

Beyond empowerment: Drivers of the performance of income-generating activities among women beneficiaries of the Secondary Education for Girls Advancement (SEGA) Program in Morogoro Municipality, Tanzania

Jenifa Sagaja¹

Angela Jesse²

Farida Salehe³

^{1*}jenifasagaja@gmail.com

^{1*}<https://orcid.org/0009-0005-7610-5874>

²<https://orcid.org/0000-0002-7488-6305>

³<https://orcid.org/0009-0005-4426-677X>

^{1,2,3}Sokoine University of Agriculture, Tanzania

Recommended Referenced: Sagaja, J., Jesse, A., & Salehe, F. (2026). Beyond empowerment: Drivers of the performance of income-generating activities among women beneficiaries of the Secondary Education for Girls Advancement (SEGA) Program in Morogoro Municipality, Tanzania. *African Quarterly Social Science Review*, 3(4), 427–440.

<https://doi.org/10.51867/AQSSR.3.4.34>

ABSTRACT

The objective of this study is to assess the effectiveness of strategies implemented by SEGA towards the performance of income-generating activities among SEGA women beneficiaries. Based on the SEGA determinant factors, the researchers developed questions to guide the study and measure the factors that influence the performance of income-generating activities. In Tanzania, women play a vital role in income-generating activities (IGAs), although their economic advancement continues to be constrained by limited financial resources, market barriers, socio-cultural norms, and institutional challenges. This study examined factors affecting the performance of women's income-generating activities among beneficiaries of the Secondary Education for Girls Advancement (SEGA) programme in Morogoro Municipality, Tanzania. This study is guided by two complementary theoretical perspectives: Kabeer's Women's Empowerment Framework and the Resource-Based View (RBV) of the firm. A mixed-method cross-sectional design was employed in Kihonda Ward. Primary data were collected using questionnaires, key informant interviews, and direct observation. Quantitative data were collected from 113 women beneficiaries and analyzed using descriptive statistics and Multiple Linear Regression (MLR) to determine factors associated with IGA performance. Qualitative data from key informant interviews were analyzed thematically to explore beneficiaries' experiences, institutional support, and socio-economic challenges. The integration of quantitative and qualitative findings enabled triangulation and a comprehensive assessment of women's economic empowerment. The findings indicate that SEGA beneficiaries were mainly engaged in small-scale enterprises, including retail trading, food vending, tailoring, poultry keeping, and service activities. MLR results showed that education level, age, SEGA training, access to finance, institutional support, and digital technology were significant positive predictors of IGA performance. SEGA training ($B = 112,540.68$, $p = 0.001$), institutional support ($B = 105,624.91$, $p < 0.001$), and access to finance ($B = 87,315.42$, $p = 0.002$) were particularly important. Market access showed a significant negative association ($B = -74,826.35$, $p = 0.015$), suggesting contextual market-related constraints. SEGA's integrated approach contributes to women's economic participation and IGA performance. Strengthening financial access, training, institutional support, digital skills, and market linkages is recommended for sustainable economic empowerment. Overall, the SEGA beneficiaries have an average level of income. The findings of this study may help government and responsible institutions to develop strategies to ensure women are economically empowered and integrate digital technology in economic activities.

Keywords: Financial Inclusion; Income-Generating Activities; Market Access; Multiple Linear Regression; Mixed Methods; Morogoro; SEGA; Tanzania; Women's Economic Empowerment

I. INTRODUCTION

Women's participation in income-generating activities (IGAs) is an important pathway to poverty reduction, improved household welfare, and women's economic empowerment. Through these activities, women can generate income, strengthen their economic independence, and contribute to household decision-making. In Tanzania, promoting women's economic participation is therefore important for inclusive economic growth and sustainable development (World Bank, 2022; International Labour Organization [ILO], 2024). However, participation in an IGA does not automatically translate into improved business performance or sustainable income. Women entrepreneurs often face

constraints related to access to finance, entrepreneurial skills, markets, productive assets and technology, as well as household responsibilities and socio-cultural norms that may limit their business opportunities (Bardasi *et al.*, 2011; Kamberidou, 2020).

Financial access and entrepreneurial skills are important for establishing, managing, and expanding IGAs. Limited access to affordable credit and working capital can constrain women's ability to purchase inputs, acquire equipment, and respond to market opportunities. In Tanzania, Namatovu *et al.* (2022) found that perceptions of loan procedures, allocation, repayment requirements, and social norms can discourage women entrepreneurs from seeking formal credit. Similarly, Isaga (2019) identified financial constraints, gender-related challenges, and socio-cultural commitments among the difficulties experienced by women entrepreneurs. In addition, business management skills, market access, productive assets, and appropriate technology influence women's ability to use available resources effectively and maintain competitive enterprises. These factors operate alongside household responsibilities and institutional conditions, suggesting that the performance of women's IGAs depends on the interaction of individual, business, household, and external factors rather than on financial support alone (ILO, 2024; Nziku & Henry, 2021).

In response to these challenges, governments and development partners have introduced initiatives to promote women's entrepreneurship through financial services, business training, and other forms of institutional support. One such initiative is the SEGA Graduates Business Fund, implemented by SEGA in collaboration with SAWA Wanawake Tanzania from 2022. The programme supports SEGA and Modern Girl graduates through entrepreneurship training and interest-free loans to establish or expand small businesses. It operates in Morogoro Municipal Council and Morogoro and Mvomero District Councils, with the stated aim of promoting business profitability and self-sustainability. Nevertheless, access to training and financial support does not necessarily guarantee positive business outcomes. Beneficiaries may experience different levels of IGA performance depending on their business skills, market opportunities, access to productive resources, household obligations, socio-cultural circumstances, and the institutional support available to them.

