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A CASE OF LOW-INCOME YOUTH OF MUSANZE DISTRICT, RWANDA**

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**ABSTRACT**

*The purpose of the study was to examine the effect of poultry farming projects on youths living conditions improvement in Musanze District, Rwanda. Data was collected from 96 smallholder farmers by using questionnaires, and 4 veterinarians in charge of livestock development. In order to analyze the data; regression models, relationship and correlation techniques were used, which indicated the positive effect of poultry farming projects on living conditions of the youths. The results of study indicated significant effects of predictors on response variables.*

**Keywords:** Poultry Farming, Training, Input Support, Poultry Product Trade, Leadership Role

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**INTRODUCTION**

Poultry has frequently been touted as a potential tool for people to use to get out of poverty (Dolberg, 2016; Kristjanson, 2014; Peacock, 2015; Holman, 2015; Dossa, 2013). Approaches that focus on the most vulnerable livestock keepers have the greatest chance of making a difference in the fight against poverty (Ashley, 2017). Women's self-sufficiency relies heavily on the production of poultry (Bravo-Baumann, 2016).

Breeding and raising domesticated birds like chickens, ducks, and roosters for meat or eggs is known as poultry farming in the industry. The world's second most consumed meat is poultry, which is raised in large numbers, primarily for their eggs and meat. For human consumption, more than 60 billion chickens are killed each year. In contrast to broilers, which are raised for meat, layers are kept for their eggs (UT, 2016). One-quarter of the protein consumed worldwide comes from chicken (Askov and Dolberg, 2016). More than 70% of

Africa's poultry products are produced using village poultry (Kitalyi, 2017). Chickens in the village have cultural and social significance in addition to their nutritional and economic importance. Giving a chicken is a traditional way to welcome important guests or to honor affine and kin in many parts of Africa. Oracles are made from the entrails of deceased birds in some cultures and are frequently sacrificed. In other words: "poultry are not simply birds; they are a human creation, a social and cultural practice," says anthropologist Michael Whyte (Whyte, 2016). Many developing countries' rising incomes and urbanization are increasing demand for animal products. In comparison to ruminants and pigs, poultry production is expanding faster (Brankaert, 2017). Globally, most extreme poverty occurs in rural areas, especially in the global South. To overcome the high rates of youth unemployment, underemployment, and poverty, the poultry industry is seen as critical. While the sector is crucial for rural economies around the world, it has significant untapped development and job creation potential, particularly in developing countries (IFAD, 2015). Youth involvement in poultry activities requires government support to overcome the roadblocks that stand in their way. Taking Bangladesh as an example, poultry production there has been shown to help reduce poverty. When it comes to engaging poor women in economic development, in particular, the Poultry Development Model of Bangladesh has been successful (Nielsen, 2018).

There is sustainable development in raising chickens for the purpose of attaining incomes. According to Global Poultry Initiative, 500 youth farmers were given an opportunity to raise chickens, each with 100-200 chickens. In a period of 18 months, the beneficiaries of the project had become well off and has had more incomes developed with in their households and became a viable market for their society. Due to this project, the youth in this poultry farming were helped to create ways in which they can improve their living standards, and therefore encourages that systems

of farming like these can develop worldwide in developing countries so as to create incomes for rural people (Global Poultry Initiative, 2016).

In the twenty-first century, poverty reduction and economic growth are still dependent on agriculture and animal husbandry. Around 75% of the world's poor people live in rural areas, and the majority of them are employed in agriculture a profession that necessitates food, especially for the young people who will be tomorrow's leaders (World Bank Report, 2018 p.24).

Agribusiness and animal husbandry depend on the contributions of young people because they are an important link in the food production and security chain on a local, regional, and global scale. This is the food production and food security generation that will take over in the next few years (Proctor & Lucchese, 2016).

According to Guèye (2017), 85 percent of rural African households keep chickens or other poultry. In Asia and Latin America, poultry is just as important to smallholders as it is to large-scale farmers (FAO, 2014a; Islam and Jabbar, 2016).

