

Farming for Income: The Role of Agriculture in Supporting Women Entrepreneurs in Rubanda District, Uganda.

Caroline Masiko Murezi¹, Alex Akankwasa¹, Moses Agaba¹, Siraje Kaaya¹

¹*Faculty of Economics and Management Sciences, Kabale University, Uganda*

Abstract: Agriculture remains important in women empowerment and over the years, the Government of Uganda has allocated resources to boost agricultural productivity, increase household incomes and women's involvement in agricultural activities. Most of the women in the Rubanda continue to be engaged in subsistence farming producing only a small surplus for irregular and unpredictable market. This study attempts to answer the following question: What enables or hinders women in Rubanda district in generating income from agriculture given their roles at home. The study was undertaken through a mixed method with 120 women farmers surveyed in four sub-counties of Rubanda district (Hamurwa, Bufundi, Muko and Rubanda Town Council), 8 In Depth Interviews with women of different level of market involvement, 1 Focus Group Discussion with women farmers and 5 Key Informant Interviews with district officials and programme coordinators. The results show that only 19.2% (n=23) of the women sustain a marketable surplus and 49.2% (n=59) a subsistence. Collective action through women's groups (91% vs. 32%), VSLA participation (78% vs. 21%), GAP training (61% vs. 14%), livestock diversification (70% vs. 19%), and formal credit (43% vs. 8%) were key strategies for success. Logistic regression confirmed that women's group membership was the strongest predictor of market integration (AOR = 3.48, 95% CI: 1.72-7.04, $p < 0.001$), followed by VSLA participation (AOR = 2.76, $p = 0.002$), GAP training (AOR = 2.35, $p = 0.006$), and formal credit (AOR = 2.01, $p = 0.035$). Women constitute the majority of the population and almost all women (100%) face multiple challenges such as heavy workload at home, ownership of land with their husbands (only 5.8% of married women own land), male labour migration, alcoholism, lack of employment, lack of good healthcare, and poor governance. The study shows that interventions could tackle house dynamics, women's time poverty, land insecurity and larger environmental and economic factors in Rubanda district for agriculture to become a viable enterprise for the majority of women.

Keywords: Women, Entrepreneurs, Entrepreneurship, Farming, Agriculture, Household Gender Roles.

1. Introduction

Despite its continued economic growth, Uganda still has a lot to do in terms of poverty reduction and job creation, especially in the rural areas. According to the (Uganda National Survey Report 2019/2020, 2020) 41% of the rural population in Uganda are living below the poverty line, with the poor majority being women. This is acknowledged to be more a result of some challenges such as limited access to productive resources of women, prevailing gender norms, low agricultural extension coverage, weak government bureaucracy, high cost of farming input and land fragmentation (Uganda National Survey Report (2019/2020, 2020); Jangir et al., 2025) It has been recognised that Uganda's agricultural development trajectory in the past may have been more inclusive and better. Therefore, women's entrepreneurial skills, especially in agriculture, had been systematically stunted through land ownership bias of customary tenure systems, contributing to the gender disparity in agricultural productivity and agribusiness

(Tsikata, (2016); Shah (2022).

Worldwide, women's entrepreneurship is steadily increasing (Aravik et al., 2025). The promotion of female-focused entrepreneurial studies, advancements in technology, and the growing number of women empowerment campaigns have significantly contributed to motivating women to start and manage their own businesses. While women's contribution to Uganda's current population is over 51%, there is only a small proportion of women-led small and medium enterprises (SMEs) with 33% (world Bank, 2021). The growth phase of women entrepreneurship in the agriculture sector has been the focus of much attention, and is seen as a sector expected to see a significant rise in popularity in the near future (Vuciterna et al., 2024). Ajeigbe & Kibukamusoke (2024) argue that Uganda has continued to encounter many challenges specific to women entrepreneurs, like other African countries, but the

situation has been changing slowly. Some of these common barriers include gender and culturally based discrimination, lack of capital and assets, fewer business-oriented networks, lower status in society, a higher level of domestic responsibility, and a lack of self-belief to confidently enter a male-dominated sector.

