



Effects of Project-Based Strategies on Poverty Reduction among Single Mothers in Kicukiro District, Rwanda

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Abstract: This study investigated the effect of project-based strategies on poverty reduction among single mothers in Kicukiro District, Rwanda. Specifically, it examined the effects of project-based skills development, financial support, income-generating, and social support strategies on poverty reduction. The study was guided by Empowerment Theory, the Sustainable Livelihoods Framework (SLF), and the Theory of Planned Behavior (TPB). A descriptive and correlational research design was adopted using quantitative and qualitative approaches. The target population comprised 348 respondents, and a sample of 186 was selected using Yamane's formula. A total of 152 valid questionnaires and 24 key-informant interviews were obtained. Quantitative data were analyzed using SPSS through descriptive statistics, Pearson correlation, ANOVA, and multiple regression, while qualitative data were analyzed thematically. The findings showed positive and statistically significant relationships between poverty reduction and skills development ($r = 0.862, p < 0.001$), financial support ($r = 0.633, p < 0.001$), income-generating strategies ($r = 0.870, p < 0.001$), and social support ($r = 0.841, p < 0.001$). Regression results further showed significant positive effects of skills development ($\beta = 0.288, p < 0.001$), financial support ($\beta = 0.173, p < 0.001$), income-generating strategies ($\beta = 0.297, p < 0.001$), and social support ($\beta = 0.280, p < 0.001$). The model explained 85.2% of the variation in poverty reduction ($R^2 = 0.852$). The study concludes that integrated project-based interventions combining skills, finance, income-generating opportunities, and social support can substantially improve the socio-economic well-being of single mothers. It recommends strengthening integrated and sustainable programmes, expanding access to finance and markets, aligning training with economic opportunities, and reinforcing mentorship and social support mechanisms.

Keywords: Project-based strategies; Skills development; Financial support; Income-generating strategies; Social support; Poverty reduction; Single mothers.

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I. Introduction

Poverty among single mothers remains an important socio-economic challenge because women who are solely responsible for household provision and childcare often face limited access to employment, capital, skills, markets, and social support. Project-based strategies have therefore been used to address these constraints through vocational and entrepreneurship training, financial inclusion, income-generating activities, and

social protection. Such interventions seek not only to address immediate economic needs but also to strengthen long-term livelihood capacity and resilience.

The dissertation notes that Rwanda has integrated project-based interventions into national development efforts, including vocational training, financial inclusion, social protection, and community-based programmes. In Kicukiro District, single mothers participate in savings groups, cooperatives, entrepreneurship initiatives, and other development interventions, yet barriers to capital,

skills, markets, and sustainability continue to affect outcomes. □

The problem addressed by the study is that, despite government and non-governmental interventions, some single mothers in Kicukiro District continue to experience low income, limited access to capital, inadequate entrepreneurial skills, and restricted market opportunities. Existing studies have largely examined women’s empowerment and poverty reduction in broad terms, leaving limited localized evidence on how project-based strategies affect single mothers specifically in Kicukiro District. The study therefore sought to provide context-specific evidence to inform the design and implementation of more effective poverty-reduction interventions.

The general objective was to assess the effect of project-based strategies on poverty reduction among single mothers in Kicukiro District, Rwanda. The specific objectives were to examine the effects of skills development strategies, financial support strategies, income-generating strategies, and social support strategies on poverty reduction.

2. Literature Review

The study was grounded in Empowerment Theory, the Sustainable Livelihoods Framework, and the Theory of Planned Behavior. Empowerment Theory explains poverty reduction through access to resources, opportunities, confidence, participation, and the ability to influence decisions. The Sustainable Livelihoods Framework emphasizes access to livelihood assets,

including human, financial, and social capital, as a basis for resilient livelihoods. The Theory of Planned Behavior highlights the influence of attitudes, social influence, and perceived behavioral control on behavior. Together, these perspectives provide a basis for understanding how skills, financial resources, income opportunities, and social support can improve the socio-economic position of vulnerable women. The dissertation explicitly identifies these three perspectives as its guiding theories.

Empirical literature reviewed in the dissertation indicates that skills development can improve employability, entrepreneurship capacity, and income generation; financial support can reduce capital constraints and enable investment; income-generating activities can increase household income and economic independence; and social support can strengthen confidence, participation, and resilience. However, the dissertation identifies a contextual and group-specific gap: evidence on the long-term and district-level effects of these combined strategies among single mothers in Kicukiro District remains limited. □

3. Methodology

A descriptive and correlational research design was adopted using mixed methods. The study was conducted in Kicukiro District, Kigali City, Rwanda. The target population consisted of 348 individuals: 280 single mothers, 1 project coordinator, 18 project staff, and 25 community leaders. A sample of 186 respondents was determined using Yamane’s formula. The sample comprised 162 single mothers, 1 project coordinator, 10 project staff, and 13 community leaders.

