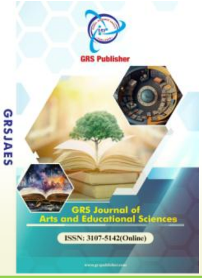
OPEN ACCESS

GRS Journal of Arts and Educational Sciences
Abbreviate Tittle- GRS J Arts Edu Scin
ISSN (Online) - 3107-5142
https://grspublisher.com/journal-details/GRSJAES
Vol-1, Iss-5 (Nov) - 2025)



Contribution of Small and Medium Enterprises to the Improvement of Socio-Economic Welfare of Rural Areas in Rwanda

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Article History
Received: 032.10.2025
Accepted: 02.11.2025
Published: 13.11.2025

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Abstract: The Government of Rwanda, through the Rwanda Development Board (RDB), has supported local SMEs by promoting standards certification, market linkages, access to finance, and skills development. Over the past five years, RDB helped 44 agro-processing SMEs obtain S-Mark certification by covering 50% of the cost, enabling local producers to access wider markets. Despite these efforts, poverty in 2017 remained at 38.2%, with GDP per capita at US$748, and most rural residents depending on agriculture. This study examined the contribution of SMEs to socio-economic welfare in rural Rwanda, focusing on dairy enterprises in Rutsiro District. Using descriptive and correlative designs, data were collected from 84 dairy SME operators through questionnaires and document reviews. Results showed 70.8% agreed dairy SMEs prioritize local employment, and 85.7% received investment training. Also, 94% could perform financial transactions confidently, and 96.4% agreed SMEs enhance welfare. Regression analysis showed a P-value of 0.007 and an adjusted R^2 of 0.718, meaning 71.8% of welfare variation was due to employment, skills, and investment. The study recommended increased financial support, management training, and insurance awareness for entrepreneurs.

Keywords: Small and Medium Enterprises, Socio-economic welfare, Rwanda.

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Cite this Article

M. Emmanuel, H. Ernest, Gratien. T, Ni. Jonathan, Contribution of Small and Medium Enterprises to the Improvement of Socio-Economic Welfare of Rural Areas in Rwanda *GRS Journal of Arts and Educational Sciences, Vol-1(Iss-5).21-32*

Introduction

Since the 1960s, Small and Medium Enterprises (SMEs) have been widely recognized for their vital role in fostering economic growth, stability, and development across nations. They constitute the largest share of businesses globally, driving employment, improving living standards, and contributing significantly to GDP. Studies highlight that SMEs often outperform large enterprises in employment growth and adaptability (Al-Shaikh, 2018). In South America, SMEs have notably boosted GDP and job creation, typically employing between five and 250 workers (Caerlewy & Marshall, 2017). Across Sub-Saharan Africa, SMEs account for about 90% of all businesses, with reforms such as those in Rwanda enhancing their competitiveness (Bateman, 2013). Uganda's SMEs, which make up 90% of its private sector, contribute 75% of GDP and employ over 2.5 million people (Muhumuza, 2017). In Rwanda, SMEs represent 98% of businesses, generating 41% of private sector jobs and benefiting from efficient registration systems and investor protections (BNR, 2017). Despite this progress, Rwanda's SME sector remains less competitive regionally. Therefore, this study seeks to analyze the contribution of SMEs to the socio-economic welfare of rural areas in Rwanda, focusing on dairy enterprises in Rutsiro District.

Statement of Problem

Socio-economic welfare is a key challenge in developing countries like Rwanda, where poverty reduction remains a central goal. According to Caerlewy and Marshall (2017), well-designed social and labor policies can promote redistribution, social cohesion, and equality. Issues such as unemployment, low education, overpopulation, and corruption hinder individual and national development. The Government of Rwanda, through the Rwanda Development Board (RDB), has supported local SMEs by facilitating standards certification, promoting market linkages, improving access to finance, and enhancing skills and technology transfer. Over the past five years, RDB has helped 44 agro-processing SMEs obtain S-Mark certification, covering 50% of the cost and enabling access to local and international markets. Despite these initiatives, poverty remained at 38.2% in 2017, with GDP per capita at US$748 and 80% of the population living in rural areas, mostly dependent on agriculture. Therefore, this study focuses on examining the contribution of small and medium-sized enterprises, particularly dairy enterprises in Rutsiro District, to the socio-economic welfare of rural communities.

Objectives of the Study

The objectives of this study are categorized into a general objective and specific objectives. The main objective was to examine the contribution of small and medium-sized enterprises to the improvement of socio-economic welfare in rural areas of Rwanda.

The specific objectives included evaluating the appreciation level of the contributions of dairy enterprises in Rutsiro District, assessing the level of socio-economic welfare in the rural areas of the district, and determining the relationship between dairy enterprises and the socio-economic welfare of rural communities in Rutsiro District.

