



# Determinants of Credit Access and Amount of Credit by Youth in Rachuonyo North Sub-County

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## Abstract

Youth unemployment is a worldwide challenge that every economy is struggling with. In Africa, the agricultural sector presents lots of opportunities for the youth that can address youth unemployment. Despite the existing opportunities in Agri-enterprises, numerous challenges limit youths from seizing the opportunities. The most common challenge is limited capital for starting and operating Agri-enterprises. Financial institutions and other programs have developed financial products to support the youths in Agri-enterprises. However, the availability of credit has not translated to the uptake of agricultural activities. The objective of this study was to examine factors influencing credit access and the amount accessible by youths. The double hurdle model was used to analyse this study. The study found that gender, education level, size of the enterprise, training, availability of collaterals, and group membership positively influenced the decision to access credit, while the age of the youth, collateral and repayment period affected positively the amount borrowed. The study recommended financial institutions relax their loan terms and conditions to the youths so that youths can easily access the loans.

## Subject Areas

Economics

## Keywords

Youth Unemployment, Agri-Enterprise, Credit Access, Financial Institution

## 1. Introduction

The population of youth in sub-Saharan Africa constitutes about 37% of the to-

tal labour force which is expected to expand at a higher rate than any other part of the world [1]. UN projections using the Medium variant scenario put the population of Kenya at about 115 million people by 2065. About 35 million youths aged between 18 - 34 years will constitute the population [2]. According to the Kenya National Bureau of Statistics KNBS [3], there was an increase in the youth population which contributed to youth unemployment, currently standing at 40% of the population. Various commitments in the agricultural sector both locally and globally have been developed to accelerate youth employment.

The International Institute of Tropical Agriculture (IITA) has partnered with the African Development Bank (ADB) to form Empowering Novel Agri-Business-Led Employment (ENABLE) Youth Program in Nigeria [4]. Another example was Agri-Hub in Tanzania, linking youths with markets, input dealers and media for promotions among others. These initiatives promoted youth employment in agriculture thus, greatly contributing to the achievement of SDGs 1, 8 and 12 addressing the issues of no poverty, decent work and economic growth, and responsible consumption and production respectively [5].

The agriculture sector in Kenya comprises five subsectors, that is; food crops, industrial crops, horticulture, livestock, and fisheries. This study was focusing on indigenous chicken (IC) production among the youths in Rachuonyo North Sub-County in Homabay County. Indigenous chicken is one of the priority value chains in Homabay County. According to Farmbiz Africa report, the number of chickens produced by Homabay chicken farmers has been on the increase over the years. For example, it is recorded that there was an increase from 1794 to 232,000 from the year 2010 to 2018 [6].

The government through the Ministry of Agriculture among other NGOs committed to supporting youth engagement in Agri-enterprises by availing funding instruments such as the Uwezo Fund, Youth Enterprise Development Fund (YEDF) and Young Africa Works (YAW). YAW is an agricultural program developed by KCB group and MasterCard Foundation and the program offers training in greenhouse management and hydroponic farming to youths aged between 18 to 35 years. The goals of the mentioned programs among others have not been realized. Youths still face constraints in accessing credit support for their ventures. The study proposed to bridge the knowledge gap by giving insight into factors affecting youth access to credit support for Agri-enterprises in rural areas.

## 2. Literature Review

Gaining access to credit facilities for Agri-enterprises activities is very vital in realizing high productivity, increased household incomes and thus poverty reduction. As noted by Afande *et al.* [7], the importance of accessing credit is equal to that of access to land. The study further emphasized the need for youth access to finance by stating that sometimes the youths may have land but lack the capital to invest. Agri-enterprises' credit is necessitated by the high cost of labour and

farm inputs. Studies show that youth access to affordable credit, and lack of capital is a challenge that must be dealt with for a positive change in the agricultural sector [8]. According to Kinya and Were [9], youth involvement in agriculture in Kenya is largely hindered by limited access to credit.