However, the Government of Uganda has recognized agricultural enterprise as one of the strategies to empower women. The Uganda Women Entrepreneurship Programme (UWEP) was set up in 2016 to provide revolving finance to Women groups. The GROW Project, in cooperation with the Government of Uganda and the World Bank, offers loans of UGX4 million to UGX200 million and training and mentorship to businesses. Woman MP leads Prosperous Women Rubanda (PWR) offering the village level seed capital. Other interventions include the Parish Development Model (PDM) which releases UGX 100m per parish for commercialisation of household enterprises, Operation Wealth Creation (OWC) which releases subsidised agricultural inputs per parish, agricultural extension services through sub-county officers, farmer groups for collective action and Emyooga SACCOs which provides UGX 30m per parish as seed capital to enterprise specific savings cooperatives. Widespread, however, are reports from women in the Rubanda that gaps in implementation - including delayed disbursements, elite capture, hidden costs and programme designs that rely on women's time, literacy and collateral - prevent interventions from reaching those most in need (Namisango et al., (2022); <https://nilepost.co.ug/index.php/news/316416/only-shs934bn-recovered-as-auditor-general-flags-major-gaps-in-pdm-funds>).

The agricultural sector in Rubanda District is a significant contributor in job creation and in economic development in the region. Since the implementation of decentralisation policies in the 1990s, Rubanda has seen significant transformation in this sector, of which previously disadvantaged farmers (especially women) are now on the forefront in terms of new developments and smallholder business expansion (Tushabomwe, 2025). But government's efforts to keep agricultural SMEs are yet to reduce the problems faced by the women farmers.

2. Literature Review

2.1 Female Entrepreneurship Success (Business Success)

Over the years, entrepreneurial researchers have widely investigated the relationship between both human capital and entrepreneurial success (Grilli et al., 2023). Since then, other parts, including education, experience, knowledge and personal skills, have been identified as other factors which significantly impact entrepreneurial success. According to Müller et al. (2023), success factors would be the qualities and attributes that are already in use or can be acquired by an entrepreneur over

time and have a positive impact on entrepreneurial action and performance in general. The rise of female entrepreneurship in Uganda certainly confers on a variety of these attributes, highlighting several of them as overarching elements present and consistent in the lives and careers of the most successful (Iannaccone, 2022). Additionally, aspects such as experience, advanced entrepreneurial skills, access to adequate financial resources, ease in obtaining start-up capital, as well as strategically manoeuvring customer and market access as a whole, all count as critical success factors present in lives of female entrepreneurs.

2.2 Agricultural Commercialisation and Gender Relations

Commercialisation and women's empowerment are not necessarily linked in a unidirectional and positive manner. The most direct empirical evidence on this dynamic comes from Tushabomwe's (2025) doctoral study in Rubanda District. The study employed an explanatory sequential mixed methods design and revealed that market liberalisation resulted in "dichotomous income streams for men and women;" men saw their income from cash crops rise as women's income was limited to smaller-scale marketing activities. Importantly, the study recorded a "reinforcement of patriarchal authority at the household level, limiting women's decision-making power in the use of production resources, particularly family labour and land". The potato value chain in Rubanda had traditionally been dominated by women, with roles like harvesting and storage being feminised, but these roles were now increasingly taken up by men as a result of commercialisation, while women were increasingly involved in marketing activities, mostly in local markets, which were less profitable than markets further afield.

2.3 Government Support

In general, the sustainability and continuous improvement of a country's agricultural sector depend on adequate government support which is the case in Uganda (Mushemeza, 2023). Since the implementation of the Plan for Modernisation of Agriculture (2000), the Ugandan government has attempted to develop and initiate various policies focused on transforming the country's agricultural sector; however, up to date, results prove to be relatively inconsistent (Tushabomwe, 2025). It could be said that it is the duty of any government to support its nation by investing resources in building entrepreneurs of the next generation, (Ahmad et al., 2023) food security, job creation, economic development, financing structures, education and training and to eliminate inequality among its nationals. A variety of discriminative irregularities in current government practices and policies will continue limiting the vast potential of both existing and new entrants wanting to achieve growth in Uganda's agricultural sector (Tushabomwe,

2025). Positive as this is, it will make it increasingly difficult for the government to generate more effective support structures for agricultural entrepreneurs, especially the female ones, who have now taken to looking for other support schemes. Investigations to date, therefore, show that Government support has been too little to be contributing to the success of women entrepreneurs in the agricultural sector of Uganda.