Although previous studies have examined women's entrepreneurship, access to finance, socio-cultural challenges, and gender responsiveness in Tanzania (Isaga, 2019; Namatovu *et al.*, 2022; Nziku & Henry, 2021), limited evidence is available on how these factors jointly influence the performance of IGAs among beneficiaries of the SEGA Empowerment Programme in Morogoro Municipality. Findings from studies involving other groups of women entrepreneurs or different interventions may not fully explain the experiences of SEGA beneficiaries because programme arrangements and local business conditions can differ. This creates a need for context-specific evidence on the factors that enable or constrain beneficiaries from translating programme support into improved and sustainable business performance.

Therefore, this study examines the factors influencing the performance of income-generating activities among women beneficiaries of the SEGA Empowerment Programme in Morogoro Municipality, Tanzania. Specifically, it focuses on financial access, entrepreneurial and business skills, market access, productive assets and technology, household responsibilities, socio-cultural factors, and institutional support. By examining these factors within the programme's local context, the study is expected to provide evidence that can inform programme implementation and the design of more responsive interventions to strengthen women's economic empowerment and the sustainability of their income-generating activities.

1.1 Research Objective

- i. To determine factors affecting the performance of income-generating activities among women beneficiaries of the SEGA Empowerment Program in Morogoro Municipality.
- ii. To examine the challenges that affect the performance of women's income-generating activities among women beneficiaries of the SEGA program.

II. THEORETICAL REVIEW

This study is guided by two complementary theoretical perspectives: Kabeer's Women's Empowerment Framework (Kabeer, 1999) and the Resource-Based View (RBV) of the firm (Barney, 1991). The two theories are used for different but complementary purposes. Kabeer's framework provides the primary lens for understanding how women's access to resources, ability to exercise agency, and resulting achievements shape their economic empowerment. RBV complements this framework by explaining how the resources and capabilities available to women beneficiaries can be combined and utilized to influence the performance of their income-generating activities (IGAs). The combination is therefore appropriate because women's IGA performance is influenced both by their access to resources and agency and by their capacity to convert available resources into productive business outcomes.

2.1 Women's Empowerment Framework

The Women's Empowerment Framework developed by Kabeer (1999) conceptualizes empowerment as a process through which individuals who have been denied the ability to make strategic life choices acquire the capacity to make and act upon such choices. The framework consists of three interconnected dimensions: resources, agency, and achievements. Resources refer to material, human, and social assets that enhance individuals' capacity to make choices, while agency refers to the ability to define goals, make decisions, and act upon them. Achievements are the outcomes that result from the interaction between resources and agency (Kabeer, 1999). The framework is relevant to this study because women's participation in IGAs depends not only on the resources available to them but also on their ability to exercise control over and utilize those resources. In the context of the SEGA Empowerment Program, resources include financial support, savings, credit, business knowledge, skills, productive assets, technology, and market networks. Agency includes women's ability to make business decisions, control productive resources, apply business knowledge, determine how income is used, and respond to challenges affecting their enterprises. Achievements are reflected in the performance of women's IGAs, including income generation, profitability, business growth, continuity and sustainability. The framework also provides an important explanation of why women who receive similar programme support may experience different outcomes. Access to resources does not automatically produce empowerment or successful economic outcomes. Women's ability to use resources may be influenced by household responsibilities, gender norms, decision-making power, mobility and other social conditions. Thus, the framework enables the study to consider both enabling factors and constraints affecting women's ability to translate programme support into productive economic activities. However, Kabeer's framework provides a broad conceptual explanation of the relationship between resources, agency and achievements but does not specifically explain how different combinations of business resources and capabilities create differences in enterprise performance. For example, two SEGA beneficiaries may receive similar financial support, but one may perform better because she possesses stronger financial management skills, marketing capabilities, business experience, or ability to use technology. This aspect requires a complementary theoretical perspective, provided by the Resource-Based View.

2.2 Resource-Based View

The Resource-Based View (RBV), originally developed by Barney (1991), explains differences in organizational performance based on the resources and capabilities controlled and utilized by an organization. The theory argues that resources can provide a basis for competitive advantage when they are valuable, rare, difficult to imitate, and effectively organized. Later RBV literature has further emphasized that organizational performance depends not simply on possessing resources but on developing capabilities to combine and utilize them effectively (Barney, 1991). In the context of this study, RBV provides a business-performance perspective that complements Kabeer's empowerment perspective. The relevant resources include financial capital, equipment, productive assets, technology, business knowledge, experience, social networks, and market connections. Capabilities include entrepreneurial skills, financial management, marketing ability, business planning, decision-making, and the ability to combine available resources in productive ways. These resources and capabilities may help explain why some women beneficiaries achieve higher levels of IGA performance than others. The important contribution of RBV to this study is that resources are not assumed to automatically produce better performance. Financial capital, for example, may improve business performance when a woman has the skills to allocate it effectively, identify profitable opportunities, and manage business risks. Similarly, access to technology may contribute to performance when the beneficiary possesses the knowledge and capability to use it productively. Thus, RBV helps explain the resource-to-performance relationship that is not fully developed in Kabeer's framework. Nevertheless, traditional RBV has limitations when applied to women's IGAs because it primarily emphasizes resources and capabilities within the enterprise and gives less attention to external social and institutional conditions. Women's businesses may be strongly influenced by household responsibilities, gender norms, access to decision-making, institutional support, and other contextual factors. These factors may determine whether women are able to acquire, control, and effectively use business resources. Kabeer's framework therefore complements RBV by explaining the role of agency and the social conditions that shape women's ability to access and utilize resources.

2.3 Complementarity of the Two Theories

The two theories are therefore not used as competing explanations. Rather, they address different parts of the study. Kabeer's Women's Empowerment Framework explains whether women have access to resources and the agency required to use those resources, while RBV explains how the resources and capabilities available to them can be transformed into business performance.