According to Rwanda's Vision 2020 strategy, the country's long-term development goals include transforming from an agriculture- and animal husbandry-based economy with low living standards to a knowledge-based, service-based economy with a middle-income country status by that time. To meet these goals, we must build on the remarkable development successes of the last decade, including fast expansion, rapid reducing poverty, and lowered equity. Rwanda has an agrarian economy; which constitutes a third of the country's GDP, accounts for almost half of the exports and employs two thirds of the population<sup>1</sup>.

The Government of Rwanda plans on moving from low to middle income country and to be recognized as a knowledge-based economy. This structural transformation of the economy requires increased productivity in the agricultural sector, followed by increased employment in other sectors. The Rwandan government's development goals are

outlined in the 2018 National Agricultural Policy. Agriculture will be transformed from a means of subsistence to a source of knowledge-based value creation. The Government of Rwanda recognizes the important and strategic role the poultry sector can play. Its vision for the sector is described in the Livestock Master Plan, published in 2017 and covers market prospects for the next 5 years. The objective is to transform the country's poultry industry from dominantly subsistence-based to knowledge-intensive and market-oriented. Plan is to increase hen population from 2016 to 2022 from 5.2 million to 7.1 million (MINAGRI, 2017).

In 2016 a study done by University of Tennessee in partnership with USAID – Rwanda found that there was a serious problem of malnutrition and recommended that poultry farming projects were needed in order to combat malnutrition (UT, 2016). Since then, farming cooperatives were created including the mainly youth-dominated cooperatives, namely “Abisunganye” cooperative, “Tworore Inkoko” cooperative, and individual growers that ventured into this industry. These were aimed to achieve the goals such as income generation, combatting malnutrition and testing whether the poultry projects can be successful. However, due to the research gap, these poultry farming projects did not achieve these goals at their expectations. It was difficult to carry out these projects because of the following issues: lack of access to high-quality feed additives; inability to conduct in-depth research; lack of access to financial services; inadequate access to markets; and participation in policy dialogue (FAO, 2016). Even though it has the potential to improve the nutrition and income of the poor, poultry farming among young people has received little attention from the research and development community. This confirms that whereas the poultry farming industry can bring great economic advantages to the youth such as food security, access to loans, job creation, social and economic improvements; these cannot be achieved if there is no research done thoroughly (Guèye, 2016).

Apart from that, the views, voices, and aspirations of people with disabilities have received very little attention in research of young people towards poultry farming projects despite alarming reports about a lack of youth interest in animal husbandry. As a result, the study's goal was to fill a research void by examining the effect of poultry farming projects on youth's living conditions improvement specifically the low-income youth of District of Musanze.

This research will provide benefit at community and organizational levels in which private sectors are performing better than government or public sector as regards to community development. If they follow the way forwards into livestock development especially the poultry sector, it's imperative that more jobs will be created for youth, reduction of malnutrition effects in children, and income generation for smallholder farmers in rural areas.

The current study focused on the effect of poultry farming on youth's living conditions improvement. Many papers have discussed the importance of poultry in general population especially rural sectors but no one has discussed the effect of poultry farming projects on youth's living conditions improvement. Findings from the research are critical for low-income youth because they addressed the enablers and impediments to their participation in poultry farming projects for the purpose of securing their livelihoods and food security for themselves and their families. This research will extremely useful in gaining a better knowledge of the effect of poultry farming projects on the quality of life for people in Musanze and throughout Rwanda for development partners and poultry value chain financiers, as well as national government policymakers and local administrative authorities in Musanze.

They used this information to help young people get involved in poultry farming when designing policies and programs, as well as when implementing projects, which helped create jobs and improved Rwanda's food security. The study's findings have improved the understanding of how

poultry farming projects can help improve youth living conditions. The study laid the groundwork for further investigation by compiling relevant literature.