Table 1: Target Population and Sample Distribution

Category	Population	Sample
Single mothers	280	162
Project coordinator	1	1
Project staff	18	10
Community leaders	25	13
Total	348	186

Source: Kicukiro District administrative records, 2025; Researcher, 2026.

Data were collected using structured questionnaires and semi-structured interviews, with documentary review used to obtain supporting secondary information. The questionnaire used a five-point Likert scale. A pilot study

involving approximately 10% of the sample was conducted outside Kicukiro District. Reliability was assessed using Cronbach’s Alpha, and all constructs exceeded the recommended 0.70 threshold; overall reliability was 0.850.

Table 2: Reliability Test Results

Variable	Items	Cronbach’s Alpha
Skills Development Strategies	5	0.842
Financial Support Strategies	5	0.816
Income-Generating Strategies	5	0.874
Social Support Strategies	5	0.831
Poverty Reduction	5	0.887
Overall Reliability	25	0.850

Source: Pilot Study Data (2026).

Quantitative data were analyzed using frequencies, percentages, means, standard deviations, Pearson correlation, ANOVA, and multiple regression. Statistical significance was assessed at the 0.05 level. Qualitative interview data were analyzed thematically. Ethical procedures included informed consent, voluntary

participation, confidentiality, anonymity, and secure handling of research information.

□

4. Results and Discussion

4.1 Response Rate

Table 3: Response Rate

Method	Administered	Obtained	Response Rate (%)
Questionnaires	162	152	93.8
Interviews	24	24	100.0
Total	186	176	94.6

Source: Field Data (2026).

The study achieved an overall response rate of 94.6%, with 93.8% for questionnaires and 100.0% for interviews. This provided sufficient information from both beneficiaries and key stakeholders for analysis. □

4.2 Descriptive Findings

Table 4: Descriptive Summary of Study Variables

Variable	N	Grand Mean	SD
Skills Development Strategies	152	4.26	0.75
Financial Support Strategies	152	4.22	0.79
Income-Generating Strategies	152	4.22	0.80
Social Support Strategies	152	4.17	0.79
Poverty Reduction	152	4.19	0.79

Source: Field Data (2026).

Respondents generally agreed that all four project-based strategies contributed positively to poverty reduction. Skills development recorded the highest descriptive grand mean (4.26), followed by financial support and income-generating strategies (4.22 each), while social

support recorded 4.17. Poverty reduction itself recorded a grand mean of 4.19. The findings suggest that respondents perceived project interventions as contributing to improved income, economic participation, self-reliance, and household welfare.

4.3 Correlation Analysis

Table 5: Pearson Correlation between Project-Based Strategies and Poverty Reduction

Variable	Skills	Financial	Income-Gen.	Social	Poverty Reduction
Skills	1	.512**	.888**	.790**	.862**
Development					
Financial Support	.512**	1	.533**	.552**	.633**
Income-Generating	.888**	.533**	1	.803**	.870**
Social Support	.790**	.552**	.803**	1	.841**
Poverty Reduction	.862**	.633**	.870**	.841**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed); N = 152. Source: Field Data (2026).

All four strategies had strong, positive, and statistically significant relationships with poverty reduction. Income-generating strategies had the strongest association ($r = 0.870$), followed by skills development ($r = 0.862$), social support ($r = 0.841$), and financial support ($r = 0.633$), all with $p < 0.001$. These results indicate that improvements

in access to skills, finance, productive opportunities, and social support were associated with improved socio-economic conditions among single mothers. □□

4.4 Multiple Regression Analysis

Table 6: Multiple Regression Results

Predictor	B	Std. Error	Beta	t	Sig.
Constant	-0.209	0.158	—	-1.321	0.189
Skills Development	0.268	0.067	0.288	4.006	0.000
Financial Support	0.191	0.043	0.173	4.453	0.000
Income-Generating	0.268	0.067	0.297	3.993	0.000
Social Support	0.344	0.070	0.280	4.912	0.000

Dependent variable: Poverty Reduction among single mothers. Source: Field Data (2026).