III. METHODOLOGY

3.1 Study Area

The study was conducted in Kihonda Ward, Morogoro Municipality, Morogoro Region, eastern Tanzania. Morogoro Municipality is an important commercial centre where small-scale enterprises, trading, food vending, tailoring, farming, and service provision contribute to household livelihoods. These activities are particularly significant for women, whose participation in income-generating activities provides opportunities to strengthen household income, financial independence, and socioeconomic well-being. The study focused on women beneficiaries of the Secondary Education for Girls' Advancement (SEGA) Empowerment Programme, which promotes economic self-reliance through entrepreneurship training, financial literacy, business development, and mentorship (SEGA, 2023). Kihonda Ward was purposely selected because it provided direct access to programme beneficiaries whose business experiences were relevant to understanding the factors influencing the performance and sustainability of women's income-generating activities.

Importantly, the study area offered an opportunity to examine whether programme support translates into tangible economic benefits, particularly through access to finance, productive resources, market information, and business networks. Although entrepreneurship initiatives can strengthen women's capabilities, their effectiveness may be constrained by inadequate capital, limited market opportunities, household responsibilities, and sociocultural barriers. Therefore, Kihonda Ward provided a relevant context for critically examining the relationship between SEGA programme strategies, local economic conditions, and women's business performance. The study's practical significance lies in identifying the opportunities and structural constraints shaping women's enterprises, thereby generating evidence to inform more responsive interventions that promote sustainable income generation and meaningful economic empowerment (Kabeer, 2012; World Bank, 2022).

3.2 Research design

This study employed a cross-sectional mixed-methods survey design to examine factors influencing the performance of income-generating activities (IGAs) among women beneficiaries of the SEGA Empowerment Program in Morogoro Municipality, Tanzania. Data were collected at a single point in time using both quantitative and qualitative approaches. The quantitative approach generated numerical data on financial resources, market access, managerial challenges, and IGA performance, while the qualitative approach provided deeper insights into beneficiaries' experiences and perceptions. The mixed-methods approach enabled the study to combine statistical evidence with contextual explanations and strengthened the credibility of the findings through triangulation (Creswell & Creswell, 2018). The cross-sectional design was appropriate because it allowed the researcher to assess existing conditions and relationships among study variables within a relatively short period and at lower cost (Levin, 2006; Setia, 2016). However, the design does not establish causal relationships with the same certainty as longitudinal studies.

3.3 Target Population

The target population of this study comprised 113 women beneficiaries of the SEGA Empowerment Programme in Morogoro Municipal, Tanzania. These women were selected as the primary target population because of their direct involvement in the programme and their ability to provide relevant information on its contribution to women's economic empowerment. Specifically, the study focused on the programme's contribution to women's access to financial resources, income generation, business development, savings, and participation in household economic decision-making. In addition, SEGA programme staff were considered key informants, where applicable, to provide supplementary information on programme implementation, entrepreneurship training, financial support, and mentorship services. The target population was defined according to the study objectives and the eligibility criteria established for participants, ensuring that the respondents had relevant experience and knowledge of the programme. The total number of eligible women beneficiaries was to be determined from official programme records and other relevant administrative sources. This population was considered appropriate because it provided a relevant basis for assessing the contribution of the SEGA Empowerment Programme to women's economic empowerment in the study area.

3.4 Sampling Procedures

The study employed purposive and simple random sampling techniques. Purposive sampling was used to select women beneficiaries who had participated in SEGA-supported empowerment programmes and were engaged in income-generating activities, as well as SEGA staff who were directly involved in programme implementation. The selected participants were considered appropriate sources of information on financial access, market access, business skills, productive resources, household and socio-cultural factors, institutional support, and IGA performance. After identifying eligible beneficiaries, simple random sampling was applied using the SEGA beneficiary registration list to

select respondents, giving each eligible woman an equal chance of participation. This procedure helped minimize selection bias and enhance the representativeness of the quantitative sample.

3.5 Sample Size

The sample size for this study was determined using Yamane formula, which is widely used in social science research to calculate an appropriate sample size from a known population while maintaining a specified level of precision. The formula helps ensure that the selected sample adequately represents the target population while minimising sampling error. The formula is expressed as follows:

$$n = N / (1 + N(e^2))$$

Where:

n = required sample size;

N = total population size;

e = level of precision (margin of error)

For this study, the total population of women who benefited from the Secondary Education for Girls' Advancement (SEGA) program was 158, and the margin of error was set at 0.05 (5%), which is commonly used in social research. Substituting the values into the formula:

image

The calculated sample size was therefore 113 respondents after rounding to the nearest whole number. Consequently, 109 women who had participated in SEGA empowerment programs were selected as respondents for the study. This sample size was considered adequate to represent the study population and provide reliable data for analysing the strategies employed by SEGA in promoting women's economic empowerment.

3.6 Ethical Consideration

The researcher observed ethical considerations throughout the data collection process to protect the rights, dignity, and privacy of the respondents. The researcher obtained the necessary ethical approvals and research permissions from the relevant authorities before conducting the study. The ethical approval was granted under Refer No. SUA/DPRTC/MAP/D/2023/0019/04. Respondents were informed about the purpose of the research, and their informed consent was obtained before data collection. Participation was voluntary, and respondents were free to withdraw from the study without penalty. The researcher maintained confidentiality by protecting respondents' personal information and ensuring their identities were not disclosed in the research report. The researcher also respected respondents' cultural values and language preferences and took appropriate measures to minimise potential harm. Furthermore, the collected data were stored securely and handled honestly and responsibly. These measures helped ensure that the research was conducted ethically and that respondents' rights and welfare were protected throughout the study.

3.7 Data Collection Methods and Tools

Primary data were collected using questionnaires, key informant interviews, and direct observation. A structured questionnaire was administered to selected women beneficiaries to collect quantitative data on socio-demographic characteristics, IGA characteristics, financial access, market access, business skills, challenges, and IGA performance. Semi-structured interviews were conducted with selected SEGA staff and programme coordinators to obtain qualitative information on programme support, access to resources, business management, and implementation experiences. Direct observation was used to assess business operations, use of resources, customer interactions, and working conditions. The use of these methods enabled the study to obtain both quantitative and qualitative information and to triangulate the findings (Creswell & Creswell, 2018).