## LITERATURE REVIEW

### Youth Engagement in Poultry Value Chain Projects

Age ranges are commonly used to define youth, but the concept of youth itself is up for debate. Theodore Xiong (2015). Ethiopia's Ministry of Youth, Sports and Culture, for example, places the age range for young people between 15 and 29 years old. According to Ghana's National Youth Policy (2016), the country's youth population ranges from 15 to 35 years old. Senegal's Youth Development Sector Policy Letter (LPDSJ, 2004) specifies a 15-35-year-old age range. The age bracket for Rwanda's National Youth Policy (2016) is 16-30 years (MYCULTURE, 2016). The study focused on people between the ages of 16 and 30.

Despite the good job prospects in poultry production, young people tend to avoid it because it is viewed as dirty and demanding by many. Poultry has been recognized on a national and international level for its ability to provide employment for young people. Literature reveals that young people's interest in farming is waning, despite the fact that they are the most productive and physically and mentally fit they will ever be. African youth are underrepresented in agriculture, especially poultry, despite the sector's potential (Mibey, 2016).

This research looked at how young people are getting involved in agriculture in general, but it omitted information about poultry in particular. Engaging youth in agricultural activities has the potential to alleviate issues such as an aging farm population and rising youth unemployment, so it is necessary to ensure the youth interest in and involvement in agriculture, particularly poultry, through deliberate policy, training and promotion shifts that focus specifically on youth. In addition to being the most important market for food consumption and the primary source of ideas and

innovation, this group is also the most influential in shaping public opinion, public policy, and taking action (Akpan, 2015).

Due to the large number of young people living in rural areas, many of whom are unemployed or earning pitiful wages, it is critical to sustainably engage them in agriculture. The vision does not ask young people to return to the farming methods of their grandparents, but rather to focus on value chains, entrepreneurship, and "agriculture as a business," all of which are the new focal points for attention. It's not uncommon for people to confuse the two. There are multiple dimensions to this new focus, which includes everything from farm inputs to production to final consumer consumption. As a new term for agriculture and business, "agropreneurship" has been coined to recognize entrepreneurial innovation, creativity, reliability, and a focus on the market (Afande, 2015).

### Poultry Training for the Youth

With such a large young population, developing youth empowerment strategies like enterprise development is extremely difficult. Implementing such youth empowerment programs is fraught with difficulties that keep them from reaching their full potential. In general, local community youth have had limited access to and involvement in the poultry project due to inadequate funding, poor project identification and implementation processes, and monitoring and evaluation are ineffective because of this. Moreover, citizens have expressed concerns about transparency and accountability (Lagat, 2012).

However, despite the fact that the Rwanda Youth in Agribusiness Forum attempts to provide structured support to increase the availability of animal husbandry training and youth participation in poultry, many young people have not received significant support from the forum. The general impression is that youths are not being supported in the implementation of poultry farming projects in a coordinated manner. Because young people are undereducated and unable to attend international poultry trainings, they have limited access to

information about poultry farming projects. In rural areas, education has been shown time and time again to be critical to overcoming development challenges. Education of rural children has been linked directly to food security, Farmers' livelihoods benefit from basic numeracy and literacy skills. For young people to be successful in agriculture, they must have easy access to knowledge and information about poultry (Valerie, 2009)

Many rural youths, according to research, are more adept at picking up new farming technologies and are eager to increase their output using more advanced and modern farming methods. ICTs are being integrated into a number of projects aimed at disseminating agricultural information to young people. For farmers' information and services, there have been numerous other mobile and ICT applications created despite their potential, these applications' participation and impact are uneven. Rural areas have access to mobile technology, but it's not as widespread as it is in urban areas. The high cost of computers and the Internet in developing countries, coupled with a lack of electricity, make it difficult for people to use the Internet (Valerie, 2009).

