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LIKELIHOOD OF SOCIAL STATUSES TO INFLUENCE ACCESS TO AGRICULTURAL INFORMATION AMONG FARMERS IN CHUKA SUB-COUNTY, KENYA

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ABSTRACT
Access to agricultural information is essential if current global problems related to food insecurity and climate change are to be addressed. Empirical evidence shows that access to agricultural information positively impacts agricultural development by enhancing farmers' adoption of agricultural technologies (Caracciolo & Keizer, 2015). Although research on the accessibility of agriculture information is growing, lack of information exists that show the likelihood of social statuses to influence adequate access to agricultural information among farmers. The study focused on educational level, farm size and farm income as social status variables. These study's objectives were to assess the levels of farmers' social statutes and determine the likelihood of social statuses to influence adequate access to agricultural information among farmers in Chuka Sub- County. Descriptive correlational research design was used to collect data from a sample of 377 farmers selected using stratified random sampling from three wards in the sub- county. A semi-structured questionnaire was used to collect data using five-point Likert-type items. Collected data was analyzed quantitatively using the Statistical Package for Social Science. Multiple linear regression was used to analyze relationships between the selected study variables on social status. The study found that 30.2% had a university degree, secondary education (27.1%), college/polytechnic education (26.5%), and primary education (14.6%). The results revealed that the majority of the farmers (37.4%) had farm sizes ranging from 0.0 to 2.9 acres. About 27% owned between 3.0 and 4.9 acres while 23.6% of the farmers owned between 5.0 and 6.9 acres. Very few farmers (12%) owned more than 7 acres. The results showed that majority of the farmers (37.4%) had farm sizes ranging from 0.0 to 2.9 acres. 27% owned between 3.0 and 4.9 acres while 23.6% of the farmers owned between 5.0 and 6.9 acres. 12% of farmers owned more than 7 acres. The results indicated that there was a significant likelihood for farmers in Chuka Sub County to access agricultural information based on their social status.
Keywords: access, farmer characteristics, social status, adoption, social status.

INTRODUCTION
Access to agricultural information is essential if current global problems related to food insecurity and climate change are to be addressed. Adequate access to agricultural information is a critical ingredient in agricultural development not only

in Kenya but worldwide (Caracciolo & Keizer 2015). The economic basis for accessing agricultural information is to assist farmers in managing risks and uncertainties concerning agricultural production and economics (Parmar *et al.,* 2019). Adequate access to agricultural information enables farmers to effectively analyze and adopt agricultural technologies at the farm level by exposing them to new technologies and educating them about the best farming and management practices (Wossen *et al*., 2017). However, access to sufficient information is likely to be affected by the social status of an individual farmer. The social status is the farmer's standing or importance to other people within a society and it's determined by their socioeconomic characteristics. The socioeconomic characteristics includes household location, income, farmer's age, and education level (Yaseen *et al.,* 2016). The effect of social status on access to agricultural information has not been comprehensively documented (Muema, 2018). The few studies that have been undertaken focused on likely influence of household income (Njeru, 2016), education (Muema, 2018), land size (Parmar *et al*., 2019) on access to agricultural information. None of the studies examined the influence of a combination of the social status elements on access to information. Moreover, very little literature exists to demonstrate the contribution of each of these elements towards adequate access to information. Therefore, this research was intended to determine the percentage variation accounted for by a combination of social status elements and also predict the relationship between each of the elements and adequate access to farming information. A clear understanding of the subject is essential in the development of right policies and extension programs that ensures adequate access of agriculture information.

The study was intended to clarify the likelihood of farmers in Chuka Sub- County to access agricultural information based on their social status. The specific objectives of the research were to; assess the levels of farmers' social statutes and determine the likelihood of social status to influence access to agricultural information among farmers in Chuka Sub-County.

METHODOLOGY

A descriptive correlational research design was used to collect data from a sample of 377 farmers selected using stratified random sampling from three wards in the sub-county. A semi-structured questionnaire was used to collect data from the respondents using five-point Likert-type items. Out of the 377 farmers who participated in the research, 197 were male (52.0%), and 180 were female (48%). Prior to the use of the instrument in actual data gathering, a pilot study was undertaken in Chogoria Ward involving 15 farmers (Hazzi & Maldaon, 2015). Agricultural and extension education experts and peers checked the instrument's validity. Subsequently, the results of the validation by the experts were given to the supervisors for final adjustments on the research instrument. The research instrument reliability was computed using Cronbach's alpha, where the coefficients of the study variables ranged from 0.63 to 0.72 as shown in Table 1. Moorthy *et al*. (2012) established that a minimum reliability coefficient of 0.60 is acceptable for social sciences. Consequently, this study considered a coefficient of 0.60 or higher acceptable.