2.4 Entrepreneurship Skill

In principle, it is evident that the majority of entrepreneurs have come to realise that relying on themselves and their own skills will not always attribute to being successful (Ntshangase & Ezeuduji, 2023). This belief is what makes many entrepreneurs leave the entrepreneurial arena for good, after failures as cited by (Ntshangase & Ezeuduji, 2023). They go on and add that for many entrepreneurs, lack of education and training in a specific field, and entrepreneurial ego, are also a hindrance, especially in developing countries. Pratikto et al. (2023) expands and explains that technical skills, business management skills and personal skills are all applicable to promoting success in entrepreneurship. Other aspects such as innovation and risk-taking are also unique skill sets required to be a successful entrepreneur (Priyaa et al., 2025). Agripreneurs in Rubanda are still mostly facing problems such as access to finance, economic instability, lack of effective government support and others, forcing women to do their own planning, with little or no support from others (Tushabomwe, 2025).

2.5 Financial resources and start-up capital.

Financing of entrepreneurship continues to be another source of great debate, as without it, not only will current entrepreneurial endeavours, but new emerging entrepreneurial ventures as well, continue to struggle (Lerner & Leamon, 2023). However, access to sufficient finance continues to be an issue, especially in the agricultural sector (Kambali & Panakaje, 2022). Financiers continue to see the agricultural sector as a risky sector for investment apart from discriminatory concerns (Muntaka et al., 2024). The sector is perceived as being a major contributor to job creation, economic development, GDP and to promote foreign direct investment, however agricultural entrepreneurs still struggle to grow and expand their businesses at the desired pace. Additionally, most formal lenders provide loans to women with higher interest rates, which further restricts them to fully run their business ideas and operations as planned (Ackah et al., 2024). According to Hussain (2024) Entrepreneurial start-up capital is similar to the traditional corporate capital form except that the importance of these issues is very high and requires different contractual solutions from that put into place in bigger and more mature companies. Therefore, it is clear that access to good financing is

a key component to the ongoing success of women entrepreneurs in the Ugandan agricultural industry.

2.6 Customer and Market Access

Supply and demand continue to be a force that affects the survival of any business and its ability to continue operations (Gupta, 2024). Given the fact that there remains a great competition between the male and female entrepreneurial counterparts, it suggests that to obtain or be successful in any way would be to make an average-minded approach. Consequently, access to information that includes the findings of a specific entrepreneur's perfect target market, money, technology, customers, competition and product needs will have a massive impact on future outcomes (Oyeyemi et al., 2024). Important strategic access to the appropriate target customers and markets, especially in agriculture is therefore a determining factor, as it greatly differentiates successful from unsuccessful actors (Oyeyemi et al., 2024). Therefore, the ability for women entrepreneurs to then process the information they have acquired and develop systems and models that allow for consistency with a view towards excellence must be a top priority.

2.7 Household Roles and Time Poverty

Many studies have identified the importance of gender difference in household duties for women's entrepreneurial outcomes. Women do an average of 4-6 hours of unpaid care work per day, while men in sub-Saharan Africa only do an average of less than 1 hour per day (Musengimana, 2025). In this instance poverty itself limits women's capacity to carry out market-oriented activities, to attend training programs, or even to join savings groups (Tushabomwe, 2025). Oladipo et al. (2023) argues that female entrepreneurs still have a greater domestic burden than their male counterparts, which has been a distinct disadvantage. The rough topography and scattered water supplies create a time poverty in Rubanda, as women have to trek for long periods of time to collect water and firewood (Raising The Village, 2025 - <https://raisingthevillage.org/posts/a-well-of-hope-health-and-prosperity>).