### **Poultry Farming Products Trade**

Farmers must be able to buy farm inputs and services and deliver poultry products to customers in order for them to have access to the market (IFAD, 2016a). Because poultry products can be sold to generate income, they help alleviate poverty and hunger in developing countries. Poultry Products Consumer demand for quantity and quality drive production as well. Long-term market access is required if smallholders are to see an increase in income and escape poverty (Schalkwyk, 2016). Farmers' production habits are heavily influenced by their ability to access the market. Poor market access discouraged producers from producing anything other than what they needed for their own consumption. Because of this, farmers who are located near better roads or have frequent and direct sales contacts with customers can expect higher incomes from poultry production (Murenzi,

2015). Other empirical studies look for the factors that influence agricultural enterprises' market participation and intensities. One study in Rwanda found that urban poultry farmers sold a higher proportion of their output than rural ones (Kabagamba, 2009; cited in Murenzi, 2015). Increased market participation was hampered by distance between the farm and the point of sale, but better output prices and better market information were important rewards for increased sales, according to the research team's findings. According to research, Rwandan authorities must act quickly to improve rural and urban road infrastructure in order to encourage rural farmers to grow high-value commodities, promote market integration initiatives, and construct more retail outlets in the remote countryside with better market facilities (Murenzi, 2015). The agricultural and animal husbandry sector's future depends on rural youth's ability to access markets in order to boost productivity, increase income, and combat global poverty and hunger. Yes, smallholder farmers, particularly those from low- and middle-income countries, face numerous obstacles when trying to sell their products in developed markets. Young people frequently lack market knowledge and experience, as well as management and entrepreneurship abilities in the business. They are also, like a large number of other small-scale farmers, unaware of current market prices, which makes them vulnerable (MINAGRI/IFAD/FAO, 2014).

### **Role of leadership on youth's living conditions improvement**

There are various frameworks and/or strategies being implemented by the Rwandan government in order to develop animal husbandry. Vision 2020, which was launched in 2000 with the goal of becoming a middle-income country by 2020, is an important initiative (EDPRS 1&2). An important part of the Economic Development and Poverty Reduction Strategy-2 is agriculture. It was a five-year program called Rwanda's Strategic Plan for the Transformation of Agriculture-3 (PSTA III) with the

goal of increasing food security and reducing poverty by expanding the private sector.

A large part of Rwanda's population relies on agriculture and animal husbandry for their livelihoods, both directly and indirectly. Farming accounts for a large portion of Rwanda's GDP (FAO, 2016), and youth could play a significant role in this, but many factors limit their ability to be productive and grow as quickly as they could. Many obstacles stand in the way of youth participating in development. Unemployment and underemployment are the main challenges that prevent young people from participating in economic development: Urbanization drives rural-to-urban migration, so the rural population involved in agricultural production is reduced as a result. It also causes marginalization of development programs, insufficient capital, and limited access. All of these problems are exacerbated by increasing population pressure (RAB, 2017).

## **METHODOLOGY**

This study was carried out using a questionnaire. The questionnaires were distributed in different poultry farming project owners located in Musanze District. A total of 96 questionnaires were distributed. Data was collected from primary sources.

Interviews were also used. In order to find out what veterinarians and farmers thought, we used interview guides. To get the most accurate information from an interview, a researcher had to get as much cooperation as possible from the subjects. In this study, the researcher interviewed KIs who are the sector veterinary officers. This made it possible to obtain data required to complete the data obtained with the questionnaire and to clarify the purpose or objective of our research. The survey was divided into 5 sections. First section was about demographic information which contains items including age, name, qualification, and so on. The second section was about training on poultry farming, third section was about poultry project in put support. The fourth section was about poultry product trade. And the

last but not least section was about role of leadership. All questionnaires were usable. The responses indicated that a total of 57% of the respondents were male and only 43% of the respondents were female. This sample was gender inclusive and slightly male dominated. It was selected so that the views on poultry farming projects could well be captured and represented. The study's participants were all adults. 35% lied in the age group of 21-25 years. Whereas 65% lied in the age group of 26-30 years. Education wise, distribution of respondents showed that 17% had ordinary level of education, 53% had advanced level, 29 % had Bachelor's degrees, and only 1% had postgraduate level. This means they were literate and academically capable of participating in our study, making informed and objective choices on the questionnaire and answering questions during the interview. This means that their responses can easily be taken as a reflection of the views of the community as only 20% of all respondents were illiterate.