Table 1: Reliability Coefficient (*N* = 377)

Items	No. of items	Cronbach's Alpha
Social status		
Education	8	0.69
Farm size	5	0.63
Farm income	5	0.72

The collected data were analyzed quantitatively using the Statistical Package for Social Science (SPSS, version 25). Multiple linear regression was used to analyze relationships between the selected study Variables on social status. According to Lilja & Linse (2022), regression analysis is a statistical technique that displays the correlation between one or more numerical variables. Cheng *et al*. (2022) further suggested that the model allow; researchers to identify the extent to which multiple independent variables account for variation in a dependent variable. Additionally, Lilja & Linse (2022) noted that the model aids in determining the equation that represents the relationship between the variables. Equation 1 illustrates the regression model used in the study.

$Y = A + X1\beta1 + X2\beta2 + X3\beta3 + e$ ..... 1 Where,

Y = Access to agricultural information

X1 = Education

X2 = Farm size *X3*
= Farm income *A*
= Constant
β = the slope (Beta coefficient) of X1, X2, and X3 *e*
= Standard error

The present study utilized the Likert scale to measure education, farm size, farm income, and access to agricultural information questions. The weighted mean for each variable was determined using Cohen's Kappa formula, as demonstrated below.

$$\text{Weighted mean} = \frac{\sum_{i=1}^{n} XiWi}{\sum^{n} Wi}$$

Where;
X = the value of the variable
W = the weights

Before analyzing the data, the researchers conducted diagnostic tests on the dependent variable (access to agricultural information) and independent variables (education, farm size, and farm income) to check for normality, linearity, and multicollinearity. The normality assumption was evaluated by examining the skewness and kurtosis of the dataset. The rule of thumb, if the data is normally distributed, the skewness and kurtosis should fall between +3 and -3. The results in Table 2 indicate that the normality assumption was met, as the values ranged from -0.06 to 1.90, consistent with recommendations from Chimadah *et al.* (2022

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Social Status[a]				
Education	-0.66	0.13	1.50	0.25
Farm size	-0.06	0.13	-0.35	0.25
Farm income	-0.23	0.13	0.18	0.25
Access to agricultural[b] information	0.04	0.13	1.90	0.25

Table 2: Normality Diagnostic Statistics for Social Status and Access to Agricultural Information (*N* = 377)
Note [a] = 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; [b] = 1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = always

Collinearity diagnostics were also performed to test the assumption that no perfect multicollinearity exists among education, farm size, farm income, and access to agricultural information. The diagnostics involved examining the Variance Inflation Factors (VIFs) and Tolerance values. It is considered acceptable if the Tolerance value is more significant than 0.1 and the VIF value is less than 10, as stated by Garson (2012). Table 3 indicates that the VIF and Tolerance values were acceptable.

Table 3: Correlation between Education, Farm Size, Farm Income, and Access to Agricultural Information (*N* = 377)

	CollinearityStatistics	
Construct	Tolerance	VIF
Education	0.97	1.03
Farm size	0.71	1.39
Farm income	0.72	1.39

a. Dependent Variable: Access to Agricultural Information

The linearity assumption was tested by creating scatterplots. This assumption states that the response variable is related to the independent variable(s) in a linear way, which means a straight line can represent it. The scatterplot showed a straight line among the data points, indicating that the linearity assumption was satisfied.

RESULTS AND DISCUSSION Participants' Social Status and Access to Agricultural Information
Agricultural information plays a crucial role in improving the productivity and profitability of farming enterprises. However, access to such information could be more equitable, depending on various factors, including social status. This research hypothesized that social status based on the educational level of the farmer, farm size, and farm income is likely to influence access to agricultural information significantly.

Participants' Level of Education
Education has been shown to significantly influence access to agricultural information, with more educated farmers having better access to information than their less educated counterparts. The study sought to determine the target farmers' educational levels and to relate them to access agricultural information. The educational levels of the study participants are presented in Table 4.

