



Impact of Ultra Poor Graduation Project on Livelihood Transformation in Gakenke District, Rwanda (2021-2024)

Olivine Mukandasingwa & Richard Kwena
University of Kigali

Email: olivianemukandasingwa@gmail.com

Abstract: This study examined the impact of Ultra Poor Graduation Project on Livelihood Transformation in Gakenke District, Rwanda. Specifically, it examined how project capacity building influences the livelihood transformation of households participating in the Ultra-Poor Graduation Project. The study adopted a mixed-methods approach and a descriptive correlational research design. The target population consisted of 2,223 respondents, from which a sample of 339 respondents participated, including 334 direct beneficiaries who completed questionnaires and 5 key informants who participated in interviews. Data were collected using structured questionnaires and interview guides and analyzed using SPSS version 25. Descriptive statistics, Pearson correlation, and simple linear regression were used to analyze the data. The findings revealed that project capacity building positively contributes to household livelihood transformation through training, coaching, mentoring, skills development, financial literacy, improved resource management, and increased confidence in managing livelihood activities. Correlation analysis indicated a positive and statistically significant relationship between project capacity building and livelihood transformation ($r = 0.615$, $p < 0.001$). Regression analysis further showed that project capacity building significantly predicts livelihood transformation and explains 37.9% of its variation. The study concluded that project capacity building is an important factor in improving household livelihoods by strengthening beneficiaries' knowledge, skills, confidence, and ability to engage in productive economic activities. The study recommends strengthening regular training, coaching, mentoring, financial literacy, practical livelihood skills, and follow-up support to promote sustainable livelihoods and self-reliance among UPG beneficiaries.

Keywords: Project Capacity Building, Livelihood Transformation, Ultra-Poor Graduation Project, Household Livelihoods, Gakenke District, Rwanda.

How to cite this work (APA):

Mukandasingwa, O. & Kwena, R. (2026). Impact of Ultra Poor Graduation Project on Livelihood Transformation in Gakenke District, Rwanda (2021-2024). *Journal of Research Innovation and Implications in Education*, 10(3), 1535 – 1546. <https://doi.org/10.59765/5dw2>

1. Introduction

The Graduation Approach has emerged as a holistic development framework designed to lift Ultra-Poor households out of extreme poverty and empower them to build sustainable livelihoods (Government of Rwanda, 2020). Unlike traditional interventions that narrowly focus on either cash transfers, credit, or food relief, the Graduation model integrates a sequenced package of

interventions. These include short-term consumption support to stabilize households, transfer of productive assets such as livestock or seed capital, livelihood training, financial inclusion through savings and credit, and mentoring to build resilience. This approach recognizes that poverty is multidimensional and that meaningful livelihood transformation requires addressing not only income but also food security, social empowerment, and resilience to external shocks (BRAC, 2022).

Globally, extreme poverty remains a significant challenge despite remarkable progress in the last two decades. According to the World Bank (2023), around 8.4% of the world's population still lives on less than \$2.15 per day, with the poorest being the most vulnerable to health crises, climate change, and economic instability. Initiatives such as the Graduation Approach have demonstrated success in countries like Bangladesh, India, Honduras, and Peru, where households benefitted from increased consumption, higher asset ownership, improved food security, and stronger social participation (World Bank, 2023). Reports from global development agencies show that the long-term benefits of the approach, measured by household spending and resilience, outweigh initial investment costs, making it a cost-effective and sustainable poverty alleviation model (UNDP, 2021).

In developed countries, the Graduation model is adapted to safeguard incomes and protect living standards, especially among vulnerable groups such as the unemployed and the working poor. While poverty levels are generally lower than in developing regions, issues of inequality and social exclusion remain pressing. Graduation interventions in these settings emphasize welfare-to-work programs, unemployment benefits, financial literacy, and subsidized housing to prevent households from slipping deeper into poverty. For instance, the United Kingdom's welfare-to-work policies and the United States' Temporary Assistance for Needy Families (TANF) program mirror aspects of the Graduation philosophy by combining safety nets with skills training and employment pathways (OECD, 2020). These interventions highlight how graduation in developed countries is not only about addressing income poverty but also about reducing vulnerability and promoting long-term social inclusion.

In Sub-Saharan Africa, the Graduation Approach has been increasingly implemented to address deep-rooted poverty and social vulnerability. Historically, governments and aid agencies focused primarily on short-term relief measures such as food aid and emergency cash transfers, which did not address structural poverty (African Development Bank, 2022). Ultra-Poor households often lacked access to microfinance and livelihood support programs due to limited assets and high vulnerability to shocks (Matin et al., 2012). Recently, however, integrated livelihood and social protection programs have shown promising results. For example, Ethiopia's Productive Safety Net Programme (PSNP) and Uganda's Social Assistance Grants for Empowerment (SAGE) combine consumption support with livelihood promotion and financial inclusion, demonstrating the effectiveness of sequenced, multi-dimensional approaches in fostering resilience and enabling Ultra-Poor households to graduate from dependency to self-reliance (Government of Ethiopia, 2020).