Literature Review

This study is grounded in Socio-economic Welfare Theory and Benefits Theory to understand how small and medium-sized enterprises (SMEs) contribute to the socio-economic welfare of rural areas. Socio-economic Welfare Theory, or "welfarism," emphasizes individual well-being as a measure of societal progress, focusing on economic welfare while excluding broader social considerations such as justice or rights, and noting that economic growth alone does not guarantee wealth distribution or improved quality of life (Fitzherbert, 2014; Chojnicki, 2016; Chołaj, 2016). SMEs enhance welfare by generating direct, indirect, and induced employment, improving business development skills, and stimulating local economies, though challenges like skill mismatches, mechanization, and capital-intensive practices can limit local benefits (Glazer, 2016; Fitzherbert, 2014; Weng, 2013; Zhang, 2011; Laurence, 2012; Gajigo & Lukoma, 2011). Business development skills and access to external advice, training, and finance are key to SME growth, yet barriers such as corruption, limited government commitment, and short-term economic pressures necessitate context-specific, long-term capacity-building interventions to sustainably improve SME performance and socio-economic welfare in rural communities (Zhang, 2011; Muhumuza, 2017; Migil, 2013; Rutherford, 2013).

Literature on Socio-economic welfare

The level of people's social economic development of an area at a specified period of time is expressed in terms of different factors such as income, quality and availability of employment, class disparity, poverty rate, quality and affordability of housing standards, people, hours of work required to purchase necessities, gross domestic product, inflation rate, number of holiday days per year, affordable (or free) access to quality healthcare, quality and availability of education, life expectancy, incidence of disease, cost of goods and services, infrastructure, national economic growth, economic and political stability, political and religious freedom, environmental quality, climate and safety Durand, (2012). Edwards *et al* (2010) urged that social economic development which briefly means the level of wealth, comfort, material goods and necessities available to a certain socioeconomic class in a certain geographic area is mainly characterized by the income, education, healthcare and housing standards.

Improved income generation

Dobson *et al* (2010) improved income generation as one of indicators of social economic development is the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However, for households and individuals, "income is the sum of all the wages, salaries, profits, interest payments, rents, and other forms of earnings received in a given period of time. Fa *et al* (2015) urged that in the field of public economics, the term may refer to the accumulation of both monetary and non-monetary consumption ability, with the former (monetary) being used as a proxy for total income.

Putzel *et al* (2011) stated that for a better social economic development, an income per capita has to increase steadily. Many factors contribute to people having a higher income such as education, globalization and favorable political circumstances such as economic freedom and peace. In addition, Fitzherbert *et al* (2014) urged that an increase in income also tends to lead to people choosing to work fewer hours. Developed countries defined as countries with developed economies have higher incomes as opposed to developing countries tending to have lower incomes.

Improved education level

Education is one of the principal indicators of social economic development or better people's welfare around the globe. Since 1909, the ratio of children in the developing world attending school has increased and this has helped to better their lives. Before then, a small minority of boys attended school. By the start of the 21st century, the majority of all children in most regions of the world attended school (Dobson *et al*, 2010).

Weng (2013) wrote that Universal Primary Education is one of the eight international Millennium Development Goals, towards which progress has been made in the past decade, though barriers still remain. Securing charitable funding from prospective donors is one particularly persistent problem. Researchers at the Overseas Development Institute have indicated that the main obstacles to funding for education include conflicting donor priorities, immature aid architecture, and a lack of evidence and advocacy for the issue.

Rauch (2013) stated that Transparency International has identified corruption in the education sector as a major stumbling block to achieving Universal Primary Education in Africa. Furthermore, demand in the developing world for improved educational access is not as high as foreigners have expected. Indigenous governments are reluctant to take on the ongoing costs involved. There is also economic pressure from some parents, who prefer their children to earn money in the short term rather than work towards the long-term benefits of education. A study conducted by the UNESCO International Institute for Educational Planning according to Zhang (2011), indicates that stronger capacities in educational planning and management may have an important spill-over effect on the system as a whole.

Improved health care

Health care is a key indicator of people's welfare, encompassing the diagnosis, treatment, and prevention of physical and mental illnesses, and delivered by various health professionals including doctors, nurses, pharmacists, and psychologists (Gajigo & Lukoma, 2011). Access to health care varies across regions and populations, influenced by socio-economic conditions and national health policies, with systems designed to meet the needs of specific populations (Ash, 2013). Effective health care requires robust financing, trained personnel, reliable information, and well-maintained facilities to ensure quality services (Auty, 2013). Globally, health care has proven vital for public well-being, as demonstrated by achievements like the eradication of smallpox in 1980 through coordinated interventions (Balmford et al., 2012).

Improved housing standards

Housing standards are a key indicator of social welfare, referring to the provision of safe and adequate dwellings for members of society, whether in formal housing or alternative shelters (Gajigo & Lukoma, 2011). Poor welfare is often reflected in informal housing, which lacks legal recognition, security of tenure, and access to basic services such as water, electricity, and sanitation, leaving occupants vulnerable and outside government regulation (Zhang, 2011; Banza et al., 2009). Globally, homelessness and insecure tenure affect populations, particularly in developing countries, where rapid urbanization, migration, and economic pressures force many into informal settlements (Broadman, 2017; Barnes, 2012). Projections suggest that informal housing will continue to grow, with over 1 billion squatters worldwide today, potentially rising to 3 billion by 2050, making informal housing a defining feature of future cities (Blom, 2014).