3.8 Data analysis

Quantitative and qualitative data were analyzed separately and integrated during interpretation. Quantitative data were coded, entered, cleaned, and analyzed using SPSS Version 27. Descriptive statistics, including frequencies, percentages, and means, were used to summarize respondents' demographic characteristics, access to financial resources, market participation, SEGA support, digital technology use, and the performance of income-generating activities (IGAs). Qualitative data from key informant interviews and open-ended questionnaire responses were transcribed and analyzed thematically. The analysis involved coding responses and grouping related information into themes based on the study objectives and the dimensions of Kabeer's Women's Empowerment Framework: resources, agency, and achievements (Kabeer, 1999). To determine the factors influencing the performance of women's income-generating activities, Multiple Linear Regression (MLR) analysis was employed. The dependent variable was the performance of women's income-generating activities, measured using income generated after participation in the SEGA programme. The explanatory variables included education level, age, SEGA training and skills development,

access to finance, market access, SEGA institutional support and mentorship, and digital technology and innovation. Education level and age were included as socio-demographic control variables, while the remaining variables represented the main programme and business-related factors examined in the study. The general multiple linear regression model was specified as follows:

$$\text{Income}_i = \beta_0 + \beta_1 \text{Education}_i + \beta_2 \text{Age}_i + \beta_3 \text{Training}_i + \beta_4 \text{Finance}_i + \beta_5 \text{Market Access}_i + \beta_6 \text{Institutional Support}_i + \beta_7 \text{Digital Technology}_i + \varepsilon_i$$

Where:

Income_i = income generated by woman i after participating in the SEGA programme; β_0 = the constant or intercept; β_1 – β_7 = regression coefficients representing the expected change in income associated with a one-unit change in each explanatory variable, holding other variables constant; Education_i = education level of respondent i ; Age_i = age category of respondent i ; Training_i = whether the respondent received SEGA training and skills development; Finance_i = access to financial resources or credit; Market Access_i = access to markets and business opportunities; $\text{Institutional Support}_i$ = SEGA institutional support and mentorship; $\text{Digital Technology}_i$ = use or improvement in access to digital technology for economic activities; and ε_i = the error term representing other factors affecting income that are not included in the model.

For categorical variables, reference categories were specified in the regression model. The statistical significance of individual explanatory variables was assessed using the t-test and corresponding p-values, with statistical significance determined at the 5% level ($p < 0.05$). The overall significance of the regression model was assessed using the F-test. The coefficient of determination (R^2) and adjusted R^2 were used to assess the proportion of variation in women's IGA performance explained by the variables included in the model. The regression analysis also considered the direction and magnitude of the estimated coefficients. A positive coefficient indicated that the explanatory variable was associated with higher IGA performance, whereas a negative coefficient indicated an inverse association, holding other variables constant. The study then compared and integrated the quantitative and qualitative findings during interpretation to provide complementary evidence on the factors affecting the performance of women's income-generating activities (Creswell & Creswell, 2018).

IV. FINDINGS & DISCUSSION

4.1 Findings

4.1.1 Strategies Employed by SEGA

Access to financial resources is an important condition for establishing and maintaining income-generating activities because women require capital to purchase stock, equipment, raw materials, and other productive inputs. Table 1 shows the forms of support received by the beneficiaries through the SEGA Empowerment Programme. Start-up capital/financial support was reported by 25 respondents (22.1%), while 18 respondents (15.9%) reported participation in savings groups. Other forms of programme support included entrepreneurship and vocational training (35.4%), mentorship and follow-up (15.0%), and market linkages (11.5%). The financial components therefore provided women with opportunities to mobilise resources for starting and maintaining their IGAs.

Table 1

SEGA Empowerment Interventions Received by Women Beneficiaries (n = 113)

Intervention	Frequency	Percentage (%)
Entrepreneurship and vocational training	40	35.4
Start-up capital/financial support	25	22.1
Formation of savings groups	18	15.9
Mentorship and follow-up	17	15
Market linkages	13	11.5

Beyond SEGA support, beneficiaries accessed financial resources from other sources. As shown in Table 4.2, SACCOS were the most commonly reported source (26.5%), followed by VICOBA (24.8%), microfinance institutions (19.5%), bank loans (15.9%), and community savings groups (13.3%). The findings demonstrate that beneficiaries relied on both formal and informal financial mechanisms to supplement the resources available through the programme.

Table 2*Other Financial Sources Accessed by Women Beneficiaries (n = 113)*

Financial source	Frequency	Percentage (%)
SACCOS	30	26.5
VICOBA	28	24.8
Microfinance institutions	22	19.5
Bank loans	18	15.9
Community savings groups	15	13.3

The qualitative findings provide further explanation of the importance of financial resources. Key informants reported that lack of start-up capital was a major challenge for some beneficiaries and that SEGA financial support enabled women to purchase business stock, equipment, and other inputs. One key informant explained:

“Most women could not start businesses because they lacked capital. Through SEGA loans, they have been able to establish shops, tailoring businesses, food vending, farming activities, and other enterprises.” (KII-2, 14 January 2026)

This finding is consistent with evidence from Tanzania showing that access to finance is an important determinant of women’s enterprise performance. Buvinić and Furst-Nichols (2016), for example, found that microcredit contributed to the performance of women-owned enterprises, although the effect of credit varied according to how loans were used and the business skills of the owners. Their findings suggest that finance is necessary but not sufficient for better enterprise performance. Similarly, evidence from Tanzania indicates that women entrepreneurs continue to face constraints in accessing finance, alongside gender-related and social barriers (Isaga, 2019). The World Bank also identifies limited access to capital, financial services, productive assets, and technology as important constraints affecting the returns to women’s enterprises in Tanzania.

Savings mechanisms were also important. The relatively high proportions of beneficiaries using SACCOS (26.5%) and VICOBA (24.8%) suggest that group-based financial arrangements provided additional opportunities for women to mobilise and manage business capital. These mechanisms may be particularly relevant where access to conventional bank finance is limited. The findings therefore indicate that financial resources were not obtained from a single source but through a combination of programme support, savings groups, microfinance institutions, and formal financial institutions.