Consistency and completeness were checked on the completed questionnaires. In order to classify responses, data was collected, sorted, and coded based on the study's objectives. For the text data, the researchers used qualitative content analysis. In addition to interviews and observations, we also used open-ended survey questions to gather this information. An open-ended survey question format was used to collect the text data for this research project. Descriptive statistics, such as percentages, frequencies, standard deviations, and weighted means, were used to analyze quantitative data. This necessitated a thorough breakdown of the components of the sample. Results, trends, and easy reference were all represented visually on the table by tabulating and presenting the data. Once more, we used the second level of data analysis to look for correlations between study variables. The correlation coefficients were calculated with SPSS, a statistical package for social sciences.

The questionnaire's validity was ensured by including a number of objective questions. The

researcher consulted with experts and the study's supervisor to get their thoughts. The instrument's reliability was tested using the split-half method. A similar questionnaire was administered to all 96 people in the sample to ensure accuracy, and interviews were conducted with the KIs.

## RESULTS AND DISCUSSION

### Training on poultry farming and youths' living conditions

This section dealt with the findings in line with the first objective which was to find out the effect of poultry training on youths' living conditions in Musanze district. The respondents for this study

were the youth's poultry smallholder farmers, and KIs who are the sector veterinarians.

With regression analysis, two statistical measurement, say model summary and coefficient gave us at which extent the change of dependent variable was influenced by independent variable. In this study, the regression analysis offered the effect with which the independent variable has on dependent variable. The correlation analysis was sought to be important to also find the relationship between the variables; in this case tested by coefficients, whereas the ANOVA testing resulted into rejecting null hypotheses.

**Table 1: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988 <sup>a</sup>	.976	.971	.56797

a. Predictors: (Constant), Training on poultry farming projects.

The results as measured by R-square and adjusted R-square, showed that 97.6% of the total variation

in living conditions improvement is caused by training practices.

**Table 2: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	209.838	3	69.946	216.823	.000 <sup>b</sup>
	Residual	5.162	16	.323		
	Total	215.000	19			

a. Dependent Variable: Youth's living conditions improvement  
b. Predictors: (Constant), Training on poultry farming projects.

The results showed statistical significance of the variables considered were 0.000. From the ANOVA, the *P*-value was less than 0.05 implying that the model was a good fit for the data. The results

indicated that there is positive relationship between training on poultry farming projects and youth's living conditions improvement.

**Table 3: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.078	.892		.088	.931
	Training on poultry projects	.739	.125	.893	5.915	.000

a. Dependent Variable: Youth's living conditions improvement

Fitting the study variables in the regression model the following equation was obtained: Youth's living

conditions improvement = 0.078 + 0.739 (training on poultry farming projects). The regression



equation revealed that holding training on poultry farming projects to a constant zero, Youth's living conditions improvement would be 0.078. The table showed that independent variable was important factor in enhancing youth's living conditions improvement. Therefore, the first hypothesis was confirmed.

### Acquiring project input support and the youths' lives improvement

The second objective for this study was to examine the effect of poultry project input support on youth's living conditions improvement in Musanze district. According to the stakeholders and youths' leaders of cooperatives interviewed, the input

support provided to the youth poultry farmers were: poultry feed to feed chickens, vaccines to vaccinate the chickens, coop house for the chickens, hatcheries for baby chicks, markets where to trade the products, capital to start the project, technical assistance for the project.

The correlation coefficient in this study revealed the effect of project in put support and that there was a relationship between the variables in the study, whereas the ANOVA testing rejected null hypothesis. In this regard, the regression model proved that the independent variable (project input support) has an effect on the dependent variable (youth's living conditions).

**Table 4: Regression model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824 <sup>a</sup>	.814	.769	.97544

a. Predictors: (Constant), Project input support.

The value of R-square in this study was 81.4% meaning that the proportion of youth's living conditions improvement (dependent variable) was explained by the independent project input support at 82.4%. This also indicated that the model was

strong, as the independent variable highly explain the dependent variable. The adjusted R-square used to compensate for additional variable in the model. In this case, the adjusted R-square was 76.9%.

**Table 5: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	45.086	5	9.017	9.477	.000 <sup>b</sup>
	Residual	40.914	43	.951		
	Total	86.000	48			

a. Dependent Variable: Youth's living conditions improvement

b. Predictors: (Constant), Project input support.