Empirical review

Empirical studies indicate that Small and Medium Enterprises (SMEs) play a crucial role in reducing poverty and enhancing household welfare. In Brazil, SMEs contributed to a 14% reduction in poverty, demonstrating greater resilience among members (Allen & Panetta, 2017). In Nepal, ultra-poor rural women used SME loans to meet basic needs and invest in business and education (Burlando & Canidio, 2015). In India, participation in SMEs increased household consumption, savings, and access to affordable credit (CARE International, 2018). In Sierra Leone, SMEs improved farmers' income, savings, storage, and crop diversity, thereby strengthening food security (Ashe & Neilan, 2013). Evaluations in Ghana, Malawi, and Uganda revealed that SMEs enhanced women's empowerment, financial inclusion, and access to credit (Vanmeenen et al., 2018). In Rwanda's Kayonza District, SMEs provide loans, training, investment guidance, and group savings services, contributing to local economic development and socio-economic welfare (CARE Rwanda, 2018).

Research Gap

Findings from the studies conducted by Allen and Panetta (2017); Burlando and Canidio (2015); Ashe (2015) and Vanmeenen et al (2018) indicated that several households revealed that the intervention of SMEs allowed them to save even smaller amounts; a development they claimed reduced their unnecessary expenses. They found out that SMEs households saw a remarkable net impact of reduction in poverty. This outcome suggests that SMEs members have more resiliency than nonmembers. Access to SMEs lead to increased savings and credit access, improved microenterprise outcomes, and increased women's empowerment.

However, none of the studies have been done in Rwanda and in particular Western Province which according to National Institute of Statistics is one of the provinces with high numbers below the poverty line. Hence, the researcher of this study wanted to establish whether SMEs contribute to the socio-economic welfare of rural areas in Rwanda. A case of Dairy enterprises, Rutsiro district District, Western Province of Rwanda.

Research Method

This chapter outlines the methodology used in the study, including research design, case study profile, data sources, collection techniques, and data processing procedures. The study adopted descriptive and correlative research designs, using both quantitative and qualitative approaches to examine the relationship between independent and dependent variables (Grinnell & William, 2016; Mugenda & Mugenda, 2013; Cooper & Schindler, 2013). The case study focused on Rutsiro District, a pastoral area in Rwanda's Western Province with six sectors, 324,654 residents, and numerous small and medium-sized dairy enterprises, where the dairy sector is crucial for poverty reduction, food security, and sustainable development (MININFRA, 2020; NISR, 2015). The study population comprised members of eight dairy cooperatives distributed across the district's sectors, totaling 513 farmers, from whom primary data was collected.

Data Presentation, Analysis and Interpretation

Chapter four presents the research findings, their analysis, and interpretation based on the study objectives, using data from 84 dairy enterprise operators in Rutsiro District analyzed through SPSS. The respondents' profile was examined, including age, gender, education level, work experience, and areas of responsibility, to provide a clear understanding of the participants. Age distribution was specifically analyzed to categorize respondents into relevant age groups, as shown in the data tables.

Table 4.1: Distribution of respondents by age

Age of respondents	Frequency	Percentage
Between 20 and 30 years old	20	23.8
Between 31 and 40 years old	36	42.9
Between 41 and 50 years old	16	19.0
Above 51 years old	12	14.3
Total	**84**	**100.0**

Source: Primary data (2021)

From table 4.4 above, it is clearly indicated that a very large number of the respondents that was represented by 42.9% were those that are ranging from the age of 31 and 40. Also this age group is followed by 20-30, 41-50 and those above 51 with 23.9%, 19.0% and 14.3% respectively. This revealed that the research involved people that were mature enough to provide unbiased information.

Gender

The researcher tasked the respondents to state accurate information about their gender. Here, the researcher wanted to understand whether the study was gender bound. All respondents were asked about their gender and the figures are shown below in the table.

Table 4.2: Distribution of respondents by gender

Respondents by gender	**Frequency**	**Percentage**
Male	64	76.2
Female	20	23.8
Total	**84**	**100.0**

Source: Primary data (2021)

Table 4.5 above indicates that 76.2% of the respondents were males and only 23.8% were females. The researcher clearly observed from the findings that the number of male SMEs operators in Rutsiro district is more than the number of female operators. According to the findings, the study involved all genders despite the fact that females were less than males. Some earlier studies commented that mostly the SMEs sector; it is the male operators who dominate due to the fact that there is always need to more money through trade which is not the case for the females.

Educational level

The education levels of respondents were also considered in this study to help the researcher identify the thinking capacities to study their respective activities.

Table 4.3: Distribution of respondents by education level

Education level	**Frequency**	**Percentage**
Degree	2	2.4
Secondary	14	16.7
Primary	47	55.9
None	21	25.0
Total	**84**	**100.0**

Source: Primary data (2021)

In order to understand the level of education of the respondents, the researcher engaged the respondents on the above and the results were indicated in table 6 above, it is clear that 55.9%, 25.0%, 16.7% and 2.4% are for the respondents who were at the level of primary, secondary, none and degree respectively. Results established that this the SMEs operators are largely literates. When interviewed, all the four respondents that had bachelor level revealed that they were pursuing a degree whereas those who never went to school at all had been offered literacy and numeracy classes by the RDB and other international developmental bodies.

Duration in the SME operations

All respondents in the sample were asked the period of time they have been Dairy enterprise operators and they provided the following as presented in the table. The data was described in form percentage in the table and was later fully discussed under the table as indicated here below.