From the perspective of the Women’s Empowerment Framework, financial resources constitute an important resource that can increase women’s capacity to participate in economic activities. However, the findings also show that access to resources does not automatically translate into better performance. The ability to use capital productively, manage the business, respond to market conditions, and sustain operations is also important. This interpretation is supported by Buvinić and Furst-Nichols (2016), who found that business management skills, loan use, and family support also influenced enterprise performance among women-owned businesses in Tanzania. Overall, the findings show that financial resources provide an important foundation for women’s participation in IGAs, but their contribution to performance depends on how effectively the resources are combined with other capabilities and conditions.

4.1.2 Market Access and the Performance of Women’s Income-Generating Activities

Market demand provides an important starting point for understanding market access because an income-generating activity can only be sustained when there is sufficient demand for the products or services offered. Table 4.3 shows the types of IGAs undertaken by the beneficiaries and the factors they considered when selecting their activities. Retail trading was the most common activity (24.8%), followed by food vending/processing (17.7%), tailoring (15.9%), poultry keeping (13.3%) hairdressing/salon services (12.4%), agriculture (8.8%), and other small businesses (7.1%). When selecting an activity, 30 respondents (26.5%) identified market demand as an important consideration, making it the second most commonly reported factor after availability of capital (28.3%). Personal skills and training accounted for 22.1%, profit potential for 15.9%, and family responsibilities for 7.1%.

Table 3*Types of Income-Generating Activities and Factors Considered When Choosing an Activity (n = 113)*

Variable	Response category	Frequency	Percentage (%)
Type of economic activity	Retail trading	28	24.8
	Food vending/processing	20	17.7
	Tailoring	18	15.9
	Poultry keeping	15	13.3
	Hairdressing/Salon	14	12.4
	Agriculture	10	8.8
	Other small businesses	8	7.1
Factors considered when choosing an activity	Availability of capital	32	28.3
	Market demand	30	26.5
	Personal skills/training	25	22.1
	Profit potential	18	15.9
	Family responsibilities	8	7.1

The results indicate that the genesis of many IGAs was linked to the perceived demand for products and services within the local market. Women were more likely to establish activities for which they expected to find customers. This is particularly evident in retail trading, food vending, tailoring, and salon services, which depend heavily on regular local demand. The finding is consistent with the ILO assessment of women's entrepreneurship development in Tanzania, which identifies access to markets and technology as important conditions for the development of women-owned enterprises. The ILO also notes that women entrepreneurs face challenges in accessing markets and business development services, which can limit enterprise growth. The qualitative evidence further supports the importance of customer demand and community networks. One key informant explained:

"Women are encouraged to use their networks and community presence to expand their market. Even without big markets, they manage to get regular customers." (KII-3, 14 January 2026)

This finding suggests that market access among beneficiaries was not limited to formal markets. Women also relied on local social networks and community relationships to identify customers and maintain sales. Such networks can be particularly important for small enterprises operating with limited capital and few formal market linkages.

However, the findings also indicate that market demand should not be equated with market access. The 26.5% who considered market demand when choosing their businesses provide evidence of market-oriented enterprise selection, but this does not by itself demonstrate that women had adequate access to customers, market information, profitable selling locations, or stable buyer networks. Therefore, market access should be understood as the ability to identify customers, reach markets, obtain market information, and sell products or services under conditions that allow the business to remain viable.

Overall, the findings suggest that market considerations influenced the establishment of women's IGAs, while community networks and local demand provided important channels for reaching customers. Nevertheless, differences in the quality of markets, competition, customer purchasing power, and the ability of women to sustain market relationships may help explain differences in IGA performance. This interpretation is important because previous evidence from Tanzania shows that women-owned enterprises face constraints not only in finance but also in accessing markets, productive assets, technology, and other business opportunities.

4.1.3 Multivariate Analysis of Factors Affecting the Performance of Women's Income-Generating Activities

The preceding sections considered financial resources and market access separately. However, women's IGA performance is likely to be influenced by several factors simultaneously. Multiple linear regression was therefore used to determine the independent contribution of the explanatory variables while controlling for the other variables included in the model.

The regression results show that education, age, SEGA training, access to finance, market access, institutional support, and digital technology were statistically significant predictors of IGA performance. Education had a positive relationship with performance, with the coefficients increasing from primary to tertiary education. Holding other variables constant, beneficiaries with tertiary education had an estimated income approximately TZS 96,741 higher than those with no formal education. This suggests that education may strengthen women's ability to manage business activities, process information, and make business decisions. Age was also positively associated with IGA performance. Compared with the reference group, beneficiaries aged 25–34, 35–44, and 45 years or above had progressively higher predicted income. This may reflect accumulated business experience and knowledge. However, the age effect should be interpreted as an association rather than evidence that age itself causes higher performance. SEGA training had a positive

and statistically significant association with IGA performance ($B = 112,540.68$, $p = 0.001$). Beneficiaries who received training had predicted income approximately TZS 112,541 higher than those who did not, holding other variables constant. This result is consistent with evidence from Tanzania showing that business management skills are associated with better performance among women-owned enterprises. Bardasi et al. (2011), for example, found that business management skills significantly contributed to the performance of women-owned enterprises. The finding therefore suggests that financial support may be more effective when beneficiaries also possess the skills required to manage and apply business resources. Access to finance was also positive and statistically significant ($B = 87,315.42$, $p = 0.002$). Beneficiaries with access to finance had predicted income approximately TZS 87,315 higher than those without access, controlling for other factors. This reinforces the earlier descriptive findings and supports previous evidence that finance is an important factor in women's enterprise performance in Tanzania. SEGA institutional support had one of the strongest positive coefficients in the model ($B = 105,624.91$, $p < 0.001$). This indicates that institutional support, including programme-related assistance, follow-up, and business support, was positively associated with IGA performance after controlling for the other variables. The result is important because it suggests that women's economic performance may depend not only on receiving an initial intervention but also on continued support that helps them apply resources and respond to business challenges.

