- Women's contribution to agricultural production **clearly significant with diverse and complex roles**.
- **Input-decisions** are **male-dominated**.
- Several **gender-based differences** in the sample group.
- Different **structure of the agricultural household**.

Research Question 2

Does the fact that a farm is managed by a woman influence cocoa revenue?

- **Cocoa revenue significantly lower** on female managed farms.
- Female farmers in a worse economic situation **due to external mechanisms** in place.
- **Strengthen women's role** in cocoa through
 - access to **official land titles**.
 - access to **formal savings accounts**.
 - access to **productive resources**.
 - improved **education and training opportunities**.



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**“When Africa’s female farmers thrive,
everyone benefits: the women themselves,
the children in whom they invest,
the communities that they feed,
and the economies to which they contribute”**

(Meinzen- Dick, 2019, para. 12).

Thank you for your attention!



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