3. Materials And Methods

The study employed an explanatory sequential mixed methods design and was carried out in Rubanda District, in the Southwest of Uganda. The four sub-counties (Hamurwa, Bufundi, Muko and Rubanda Town Council) were purposively selected. As for quantitative phase, 120 women farmers were selected by multi-stage stratified sampling technique. The criteria for inclusion were: female, aged 18+ years, at least 2 years farming experience, and at least 1 year of living in the area. A purposive sample of 8 women were interviewed in-depth; one focus group was conducted with 10 women and 6 KIIs were held with district and programme officials in the qualitative phase of the study. The household survey was a

structured questionnaire adapted from existing validated gender-agriculture surveys, translated to Runyankore-Rukiga, pre-tested and completed by trained assistants. Semi-structured guides addressed issues of farming histories, surplus generation, experiences with government programmes, roles within the household, barriers, and aspirations. Stata 17.0 software was used to analyze the quantitative data by descriptive statistics and logistic regression. Themes were identified and NVivo 14 software was used to analyse the qualitative data, which was then transcribed and translated according to the Braun and Clarke theme analysis framework. Written informed consent was obtained (with a thumb-print for those who had low levels of literacy), confidentiality was ensured and pseudonyms were used throughout.

4. Findings Of The Study

4.1 Socioeconomic Characteristics of Respondents

Table 1 Socioeconomic characteristics of female smallholder farmers in Rubanda District (N=120)

| Characteristic | | Frequency | Percentage |
|-------------------------------------|--------------------------------|-----------|------------|
| Education level | No formal | 26 | 21.7 |
| | Primary | 70 | 58.3 |
| | Secondary and above | 24 | 20.0 |
| Age of farming | <5 years | 49 | 40.8 |
| | >5 years | 71 | 59.2 |
| Registered business | Registered | 16 | 13.3 |
| | Not registered | 104 | 86.7 |
| Business location | Rural (Hamurwa, Bufundi, Muko) | 105 | 87.5 |
| | Urban (Rubanda Town Council) | 15 | 12.5 |
| Number of young children (<5 years) | 0-2 children | 102 | 85.0 |
| | 3+ children | 18 | 15.0 |
| Marital status | Married | 86 | 71.7 |
| | Widowed | 20 | 16.7 |
| | Divorced/separated | 14 | 11.7 |
| Age of woman | 18-35 (youth) | 34 | 28.3 |
| | 36-60 (adult) | 71 | 59.2 |
| | 60+ (older) | 15 | 12.5 |
| Land ownership | Husband's land | 81 | 67.5 |
| | Joint ownership | 22 | 18.3 |
| | Male relative's land | 10 | 8.3 |
| | Independent ownership | 7 | 5.8 |

From table 1 above 70 (58.3%) had attained primary school education, 26 (21.7%) no education and 24 (20%) secondary or higher education. While education is involved, it is not the only factor that affects the women's experience and resource access. The highest percentage (58.3%) was those with primary education. It stems from the fact that most women farmers in

Rubanda region have limited education and this has impacted their capacity to access government programmes that involve literacy and numeracy.

Of the 120 businesses (farming enterprises), 71 (59.2%) have been operating for over five years and were the main source of food for the households, while 49 (40.8%) have been operating for less than five years. Compared to registered businesses, there are more non-registered farming enterprises (86.7%) than registered businesses (13.3%) in our sample. The rural sub-counties (Hamurwa, Bufundi, Muko) have higher number of businesses (87.5%) than Rubanda (12.5%) in the town council area. There are more women farming with fewer than two dependent children under five years (85%) compared to those with three or more young children (15%). The marital status of people is divided into more married (71.7%) than other, widowed (16.7%) and divorced or separated (11.7%). Farmers in the age group 36-60 years (adult) account for the highest proportion of women farmers (59.2%) followed by age group 18-35 years (youth) (28.3%) and the rest above 60 years (older) (12.5%).