Digital technology was also positively associated with IGA performance ($B = 69,418.27$, $p = 0.009$). This may reflect the role of digital tools in accessing information, communicating with customers, promoting products, and identifying business opportunities. Evidence from Tanzania similarly indicates that women-owned enterprises have more limited access to productive technologies and communication resources, which can constrain enterprise profitability. In contrast, market access had a statistically significant negative coefficient ($B = -74,826.35$, $p = 0.015$). This means that, after controlling for the other variables and according to the way market access was measured and coded in the study, beneficiaries classified as having market access had lower predicted income than the reference group. Although this result appears unexpected, it should not simply be interpreted as evidence that market access reduces business performance. One possible explanation is that the measure of market access captured the existence of market participation rather than the quality or profitability of the market. Women may have access to highly competitive markets, have low purchasing power, involve high transport or operating costs, or generate low margins. The result may also reflect differences in the types of businesses operated by beneficiaries. Further investigation is therefore necessary to understand this negative association. Taken together, the regression findings provide the central synthesis of the study. They show that IGA performance was associated with a combination of individual characteristics, programme support, financial resources, institutional support, and technology, rather than being explained by a single factor. The results also demonstrate that access to a resource does not automatically guarantee higher performance; the value of the resource depends on women's capacity to use it effectively and on the business environment in which the IGA operates. This interpretation is consistent with the Women's Empowerment Framework, in which resources provide the basis for action, while agency and the surrounding conditions influence women's ability to convert those resources into achievements. It is also consistent with the broader Tanzanian evidence that women's enterprise performance is shaped by interacting constraints involving finance, skills, markets, technology, and social and institutional conditions.

The findings therefore suggest that improving the performance of women's IGAs requires a combined approach rather than isolated interventions. Financial resources need to be accompanied by appropriate business skills, institutional follow-up, access to technology, and effective market opportunities. This integrated interpretation is particularly relevant to the SEGA Empowerment Programme because the programme itself combines financial, training, mentorship, and market-related interventions.

Table 4*Multiple Linear Regression Results on Factors Affecting IGA Performance*

Variable	Estimate (B)	Std. Error	t-value	p-value
Constant	85,420.35	28,615.42	2.985	0.004***
Education level (Ref: None)				
Primary	42,680.21	18,943.17	2.253	0.027**
Secondary	68,315.74	21,402.56	3.192	0.002***
Tertiary	96,740.52	24,815.33	3.899	<0.001***
Age (Ref: 18–24)				
25–34	35,218.46	14,872.39	2.368	0.020**
35–44	51,604.83	18,205.71	2.835	0.006***
45+	73,821.16	28,417.52	2.598	0.011**
SEGA training (Ref: No)				
Yes	112,540.68	32,185.47	3.497	0.001***
Access to finance (Ref: No)				
Yes	87,315.42	27,604.83	3.163	0.002***
Market access (Ref: No)				
Yes	-74,826.35	30,142.67	-2.482	0.015**
SEGA institutional support (Ref: No)				
Yes	105,624.91	29,831.54	3.54	<0.001***
Digital technology (Ref: No)				
Yes	69,418.27	25,716.39	2.699	0.009***

*Note: ** $p < 0.05$; *** $p < 0.01$.**4.1.4 Challenges Affecting the Performance of Women's Income-Generating Activities**

The findings presented in Table 4.3 indicate that although the SEGA Empowerment Programme has enhanced women's participation in income-generating activities, many beneficiaries continue to encounter challenges that limit business growth and long-term sustainability. More than half of the respondents (53.1%) reported experiencing challenges in implementing and managing their enterprises, while 46.9% indicated that they had not encountered major difficulties. This finding suggests that despite the positive contribution of SEGA in promoting women's entrepreneurship, significant barriers remain that affect enterprise performance. The most frequently reported challenge was inadequate start-up capital combined with limited technological skills (37.9%), followed by market competition (16.7%), seasonal fluctuations in demand (13.0%), and inadequate technological skills alone (8.3%). These findings show that financial constraints remain a major barrier, but they also point to gaps in the practical skills required to use technology effectively in business operations. The results are therefore relevant to the training provided by SEGA because entrepreneurship training alone may not fully address the specific technical and digital requirements of different enterprises. The findings on business operations also indicate that lack of start-up capital was reported by 31.0% of respondents, followed by market competition (17.7%), limited customers (15.9%), high raw-material costs (14.2%), family responsibilities (12.4%), and limited access to loans (8.8%). These results indicate that some challenges cannot be solved through training alone. Financial resources, access to customers, input costs, and household responsibilities also influence the ability of women to sustain their businesses.

Despite these constraints, women demonstrated considerable resilience in sustaining their businesses. The most common coping strategy was participation in savings groups (30.1%), followed by reinvesting business profits (22.1%), using mobile money and digital marketing platforms (17.7%), forming business partnerships (15.9%), and seeking support from family or community members (14.2%). These findings indicate that women actively adopt various financial and social strategies to overcome operational challenges and maintain business continuity. Overall, the quantitative findings demonstrate that financial constraints, market-related barriers, and household responsibilities remain the major factors limiting the performance of women's income-generating activities. Nevertheless, beneficiaries continue to demonstrate adaptability by utilizing savings mechanisms, business reinvestment, social networks, and digital technologies to sustain their enterprises.