Efforts by the Kenyan government to manage the financial challenges facing the youths through initiatives such as Youth Development Funds, UWEZO Funds, and NYS among other initiatives have not realized their full objectives. According to Lagat *et al.* [10], the knowledge gap and stringent measures contributed to the failure of these initiatives. Furthermore, youths require financial support to conduct their business operations, however formal microfinance has not succeeded in accomplishing the same [11]. The government and other NGOs have extensively invested in capacity building and the provision of funds to youth groups across the country, but the clarity in the coordination of the programs remains a setback. Many studies have explored factors that affect access to credit by various actors in the agricultural value chain. In Nigeria, Ijioma and Osondu [12] did a study on agricultural credit sources and determinants of credit acquisition by Idemili farmers. The study found that among the challenges farmers faced with credit access were the high cost of credit in terms of interest rate charged, lack of collaterals needed by the financiers, delays in loan approval and long distance to the source of credit. According to the study, some farmers misappropriate the acquired credit. The reasons given by such individuals were that they used such funds to meet non-food household needs. Ijioma and Osondu [13] recommended that the Nigerian government should develop education policies to help farmers acquire knowledge on credit management, and also give some incentives to entice farmers to participate in such training whenever organized.

In Kenya, the same scenarios have been recorded by literature. For example, Ndungu [13] did a study on factors affecting credit access among SMEs in Murang'a County. The study established that among other factors, the number of lending institutions, the interest rate on loans, collateral as a security for the loans, and literacy among the respondents are significantly affecting credit access among SMEs. The findings of the study corroborate the findings of a study conducted by Babu [14] on factors that affect access to formal finance by youth-owned SMEs in Kiambu County. The study noted that interest rates on loans, collateral and repayment period are the most significant factors that affect credit access by youth-owned enterprises. Studies conducted in this area include research on microfinance services and financial performance of small and medium enterprises of youth SMEs in Kisumu County by Omondi and Jagongo, and also research by Thuku on factors affecting access to credit by small and medium enterprises in Nyeri County. The results from both studies confirmed that access to finance has contributed to the performance of youth agripreneurship. Their results also corroborated with other previously discussed studies on the effects of interest rates on loans, collaterals, duration for loan payments and penalties charged on loan defaulters as the major challenges affecting youth access to loans.

### 3. Research Methodology

#### 3.1. Study Area

The study was conducted in Rachuonyo North Sub-County, Homa Bay County, situated in the western part of Kenya. (Figure 1) This county was chosen for the study because it is one of the food insecure counties in Kenya, and Agri enterprises, especially indigenous chicken production is at the forefront in accelerating the economic growth of the region. It is estimated that 82% of the county population does not have enough food to meet the needs of the household [15].

Homa Bay County is one of the six Counties in the former Nyanza province, having a population of 1,777,181 [3]. It covers an area of 4267.1 km<sup>2</sup> which includes the water surface. Homa Bay County lies between Longitudes 34° East and 34° West and between Latitudes 0°15' South and 0°52' South. The County is located in South Western Kenya along Lake Victoria and it borders Kisumu and Siaya Counties to the North, Kisii and Nyamira Counties to the East, Migori County to the South, and Lake Victoria and the Republic of Uganda to the West. The County has two main relief regions; the lakeshore lowlands and the upland plateau. The climatic condition of the county is an inland equatorial type of climate which is modified by the altitude and nearness to the lake. The county has two main rainy seasons; the long rainy season from March to June ranging from