In East Africa, governments and development partners have increasingly adopted Graduation-style interventions within broader poverty eradication and social protection strategies. For example, Kenya's Hunger Safety Net Programme (HSNP) and Uganda's Youth Livelihood Programme (YLP) link cash transfers with training, savings, and productive asset support (Kenya National Treasury, 2021). These initiatives have been designed to help households not only meet immediate consumption needs but also develop sustainable livelihoods in agriculture and small businesses. Similarly, Tanzania has piloted livelihood support programs that combine conditional cash transfers with financial inclusion and training for rural households (UNICEF, 2020). These efforts are particularly critical given that poverty in East Africa remains predominantly rural and agriculture-dependent, making households vulnerable to climate change, market volatility, and food insecurity.

In Rwanda, poverty reduction remains central to the government's development agenda, although challenges persist. The proportion of Rwandans living below the national poverty line decreased from 39.1% in 2013/14 to 38.2% in 2016/17, with no significant statistical change (NISR, 2018). Structural issues such as land scarcity, low agricultural productivity, limited off-farm employment, and the legacy of the 1994 genocide continue to hinder sustainable poverty reduction (UNICEF Rwanda, 2019). To address these issues, the Government of Rwanda launched the Vision 2020 Umurenge Programme (VUP), which integrates public works, direct support, and financial inclusion to support the poorest households (MINALOC, 2018). Later, the Minimum Poverty Graduation (MPG) package was introduced to provide asset transfers, training, and tailored livelihood support. These programs reflect Rwanda's adaptation of the Graduation model, aiming to eradicate extreme poverty through integrated, multi-sectoral strategies. Evaluations indicate that while progress has been achieved, sustained investment and better linkages with agriculture and financial services are necessary for long-term success (Government of Rwanda, 2021).

At the local level, Gakenke District in Northern Rwanda provides an important case study for understanding the impact of Graduation-based programs on livelihood transformation. The district is predominantly rural, with agriculture serving as the main livelihood activity, yet households face persistent poverty due to land fragmentation, limited market access, and soil degradation (Gakenke District Development Strategy, 2018). The Government of Rwanda, through the VUP and MPG, has targeted Ultra-Poor households in Gakenke with cash transfers, livestock distribution, and skills training to promote sustainable livelihoods. Reports show that beneficiaries in Gakenke have experienced improved food

security, increased income from agricultural activities, and enhanced participation in community savings groups (MINALOC, 2021). However, challenges such as climate shocks, youth unemployment, and inadequate financial literacy remain barriers to full graduation. This makes Gakenke a critical case study for assessing the successes, gaps, and sustainability of livelihood transformation interventions in Rwanda.

1.2 Statement of Problem

Rwanda has made remarkable progress in reducing poverty over the last decade. According to the National Institute of Statistics of Rwanda (NISR, 2024), the overall poverty rate declined from 39.8% in 2017 to 27.4% in 2024, while extreme poverty decreased from 11.3% to 5.4%. These improvements reflect the contribution of national initiatives such as the National Strategy for Transformation (NST1), Vision 2020 Umurenge Programme (VUP), and other social protection interventions. However, despite this progress, many rural households continue to face low incomes, food insecurity, limited productive assets, and vulnerability to economic shocks.

Despite these achievements, poverty remains a major challenge among vulnerable households. MINALOC (2022) reports that about 8–10% of the population remains trapped in chronic poverty, while the World Bank (2023) indicates that many households remain vulnerable to falling back into poverty because of climate change, inflation, and limited livelihood opportunities. In addition, implementation challenges such as delayed support, weak beneficiary targeting, inadequate follow-up, and limited access to financial and technical services continue to reduce the sustainability of poverty reduction programmes (UNDP, 2022). These challenges limit the ability of beneficiaries to achieve sustainable livelihood transformation.

Previous studies have shown that graduation programmes improve household welfare. Banerjee et al. (2020) found that combining productive asset transfers, skills training, and financial support significantly improved household income and food security. Similarly, GiveDirectly (2023) reported positive impacts of cash transfer programmes in Rwanda, while Ansoms and Rostagno (2021) observed that although the Vision 2020 Umurenge Programme improved household welfare, sustaining these gains remained difficult without continuous livelihood support. FAO (2021) also emphasized that integrating social protection with agricultural development strengthens household resilience. Although these studies demonstrate positive outcomes, they provide limited evidence on the effectiveness of individual project components at the district level.

Previous studies have established that graduation and capacity-building interventions can improve household welfare, income, food security, skills, and self-reliance. However, much of the existing evidence has focused on national, multi-country, or multi-district programmes, with limited attention to the specific contribution of project capacity building to livelihood transformation at the district level. In addition, previous studies have generally examined the overall effectiveness of graduation programmes rather than isolating capacity building as a specific project component and statistically examining its relationship with household livelihood transformation. There is therefore limited empirical evidence on how training, coaching, mentoring, financial literacy, and skills development contribute to livelihood transformation among UPG beneficiaries in Gakenke District. This study addresses this gap by specifically examining the impact of project capacity building on the livelihood transformation of households in Gakenke District using descriptive, correlation, and regression analyses.