Table 5*Challenges Affecting the Performance of Women's Income-Generating Activities (n = 113)*

Variable	Category	Frequency (n)	Percentage (%)
Experienced challenges	Yes	60	53.1
	No	53	46.9
Major challenges	Limited start-up capital and inadequate technology skills	41	37.9
	Market competition	18	16.7
	Seasonal demand fluctuations	14	13
	Inadequate technology skills	8	8.3
Challenges during business operations	Lack of start-up capital	35	31
	Market competition	20	17.7
	Limited customers	18	15.9
	High raw material costs	16	14.2
	Family responsibilities	14	12.4
	Limited access to loans	10	8.8
Strategies used to overcome challenges	Joined savings groups	34	30.1
	Reinvested profits	25	22.1
	Used mobile money and digital marketing	20	17.7
	Formed business partnerships	18	15.9
	Sought family/community support	16	14.2

The thematic analysis of the Key Informant Interviews identified five interrelated themes explaining the challenges affecting the performance and sustainability of women's income-generating activities. The most dominant theme emerging from the interviews was inadequate financial capital. Key informants consistently explained that although SEGA provides business loans and financial support, available resources remain insufficient to meet the increasing demand among women entrepreneurs. Many beneficiaries require additional capital to expand their businesses, purchase equipment, or increase stock. The KII-3 explained:

“Limited funding restricts support to all women, and cultural expectations still pressure women to prioritize domestic responsibilities over economic activities.” (KII-3, 14 January 2026)

Similarly, programme staff observed that limited access to additional financing after the initial support often slows business growth, particularly for women wishing to diversify or expand their enterprises. These findings reinforce quantitative evidence showing that inadequate start-up capital remains the most significant challenge affecting business performance. The interviews further revealed that increasing competition within local markets limits business profitability. Many women operate similar enterprises within the same communities, resulting in reduced customer numbers and lower sales. The Business Loan Officer stated:

“Community resistance, market barriers, and cultural and gender norms are still major challenges.” (KII-2, 14 January 2026)

Informants explained that limited market opportunities, fluctuating customer demand, and competition from established traders reduce women's ability to generate consistent income, despite possessing adequate entrepreneurial skills. Another important theme concerned the continued influence of traditional gender roles on women's entrepreneurship. Key informants explained that women continue to shoulder primary responsibility for childcare, household management, and family care, reducing the time available for business management and expansion. According to KII-4,

“Cultural expectations still pressure women to prioritize domestic responsibilities over economic activities.” (KII-4, 14 January 2026)

Interview participants further reported that teenage pregnancy, family obligations, and limited support within households reduce women's participation in training sessions and business development activities. These findings demonstrate that economic empowerment remains closely linked to broader social and cultural contexts that influence women's ability to participate fully in entrepreneurship. Key informants also identified institutional challenges affecting programme implementation. Although SEGA provides follow-up visits and technical support, staff indicated that monitoring activities are sometimes constrained by limited resources and inconsistent beneficiary participation. KI-1 explained:

“Poor cooperation from some supported women during follow-ups is a challenge, although it also helps us to improve our strategies.” (KII-1, 14 January 2026)

Similarly, the KII-9 emphasized the importance of continuous technical support by noting:

“Frequent mentorship is needed, and mentorship provided monthly or once every two or three months is not enough.” (KII-9, 15 January 2026)

These findings suggest that regular mentoring, monitoring, and technical assistance remain essential for improving business survival and long-term sustainability. Despite facing multiple economic, social, and institutional challenges, the interviews consistently highlighted women as highly resilient and resourceful entrepreneurs who actively develop coping strategies to sustain their income-generating activities. Beneficiaries reported that they do not remain passive in the face of constraints but instead engage in collective savings, reinvestment of profits, business diversification, and reliance on social networks to maintain and stabilize their enterprises. This resilience plays a critical role in ensuring business continuity even under conditions of limited capital, market fluctuations, and household pressures. Key informants emphasized that women’s survival in business is largely driven by adaptive strategies developed through both personal experience and SEGA support structures. One respondent explained:

“Even when capital is low, or sales are not good, women try different ways to survive. Most of them join savings groups or rotate small profits to keep the business going.” (KII – 2, 14th Jan 2026)

Another informant added:

“We see women reinvesting whatever little profit they make back into their businesses. This helps them slowly grow instead of closing down.” (KII – 1, 14th Jan 2026)

A field-level officer further noted:

“Women are very adaptive. When one business is not performing well, they try another or combine several small activities to balance income.” (KII – 3, 14th Jan 2026)

In addition, another respondent highlighted the importance of social networks in sustaining business operations:

“Most of these women depend on each other. They borrow ideas, support one another financially through groups, and even share customers at times.” (KII – 4, 14th Jan 2026)

These quotations demonstrate that women’s resilience is not accidental, but a structured survival strategy built around savings groups, reinvestment behavior, diversification of income sources, and strong community support systems. This adaptive capacity directly strengthens business sustainability and explains why many SEGA beneficiaries continue operating despite persistent financial and market-related challenges. Importantly, these qualitative insights align closely with the quantitative findings, which show that women commonly manage challenges through savings groups, profit reinvestment, digital marketing, partnerships, and family/community support. Together, these results confirm that resilience is a central driver of sustainability in women-led enterprises under the SEGA programme.

The quantitative and qualitative findings consistently demonstrate that the performance of women’s income-generating activities is shaped by a combination of financial, market, socio-cultural, and institutional factors. Survey findings revealed that more than half of the respondents experienced business challenges, with inadequate start-up capital, limited technological skills, market competition, high production costs, limited customers, and family responsibilities emerging as the principal constraints. Nevertheless, many women adopted adaptive strategies such as participating in savings groups, reinvesting business profits, utilizing digital marketing platforms, establishing business partnerships, and relying on family and community support to sustain their enterprises. The qualitative findings provide a deeper understanding of these challenges by revealing that limited programme funding, persistent gender norms, household responsibilities, inadequate mentorship, weak institutional follow-up, and increasing market competition continue to constrain women’s entrepreneurial performance. At the same time, the interviews demonstrate that beneficiaries have developed remarkable resilience by utilizing available financial and social resources to maintain and gradually expand their businesses. Collectively, these findings suggest that while SEGA has substantially strengthened women’s economic participation, the long-term performance and sustainability of income-generating activities require continued investment in financial inclusion, market development, mentorship, institutional support, and interventions that address persistent socio-cultural barriers. Such an integrated approach would enhance not only women’s business performance but also the broader goal of sustainable economic empowerment.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The findings demonstrate that the performance and sustainability of women’s income-generating activities (IGAs) are shaped by the interaction of financial resources, market access, and structural constraints. Access to start-up capital and financial services through SACCOS, VICOBA, microfinance institutions, bank loans, and community savings groups provide women with opportunities to establish and sustain their enterprises. However, inadequate capital and limited access to loans continue to constrain business expansion. Similarly, access to local markets enables women to respond to consumer demand and generate income, although market competition, limited customer bases, and low purchasing power may restrict growth. Entrepreneurship training, mentorship, and community networks provided

through SEGA interventions can strengthen women's capacity to identify market opportunities and improve business performance.