In this case, from the ANOVA table, p-value was 0.000 which was less than the 0.05 and 0.001, set as standard significance levels. This meant that researcher rejected the null hypothesis and went by

the alternative hypothesis, which states that the independent variable (project input support) affects youth's living conditions improvement.

**Table 6: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.226	0.114	0.275	1.972	0.055
	Project input support	7.607	2.464		3.087	0.004

a. Dependent Variable: Youth's living conditions improvement

Youth's living conditions improvement = 0.226 + 7.607 (project input support)

The regression equation showed that youth's living conditions improvement will always depend on a constant factor of 0.226 regardless of the existence of other youth living conditions determinants. The other variables explained that; every unit increase in project input support will increase the youth's living conditions improvement by a factor of 7.607. Overall, the second hypothesis is also confirmed.

### Effect of poultry products trade on youth's living conditions improvement

The third objective of the study was to determine the effect of poultry products trade on the youths' living conditions in Musanze district.

The correlation coefficient in this study has revealed that there is a relationship between the variables, whereas the ANOVA testing rejected null hypothesis. In this regard, the regression model proved that the independent variable (poultry products trade) had an effect on the dependent variable (youth living conditions).

**Table 7: Regression Model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985 <sup>a</sup>	.970	.962	.33207

a. Predictors: (Constant), Poultry products trade.

The value of R-square in this study was 97% meaning that the proportion of youth's living conditions improvement (dependent variable) was explained by the independent variable (poultry

products trade) at 97%. This indicated that the model was strong, as the independent variable highly explained the dependent variable.

**Table 8: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	53.346	4	13.336	120.942	.000 <sup>b</sup>
	Residual	1.654	15	.110		
	Total	55.000	19			

a. Dependent Variable: Youth's living conditions improvement  
b. Predictors: (Constant), Poultry products trade.

In this case, from the ANOVA table, p-value was 0.000 which was less than the 0.05 and 0.001, set as standard significance levels. This meant that researcher rejected the null hypothesis and went by

the alternative hypothesis, which stated that the independent variable affects youth's living conditions improvement in Musanze District.

**Table 9: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.209	.096	.260	2.173	.046
	Poultry products trade	8.939	.151	.983	5.915	.000

a. Dependent Variable: Youth's living conditions improvement

Youth's living conditions improvement = 0.209+ 8.939 (Poultry products trade)

The regression equation showed that youth's living conditions improvement depended on a constant

factor of 0.209 regardless of the existence of other youth's living conditions improvement determinants. The other variables explained that; every unit increase in Poultry products trade will increase youth's living conditions improvement by a factor of 8.939. Therefore, the third hypothesis was confirmed.

### Effect of leadership on youth's conditions improvement

The fourth objective was to establish the role of local leadership on youth's living conditions in Musanze District.

The correlation coefficient in this study has revealed that there is a relationship between the variables, whereas the ANOVA testing rejected null hypothesis. In this regard, the regression model proved that the independent variable (leadership authorities) has an effect on the dependent variable (youth living conditions).

**Table 10: Regression model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727 <sup>a</sup>	.528	.499	2.20572

a. Predictors: (Constant), Leadership authorities

The results as measured by R-square and adjusted R-square, show that 52.8% of the total variation in

Youth's living conditions improvement was caused by Leadership authorities.

**Table 11: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	261.296	3	87.099	17.902	.000 <sup>b</sup>
	Residual	233.530	48	4.865		
	Total	494.827	51			

a. Dependent Variable: Youth's living conditions improvement  
b. Predictors: (Constant), Leadership authorities

The results showed statistical significance of the variables considered were 0.000. From the ANOVA, the *P*-value was less than 0.05 implying that the model was a good fit for the data. The results

indicated that there was positive relationship between leadership authorities and youth's living conditions improvement.