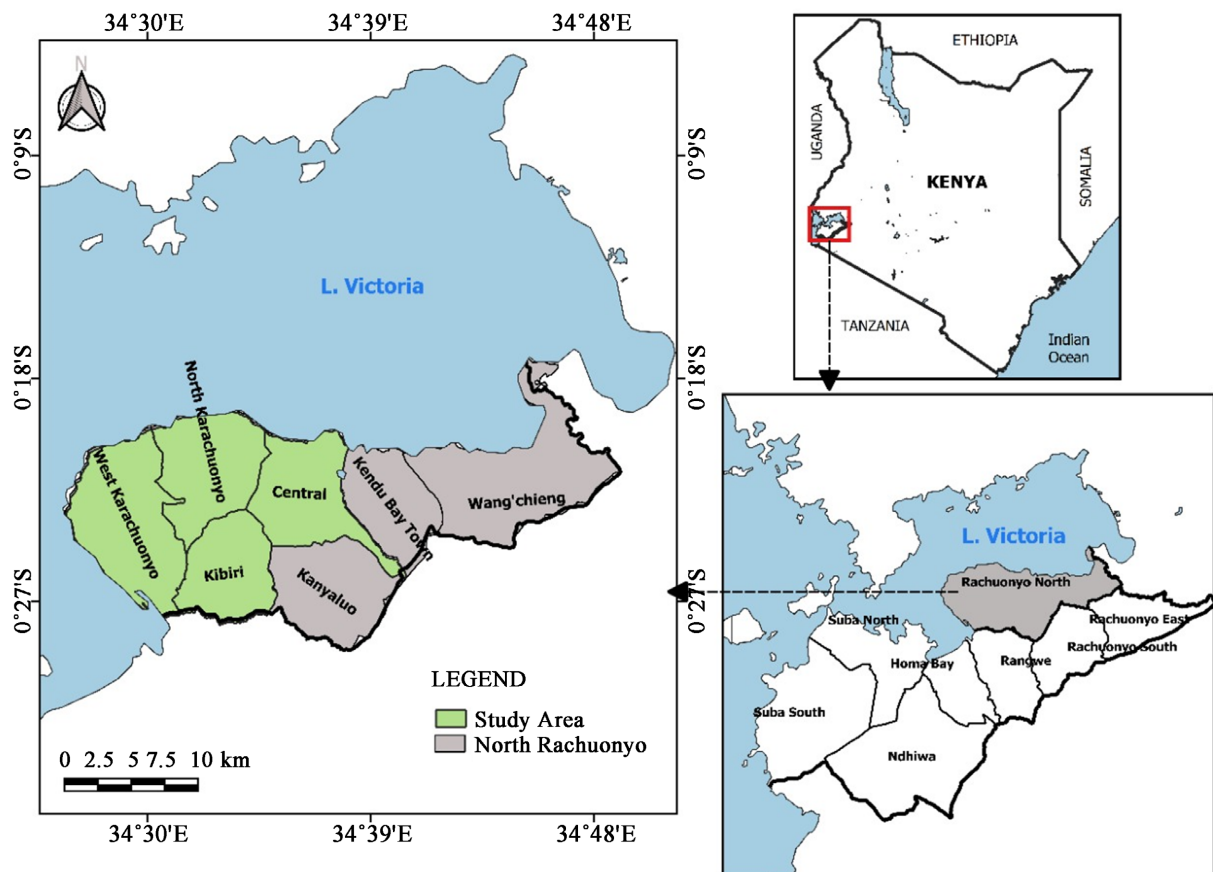


Figure 1. Map of Rachuonyo North Sub-County.

250 - 1000 mm and the short rainy season from August to November ranging from 700 - 800 mm. Temperature ranges from 18.6°C to 17.1°C.

### 3.2. Sample Size Determination

The target population for the study was youths engaging in indigenous chicken production within Homa Bay County. The study focused on four of the seven wards of Rachuonyo North Sub-County namely, North Karachuonyo, West Karachuonyo, Kibiri and Central Karachuonyo as shown in the study map. According to the economic reports 2018 from the Office of Trade and industrialization of Homa Bay County, there were 2811 registered youth agripreneurs in the entire county. The four wards of Rachuonyo North however, have a total of 614 registered IC youth farmers from which the sample was drawn. To get the sample size, probability proportionate to size sampling methodology was used [16]. The formula specification is as shown in the equation below:

$$n = \frac{N}{1 + Ne^2} \quad (1)$$

$$n = \frac{614}{1 + 614 \times 0.05^2} = 242.21 = 243 \quad (2)$$

where:  $n$  = Sample size;  $N$  is the total population; and  $e$  is the precision error. This gives a sample of 243 respondents.