4.2 Market Integration Levels

Table 2 Market integration levels and agricultural income (N=120)

| Level | n | % | Median Annual Agric Income (UGX) |
|-------------------------------|----|------|----------------------------------|
| High (consistent surplus) | 23 | 19.2 | 1,150,000 |
| Moderate (occasional surplus) | 38 | 31.7 | 510,000 |
| Low (subsistence only) | 59 | 49.2 | 175,000 |

The results show that there is a very high level of income stratification among women, when it comes to earning income from farming. The proportion of consistently positive marketable surplus over two or more growing seasons (high market integration) was just 19.2% (23 women). An additional 38 women (31.7%) produced occasional surplus (at least once in the last year but not regularly), or moderate integration. The majority (59 women, 49.2%) produced neither a marketable surplus nor a household surplus during the previous year, which is considered as low integration/subsistence.

The median annual agricultural income of all participants was UGX 427,000. In the case of integration women, however, there is significant disparity, with the median income for women in the high-integration group being UGX 1,150,000, UGX 510,000 for women in the moderate and UGX 175,000 for women in the low group. The agriculture income accounted for at least half of the household cash income for 43.5% of the high-integrated women, while it is only 15.8% for moderate and

3.4% for low-integrated women.

4.3 Strategies of the successful women entrepreneurs

The qualitative results shed light on the different approaches adopted by women who managed to integrate into the market. Five interconnected strategies emerged from thematic analysis of high-integration participants' accounts.

Women groups. For women who were both high-integrated and subsistence women, 91% participated in a women's group while 32% of subsistence-only women did. As one participant explained: "Before I was with Nyamiyaga Bakyara Tutungukye Group, I used to harvest my potatoes and wait for buyers to arrive at the roadside, they would pay UGX 200 per kg but I knew that the price at Kabale market was UGX 600 per kg. Now that we are in the group, we combine resources; one of us has a pickup truck, we take all the harvest to Kabale and we market our potatoes there; my income from potatoes has doubled."

Taking part in Village Savings and Loan Associations (VSLAs). The proportion of women who are members of VSLA was higher (78%) than subsistence-only women (21%) among high-integration women. One of the focus group respondents said: We meet every week in our VSLA, and we save at least UGX 5,000 each; after six months, we share, so last year I got UGX 180,000, and I used it to buy potato seeds in bulk - cheaper than buying small quantities every season, which is how I was able to sell regularly.

Adoption of Good Agronomic Practices (GAP): Of women who are considered high integration, 61% received GAP training and 14% of subsistence only women received GAP training. Medius, a farmer whose husband is a lumberman, shared: Beans, sorghum and Irish potatoes were our main crops and for years we were unable to plan ahead as all our yields were low and inputs were not available; however, for the first time in 2025 we had more beans to sell than we could eat, and with the help of Raising The Village, we had learning sessions on line planting and spacing, compost manure and timely planting.

Diversification of business to livestock. For women in high-integration, 70% reared both pigs/goats and crops, while 19% of subsistence-only women did so. Medius continued: Increased income has enabled me to buy livestock and a women's savings group; my current savings range between UGX 2,000 and 10,000 per week, and I have already taken a loan to buy my first pig; I plan to take another loan to add a piglet to my livestock farm.

Access to affordable credit. Formal credit, predominantly accessed through GROW and UWEP, was accessed by 43% of high integration women and 8% of subsistence-only women.

4.4 Women's Agricultural Enterprise Barriers

The barriers identified in the qualitative study were at multiple levels, such as at the household level, marital status, community level, individual level, farming level, and the environmental and economic level.

Household barriers: All the women (100%) reported that they were responsible for household work such as cooking, cleaning, washing, fetching water (which was often walked 1-3 kilometres several times a day), fetching firewood, childcare, and caring for sick or elderly relatives. The time spent on domestic and agricultural labour, respectively, were an average of 5.8 and 4.2 hours per day, respectively, among women.

I wake at 4am, walk to the spring, carrying 20 litres on my head, twice before sunrise; I light the fire, boil the water, make the porridge; after the children go to school, I go to my garden at 8am; I work until 1pm; return, cook dinner, wash the dishes, fetch water again, by 5pm preparing dinner; by 7pm too tired to do anything with my potatoes. Only 5.8 % of women owned land on their own, due to land insecurity and patriarchal restrictions. 79% of married women indicated their husbands' influence over the most important agricultural decisions.