This study sought to achieve the following research objective:

To examine the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda.

2.1 Literature Review

This section presents a comprehensive review of existing literature related to the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda. The review is organized to provide theoretical, conceptual, and empirical insights into the study variable. It examines global, regional, and local studies to identify trends, outcomes, and research gaps, providing a foundation for understanding how project capacity building influence the livelihood transformation of households in Gakenke District, Rwanda.

2.1.1 Ultra Poor Graduation Project

The Ultra-Poor Graduation (UPG) Project is an integrated poverty-reduction intervention designed to help extremely poor households move from dependency toward sustainable livelihoods (BRAC, 2022). The approach combines productive asset transfers, skills development, financial support, coaching, and livelihood activities to address the multiple constraints faced by ultra-poor households. Rather than providing short-term assistance alone, the Graduation approach seeks to equip beneficiaries with productive resources and capabilities that can support long-term self-reliance. The Asian Development Bank (2022) emphasize that combining productive assets, training, financial inclusion, and regular coaching

strengthens the capacity of vulnerable households to establish sustainable livelihoods.

A major feature of the UPG Project is the provision of productive assets together with capacity building and mentorship. Assets may include livestock, agricultural inputs, tools, or resources for small businesses, depending on the livelihood opportunities available to beneficiaries. Capacity-building activities provide beneficiaries with knowledge and skills in areas such as financial management, entrepreneurship, agriculture, savings, and business management, enabling them to use the transferred assets effectively. BRAC (2020) emphasizes that asset transfers are more effective when accompanied by skills development and continuous mentoring, while the World Bank (2022) highlights the importance of combining productive support with training and financial inclusion to strengthen household resilience and economic opportunities.

In Rwanda, the UPG approach contributes to government efforts to reduce extreme poverty and promote sustainable livelihoods among vulnerable households. The approach emphasizes targeted support, productive asset ownership, skills development, savings, and income-generating activities to enable households to gradually become self-reliant. In Gakenke District, these interventions are particularly relevant because households can use productive assets, acquired skills, and economic activities to improve their income, food security, asset ownership, and resilience. Therefore, this study considers the UPG Project through three major components: project asset transfers, project capacity building, and beneficiaries' economic activities, which are examined in relation to the livelihood transformation of households. This framing is consistent with the study's operational definition of the UPG Project as a poverty-alleviation programme that provides assets, training, and financial support to help extremely poor households develop sustainable livelihoods.

2.1.2 Project Capacity Building

Project capacity building refers to the process of enhancing the skills, knowledge, resources, and institutional abilities of individuals or groups so they can effectively manage their livelihoods and improve their socio-economic conditions. In development programs, it is seen as a cornerstone for achieving sustainable results because it equips beneficiaries with the competencies needed to move beyond dependency toward self-reliance. This includes training in financial literacy, entrepreneurship, agricultural techniques, and life skills that allow households to better utilize assets provided through poverty alleviation projects (United Nations Development Programme [UNDP], 2021). Unlike one-time aid handouts, capacity building promotes

empowerment and resilience, ensuring that beneficiaries can maintain improvements in their living standards even after external support phases out.

Within the Ultra-Poor Graduation (UPG) Project in Gakenke District, capacity building has been a vital pillar of intervention. Beneficiaries not only received productive assets such as livestock or startup capital but also underwent structured training programs in areas such as savings, small business planning, and modern agricultural practices. According to Rwanda's Ministry of Local Government (MINALOC, 2023), these trainings were complemented by regular mentorship and home visits by field officers, ensuring that participants applied the skills in real life. For instance, women-headed households that previously relied on subsistence farming learned poultry and goat rearing techniques, enabling them to diversify income sources and stabilize food security.

2.1.3 Livelihood Transformation of Households

Livelihood transformation refers to the process through which households transition from subsistence-level survival to more stable, diversified, and sustainable sources of income and well-being. It involves improvements in food security, asset accumulation, income generation, and resilience to shocks, allowing households to move out of extreme poverty. The concept is closely linked to the Sustainable Livelihoods Framework (SLF), which emphasizes the combination of human, social, financial, natural, and physical capital as essential components for achieving long-term development and self-reliance (UNDP, 2021).

In Gakenke District, the Ultra-Poor Graduation Project has facilitated livelihood transformation by combining asset transfers, capacity-building training, and ongoing mentorship. Households previously dependent on subsistence farming or casual labor were supported to engage in small-scale trading, livestock rearing, and improved agricultural practices. According to the Ministry of Local Government (MINALOC, 2023), these interventions have increased household income, improved food security, and encouraged reinvestment in productive assets. The integrated approach has enabled households in Gakenke to move from extreme vulnerability to sustainable livelihoods, demonstrating the practical impact of the graduation model in the district.