### 3.3. Target Population and Distribution in Each Ward

Rachuonyo North sub-county has seven wards. Four out of the seven wards in Rachuonyo North Sub-County that is; West Karachuonyo, North Karachuonyo, Kibiri, and Central Karachuonyo, lead in terms of population, area coverage and Indigenous Chicken enterprises, and were purposively selected for these reasons. Proportionate random sampling was used in selecting the 243 youths engaging in IC production from the four wards. (Table 1) The specific samples from each ward were obtained by calculations in terms of proportionate to size. That is, proportions were developed from various wards' number of indigenous chicken farmers as a fraction of the total population of indigenous chicken farmers in the four wards. The various samples wards' samples were arrived at through multiplying the respective ward's proportion by the study sample size (243).

**Table 1.** Target population and distribution in each Ward.

Ward	Target Population	Proportion	Proportionate per Cluster
North Karachuonyo	190	0.31	75
West Karachuonyo	160	0.26	63
Kibiri	147	0.24	58
Central Karachuonyo	117	0.19	47
<b>Total</b>	<b>614</b>		<b>243</b>

Source: Rachuonyo Sub-County Report, 2021.

### 3.4. Data Collection Methods and Analysis

The study used primary data which was collected from youth aged between 18 - 35 years old engaging in indigenous chicken production in the month of January 2022. Questionnaires were used to collect data from the respondents. These questionnaires contained both closed and open-ended questions and were administered by trained enumerators. The data collected from the field were then coded, cleaned, and analysed using descriptive and econometrics analysis. STATA version 15 was used as the data management tool to help in the data analysis.

### 3.5. Empirical Model

Accessing entrepreneurship credit or not by the rural youth is considered binary, thus can lead to generation of several zeros for those who have no access. For the youths who have access to credit, the amount of credit accessed becomes a question. According to Feder *et al.* [17] intensity of adoption is defined as the level of adoption of a given technology. For instance, in the case of adoption of fertilizer application, the amount of fertilizer applied per hectare becomes the intensity of adoption. Intensity has been measured in several ways in literature. In their study, Nkonya *et al.* [18] measured intensity of adoption as the number of hectares planted with improved seed or the amount of input applied per hectare. Other related studies [19] [20] defined intensity of adoption as the proportion of area under the improved variety. In this study, intensity of credit access, also referred to as the extent of credit access, measured the amount of credit for the IC production a youth was able to borrow from financial service providers.

The decisions guiding credit access, and the intensity of credit accessed by rural youths could be made jointly or separately. In a case where these decisions are jointly made, Tobit model would be applicable in the data analysis since the Tobit model allows for clustering the zeros recorded from youths not accessing credit and it also assumes that access to credit and the amount of credit accessed are influenced by the same set of variables. However, studies by Barret [21] noted that the decision to borrow and the amount borrowed are sequential. This study assumed access to credit, and the intensity of credit access to be a two-tier process. First, factors affecting access to credit, and secondly, factors affecting the amount of money a youth can borrow from financial institutions. In such cases, most studies have employed 2-step Heckman selection or the Double Hurdle models. This is because both models allow a single variable to affect access to credit, and extent of credit access differently, thus relaxing the assumption of the Tobit model.