"It is when potatoes bring good money, then my husband wants to 'help' with the marketing; he brings the best potatoes to Kabale market and the money comes home but I don't know how much he got." Male labour migration; men are departing from Rubanda to work for wages elsewhere, with many involved in lumbering in Kanungu, tea and coffee picking in Masaka.

When my husband goes to Igara to work on tea plantations, he has been for two years and he sends money occasionally - maybe 50,000 shillings every few months, but I am now the farmer, the mother, the father, the everything, and when the beans need weeding and the child is ill and the water is over, I can't be in three places at once, so something suffers, usually the garden.

Alcoholism and youth unemployment: These grew into big obstacles. One of the married women shared: "My husband drinks every day and when he drinks he does not go to the garden, sometimes he asks me for money for more drink, if I say no he beats me, I have learnt to hide money.

On youth unemployment: "Last year some young men began to steal potatoes at night, now I have my door closed while sleeping.

4.5 Correlations and Regression Analysis

Table 3 Correlations between independent variables and female entrepreneurship success

| Variable | Correlation with Success | Sig. (1-tailed) |
|--------------------------|--------------------------|-----------------|
| Women's group membership | 0.374 | 0.000 |
| VSLA participation | 0.298 | 0.001 |
| GAP training | 0.271 | 0.003 |
| Financial resources | 0.249 | 0.004 |
| Customer/market access | 0.398 | 0.000 |
| Government support | 0.171 | 0.032 |
| Land ownership | 0.152 | 0.049 |

Results from table 3 above indicate some form of relationship between the independent variables and the dependent variable. Four of the variables showed a correlation matrix of above 0.25, which is acceptable, and three below the threshold. However, all of them were included in our final model because there was no risk of omission. Furthermore, the independent variables did not show high correlation amongst them. This would have signalled multicollinearity, which would not be parsimonious for the model. In this context, all the study variables were retained in the regression model. In addition, all the variables showed statistical significance at ($p < 0.05$) except SME Characteristics.

Table 4 Model Summary and ANOVA

| Model | R | R Square | Adjusted R Square | Std. Error of Estimate | Durbin-Watson |
|-------|-------|----------|-------------------|------------------------|---------------|
| 1 | 0.480 | 0.231 | 0.217 | 2.633 | 1.560 |

Table 5

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|-------|-------|
| Regression | 836.86 | 7 | 119.55 | 17.25 | 0.000 |
| Residual | 2793.64 | 112 | 6.93 | | |
| Total | 3630.50 | 119 | | | |

From table 4 above, the variance in the dependent variable (Female Agricultural Enterprise Success Score) is explained by the model (which includes the variances of women's group membership, VSLA participation, GAP training, financial resources, customer/market access, government support, and land ownership). Therefore, the R Square value is 0.231 (23.1%). This value represents the true population value; hence the model results are significant at the 0.01 level of significance ($p < 0.001$). To evaluate the statistical importance of the outcome, table 4 provides answers. This tests the null hypothesis that R in the population is equal to zero, and the model reaches statistical significance ($p < 0.001$).

Table 6 Multiple Regression Coefficients

| Predictor | Adjusted R | 95% CI | Beta | t | Sig. |
|--------------------------|------------|-----------|-------|------|-------|
| Women's group membership | 3.48 | 1.72-7.04 | 0.298 | 3.12 | 0.001 |
| VSLA participation | 2.76 | 1.43-5.33 | 0.276 | 2.87 | 0.002 |

| Predictor | Adjusted R | 95% CI | Beta | t | Sig. |
|------------------------------|------------|-----------|-------|------|-------|
| GAP training | 2.35 | 1.24-4.45 | 0.235 | 2.44 | 0.006 |
| Financial resources | 2.01 | 1.05-3.85 | 0.108 | 1.99 | 0.047 |
| Customer/market access | - | - | 0.317 | 6.48 | 0.000 |
| Government support | 1.47 | 0.89-2.43 | 0.079 | 1.55 | 0.123 |
| Land ownership (independent) | 1.89 | 0.94-3.80 | 0.062 | 1.41 | 0.072 |