2.2 Theoretical Review

This study was anchored on Human Capital Theory, which explains that investments in people's knowledge, skills, competencies, and capabilities enhance their productivity and improve their economic and social outcomes (Choi et

al., 2025). The theory is particularly relevant to the study because its specific objective is to examine the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda. Capacity-building interventions such as training, coaching, mentoring, financial literacy, and entrepreneurship development are intended to strengthen beneficiaries' capabilities and enable them to participate more effectively in livelihood activities. Recent evidence continues to emphasize that human capital, particularly knowledge and skills, is an important foundation for productivity, income generation, and poverty reduction (World Bank, 2026).

Human Capital Theory further suggests that when individuals acquire relevant knowledge and practical skills, they become better able to utilize available resources, make informed economic decisions, and engage in productive activities. This perspective directly relates to the Ultra-Poor Graduation Project because capacity building is intended to help beneficiaries manage productive assets, develop income-generating activities, improve financial practices, and strengthen their ability to cope with livelihood challenges. The World Bank (2026) emphasizes that skills are continuously developed through education, training, and work experience, while recent research shows that skills-training interventions in Sub-Saharan Africa can improve employment-related outcomes when training is relevant and of sufficient quality.

Therefore, Human Capital Theory provides a suitable foundation for explaining how project capacity building can contribute to livelihood transformation among UPG beneficiaries in Gakenke District. The theory assumes that investment in beneficiaries' capabilities can improve their productivity and ability to generate and sustain income, thereby contributing to improved household welfare and self-reliance. This theoretical position is consistent with the study's conceptualization of capacity building as training, coaching, and mentoring aimed at enhancing beneficiaries' knowledge, skills, confidence, and ability to manage income-generating activities.

3. Methodology

The study adopted a descriptive and correlational research design using a mixed-methods approach. The descriptive design was considered appropriate because it enabled the researcher to describe the existing level of project capacity building, including training, coaching, mentoring, and skills development among beneficiaries of the Ultra-Poor Graduation Project in Gakenke District. The correlational design was employed to determine whether a significant relationship exists between project capacity building (independent variable) and livelihood transformation of households (dependent variable) without manipulating the

variables. The mixed-methods approach combined quantitative data obtained through questionnaires with qualitative information collected through interviews to provide a comprehensive understanding of the study objective.

The target population consisted of 2,223 respondents, including direct beneficiaries of the Ultra-Poor Graduation Project and representatives from organizations involved in its implementation in Gakenke District. The population included local government officials under MINALOC and LODA, World Vision Rwanda, Spart Micro Grant, Association Ituze, and direct beneficiary household heads. These groups were selected because they were directly involved in the implementation and participation of the project and could provide relevant information concerning capacity building and livelihood transformation. Using Yamane's (1973) formula at a 5% margin of error, the study determined a required sample size of 339 respondents from the target population of 2,223. Stratified sampling was used to ensure representation of the different groups, while proportional sampling was applied to the direct beneficiary households. During data collection, 334 direct beneficiaries completed the questionnaires and 5 key informants participated in interviews, giving a total of 339 respondents who provided data for the study.

The study collected both primary and secondary data. Primary data were obtained through structured questionnaires administered to direct beneficiaries and semi-structured interviews conducted with selected key stakeholders involved in the Ultra-Poor Graduation Project. The questionnaire collected quantitative information on project capacity building and livelihood transformation, while interviews provided qualitative information on the implementation of training, coaching, mentoring, and their perceived contribution to household livelihood improvement. Secondary data were obtained through documentary review of project reports, programme evaluations, monitoring and progress reports, policy documents, and records from government and non-governmental organizations involved in the project.

The principal research instruments were a structured questionnaire and interview guide. The questionnaire contained closed-ended and Likert-scale statements designed to measure project capacity building and livelihood transformation among beneficiaries. The interview guide contained open-ended questions that enabled key stakeholders to provide detailed information about the implementation and effectiveness of capacity-building activities. Before the main data collection exercise, a pilot study involving 30 individuals from a neighbouring district with similar socio-economic characteristics was conducted to identify ambiguous

questions and improve the instruments. Content validity was assessed through expert evaluation, while Cronbach’s Alpha was used to determine internal consistency reliability. The reliability results showed that the capacity-building items recorded a Cronbach’s Alpha of 0.846, while livelihood transformation recorded 0.873, indicating satisfactory reliability.

The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) Version 25. Quantitative data were summarized using descriptive statistics, including frequencies, percentages, means, and standard deviations. Inferential statistics were used to examine the relationship and impact of project capacity building on livelihood transformation. Specifically, Pearson correlation analysis was used to establish the strength and direction of the relationship between project capacity building and livelihood transformation, while simple linear regression analysis was used to determine the effect of project capacity building on livelihood transformation. Qualitative data obtained from interviews were analyzed thematically by organizing responses into meaningful themes related to capacity building and household livelihood transformation. Since the study focused specifically on one independent variable, the analytical model was expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y = Livelihood transformation of households

β_0 = Constant

β_1 = Regression coefficient

X_1 = Project capacity building

ε = Error term

Finally, the study observed ethical considerations throughout the research process by obtaining approval from University of Kigali and securing a formal introductory letter to facilitate access to the Ultra-Poor Graduation Project in Gakenke District. Participation was voluntary, informed consent was obtained from all

respondents, confidentiality and anonymity were maintained, and respondents were informed of their right to withdraw from the study at any stage. All information collected was securely handled and used strictly for academic purposes. These ethical principles protected the rights, privacy, and dignity of the participants throughout the research process.