The difference between Heckman 2-step selection and Double Hurdle models is on how they treat the zeros. According to the Heckman model, youths with no access to credit will never access credit for the Agri-enterprises but in the Double Hurdle model, youths with no access to credit are seen as corner solution, that is, they can be potential borrowers in the case of some changes like reduction in loan interest rate, and maybe distance between financial institutions and youths

in need of the loan. Hence, this makes 2-stage Heckman selection model too restrictive. Thus, this study chose to employ Double Hurdle model to analyse factors influencing youths' access to credit and the amount of credit accessed for IC production. The first part of the model analysed the factors influencing credit access among the youths. The equation of the model was specified as below:

$$d_i^* = \alpha_i Z_i + \mu_i \quad (3a)$$

$$d_i = 1 \text{ if } d_i^* > 0 \text{ and } d_i = 0 \text{ otherwise} \quad (3b)$$

where  $d_i^*$  is a latent variable that takes the value of 1 if the youth access credit for Agri-enterprises and zero otherwise.  $Z_i$  is a vector of observed variables that explain youth access to credit,  $\alpha$  is a vector of unobserved parameters to be estimated and  $\mu_i$  is the error term assumed to be independent and normally distributed as  $\mu_i, N(0,1)$ .

The second part of the double hurdle model used the truncated model to determine the intensity of credit access. It used observations from the respondents from the first hurdle who have credit access. This model closely resembles the Tobit model and was expressed as below:

$$Y_i^* = \beta X_i + V_i \quad (5)$$

$$Y_i = Y_i^* \text{ if } Y_i^* > 0 \text{ \& } d_i > 0 \quad (6a)$$

$$Y_i = 0 \text{ if otherwise} \quad (6b)$$

where  $Y_i$  is the latent variable describing the extent of credit access for the youth Agri-enterprises,  $X_i$  is the vector of individual characteristics,  $\beta$  is the vector of parameters to be estimated,  $V_i$  is the error term normally distributed with zero mean and constant variance  $\sigma$ .

The second equation for the extent of credit access with the amount of capital a youth can borrow as the dependent variable as estimated by truncated normal regression is as shown below:

$$\begin{aligned} \text{Intcrdtacc} = & \beta_0 + \beta_1 \text{age} + \beta_2 \text{hhs} + \beta_3 \text{edu} + \beta_4 \text{marst} + \beta_5 \text{hhh} + \beta_6 \text{pbp} \\ & + \beta_7 \text{entsize} + \beta_8 \text{loanhist} + \beta_9 \text{savnghbt} + \beta_{10} \text{dstfi} \\ & + \beta_{11} \text{recdkpng} + \beta_{12} \text{finlit} + V_i \end{aligned}$$

The log-likelihood for the double hurdle model is specified below:

$$L(\alpha, \beta, \sigma^2) = \prod_0 \left[ 1 - \varphi(z_i' \gamma) \varphi\left(\frac{x_i' \beta}{\sigma}\right) \right] \times \prod_1 \left[ \varphi(z_i' \gamma) \sigma^{-1} \phi\left(\frac{y_i - x_i' \beta}{\sigma}\right) \right]$$

where  $\varphi$  and  $\phi$  are the standard normal cumulative distribution function and density function respectively. This log-likelihood comprised of values that were estimated in the first hurdle by the Probit model and second hurdle by the truncated normal regression model. (Table 2)

## 4. Results

Out of the 243 participants interviewed during the data collection, 116 farmers were males and 127 were females. Out of the 243 farmers, 63.37% were aware of