Table 4: Educational Levels of the Research Participants (*N* = 377)

Educational Level	Freq. (*f*)	Percent (%)
None	6	1.6
Primary	55	14.6
Secondary	102	27.1
College/Polytechnic	100	26.5
University	114	30.2

The results showed that most respondents (98.6%) had formal education. The highest percentage of respondents (30.2%) had a university degree, followed by those with secondary education (27.1%), college/polytechnic education (26.5%), and primary education (14.6%). More than half of the respondents (*n* = 214, 56.7%) had college and university education. The result shows that many of the farmers in the sub-county were well-educated. Educated farmers in the sub-county had great access to agricultural information. This also confirms the study by Ninh, (2020), which found that education plays a significant role in accessing agricultural information. However, farmers with higher levels of education, such as college/polytechnic and university degrees had greater access to agricultural information than those with lower levels of education. The findings are in line with those of Togba *et al*. (2022) that education influences access to agricultural information.

Educational Level and Access to Agricultural Information

This study further sought to determine the perception of the farmers on the relationships between educational level and access to agricultural information. As presented in Table 5, the respondents were given a set of Likert-type items and asked to indicate whether or not they agreed with them.

Table 5:

Statement[a]	*M*	*SD*
An increase in education level increases farmer access to information	4.2	0.9
Education builds capabilities for productivity and economic growth	4.2	0.9
Differences in education level affect farmers' information choice	4.0	1.1
Farmer's education level correlates with the use of new technologies	4.0	1.0
Farmers with college or university education access agricultural information than others	3.7	1.3
Farmers with no formal education cannot access agricultural information	2.9	1.4
With the increase in educational levels, farmers veer toward a modern information	3.9	1.0

Relationship between Educational Level and Access to Agricultural Information (*N* = 377)

Note: [a] =1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

Most respondents were of the opinion that increased educational level improved access to agricultural information (*M* = 4.2, *SD* = 0.9). The finding could have been due to exposure to a variety and diversification of information sources. Farmers with college or university education had greater access to agricultural information than others (*M* = 3.7, *SD* = 1.3). The differences in education level affected farmers' information choices (*M* = 4.0, *SD* = 1.1). Farmers with higher educational levels had greater access to agricultural information and therefore, had a wide range of facts that they could use for making farm decisions. The results are in line with those of Murage *et al*. (2015) which showed that access to agricultural information was dependent on the education of the farmer among other factors. Most respondents also pointed out that education builds capabilities for productivity and economic growth as it influences the adoption of modern technologies (*M* = 4.2, *SD* = 0.9). Farmers with formal education have greater access to modern technologies. Thus, they are more likely to adopt them than their counterparts (*M* = 4.0, *SD* = 1.0). The higher adoption rates result in improved farm productivity and the generation of higher income, as reported by Paltasingh and Goyari (2018).

The results further indicated that most of the respondents disputed the claim that farmers with no formal education could not access agricultural information (*M* = 2.9, *SD* = 1.4). Farmers had access to agricultural information from fewer sources than those with formal education. Most farmers without formal education relied on traditional sources such as television, radio, extension agents, relatives, and friends. The results agree with Murage *et al*. (2015) findings that most rural farmers needed help accessing information from modern sources due to their illiteracy levels. Therefore, with increased educational levels, farmers veer towards modern information sources (*M* = 3.9, *SD* = 1.0). Some of the modern sources utilized included the internet and digital application platforms like WhatsApp, Mfarm, Mshamba, and Mbegu Choice. The digital application makes agricultural services easy to locate and use. The results

line up with those of Nikam *et al.* (2020), who reported the changing information source use patterns from the traditional to modern. **Farm Size**

The study also sought to describe the distribution of farmers based on their farm size. The farmers were categorized on the basis of the size of their farms. The categories included those who owned 0-2.9 acres, 3.0-4.9 acres, 5.0-6.9 acres, 7.0-8.9 acres, and above 8.9 acres. The frequency (*f*) and percentage (%) of the farmers in each category are presented in Table 6.