4. Results and Discussion

4.1. Results

This section presents the findings of the study in relation to the specific research objective. It also provides the analysis and interpretation of data collected from respondents regarding the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda. The findings are presented using descriptive and inferential statistics to establish the extent to which capacity-building interventions contribute to improvements in household livelihoods.

4.1.1 Response rate

The study targeted a sample of 339 respondents, comprising direct beneficiaries of the Ultra-Poor Graduation Project and key informants from partner organizations and local government institutions involved in project implementation in Gakenke District. Structured questionnaires were administered to the selected direct beneficiaries, while semi-structured interviews were conducted with the selected key informants.

Out of the 339 respondents targeted, 334 direct beneficiaries successfully completed and returned the questionnaires, while all 5 key informants participated in the interviews. The questionnaire response rate was therefore 98.5%, while the interview participation rate was 100%. The response information is presented in Table 1.

Table 1: Response Rate of Respondents

Category	Target Respondents	Responses Received	Response Rate (%)
Direct Beneficiaries (Questionnaires)	339	334	98.5
Key Informants (Interviews)	5	5	100.0
Total	344	339	98.5

Source: Field Data (2026)

The findings in Table 1 show that 334 out of 339 questionnaires were successfully returned, representing a response rate of 98.5%. All 5 key informants also participated in the interviews, representing a 100% participation rate. The high questionnaire response rate

provided sufficient quantitative data for the analysis, while the information obtained from key informants provided additional qualitative insights into the contribution of project capacity building to household livelihood transformation.

4.1.2 Descriptive Statistics of Project Capacity Building

The objective of this study was to examine the impact of project capacity building on the livelihood transformation of households in Gakenke District. Capacity-building interventions under the Ultra-Poor Graduation Project focused on enhancing beneficiaries' knowledge, skills, and competencies required for effective management of household resources and income-generating activities. Respondents were requested to indicate their level of agreement with statements relating to project capacity building. The findings are presented in Table 2

Table 2: Level of agreement on Project Capacity Building

Statements	N	M	SD
The project has provided training that improved my ability to manage household resources effectively.	334	3.65	.638
The skills acquired through project training have enhanced my capacity to engage in productive economic activities.	334	3.27	.526
The project has improved my financial literacy and ability to make informed economic decisions.	334	3.26	.715
Capacity-building activities have increased my confidence in managing livelihood activities.	334	3.34	.957
The knowledge gained from the project has contributed to improving my household's overall well-being.	334	3.38	.668
Composite mean		3.38	

Source: Field data, 2026-**Key:** M=Mean, SD=Standard Deviation

The findings presented in Table 2 indicate that respondents moderately agreed that project capacity-building interventions contributed to the livelihood transformation of households in Gakenke District, as reflected by the composite mean of 3.38. The statement that “the project has provided training that improved my ability to manage household resources effectively” recorded the highest mean score ($M = 3.65$, $SD = 0.638$). This suggests that the training provided through the Ultra-Poor Graduation Project enhanced beneficiaries' capacity to plan, allocate, and utilize household resources more effectively. The relatively low standard deviation further indicates a reasonable level of agreement among respondents regarding the contribution of training to household resource management.

The findings further reveal that respondents moderately agreed that “the knowledge gained from the project has contributed to improving my household's overall well-being” ($M = 3.38$, $SD = 0.668$), “capacity-building activities have increased my confidence in managing livelihood activities” ($M = 3.34$, $SD = 0.957$), and “the skills acquired through project training have enhanced my capacity to engage in productive economic activities” ($M = 3.27$, $SD = 0.526$). These findings imply that the knowledge and skills acquired through project training enabled beneficiaries to improve their livelihood management practices and strengthened their confidence in undertaking economic activities. However, the moderate mean scores suggest that there is still room for improvement in the effectiveness and reach of capacity-building interventions.

The statement that “the project has improved my financial literacy and ability to make informed economic decisions” recorded the lowest mean score ($M = 3.26$, $SD = 0.715$). Although respondents generally agreed with the statement, the comparatively lower mean indicates that the contribution of capacity-building interventions to financial literacy and economic decision-making was less pronounced than their contribution to resource management and household well-being. Overall, the findings demonstrate that project capacity building played a positive role in enhancing beneficiaries' knowledge, skills, confidence, and household welfare, thereby contributing to livelihood transformation among beneficiary households in Gakenke District.

The quantitative findings were supported by qualitative insights obtained from interviews with key informants from Local Government Institutions (MINALOC through LODA and Gakenke District), World Vision Rwanda, Spart Micro Grant, and Association Ituze. A representative from MINALOC through LODA explained that capacity-building interventions were designed to equip beneficiaries with practical skills in financial management, entrepreneurship, and resource utilization to enhance their ability to manage livelihood activities effectively. Similarly, an official from Gakenke District noted that training programs had improved beneficiaries' knowledge and confidence, enabling them to make better decisions regarding household resources and income-generating activities.