**Table 2.** Description of variables used in double hurdle model.

Variables	Description of the variables	Measurements	Expected sign
<b>Dependent Variable</b>			
Crdtacc	Credit access	Dummy (1 = Yes, 0 = No)	+/-
Int crdtacc	Amount of credit accessible	Amount of capital invested (Discrete)	+/-
<b>Independent Variable</b>			
Age	Age of the respondent	Continuous	+/-
Sex	Gender of the respondent	Dummy (1 = M, 0 = F)	+/-
Edu	Education level	number of years in school	+/-
Hsesiz	Household size	Number of individuals	+/-
Marst	Marital status	Categorical (1 = s, 2 = m, 3 = d, 4 = w)	+
Inclev	off-firm Income	Dummy (1 = Yes, 0 = No)	+/-
Exp	Experience in agri-enterprises	Dummy (1 = Yes, 0 = No)	+/-
Entsiz	Size of the enterprise	Continuous	+
Infoacc	Access to credit information	Dummy (1 = Yes, 0 = No)	+/-
Grpmember	Group membership	Dummy (1 = Yes, 0 = No)	+/-
Accland	Access to land	Dummy (1 = Yes, 0 = No)	+/-
Entrain	access entrepreneurship training	Dummy (1 = Yes, 0 = No)	+/-
Notrn	number of trainings youth attended	Discrete	+
Finacc	Access to financial Institutions	Dummy (1 = Yes, 0 = No)	+/-
Collat	Availability of collaterals	Dummy 1 = Yes, 2 = No	+/-
Pbp	Loan payback period	Continuous	+/-
Lnhist	previous default in loan payment	Dummy (1 = Yes, 2 = No)	+/-
Rcdkng	means of keeping enterprise records	Discrete	+

the financial institutions while 36.63% were not aware of the financial institutions. Among the farmers who were aware of the financial institutions, 44.86% had access to such institutions while 55.14% had no access. Those who accessed credit were 33.74% while 66.26% did not accessed credit. The average age of youths who accessed credit was 28 years, while that of youths who did not access credit was 29 years. Youths who had accessed to credit had a mean household size of 4 persons while the mean household size for those who had no access to credit was 3 persons. Results on gender indicated that 77% males and 23% females accessed credit while 21% and 79% of males and females respectively had no access to credit implying that male famers had better chances of accessing credit than their female counterparts which corroborate to the findings by Julien *et al.* [22]. Further, findings on marital status established that 25.6%, 56.1%, 8.5% and 9.8% of the youths were single, married, divorced and widowed, respectively. On the other hand, 33%, 59.6%, 3.7% and 3.7% of youths who had no



access to credit were single, married, divorced, and widowed respectively.

### Factors Influencing Credit Access and Amount of Credit Accessible by the Youth of Rachuonyo North Sub-County

Double hurdle model was used to examine factors that influence decision to access credit and intensity of the credit among the youth of Rachuonyo North Sub-County. The log-likelihood ratio test (LR) was used to assess suitability of the model in comparison to the Tobit model. In this study, the log-likelihood ratio (LR) test statistic was 106.17, which was significant at 1% significance level. This means that the double hurdle model was found adequate, resulting in two distinct decision-making stages in which rural youth in Rachuonyo North Sub-County select whether or not to access credit and how much credit to access. Tobit model was not used in this situation because it was unable to distinguish between the stages of credit access and the intensity of credit access.

**Table 3** shows the results of maximum likelihood estimate for the double hurdle regression model, including the decision to access credit and the amount of credit. The sigma constant was determined to be relatively large (0.4713) and statistically significant at 1%. The correlation coefficient between the first tier (accessing credit) and the second tier (amount of credit) was measured by Sigma. The sigma constant statistic was significant, according to Wooldridge [23], showing that there was a high reliance between the two tiers, implying that the model was more appropriate than the Tobit specification. After fitting the model, the log-pseudo likelihood was  $-132.2783$ , and the Wald Chi (2) statistic was 106.17, with  $\text{Probability} > \text{Chi}^2 = 0.000$ . This means that the parameters were all jointly significant and the covariates explained the decision to access credit and the amount of credit accessed at 1% significance level. **Table 3** indicates that the sex of the farmer, education level, size of the enterprise, access to training, and availability of collateral and group membership significantly influenced the decision to access credit. On the other hand, age of the farmer, availability of collateral and repayment period influenced the amount of credit that a youth receives.

At a 5% significance level, the farmer's age was determined to be positive and significant on the amount of credit earned. This means that as the IC farmer's age increases by one year, the amount of credit he or she receives increases by 0.0344 percent. This may be due to the fact that as farmers grow older, they are viewed as experienced in new agricultural advances, production, and marketing. Credit lenders consider them reliable and responsible in terms of managing loans thus increasing their credit accessible limits. This is similar to the findings by Obuobisa-Darko [24] where age was found to have a positive and significant effect on the intensity of adoption of cocoa research innovations in Ghana.