Despite these opportunities, women continue to experience financial, market-related, and household constraints. Lack of start-up capital was the most frequently reported challenge (31.0%), followed by market competition (17.7%), limited customers (15.9%), household responsibilities (12.4%), and limited access to loans (8.8%). These findings suggest that the availability of financial services does not necessarily translate into adequate financing for enterprise growth. Household responsibilities may further limit the time women can devote to business activities. Nevertheless, women demonstrate agency by adopting various coping strategies, including participation in savings groups (30.1%), reinvestment of business profits (22.1%), use of mobile money and digital marketing (17.7%), business partnerships (15.9%), and reliance on family or community support (14.2%).

Interpreted through Kabeer's empowerment framework, these findings highlight the interrelationship between resources, agency, and achievements in women's economic empowerment. Financial resources and market opportunities provide the means through which women engage in economic activities, while their coping strategies reflect their capacity to respond to business constraints. However, the persistence of financial limitations, competitive markets, and competing household responsibilities may undermine their ability to achieve sustained economic gains. Therefore, strengthening women's economic empowerment requires an integrated approach that combines access to adequate and affordable finance, expanded market linkages, entrepreneurship development, and support for balancing productive and unpaid care responsibilities. Such interventions can enhance the viability of women's enterprises and contribute to more sustainable economic outcomes.

5.2 Recommendations

Based on the findings of this study, several recommendations are proposed to address the challenges facing women entrepreneurs and enhance the performance and sustainability of their businesses. First, the government and relevant entrepreneurship development stakeholders should strengthen initiatives that facilitate women entrepreneurs' access to adequate, timely financial resources, business development services, and reliable markets. This would help address persistent challenges related to limited business capital, increasing market competition, and difficulties in attracting and retaining customers. Entrepreneurship support programs, including the SEGA Empowerment Programme examined in this study, should provide regular entrepreneurship training, ongoing mentorship, and appropriate follow-up support to enable women entrepreneurs to respond effectively to emerging business challenges and adapt to changing market conditions. Financial institutions, including savings and credit cooperative societies (SACCOS), village community banks (VICOBA), microfinance institutions, and commercial banks, should develop accessible, affordable financial products that reflect the needs and financial circumstances of women-owned enterprises. In addition, market stakeholders should strengthen market linkages and facilitate women entrepreneurs' participation in broader markets, business networks, and digital platforms to improve product visibility and expand their customer base. Women entrepreneurs themselves should adopt sound financial management practices, particularly regular saving, prudent spending, and reinvesting business profits, while leveraging available market opportunities and digital technologies to improve operational efficiency and business growth. Collectively, these measures could help address the structural and operational barriers identified in the study, strengthen the resilience of women-owned enterprises, and promote their long-term sustainability beyond the specific program investigated.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Funding Declaration

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

REFERENCES

- Akter, A., & Ahmad, N. (2020). Empowering rural women's involvement in income-generating activities through the BRAC microfinance institution in Sylhet district, Bangladesh. *Journal of Academic Research in Business and Social Sciences*, 10(11), 146–161.
- Bardasi, E., Sabarwal, S., & Terrell, K. (2011). How do female entrepreneurs perform? Evidence from three developing regions. *Small Business Economics*, 37(4), 417–441.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>



- Buvinić, M., & Furst-Nichols, R. (2016). Promoting women's economic empowerment: What works? *The World Bank Research Observer*, 31(1), 59–101. <https://doi.org/10.1093/wbro/lkv012>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- International Labour Organization. (2023). *World employment and social outlook: Trends for women 2023*. International Labour Organization.
- International Labour Organization. (2024). *Women and men in the informal economy: A statistical update*. International Labour Organization.
- Isaga, N. (2019). Start-up motives and challenges facing female entrepreneurs in Tanzania. *International Journal of Gender and Entrepreneurship*, 11(2), 102–119.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>
- Kamberidou, I. (2020). "Distinguished" women entrepreneurs in the digital economy and the multitasking whirlpool. *Journal of Innovation and Entrepreneurship*, 9(1), Article 3.
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry*, 7(1), 24–25. <https://doi.org/10.1038/sj.ebd.6400375>
- Namatovu, R., Dawa, S., Mulira, F., & Katongole, C. (2022). Barriers to women entrepreneurship in East Africa. *African Journal of Business Management*, 16(4), 98–112.
- Nziku, D. M., & Henry, C. (2021). Policies for supporting women entrepreneurs in developing countries: The case of Tanzania. *Journal of Entrepreneurship and Public Policy*, 10(1), 38–58.
- OECD. (2021). *SIGI 2021 regional report for Africa*. OECD Publishing. <https://doi.org/10.1787/a6d95d90-en>
- SEGA. (2023). *Annual report and program overview*. Secondary Education for Girls' Advancement.
- Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, 61(3), 261–264. <https://doi.org/10.4103/0019-5154.182410>
- United Nations. (2022). *The Sustainable Development Goals report 2022*.
- United Nations Entity for Gender Equality and the Empowerment of Women. (2024). *Women's economic empowerment strategy 2024–2027*.
- World Bank. (2022). *Women, business and the law 2022*.
- World Bank. (2023). *Women, business and the law 2023*.