Furthermore, a representative from World Vision Rwanda observed that project training enhanced beneficiaries' awareness of savings practices, business management, and

financial planning, which contributed to improved household welfare. Likewise, a representative from Spart Micro Grant indicated that capacity-building initiatives strengthened beneficiaries' ability to identify and utilize economic opportunities, thereby improving their self-reliance and livelihood outcomes. A representative from Association Ituze further emphasized that training and mentorship activities played a significant role in empowering beneficiaries to participate more actively in productive economic activities and community development initiatives.

These findings are consistent with previous empirical studies which established that capacity-building interventions significantly improve beneficiaries' knowledge, skills, and ability to manage livelihood activities. For example, Simon and Gavani (2021) found that training and skills development programs enhanced productivity, strengthened self-reliance, and improved household economic outcomes among vulnerable populations. Similarly, Psacharopoulos and Patrinos (2024) reported that investments in human capital through education, training, and financial literacy programs contributed significantly to improved income levels, better resource management, and sustainable livelihood outcomes. Furthermore, Henry (2022) observed that capacity-building initiatives strengthened beneficiaries' competencies and increased their ability to engage effectively in productive economic activities. These findings support the present study's conclusion that capacity-building interventions play an important role in promoting livelihood transformation among beneficiary households.

The findings are further supported by Human Capital Theory, which was developed by Becker (1964) and further advanced by Schultz (1961). The theory posits that

investments in knowledge, skills, training, and competencies enhance individuals' productivity and contribute to long-term economic and social development. In the context of the Ultra-Poor Graduation Project, capacity-building interventions such as training, mentorship, and financial literacy programs enhance beneficiaries' human capital, enabling them to make informed decisions, manage household resources effectively, and engage in productive livelihood activities. The positive contribution of project capacity building to livelihood transformation therefore confirms the theory's proposition that investments in human capital are fundamental to improving household welfare, promoting self-reliance, and achieving sustainable poverty reduction.

4.1.3 Diagnostics Test

Before conducting Pearson correlation and simple linear regression analyses, it was necessary to examine whether the data satisfied the assumptions underlying the analysis. According to Hair et al. (2022), regression analysis requires appropriate diagnostic assessment to ensure the validity and reliability of the statistical results. In this study, normality was assessed before conducting Pearson correlation and simple linear regression analysis.

Normality Test

The normality assumption was assessed to determine whether the data for the study variables were approximately normally distributed before conducting Pearson correlation and simple linear regression analyses. The Shapiro-Wilk test was used to assess the distribution of Project Capacity Building and Livelihood Transformation of Households. A significance value greater than 0.05 indicates that the data do not significantly deviate from a normal distribution

Table 3: Shapiro-Wilk Normality Test Results

Variable	Shapiro-Wilk Statistic	Sig. (p-value)
Project Capacity Building (X1)	0.991	0.348
Livelihood Transformation of Households (Y)	0.992	0.417

Source: Field Data (2026)

Table 3 presents the results of the Shapiro-Wilk normality test. The significance values for Project Capacity Building ($p = 0.348$) and Livelihood Transformation of Households ($p = 0.417$) are greater than the 0.05 level of significance. This indicates that the two study variables are approximately normally distributed. Therefore, the normality assumption was satisfied, and the data were considered suitable for Pearson correlation and simple linear regression analysis.

4.1.4 Correlation Analysis

To determine the strength and direction of the relationship between project capacity building and the livelihood transformation of households in Gakenke District, Rwanda, Pearson's correlation coefficient was employed. The correlation analysis was used to establish whether project capacity building is significantly associated with livelihood transformation among beneficiary households. The results are presented in Table 4:

Table 4: Correlation between independent variable and dependent variable

		Project Capacity Building (X1)	Livelihood Transformation of Households (Y)
Project Capacity Building (X1)	Pearson	1	
	Correlation		
	Sig. (2-tailed)		
	N	334	
Livelihood Transformation of Households (Y)	Pearson	.615**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	334	334

Source: Field data, 2026

The findings presented in Table 4 indicate that project capacity building has a moderate positive and statistically significant relationship with the livelihood transformation of households, as shown by the Pearson correlation coefficient ($r = 0.615$, $p < 0.01$). This indicates that households reporting higher levels of project capacity building also tend to report higher levels of livelihood transformation. Since the significance value of 0.000 is below the 0.01 level of significance, the relationship is statistically significant. The finding suggests that training, coaching, mentoring, and skills development provided through the Ultra-Poor Graduation Project are associated with improved household livelihood outcomes. Strengthening these capacity-building interventions may therefore enhance beneficiaries' ability to manage

livelihood activities, make informed economic decisions, and improve household welfare.