Table 4.4: Distribution of respondents by duration in the SME operations

Working experience	**Frequency**	**Percentage**
Less than one year	4	4.8
1 to 2 years	8	9.5
3 to 4 years	16	19.0
5 to 6 years	28	33.3
7 to 8 years	16	19.0
9 years and above	12	14.3
Total	**84**	**100.0**

Source: Primary data (2021)

Table 4.7 shows that out of 84 respondents, only 4 respondents which is 4.8% of the total respondents has been working in the Dairy enterprises for the period of less than one year, 8 respondents equal to 9.5% of the total respondents indicated that they have been employed by Dairy enterprises for the period between 1 and 2 years and the 16 respondents have working experience of between 3 and 4 years with 19.0%. The remaining respondents corresponding to 33.3% of the total respondents of 84 have worked in Dairy enterprises between 5 and 6 years. In addition, respondents that had worked for the company from 7 to 8 and those above 9 years were represented by 19.0% and 14.3% respectively. Thus, from the above findings, it is clear that Dairy enterprises operators have really delayed in the business for quite many years and this helped to know some of the reasons the Dairy enterprises are loved by the operators and the rural areas of the SMEs in general.

An evaluation of the appreciation level on contributions of Dairy enterprises

This section intends to make a full study of the practices that small and medium sized enterprises get involved to enforce socio-economic welfare of the rural areas. The selected contributions and factors are: employment opportunities, business development skills and investment abilities. The findings were presented in tables in form of percentages below.

Respondents' views on employment opportunities

This sub section discusses the respondents' level of appreciation on employment opportunities provided by Dairy enterprises and the results are clearly indicated in the table whereby they in form of percentages. The explanations are under the table.

Acceptance level of respondents on employment opportunities

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean
	F	%	F	%	F	%	F	%	F	%	F	%	
Local community of Rutsiro is given first priority to get jobs	60	70.8	24	29.2	0	0	0	0	0	0	84	100	4.88
Both males and females are given same chances for job opportunities	28	33.3	48	57.1	8	9.5	0	0	0	0	84	100	4.54
Disadvantaged people are also offered jobs	12	14.3	60	71.4	12	14.3	0	0	0	0	84	100	4.22
Dairy enterprises employment opportunities increase annually	36	42.9	48	57.1	0	0	0	0	0	0	84	100	4.61

Source: Primary data (2021)

This study sought to assess respondents' views on the contribution of dairy enterprises to employment opportunities in Rutsiro District. Results indicated that 70.8% of respondents strongly agreed that local communities are given priority for jobs, while 57.1% agreed that both men and women have equal chances, and 71.4% acknowledged that disadvantaged people are also employed. Additionally, 57.1% agreed that employment opportunities increase annually. Mean scores ranging from 4.21 to 4.88 further confirmed the strong role of dairy enterprises in providing employment, highlighting their significant contribution to the socio-economic welfare of workers.

Respondents' views on business development skills

This sub section discusses the respondents' level of appreciation on business development skills and the results are clearly indicated in the table whereby they in form of percentages mean and standard deviation. The explanations are under the table.

Table 4.5: Acceptance level of the respondents on business development skills

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean
	F	%	F	%	F	%	F	%	F	%	F	%	
SMEs offer skills like planning and budgeting to members of SMEs	68	81.0	16	19.0	0	0	0	0	0	0	84	100	4.71
Public gets training in the different areas of investment	72	85.7	12	14.3	0	0	0	0	0	0	84	100	4.71
SMEs are offered sales and marketing skills to expand their market	12	14.3	16	19.0	15	17.9	41	48.8	0	0	84	100	4.10
SMEs learn sound business plans for effective or efficient planning	48	57.1	36	42.9	0	0	0	0	0	0	84	100	4.62

Source: Primary data (2021)

The findings in Table 4.9 indicate strong support for the role of dairy enterprises in enhancing business development skills among operators. About 85.7% of respondents agreed or strongly agreed that dairy enterprises provide training in areas such as planning, budgeting, analytical, communication, and negotiation skills. However, 48.8% of respondents disagreed that SMEs effectively offer sales and marketing skills to expand markets. Mean scores ranging from 4.10 to 4.71 further confirm that most training areas are highly valued, providing strong evidence that dairy enterprises significantly contribute to the business development capacity of SME operators in Rutsiro District.

Respondent's views on the investment abilities

This sub section indicates the respondents' views on the investment abilities of the small and medium enterprises and the results are clearly explained in the tables whereby they are in form of percentages whereas discussions are under the table.

Table 4.6: Acceptance level of the respondents on the investment abilities

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean
	F	%	F	%	F	%	F	%	F	%	F	%	
We're able to analyze profits and losses of our investment	48	57.1	36	42.9	0	0	0	0	0	0	84	100	4.21
We're capable to decide on what we want to do with our money	76	66.7	8	33.3	0	0	0	0	0	0	84	100	4.34
We count any numbers or/and calculate figures in any transaction	79	94.0	5	6.0	0	0	0	0	0	0	84	100	4.87
We're able to choose a far less risky business to invest in our savings	9	10.7	13	15.5	35	41.7	27	32.1	0	0	84	100	4.01

Source: Primary data (2021)

The results in Table 4.10 highlight the investing abilities of SME operators in Rutsiro District, particularly among selected dairy enterprise members. Most respondents strongly agreed that they could perform calculations for transactions (94.0%) and make decisions on how to use their money (66.7%), while 57.1% agreed they could analyze profits and losses. However, 41.7% disagreed that they could select low-risk investment opportunities, with a small portion agreeing or undecided. Mean scores ranged from 4.01 to 4.87, indicating strong evidence of these investing abilities, though the challenge of identifying less risky investments was noted. Overall, the findings show that SME operators possess key financial and analytical skills, but require further guidance on risk management in investments.