The regression model showed that all four strategies had statistically significant positive effects on poverty reduction. Income-generating strategies had the largest standardized coefficient ($\beta = 0.297$), followed by skills development ($\beta = 0.288$), social support ($\beta = 0.280$), and financial support ($\beta = 0.173$). The model explained 85.2% of the variation in poverty reduction ($R^2 = 0.852$), indicating strong explanatory power. The overall ANOVA was statistically significant, $F(4,147) = 212.040$, $p < 0.001$. □□

The findings are consistent with the theoretical framework. Skills development strengthens human

capital and economic capability; financial support increases access to financial assets; income-generating activities create direct livelihood opportunities; and social support strengthens confidence, participation, and social capital. The combined effect supports the argument that integrated interventions are more useful for sustainable poverty reduction than isolated forms of assistance.

4.5 Hypothesis Testing

Table 7: Summary of Hypothesis Testing

Hypothesis	t-value	p-value	Decision
H01: Skills development has no significant effect	4.006	0.000	Rejected
H02: Financial support has no significant effect	4.453	0.000	Rejected
H03: Income-generating strategies have no significant effect	3.993	0.000	Rejected
H04: Social support has no significant effect	4.912	0.000	Rejected

Source: Field Data (2026).

All four null hypotheses were rejected because their p-values were below 0.05. Thus, skills development, financial support, income-generating strategies, and social support each significantly influenced poverty reduction among single mothers. The dissertation identifies income-generating strategies as the strongest predictor based on the standardized beta coefficient, while emphasizing the complementary nature of the four interventions.

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that project-based strategies significantly contribute to poverty reduction among single mothers in Kicukiro District. Skills development improves practical competencies, entrepreneurship capacity, confidence, and economic participation. Financial support helps beneficiaries overcome capital constraints and invest in economic activities. Income-generating strategies provide direct opportunities for

business, self-employment, and improved household income, and recorded the strongest relative contribution in the regression model. Social support strengthens confidence, decision-making, participation, and the ability to benefit from other interventions. Overall, the evidence supports an integrated approach that combines economic and social interventions to promote sustainable livelihood improvement. □

5.2 Recommendations

Project management teams and implementing organizations should align vocational, entrepreneurship, and practical business training with beneficiaries' economic needs and available market opportunities, followed by continuous mentorship and follow-up. Financial support should be accompanied by financial literacy, business management guidance, and monitoring. Projects should strengthen market linkages, business expansion support, and partnerships with cooperatives and private-sector actors so that income-generating activities can become sustainable. Social support components, including counselling, mentorship,

childcare support, and community networks, should be integrated into poverty-reduction programmes. Local authorities and development partners should strengthen coordination among NGOs, community leaders, and vulnerable households and facilitate access to economic opportunities. □

5.3 Suggestions for Further Research

Future studies should examine other districts and vulnerable groups, assess the roles of digital financial services, market accessibility, policy support, community participation, and institutional capacity, and use longitudinal designs to assess the long-term sustainability of project interventions. □

References

- Anderson, P., & Clark, J. (2024). Skills development and employment outcomes: A global perspective. *International Journal of Human Resource Development*, 29(3), 201–220.
- Anderson, P., & Lewis, R. (2024). Social protection programs and poverty reduction outcomes. *Global Social Policy Review*, 22(2), 145–162.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Kabeer, N. (2018). Gender, livelihood capabilities and women's economic empowerment. *Feminist Economics*, 24(1), 1–30.
- Kabeer, N. (2024). Women's empowerment and poverty reduction strategies. *World Development*, 158, 106–120.
- Kakooza, T. (2022). *Introduction to research methodology*. Fountain Publishers.
- Kothari, C. R. (2019). *Research methodology: Methods and techniques* (4th ed.). New Age International.
- Ministry of Finance and Economic Planning (MINECOFIN). (2024). *Rwanda economic update*. Government of Rwanda.
- Mukamana, J. (2025). Financial inclusion and livelihood improvement among women in Kigali. *Rwanda Journal of Social Sciences*, 11(2), 75–92.
- National Institute of Statistics of Rwanda (NISR). (2023). *Integrated household living conditions survey (EICV6)*. Government of Rwanda.
- OECD. (2023). *Social policy and inequality report*. OECD Publishing.
- UNDP. (2023). *Human development report 2023/2024*. United Nations Development Programme.
- UN Women. (2024). *Progress on the sustainable development goals: The gender snapshot 2024*. UN Women.
- Uwimana, A. (2025). Skills development and poverty reduction in Kigali. *Rwanda Journal of Development Studies*, 13(1), 61–79.
- World Bank. (2022). *Gender strategy 2022–2030*. World Bank.
- World Bank. (2023). *Rwanda poverty assessment*. World Bank.
- World Bank. (2024). *Poverty and equity brief: Sub-Saharan Africa*. World Bank.
- Zimmerman, M. (2020). Empowerment theory: Psychological, organizational, and community levels. *American Journal of Community Psychology*, 65(1), 1–16.