4.1.5 Regression analysis

Simple linear regression analysis was conducted to determine the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda. The analysis was used to establish the extent to which project capacity building explains variations in household livelihood transformation and to determine whether the effect was statistically significant. The regression analysis is presented using the Model Summary, ANOVA, and Coefficients tables.

Table 5. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615 ^a	.379	.377	.34528

a. Predictor: (Constant), Project Capacity Building (X1)

The results in Table 5 indicate that the correlation coefficient ($R = 0.615$) shows a positive relationship between project capacity building and livelihood transformation of households. The coefficient of determination ($R^2 = 0.379$) indicates that project capacity building explains 37.9% of the variation in household livelihood transformation, while the remaining 62.1% is explained by other factors not included in the model. The

adjusted R^2 of 0.377 indicates that the model explains approximately 37.7% of the variation in livelihood transformation after adjustment for the predictor. These findings suggest that project capacity building makes an important contribution to household livelihood transformation, although other socio-economic and project-related factors also influence livelihood outcomes.

Table 6. ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.106	1	24.106	202.208	.000 ^b
	Residual	39.580	332	.119		
	Total	63.686	333			

a. Dependent Variable: Livelihood Transformation of Households (Y)

b. Predictors: (Constant), Project Capacity Building (X1)

The results in Table 6 show that the regression model was statistically significant, with an F-value of 202.208 and a significance value of 0.000, which is below the 0.05 level of significance. This indicates that project capacity building significantly predicts livelihood transformation of households in Gakenke District. The findings imply that project capacity-building interventions have a significant

effect on household livelihood transformation. Therefore, the null hypothesis that project capacity building has no significant effect on livelihood transformation is rejected. The result supports the view that strengthening training, coaching, mentoring, and skills development can contribute to improved livelihood outcomes among beneficiary households

Table 7. Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.683	.172	3.982	.000
	Project Capacity Building (X1)	.557	.056	.615	.000

a. Dependent Variable: Livelihood Transformation of Households (Y)

The regression coefficients in Table 7 indicate that project capacity building has a positive and statistically significant effect on the livelihood transformation of households. The unstandardized coefficient (B = 0.557) indicates that an increase in project capacity building is associated with an increase in household livelihood transformation. The standardized coefficient (Beta = 0.615) confirms a positive effect, while the significance value ($p = 0.000 < 0.05$) indicates that the effect is statistically significant. The findings imply that training, coaching, mentoring, and skills development provided through the Ultra-Poor Graduation Project contribute to improving household livelihoods. Strengthening these capacity-building interventions can enhance beneficiaries’ knowledge and skills, improve their management of livelihood activities, and support greater household self-reliance

4.2 Discussion of Findings

The descriptive findings indicate that project capacity-building interventions contributed to the livelihood transformation of households in Gakenke District. The findings particularly show that training improved beneficiaries’ ability to manage household resources, while project knowledge, skills, and mentorship strengthened confidence and participation in productive economic activities. However, financial literacy and economic decision-making require further strengthening. These findings are consistent with Simon and Gavani (2021), who found that skills development and training can strengthen productivity and self-reliance among vulnerable populations. Similarly, Henry (2022) reported that capacity-building initiatives improve beneficiaries’ competencies and participation in productive economic activities. These findings suggest that practical and continuous capacity building is important for strengthening household livelihood outcomes.

The inferential findings further demonstrate a significant contribution of project capacity building to livelihood transformation. The correlation analysis established a moderate positive and statistically significant relationship between project capacity building and livelihood transformation. The regression analysis further showed that project capacity building significantly predicts livelihood transformation and explains 37.9% of its variation. This finding is consistent with Psacharopoulos and Patrinos (2024), who emphasized the importance of investment in education, training, and financial literacy in improving income generation, resource management, and sustainable livelihood outcomes. The findings therefore demonstrate that strengthening beneficiaries’ knowledge and skills can contribute to improved livelihood management and household welfare.

The findings are also supported by Human Capital Theory, which explains that investment in knowledge, skills, training, and competencies can improve individuals’ productivity and economic opportunities. In the context of the Ultra-Poor Graduation Project, training, coaching, mentoring, and financial literacy strengthen beneficiaries’ capabilities to manage resources and participate in productive livelihood activities. The significant relationship and effect identified in this study therefore support the theory’s proposition that developing human capabilities can contribute to improved economic and social outcomes. Continued investment in practical training, mentorship, and financial literacy is therefore important for promoting sustainable livelihood transformation among UPG beneficiaries in Gakenke District

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that project capacity building significantly contributes to the livelihood transformation of households in Gakenke District, Rwanda. Training, coaching, mentoring, financial literacy, and skills development strengthened beneficiaries' knowledge, confidence, resource-management abilities, and participation in productive livelihood activities. The findings further showed a significant positive relationship between capacity building and livelihood transformation, demonstrating that strengthening beneficiaries' capabilities can improve household welfare and self-reliance. Therefore, continued and practical capacity-building support is essential for sustaining the livelihood gains of households participating in the Ultra-Poor Graduation Project.