An assessment of the level of socio-economic welfare of the rural areas

Here, the researcher wanted to find out how the respondents perceive the rural areas' social economic welfare in relation to the services provided by Dairy enterprises, Rutsiro district. The indicators include income generation, education level, healthcare and housing standards.

Respondents' views on the level of socio-economic welfare of the rural areas

This sub section discusses the respondents' level of appreciation on their level the rural areas' socio-economic welfare in relation to the services provided by Dairy enterprises, Rutsiro district; and the resulq4ts are clearly indicated in the table whereby they in form of percentages. The descriptions and analyses are shown below the table.

Table 4.7: Respondents' views on level of socio-economic welfare of the rural areas

Statements	Standard Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean
	F	%	F	%	F	%	F	%	F	%	F	%	
SMEs contribute to socio-economic of the rural areas highly	81	96.4	3	3.6	0	0	0	0	0	0	84	100	4.87
SMEs contribute to socio-economic of the rural areas averagely	5	6.0	79	94.0	0	0	0	0	0	0	84	100	4.33

SMEs contribute to socio-economic of the rural areas poorly	0	0	8	9.5	42	50.0	34	40.5	0	0	84	100	3.64

Source: Primary data (2021)

The findings in Table 4.11 indicate that SMEs significantly contribute to socio-economic welfare, with 96.4% of respondents strongly agreeing and 94.0% agreeing that SMEs make an average contribution. No respondents indicated strong disagreement, while 40.5% disagreed that SMEs contribute poorly. Mean scores ranged from 3.64 to 4.87, with two means above 4.3, providing strong evidence of the substantial role SMEs play in enhancing the socio-economic welfare of rural areas.

Respondents' views on the level of their income generations

This sub section discusses the respondents' level of appreciation on their income generation levels in relation to the services provided by dairy enterprises, Rutsiro district; and the results are clearly indicated in the table whereby they in form of percentages. The descriptions and analyses are shown below the table.

Table 4.8: Respondents' appreciation on income and savings

Income per month	Before dairy enterprises		After dairy enterprises	
	F	%	F	%
Below 50,000frw	67	79.7	7	8.3
50,001frw - 100,000frw	2	2.4	24	28.6
100,001frw - 200,000frw	15	17.9	51	60.7
Above 200,001frw	00	0.0	2	2.4
Total	**84**	**100**	**84**	**100**
Savings per month	**Before dairy enterprises**		**After dairy enterprises**	
	F	**%**	**F**	**%**
Below 5,000frw	66	78.6	13	15.5
5,001frw - 10,000frw	17	20.2	34	40.5
10,001frw - 20,000frw	01	1.2	30	35.7
Above 20,001frw	00	0.0	07	8.3
Total	**84**	**100**	**84**	**100**

Source: Primary data (2021)

Table 4.12 highlights respondents' income and savings before and after working at dairy enterprises. Initially, 79.7% of respondents earned below 50,000 Frw per month, which was insufficient for family needs. After joining the dairy enterprises, 60.7% reported earning between 100,000 Frw and 200,000 Frw, significantly improving their financial situation. Regarding savings, 78.6% initially saved less than 5,000 Frw monthly, often nothing at all, but after employment, 40.5% were able to save between 5,000 Frw and 10,000 Frw, demonstrating a clear enhancement in their economic well-being.

Respondents' views on the level of their housing standards and healthcare

This sub section discusses the respondents' level of appreciation on their housing standards and healthcare levels in relation to the services provided by dairy enterprises, Rutsiro district; and the results are clearly indicated in the table whereby they in form of percentages. The descriptions and analyses are shown below the table.

Table 4.9: Respondents' appreciation on housing and medical requirement

Housing standard	Before dairy enterprises		After dairy enterprises	
	F	%	F	%
Single room	43	51.2	19	22.6

Double room	31	36.9	23	27.4
Spaceous	10	11.9	41	48.8
Self contained	00	0.0	01	1.2
Appartment	00	0.0	00	0.0
Total	**84**	**100**	**84**	**100**
Medical requirment	**Before dairy enterprises**		**After dairy enterprises**	
	F	**%**	**F**	**%**
Monthly	01	1.2	19	22.6
Quaterly	15	17.9	60	71.4
Annually	52	61.9	05	6.0
Never	16	19.0	00	0.0
Total	**84**	**100**	**84**	**100**

Source: Primary data (2021)

The findings in Table 14 show that dairy enterprises positively impacted the social and economic development of their beneficiaries. Before employment, 51.2% of respondents lived in single-room houses, but after joining the dairy enterprises, 48.8% moved into more spacious homes, with many even constructing their own houses. Regarding medical access, 61.9% of respondents could only afford annual medical care before employment, whereas after joining the enterprises, 22.6% accessed medical services monthly and 71.4% quarterly. Interviews with the dairy enterprises coordinator confirmed that the company provides risk insurance covering death, permanent disability, and medical expenses up to two million Rwandan Francs.