Table 6: Average Farm Sizes in the Sub- County (*N* = 377)

Acreage	Freq. (*f*)	Percent (%)
0.0 - 2.9	141	37.4
3.0 - 4.9	102	27.1
5.0 - 6.9	89	23.6
7.0 - 8.9	30	8.0
Above 8.9	15	4.0

The results showed that the majority of the farmers (37.4%) had farm sizes ranging from 0.0 to 2.9 acres. About 27% owned between 3.0 and 4.9 acres while 23.6% of the farmers owned between 5.0 and 6.9 acres. Very few farmers (12%) owned more than 7 acres. The results implied that many of the farmers (64%) owned less than five acres a finding that confirms the FAO (2015) report that the average size of a smallholder farm in Kenya was 0.47 hectares. The small size of farms may have been contributed by land subdivision, population growth among other factors. The study found that many of the farmers some of whom who owned large sized farms had subdivided them against their sons. It was reported by the respondents that the culture of the Ameru people demands that the sons be given land by the parents as soon as they get to adulthood. The respondent pointed out the more the number of children a family had, the smaller the size of land each son or daughter would inherit from their parent. Some people especially those living in the outskirts of urban areas subdivide the land into small plots immediately after inheritance for sale. The findings are in line with those of Muyanga & Jayne (2014) that population growth and urbanization are the top drivers of a steady fall in the average farm size in Kenya.

Farm Size and Access to Agricultural Information

The study sought to establish the perception of farmers in relation to the likely influence of farm size toward access to agricultural information. The respondents were asked to indicate their levels of agreement with a set of statements relating the two variables. The statements were Likert-type measure on a five-point scale as shown in Table 7.

Table 7: Farm Size and Access to Agricultural Information (*N* = 377)

Statement[a]	*M*	*SD*
Normally, access to agricultural information is necessary only for farmers with large-sized farms	2.5	1.4
Despite the size of the farm, farmers should access agricultural information to maximize their farm products	3.8	1.2
Farmers with small farm sizes have limited access to agricultural information.	3.0	1.3
The lack of a title deed discourages me from accessing agricultural information	2.9	1.3
Since I have many agricultural activities on my farm, I have to access agricultural information.	3.6	1.1

Note. [a] *= 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree*

The results indicated that most of the respondents disputed the claim that access to agricultural information is necessary only for farmers with large-sized farms (*M* = 2.5, *SD* = 1.4). Most farmers argued that access to information by both smallholder and large farms was vital in decision making for viable and sustainable enterprises. This confirms argument by Nikam *et al.,* (2020), that access to agricultural information is a basic necessity for farmers both with small and large farms. A majority of the respondents pointed out that despite the size of the farm, farmers should access agricultural information to maximize their farm products (*M* = 3.8, *SD* = 1.2). This is because farmers need various kinds of information from different sources to improve existing practices and adopt new technologies to

enhance the farm's yield and income. Market information, for instance enhances access to better markets which can fetch the farmer better prices for his/her farm produces. Due to lack of this kind of information farmers decide to sell their farm produce through middlemen who exploits them badly. Therefore, access to information can significantly increase farmers' incomes and livelihoods as reported by Piabuo *et al.* (2020).

Many of the respondents moderately agreed with the claim that farmers with small farm sizes had limited access to agricultural information as compared to those operating large-sized farms (M = 3.0, SD = 1.2). The respondents argued that since farmers both with small and large farms need information for decision making their sizes do not matter. However, it has been previously reported that although the proportion of farmers accessing extension advice in Kenya is low, extension services tend to favor wealthier farmers who own large farms (Birch, 2018). The findings also contradict those reported by FAO (2015) that smallholder farmers have less access to extension services than large holder farmers. This may be attributed to the fact that agricultural extension services are the dominant method of public-sector support towards agricultural knowledge and innovation sharing in most rural areas and especially to smallholder farmers. However, access to this information is limited due to inadequate extension staff. On the contrary, large farmers have embraced diverse information sources and modern technologies that enhances information seeking.

According to a majority of the farmers, lack of title deed did not discourage them from accessing agricultural information (M = 2.9, SD = 1.3). The respondents argued that information sources such as government extension officers, research centers, and the private-sector extensionists do not discriminate farmers when sharing agricultural information based on land ownership. The respondents believed that farmers who were involved in many farm enterprises had better access to agricultural information (M = 3.6, SD = 1.1). This is attributed to the higher information needs due to the number of activities being undertaken in the farm. The more the activities/enterprises the higher the information needs. However, the information seeking behavior of a farmer is a function of the recognition of one's information needs. This is what drives the farmer to make use of information services and resources to meet the perceived needs as reported by farmer to make use of information services and resources to meet the perceived needs as reported by Emmanuel (2012).