**Table 12: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.867	3.816		7.565	.002
	Leadership authorities	2.673	.682	.433	3.921	.000

a. Dependent Variable: Youth's living conditions improvement

Fitting the study variables in the regression model the following equation was obtained:  
Youth's living conditions improvement= 5.867 + 2.673 (leadership authorities)

The regression equation revealed that considering leadership authorities to a constant zero, youth's living conditions improvement would be 5.867. Overall, the fourth hypothesis was also confirmed.

## CONCLUSIONS AND RECOMMENDATIONS

This research tried to identify whether poultry farming initiatives had any impact on the living conditions of the area's low-income youth. Following were the study's goals: to discover the impact of poultry training on Musanze District's youth's living conditions; to examine the effect of project input support on youth's living conditions in Musanze District; to determine the effect of poultry products trade on youth's living conditions of the youth in Musanze district; to establish the role of leadership authorities on youth's living conditions improvement in Musanze District. The following were the most important findings: Training practices explained 97.6 percent of the variation in living conditions improvement, according to the results of the first objective measured by R-square and adjusted R-square. Regarding the second objective, the results as measured by R-square in this study was 81.4% meaning that the proportion of youth's living conditions improvement the independent project input support explains 82.4% of the (dependent variable). As for the third objective, respondents confirmed that poultry products trade had improved their living conditions at a level of 97%. R-square and adjusted R-square results showed that leadership authorities were responsible for 52.8% of the total variation in youth living conditions improvement. In order to help young people in the poultry industry, the study indicated that government budgets should be allocated to fund advanced technology, establish innovation hubs, and provide machinery and tools. This should keep improving poultry production efficiency and contribute to higher production efficiency.

Based on this study, the following recommendations were proposed by the researcher in order to enhance the youth involvement in poultry farming so as to improve their living conditions:

It was recommended to the Government of Rwanda through Musanze District as follows:

- There is a great need for the government, especially through district of Musanze, as government entity, to support the youth who intend to undertake poultry farming as a profession; this will assist in enabling them to improve their living conditions as they are able to create a job and in the end generate incomes.
- The Government through her parastatal entities should closely work with already initiated youth poultry projects in order to offer ideas on how to solve different technical issues that they face in the poultry farming projects.
- The government through ministry of agriculture and animal resources should make adequate budgetary allocation to finance for modern technology, establish innovation hubs and provide machines and equipment to support poultry farming activities for the youth. This will improve efficiency in farming and save huge costs that might in turn contribute to improved productivity.
- The study further recommends that Government and organization supporting youth should establish a public training and development program to educate the youth in poultry farming for the purpose of knowledge acquisition resulting into improved agriculture production.
- Government should subsidize loans for youth who aspire to start projects in agriculture to make the loans more affordable for youth in agriculture projects, assist youth in saving mobilization to increase loanable fund, assist youth in poultry in training youth on loan utilization, saving culture and business management.
- Government and/or nongovernmental organizations need to take best practices and lessons from existing youth in poultry farming model so as to encourage other youth to venture in these projects or support the existing projects to scale up.
- Intermediating the control of prices for poultry products in order to combat low prices on market for meat, eggs to increase profitability

- Strengthening capacity of district and other youth centers by creating programs specifically focused on agriculture poultry
  - Government should make intervention to increase availability of poultry inputs by attracting foreign and national investment in poultry inputs production as included in Made in Rwanda to reduce cost on mostly imported inputs.
- It was recommended to youth in poultry that:
- The youth who have a passion in farming should consider registering other youths who share in the same goals and objectives thereby forming a big coalition of youth in poultry cooperatives.
  - Youth in poultry must find out ways in which they can do self-directed learning on poultry practices to increase production.
- Youth in poultry or others that want to join in poultry must be able to create competitive business plans so as to assume financial opportunities from financial institutions.
  - Youth in poultry farming must find alternative ways to mobilize for resources in order to manage the whole value chain and hence low production cost.
  - Enhanced marketing to different institutions so that they can get customers who buy in large quantities and with higher costs including hotels and restaurants for their poultry products.
  - Working together in order to import poultry inputs as a group rather than individuals; hence decreasing the cost of inputs from current veterinary stores and increasing the quantities for future use.

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