Respondents' views on the level of their education improvement

This sub section discusses the respondents' level of appreciation on their level of education improvement in relation to the services provided by dairy enterprises, Rutsiro district; and the resulq4ts are clearly indicated in the table whereby they in form of percentages. The descriptions and analyses are shown below the table.

Table 4.10: The level at which diary enterprises contribute to education levels

Level	**Frequency**	**Percentage**
High (above 75%)	52	61.9
Medium (50%-75%)	26	31.0
Low (Below 50%)	6	7.1
Total	**84**	**100.0**

Source: Primary data (2021)

The study found that dairy enterprises significantly contribute to the educational improvement of their members and employees. A majority of respondents, 61.9%, agreed that these enterprises positively influence education. Interviews with enterprise members highlighted several roles played by the dairy enterprises, including providing loan products, guiding clients to make sound business decisions, promoting

Finding out the relationship between Dairy enterprises and socio-economic welfare

With the help of SPSS, this sub section expresses the significance relationship between the research variables which include contributions of Dairy enterprises and social economic welfare of the rural areas in Rutsiro district.

Correlation analysis

This helped the researcher to understand the relationship that lies between an independent variable and dependent variables of this study.

Table 4.11: Pearson Chi-square test

Model	**Value**	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.325[a]	2	.007

Likelihood Ratio	.883	2	.009
Linear-by-Linear Association	.610	1	.044
N of Valid Cases	84		

a. 2 cells (17.7%) have expected count less than 5.

The primary role of the chi-square test is to examine whether two variables are independent ("not correlated with" or not related) or not. In this study a way to take decision was based on the P-value and the alpha. After the analysis, it was found out that the P-value was less than alpha (significance level). As it is revealed in table 4.15, P-Value was found to be 0.007 which is less than alpha value of 0.05 and this explains that the study's independent variable and dependent variable are associated.

From the chi-square test therefore, the researcher learnt that SMEs in terms of employment opportunities, business development skills were significantly related to the socio-economic welfare of the rural areas.

Regression Analysis

With the help of SPSS, this sub section expresses the significant relationship between the research variables which include SMEs contributions and social economic improvement of the rural areas. This subsection helped the researcher to understand the relationship that lies between an independent variable and independent variable of this study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816[a]	.6809	.718	.12254

a. Predictors: (Constant), Employment opportunities, Business development skills, Investment abilities

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.718, an indication that there was variation of 71.8% on socio-economic welfare of the rural areas due to changes in employment opportunities, business development skills.

The results indicated in the table show that 71.8% changes in social economic development of the rural areas could be accounted on by employment opportunities, business development skills. Hence, a strong positive relationship between the study variables marked the model summary table.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.991	5	.248	7.132	.002[a]
	Residual	.369	18	.023		
	Total	1.360	23			

a. Dependent Variable: Socio- economic welfare

b. Predictors: (Constant), Employment opportunities, Business development skills, Investment abilities

From table 4.17, ANOVA test shows a p-value of 0.002 less than alpha (5%), the significance level. This means the given data fit well with the multiple regression models which is an indication that employment opportunities, business development skills, investment abilities have a contribution to the socio-economic welfare of the rural areas. Hence, the significance value which was also less than 0.05 is an indication that the model was statistically significant.

Table 4.12: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.253	.863		.292	.774
	Employment opportunities	.756	.132	.451	2.768	.014
	Business development skills	.812	.288	.461	2.821	.012
	Investment abilities	.789	.255	.212	1.527	.146

a. Dependent Variable: Socio-economic welfare

From the data in table 15, the established regression equation was:

$Y= \beta0+ \beta_1X_1+\beta_2X_2+ \beta_3X_3 + e$

Y= 0.252 + 0.756 (Employment Opportunities) + 0.812 (Business development skills) + 0.789 (Investment abilities).

From the above regression equation, it was revealed that holding employment opportunities, business development skills, investment abilities to a constant zero, socio-economic welfare of the rural areas would be 0.253. Indeed, this constant called y-intercept is not realistic but it is a needed parameter in the model. Also, a unit increase in employment opportunities would lead to increase in socio-economic welfare of the rural areas by a factor of 0.756, a unit increase in business development skills would lead to increase in socio-economic welfare of the rural areas by a factor of 0.812; a unit increase in investment abilities would lead to increase in socio-economic welfare of the rural areas by a factor of 0.789. From these positive results which each component of SMEs would improve socio-economic welfare of the rural areas by a big range, this evidences that all the variables were statistically significant in contributing to social economic welfare of the rural areas in Rwanda and specifically, Rutsiro district.

Conclusion

In crowning it all, the study concluded small and medium sized enterprises in terms of employment opportunities, business development skills, investment abilities have a positive impact on the socio-economic welfare of the rural areas in as it was revealed in which according to the study participants the highly strongly agreed was the fact that SMEs highly contribute to socio-economic welfare and this was strongly agreed by 96.4% of the respondents. In addition, the highly strongly agreed was the fact that SMEs highly contribute to socio-economic welfare and this was strongly agreed by 96.4% of the respondents. After the analysis, it was found out that the P-value was less than alpha (significance level). As it is revealed in table 4.17, P-Value was found to be 0.007 which is less than alpha value of 0.05 and this explains that the study's independent variable and dependent variable are associated

Suggestions

To address limited access to finance, the government and related institutions should provide funding, and entrepreneurs could pool resources or form cooperatives. Inadequate management skills can be improved through regular training and workshops, which entrepreneurs should actively attend. SMEs management should prioritize safety measures and risk management. Additionally, entrepreneurs should be aware of insurance options to mitigate potential accidents and losses.