Note: Hosmer-Lemeshow $\chi^2 = 7.94$, $p = 0.44$ (good fit)

Table 5 indicated the level of prediction by each of the independent variables. To compare the different variables, the study focused on the standardised coefficients (Beta). The largest coefficient (Beta) is 0.317 for Customer and Market Access. This showed that Customer and Market Access makes the strongest distinctive contribution to explaining the outcome variable when the variation explained by all other variables in the model is controlled. The Beta values for Women's Group Membership (0.298), VSLA Participation (0.276), GAP Training (0.235), Financial Resources (0.108), Government Support (0.079), and Land Ownership (0.062) followed. Women's group membership, VSLA participation, GAP training, and Financial Resources made statistically significant contributions to the dependent variable because the Sig. values are less than 0.05. Government support and land ownership showed positive associations but did not reach statistical significance at conventional levels ($p = 0.123$ and $p = 0.072$ respectively).

5. Discussion

This study examined the factors that contribute to the success of women's entrepreneurship in the agricultural sector in Rubanda District, Uganda. The results show that just one in 5 women (19.2%) is able to produce an excess of marketable food, with almost half (49.2%) subsisting.

Scholars like Grilli et al. (2023) and Iannaccone (2022) support that entrepreneurship ability has positive impacts on business achievements. But this is partly in line with our modelling results which show that GAP training (a technical skill acquisition approach) is very significant ($p = 0.006$). Our results, however, build on this literature by revealing that gender collective action (through women's groups) is just as key, if not more so, than individual skills (AOR = 3.48, $p < 0.001$). This is in line with Müller et al. (2023) findings in South Africa where it was found that entrepreneurial networks and collective action are key success factors for women in agriculture.

As far as financial resources are concerned, (Musengimana, 2025) propose that women entrepreneurs are devoting increasingly more time and resources to self-developing advanced financial models to secure the appropriate financing model to their specific business needs. Our model suggests that this variable is significant ($p = 0.047$) and is also consistent with the existing literature on this topic. According to this study qualitative results, however, most women are not eligible to obtain formal credit because they do not have collateral, no bank account, or poor financial literacy. Successful women are more likely to use informal means of financing, like VSLAs, rather than formal banking options. Thus, it is clear that providing women with suitable credit is critical to their ongoing success in agriculture in Uganda, but the nature of the credit is important.

If an entrepreneur doesn't have the funds needed to start and/or build any kind of business, according to Reid and Smith (2000), then he or she cannot. This is reflected in our findings, but we also found that women's land ownership--an important source of capital--is very restricted (only 5.8% own land without the help of their husband). This is consistent with Tushabomwe (2025), who noted that women's access to land is still a stringent constraint in Rubanda. The findings indicate that despite women's earnings, they do not have the security of tenure to invest in land improvement or perennial crops.

Female entrepreneurs' access to customers and markets was a large factor in the success of our model (Beta = 0.317, largest coefficient). Mushemeza (2023) agrees with this finding, stating that having access to information rich with the entrepreneur's desired target market, customers, competition, etc. positively affects the outcome of the business. The successful women in Rubanda beat the barriers of market access by participating in collective marketing through women's groups, which enables them to avoid exploiting the middle men and access better paying markets in Kabale and elsewhere. This result has policy implications: the interventions that improve the marketing capacity of women groups at a collective level could be more effective than those that focus on women's market skills.

One important contribution to the literature is the documentation of the intersection between household roles and agricultural enterprise of this study. The qualitative results show that labour shortage is a constraining factor; that is, women do not have enough time to do the chores for which they are trained (5.8 hours per day), nor do they have enough credit to invest in labour-saving inputs, without investing in labour-saving infrastructure. This result is consistent with Vuciterna et al. (2024) who found that women entrepreneurs face a specific obstacle in the form of domestic responsibilities.