Sex of the farmer was found to be positive and significant on decision to access credit for Indigenous Chickens enterprise at 1 percent level. This suggests that male farmers had 1.1765 times more chances of getting loans than female counterparts. This may be owing to the fact that male farmers own land title

**Table 3.** Double hurdle model with selection estimation results for determinants of credit access and amount of credit for Youth in agri-enterprises Activities.

Variables	Coeff.	Robust.		Coeff.	Robust.	
		Standard Error	P> Z		Standard Error	P> Z
	Tier1 (Access to credit)			Tier 2 (Amount of credit)		
Age	0.0468	0.0379	0.217	0.0344**	0.0151	0.023
Sex	1.1765***	0.2508	0.000	-0.1645	0.1202	0.171
Marital status	0.1756	0.1784	0.325	0.0682	0.0752	0.364
Education level	0.5415***	0.1581	0.001	0.0736	0.0714	0.303
Enterprise size	0.3555***	0.1353	0.009	-0.0785	0.0637	0.218
Record keeping	-0.1549	0.2553	0.544	-0.1377	0.1011	0.173
Access training	0.7123***	0.2422	0.003	0.0562	0.0984	0.568
Availability of collateral	0.9149***	0.2756	0.001	0.2139*	0.1239	0.084
Repayment period	-0.1116	0.1178	0.344	0.7216***	0.0473	0.000
Group membership	1.5110***	0.2223	0.000	-0.0152	0.1497	0.919
Previous default	-0.3372	0.2235	0.131	0.0384	0.1151	0.739
Constant	-6.1906***	1.3528	0.000	7.0481	0.6078	0.000
Sigma						
Constant	0.4713	0.0478	0.000			
Number of observations	243					
Wald chi <sup>2</sup> (11)	106.17					
Prob > chi <sup>2</sup>	0.000					
Log pseudolikelihood	-132.2783					

\*, \*\*, \*\*\* represents 10%, 5% and 1% significance level, respectively.

deeds and other collateral that can be used to secure a loan. This is consistent with the findings by Karanja *et al.* [25] who found that financial institutions can limit women out of the market by granting them smaller loans than their male counterparts by developing unfriendly procedures and requirements such as collateral in terms of land title deeds. FAO [26] on the other hand had a different view claiming that there is minimal variation in male and female access to credit, thus female farmers had significantly better access to Cooperative and NGO credit sources compared to men.

The education level of the farmer was positively significant in the decision to acquire credit for chicken production at a 1 percent level. This means that the more educated the chicken farmer is, the higher the chances of acquiring credit. A farmer with one more year of education was 0.5415 more likely to acquire credit. This could be due to the fact that high education level, which is critical for capital acquisition in poultry farming, allows a farmer to understand loan terms

and also to be more competitive in the market. Furthermore, financial institutions regard well-educated farmers to have a greater understanding of how to manage the chicken business than farmers who are less educated. This is in line with research by Ndungu [13] who found that well-educated farmers are more likely to acquire formal loans due to financial literacy which improves credit management ability.

The size of the enterprise was positively significant on the decision to acquire credit for Indigenous Chicken at a 1 percent significance level. An increase in the number of Indigenous Chickens by one unit increases the likelihood of acquiring credit for Indigenous Chickens by 0.3555. The positive sign could be attributed to youth farmers' enthusiasm for the idea of commercializing Indigenous Chicken, which prompted them to seek finance for the purpose. This is in line with the findings by Chandio *et al.* [27] who found that landholding size has a positive and significant effect on the demand for credit. They found that an increase in the size of cultivated lands for rice plantations increased the amount of input required and therefore increased the demand for loans.