References

1. Allen K, and Panetta, L. (2017). The Consistency of UK Insurance Fund Trustee Decision Making. 4th edition, Washington: Dictionary le petit Robert.
2. Al-Shaikh M. (2018). An overview and evaluation of composite indices of development. Growth of SME Indicators. The Hague: Heerlen Publications.
3. Ambachtsheer K., Capelle R. & Lum H., (2017), The State of Global Insurance Fund Governance, 3rd edition, London: WellComp.com Publishers.
4. Ash K. (2013). Internal Insuring, History, Evolution and Prospects. 9th edition, New York: The Riot.
5. Ashe, J and Neilan H. (2013). Factors Affecting Performance of SMEs. 5th edition, London: Independent Publishers Ltd.
6. Auty, M. (2013). Effects of Business Process Outsourcing on Insurance Performance in EU, Kansas: Dreamland Publishers.
7. Balmford K, Choi M, Keilla, D and Fish, K. (2012). Developing Insurance Rural areas and Social Standards. London Independent Publishers Ltd.
8. Banza, M. (2009). Pension Fund Efficiency: The Impact of Scale, Governance and Plan Design, DNB Working Paper, Kansas: Dreamland Publishers.
9. Barnes, H. (2012). The Consistency of UK Pension Fund Trustee Decision Making. 4th edition, Washington: Dictionary le petit Robert.
10. Barrick, M., Mount, M., and J. Strauss. (2018). Conscientiousness and Performance of Insurers' Representative: New Delhi: Tata McGraw-Hill.
11. Bateman, M. (2013). Business Performance Measurement against Insurance Management, New York: Pinkwell publishers.
12. Bauer, R. (2016). *Business Growth Indicators*, 6th edition. Cambridge: MIT Press.
13. Beuningen, Van J. & H. Schmeets (2013) Developing a Social Capital Index, Financial Indicators Research, 2nd edition, New Dheli: Prentice hall.
14. Bikker, J. (2016) 'Insurance Fund Efficiency: The Impact of Scale, Governance and Plan Design, DNB Working Paper, Kansas: Dreamland Publishers.
15. Blom L. (2014). The Perceived Benefits of Dairy enterprises In Old Age. 4th edition, Washington: Dictionary le petit Robert.
16. Boelhouwer, J (2010). Wellbeing of Insurance in the Netherlands. The SCP life situation index since 2008. The Hague: Institute for social research.
17. Booysen, F (2012). An overview and evaluation of composite indices of development. Growth of SME Indicators; The Hague: Heerlen Publications.
18. Borchgrevilko, S and Hambarg, K. (2012). Internal Insuring, History, Evolution and Prospects. 9th edition, New York: The Riot.
19. Broadman J. (2017). The Effectiveness of Pensioning: Australian Review, Johannes Burg: Richlies Horse Publishers.
20. Burlando H and Canidio K (2015). Performance and Financial Ratios of Security Fund Institutions. Nairobi: ACK Uzima Publishing House.
21. Byrne A., Harrison D. & Blake, D. (2017). Dealing with the Insurance Business Investor, New York: Ernst & Young LLP.
22. Caerlewy E. & Marshall J.C., (2017), The Consistency of UK Insurance Fund Trustee Decision Making. 4th edition, Washington: Dictionary le petit Robert.
23. CARE International (2018). Wellbeing of Insurance in the Netherlands. The SCP life situation index since 2008. The Hague: Institute for social research.