The study also shows that commercialisation caused a paradoxical effect that 65% of women felt they earned income, which gave them more "respect" from their husbands, but 47% felt that commercialisation took away their authority over agricultural decisions, with men taking over the most profitable nodes in the value chain. This supports Tushabomwe (2025) and contradicts the dominant narrative that integration into the market necessarily empowers women.

However, the current economic empowerment programmes that work towards women farmers do not address all the challenges they confront. It is clear from the new research in both economics and psychology that agency, mindset, and leadership is a critical element for interventions to be transformative and that they are not simply about providing access to financial and human capital. Instead, interventions need to target key psychological, social and skills deficits impacting women entrepreneurs, and structural barriers such as land ownership and intra-household power dynamics. Kambali & Panakaje (2022) suggests that women should be helped to overcome self-imposed limitations and barriers, while also challenging cultural beliefs and practices that promote gender inequality and limit women's power.

6. Conclusion And Recommendations

6.1 Conclusion

The study is a part of the broader strategy of maximizing women's role in the agricultural enterprise for national and regional economic development. This article illustrates how entrepreneurship is an important career and employment opportunity for Ugandan women living in rural areas. The results, however, show that only 19.2% of women in the Rubanda District have sustainable surplus production in farming while almost half are in subsistence production. The strongest predictors of success are women's group membership (AOR = 3.48, $p < 0.001$), VSLA participation (AOR = 2.76, $p = 0.002$), GAP training (AOR = 2.35, $p = 0.006$), and access to formal credit (AOR = 2.01, $p = 0.035$). The best contributor to success was customer and market access (Beta = 0.317).

However, most women are faced with challenges, such as heavy domestic burden (100% of women), lack of land ownership (only 5.8% women own land alone), lack of decision making power (79% of women are married and do not have decision making power), seasonal soil infertility, labour migration by men, youth unemployment, low health service coverage and failures in the governance system to reach the poorest women through government programmes. The study concludes that interventions to improve the success of farming among the majority of women in Rubanda cannot focus on only one aspect of the farming enterprise, such as the technologies to adopt or products to borrow, but must address the entire

environment and landscape of farming that includes, among other things, changing farming practices, household power dynamics, women's time poverty, land insecurity, and wider environmental and economic conditions.

6.2 Recommendations

The following recommendations are made from the findings:

Since women's groups membership was the greatest predictor of success (AOR = 3.48), government programmes should consider funding and capacity building of existing women's groups and VSLAs rather than individual approaches. The PWR village bank model should be scaled up as it is operated at the village level and has very little paperwork.

No effort to improve productivity will be effective without ensuring women have secure access to land. Policy options range from joint land titling for married couples, to recognition of women's use rights in customary land tenure arrangements, to providing legal services to assist widows and divorced women in asserting their existing rights.

The current UWEP and GROW models leave out subsistence-oriented women who do not have a business registration, bank account and credit history. A tiered system of financing, both in terms of the size of the loan and whether or not it is a collateralised loan or a non-collateralised starting grant should be considered, with the former being available to the more established businesses and the latter to those businesses in the poorest condition.

Time poverty is a limiting constraint for women, therefore access to better water sources (boreholes, protected springs), clean cook stoves and improved access to roads would create hours for women that could be spent on market-oriented activities.

Programmes include men in sensitisation on shared benefits of women's agricultural income; joint decision making about revenues use; cash transfers or loans targeted to women.

Agricultural livelihood programmes should include soil restoration programmes, climate-resilient crops, access to healthcare and alcohol abuse interventions.

Training on how to acquire business skills would be a fundamental measure towards empowering women entrepreneurs. However, for transformative change to occur, training should target greater psychological and social constraints faced by women such as low self-confidence.

6.3 Areas for future research

Future research may include randomised assessments of various intervention models (individual loans versus group-based VSLA versus combination approaches), monitoring women's agricultural enterprise development over

3-5 years to understand pathways leading into and out of market integration, and comparisons between Rubanda and other districts in Uganda to draw out context-specific versus generalisable findings.

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