Access to training was found to be positively significant on the decision to acquire credit by Indigenous Chickens farmers at a 1 percent level. The results indicate that access to training increases the chance of acquiring credit by 0.7123. This depicts the importance of training since it enables a farmer to understand the benefits that are associated with having enough credit to invest in the indigenous chicken enterprise. The finding is similar to a study by Kamau [28] who reported that the number of times a farmer is trained has a positive impact on the decision to adopt the use of improved indigenous chicken. In addition, Kamau supported his finding by noting that training in agricultural practices could bring in changes in food security by improving farmers' knowledge, skills and attitude.

Results indicate that the availability of collateral security was positively significant on the decision to acquire credit and the amount of credit acquired at 1% and 10% significance level respectively. This means that availability of collateral increases the likelihood of accessing credit for Indigenous Chicken enterprise by 0.9149. In addition, the availability of collateral increases the amount of credit given to farmers by 0.2139. This is attributed to the fact that collateral securities were used to secure loans in the financial institutions; hence farmers who had collateral securities were able to access loans and as well accessed higher amounts of loans than their counterparts with no collateral security. This finding is in accord with the study by Magembe [29] who established the importance of collateral on credit access as most SMEs (74%) who applied for loans were required to pledge collateral as a means of avoiding the risk of loan defaulters. He argued that collateral fills the information asymmetry between the lender and borrower alongside contract signing to help borrowers abide by the agreements.

The repayment period of loans by financial institutions was positively signifi-

cant on the amount of credit at the 1 percent level. This means that an additional year of repayment period increases the amount of credit youths would want to borrow by 0.7216. Farmers seeking loans from financial institutions would like to have their loans stretched out over a longer period of time so as to minimize the risks and uncertainties that are associated with the repayment of these loans. Furthermore, farmers prefer to take larger amounts of loans in cases where the repayment period is longer since they can receive money from other sources to help them repay the loans. As a result, in circumstances where the payback schedule is protracted, indigenous chicken growers would be able to borrow a larger amount of credit.

Group membership was positively significant on the decision to acquire credit at a 1 percent significant level. The results obtained establish that group membership increases the likelihood of acquiring credit in financial institutions by 1.511 units. A possible reason is that farmers that engaged in groups were able to share information about indigenous chicken production, including feed supplies, production costs, poultry breeds, and market information. Farmers who are members of groups were able to discuss some of the most pressing challenges facing the poultry industry. Furthermore, these farmers could bargain collectively for better pricing and market their products as a group. The findings from this study are in harmony with the results obtained by Nwosu *et al.* [30] who postulate that group membership of a farmer increases their chances of accessing credit as well as the probability of using such credit to operate their enterprises.

## 5. Conclusion

Results of the double hurdle model indicate that the gender of the farmer, education level, size of the enterprise, access to training, availability of collateral and group membership positively influenced the decision to access credit for the youth farmers doing indigenous chicken. On the other hand, the age of the farmer, availability of the collateral and repayment period positively influenced the amount of credit that the indigenous chicken farmers could receive from financial institutions. Collaterals were found to be significant and positively influence both the decision by the youths to access credit as well as the amount of credit one can borrow from financial institutions. It is important to note that the decision to borrow loans depends on the borrower, in this case, the youth while the decision on the amount of money borrowed can depend to a small extent on the youth but largely depends on the financial institutions. This is mainly because the financial institutions giving credit have structures in place to determine the credit worthiness of the borrowers to help avoid unnecessary risk.

## 6. Recommendations

There is a need to offer training and technical advice to the youths on poultry management. This involves offering additional extension services that would allow for a faster flow of information on credit, especially the sources of credit, the

requirements for accessing credit, the interest rate in various financial institutions and the types of loans that they offer. The study found that access to training was positively significant to accessing credit which would be used in IC management and therefore resulting in increased household income. Training will as well ensure that youth farmers get the right skills and knowledge concerning IC management thus improving production.

### Conflicts of Interest

The authors declare no conflicts of interest.

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