24. Choi M, Keilla, D and Fish, K. (2014). Internal Audit's Role in the Insurance in SMEs. New York: Ernst & Young LLP.
25. Chojnicki I. (2016). Houston Chronicle: Contingency Theory Pension. 3rd Edition, Libras: Horizon prints.
26. Chołaj H. (2016). Pension Benefits and Problems Associated with Independent Dairy enterprises. Quebec: CPA Journal publishers.
27. Clapman P. Capelle R. & Lum H. (2017). Insurance Fund Governance: Best Practice Principles, 4th edition, London: Independent Publishers Ltd.
28. Clark, G.L., (2017) The Growing Tension between Expertise and Legislation on Insurance roles, Natorp Boulevard: Erin Joyner Publications House.
29. Cooper & Schindler (2013). Wellbeing in the Netherlands. The SCP life situation index since 2008. The Hague: Institute for social research.
30. Cooper L and Schindler S. (2013). Advanced Research Methodology. 2nd edition, New York: Pinkwell publishers.
31. Dobson et al (2010). Conscientiousness and Performance of Dairy enterprises' Representative: New \ Delhi: Tata McGraw-Hill.
32. Drewnowski, J. (2014) On Measuring and Planning the Quality of Life, The Hague: Mouton Publishers.
33. Dunjia, Y. J. (2013). Insurance Plans and Retirement Savings Performance. 3rd edition, London: Well Comp.com Publishers.
34. Durand K. (2012). An overview and evaluation of composite indices of development. Social Indicators The Hague: Heerlen Publications.
35. Edwards, N Horneff, J, Ghalley, N and Phill, F. (2010). Dealing with the Insurance Business Investor, New York: Ernst & Young LLP.
36. Fa L. Schmitt, R., & Jankowitsch, B. (2015). Systems of social indicators and social reporting: The state of the art. Mannheim: Centre for Survey.
37. Ferreira, J and Souza, M (2018). A Framework for Evaluating Insurance Function. New York: Altamonte Springs International.
38. Fitzherbert L. 2014). Pension Benefits and Problems Associated with Independent Dairy enterprises.
39. Quebec: CPA Journal publishers. Gajigo K & Lukoma L. (2011). Factors Affecting Performance of Social Fund. 5th edition, London: Independent Publishers Ltd.
40. Glazer A. (2016). A Framework for Evaluating Pension Function. New York: Altamonte Springs International.
41. Graham K & Marshal, M (2015). The State of Global Pension Fund Governance, 3rd edition, London: WellComp.com Publishers.
42. Gramling P. (2013). The Perceived Benefits of Insuring Business. 4th edition, Washington: Dictionary le petit Robert.
43. Grinnel, M and William, K (2016). Methodologies in modern research. 2nd edition, New Delhi: Vikas Publishing House.
44. Hajideah, V. (2017). Research Types used to measure Living Standards. 3rd edition, London: Oxford University Press.
45. Harper, P. (2014), The Insuring Handbook. Kansas: City University Press.
46. Hoffmann (2017), Evaluation of Insurance and Insurer. Mubai: Hindu House Pik.
47. Horneff, J, Ghalley, N and Phill, F. (2016). Factors Affecting Performance of SMEs. 5th edition, London: Independent Publishers Ltd.
48. Kafle, A. (2014). The Effectiveness of Insuring Businesses: Australian Review, Johannes Burg: Richlies Horse Publishers.
49. Laurence, M. (2012). Business Performance Measurement against Pension Management, New York: Pinkwell publishers.
50. Migil K. (2013). Developing a Social Capital Index, Social Indicators Research, 2nd edition, New Dheli: Prentice hall.
51. Muga, L. (2012). Effects of Business Process Outsourcing on Insurance Performance in EU, Kansas: Dreamland Publishers.
52. Mugenda O and Mugenda, A. (2013) Research Methods, Quantitative Methods and Qualitative, Kampala: MK Publishers Ltd.
53. Muhumuza, L. (2017). Pension Fund Efficiency: The Impact of Scale, Governance and Plan Design, DNB Working Paper, Kansas: Dreamland Publishers.
54. Naale L, Harrison D. & Blake, D. (2013). On Measuring and Planning the Quality of Life, The Hague: Mouton Publishers.
55. National Bank of Rwanda. (2017). 2017 Annual report of the National Bank of Rwanda, Retrieved https://www from. bnr.rw /fileadmin/uploaded/BNR_Annual_Report_2016-2017.d.pdf.
56. National Institute Statistics of Rwanda. (2015). The Integrated Business Enterprise Survey in Rwanda 2015. Retrieved: http://www.statistics.gov.rw/publication/integrated-business-enterprise-survey-ibes-2015.
57. Ndege, J. O. (2014). Performance and Financial Ratios of Security Fund Institutions. Nairobi: ACK Uzima Publishing House.
58. Paxton, L. (2012). Roles and Challenges of Insurance in the Banking Industry. Natorp Boulevard: Erin Joyner Publications House.
59. Peursem, K. (2016). Insurance and Institutions' Role and Authorities: New Zealand Evidence. New York: Palgrave Publishers Hal.
60. Pickell, S. (2016). Developing Insurance Rural areas and Social Standards. London Independent Publishers Ltd.
61. Putzel L, Choi M, Keilla, D and King, K. (2011). The Growing Tension between Expertise and Legislation on Pension Fund, Natorp Boulevard: Erin Joyner Publications House.

62. Rauch K. (2013). The Perceived Benefits of Dairy enterprises In Old Age. 4th edition, Washington: Dictionary le petit Robert.
63. Rutherford J. (2013). Roles and Challenges of Insurance in the Banking Industry. Natorp Boulevard: Erin Joyner Publications House.
64. Schmitt, R., & Jankowitsch, B. (2015). Systems of financial indicators and social reporting: The state of the art. Mannheim: Centre for Survey.
65. Sztompka K. (2016). The Effectiveness of Pensioning: Australian Review, Johannes Burg: Richlies Horse Publishers.
66. United Nations Development Program. (2015). 2015 United Nations Development Program, Retrieved from http://web.undp.org/evaluation/documents/annual-report/2015/ARE-2014.pdf.
67. Vanmeenen, K Dlatter L and Gerorgino O. (2018). Factors Affecting Performance of SMEs. 5th edition, London: Independent Publishers Ltd.
68. Weng I. (2013). Performance and Financial Ratios of Security Fund Institutions. Nairobi: ACK Uzima Publishing House.
69. World Bank (2018). 2018 World Bank report on the economy of Rwanda, Retrieved from http://www.worldbank.org/en/about/annual-report-2018.pdf.
70. Zhang, K. (2011). Pension Benefits and Problems Associated with Independent Dairy enterprises. Quebec: CPA Journal publishers.