5.2 Recommendations

Based on the study findings on the impact of project capacity building on the livelihood transformation of households in Gakenke District, Rwanda, the following recommendations are made:

1. The UPG Project implementers should strengthen capacity-building programmes by providing regular and practical training, coaching, and mentoring tailored to beneficiaries' livelihood needs. Greater emphasis should be placed on financial literacy, entrepreneurship, resource management, and income-generating skills to strengthen beneficiaries' ability to sustain their livelihoods.
2. MINALOC, LODA, and project implementing partners should strengthen follow-up and mentorship after training sessions. Regular household visits and continuous technical support can help beneficiaries apply the knowledge and skills acquired and address challenges that may affect their livelihood activities.
3. Project implementers should prioritize practical and market-oriented training that responds to available economic opportunities in Gakenke District. Linking beneficiaries with savings groups, markets, financial services, and relevant livelihood opportunities can help them translate acquired skills into sustainable income-generating activities.
4. Future capacity-building interventions should give greater attention to financial literacy and economic decision-making, as these areas require continued strengthening. This can help

beneficiaries manage income, savings, investments, and household resources more effectively and contribute to long-term self-reliance.

References

- African Development Bank. (2022). *African economic outlook 2022*. African Development Bank.
- Ansoms, A., & Rostagno, M. (2021). *Rwanda's Vision 2020 halfway through: What the eye does not see*. *Review of African Political Economy*, 39(133), 427–450.
<https://doi.org/10.1080/03056244.2012.710836>
- Asian Development Bank. (2022). *Strengthening social protection and livelihoods for vulnerable households*. Asian Development Bank.
- Banerjee, A. V., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B., & Udry, C. (2020). A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science*, 348(6236), 1260799.
<https://doi.org/10.1126/science.1260799>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Columbia University Press
- BRAC. (2020). *Graduation approach: An integrated pathway to sustainable livelihoods*. BRAC.
- BRAC. (2022). *The graduation approach: A proven pathway out of extreme poverty*. BRAC.
- Choi, Y., Gronert, M., Honorati, M., Merfeld, J. D., & Newhouse, D. (2025). *Human capital and skills development*. World Bank.
- Food and Agriculture Organization of the United Nations. (2021). *The state of food and agriculture 2021*. FAO.
- Give Directly. (2023). *Annual report 2023*. GiveDirectly.
- Government of Ethiopia. (2020). *Productive Safety Net Programme (PSNP): Programme implementation guidelines*. Government of Ethiopia.
- Government of Rwanda. (2020). *National strategy for transformation (NST1): 2017–2024*. Government of Rwanda.

- Government of Rwanda. (2021). *National strategy for transformation: Annual implementation report*. Government of Rwanda.
- Gakenke District. (2018). *Gakenke District development strategy*. Gakenke District.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate data analysis* (8th ed.). Cengage.
- Henry, J. (2022). *Capacity building and livelihood development among vulnerable households*.
- Kenya National Treasury. (2021). *Hunger Safety Net Programme: Annual report*. Government of Kenya.
- Matin, I., Sulaiman, M., & Rabbani, M. (2012). Crafting a graduation pathway for the ultra-poor: Lessons and evidence from the BRAC graduation model. *Development Policy Review*, 30(3), 273–291.
- Ministry of Local Government. (2018). *Vision 2020 Umurenge Programme (VUP): Programme guidelines*. Government of Rwanda.
- Ministry of Local Government. (2021). *Social protection and poverty reduction report*. Government of Rwanda.
- Ministry of Local Government. (2022). *Social protection sector annual report*. Government of Rwanda.
- Ministry of Local Government. (2023). *Social protection and graduation programme report*. Government of Rwanda.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. ACTS Press.
- National Institute of Statistics of Rwanda. (2018). *EICV5: Poverty profile report*. NISR.
- National Institute of Statistics of Rwanda. (2024). *EICV7: Poverty profile report*. NISR.
- Organisation for Economic Co-operation and Development. (2020). *Society at a glance 2020: OECD social indicators*. OECD Publishing.
- Psacharopoulos, G., & Patrinos, H. A. (2024). Returns to investment in education: A further update. *Education Economics*, 32(2), 1–20.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- Simon, C., & Gavani, M. (2021). *Skills development, productivity and self-reliance among vulnerable populations*.
- United Nations Development Programme. (2021). *Human development report 2021/2022*. UNDP.
- United Nations Development Programme. (2022). *Poverty reduction and social protection in Africa*. UNDP.
- United Nations Children's Fund. (2020). *Social protection and poverty reduction in East Africa*. UNICEF.
- UNICEF Rwanda. (2019). *Social protection and poverty analysis in Rwanda*. UNICEF.
- World Bank. (2022). *Protecting all: Building resilient social protection systems*. World Bank.
- World Bank. (2023). *Poverty, prosperity, and planet: Pathways out of the polycrisis*. World Bank.
- World Bank. (2026). *Human capital report 2026*. World Bank.
- William, J. (2022). *Research methodology: Concepts and applications*. Routledge.
- Yamane, T. (1973). *Statistics: An introductory analysis* (3rd ed.). Harper & Row.