Farm Income

The study also assessed the distribution of farmers in the Chuka Sub- County based on their levels of income. This was to determine whether the farmers had the financial resources needed to seek agricultural information. The sampled farmers were grouped into five categories based on their off-farm and on-farm incomes as shown in Table 8.

Table 8

Average Annual On-farm and Off-farm Incomes (N = 377)

Income Level (Kshs.)	Off-farm Income		On-farm Income	
	Freq. (*f*)	Percent (%)	Freq. (*f*)	Percent (%)
Below 25,000	154	40.8	182	48.3
25,000-50,000	88	23.3	95	25.2
50,000-100,000	71	18.8	56	14.9
At 100,000	21	5.6	14	3.7
Above 100,000	43	11.4	30	8.0

The results indicated that off-farm and on-farm income were somewhat related in that those farmers who reported low annual on-farm incomes also generated little off-farm income. It would have been expected that many of the smallholder farmers would generate much more income from the multiple farm activities they engage in as compared to off-farm sources. Many of the farmers (n = 154, 40.8%) generated an off-farm less than Kshs 25, 000 and on-farm income (n = 182, 48.3%) of a similar amount annually. This implied that many of the farmers in the sub-county were producing crops and rearing livestock for subsistence. The low levels of on-farm income may have been brought about by low productivity and the desire to cater for the family needs. Many of the smallholder farmers sold a part of their production immediately after harvest, when prices are at their lowest level to meet the immediate needs of their families. For instance, harvest period coincides with the beginning of the school year and some farmers sell their farm produce to pay for their children school fees, books, and uniforms.

The little levels of off – farm income showed that most of the farmers in the sub-county were not entrepreneurial and therefore, they have not embraced farming and other agricultural related enterprise as business entities or opportunities to make money. This may be may be contributed by the fact that many of the smallholders lack the skills and resources required to engage in commercialized agricultural activities as observed by Tabu *et al*. (2017). The findings are in agreement with those of FAO (2015) that the changes in markets, technologies, economies of scale, and storage needs make smallholders unprofitable thus outweighing the advantages of small farms in productivity per hectare. As shown in Table 14, very few farmers reported more than Kshs 100,000 annually through both on- (n = 30, 8.0%) and off-farm (n = 43, 11.4%) income generating activities.

Farm Income and Access to Agricultural Information

Farmers' perception relating to likely associate between the farm income and access to agricultural information was sought by the study. A set of statement relating to the association between the two variables were used. The statements were Likert- type measured using a five-point scale as shown in Table 9.

Table 9: Farm Income and Access to Agricultural Information (N = 377)

Statement[a]	*M*	*SD*
agricultural information		
Acquiring and using agricultural information helps to increase my farm income	3.8	1.0
Seeking agricultural information increases my farm income	2.6	1.3
Farmers earning low income have no access to agricultural information	2.9	1.2
Farmers whose main income comes from farming have access to agricultural information	3.3	1.2

Note. [a] *= 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree*

income access Sometimes, my farm is limited; thus, unable to 3.3 1.2

Although many of the farmers were not sure whether low farm income would limit them from accessing agricultural information (M = 3.3, SD = 1.2), some argued with certainty that they were unable to access it due to lack of financial resources. This implied that that financial constraints can hinder farmers' access to information, limiting their ability to make informed decisions about farming practices. This finding aligns with a previous study by Murage *et al*. (2015), which also identified economic factors as barriers to accessing agricultural information.

According to a majority of the farmers, acquiring and using agricultural information helps to increase their farm income (M = 3.8, SD = 1.0). This indicates that farmers recognize the potential benefits of accessing information and its impact on their overall income. The finding is consistent with Njeru's (2016) study results that access to agricultural information can empower farmers to adopt improved practices and technologies leading to increased productivity and profitability.

However, the respondents disagreed with the statement that seeking agricultural information increases their farm income (M = 2.6, SD = 1.3). This suggests that farmers do not perceive accessing information as a cost or burden on their income. It implies that farmers believe that the benefits derived from accessing information outweigh any potential costs associated with seeking it. This finding is in line with previous research (Amengor *et al*., 2022), indicating that farmers tend to value information acquisition as a means to enhance their productivity and financial well-being.

Many farmers had difficulties relating lack of financial resources to poor access to agricultural information. Most of the respondents disputed the claim that farmers earning low income have no access to agricultural information (M = 2.9, SD = 1.2). This finding challenges the assumption that only high-income farmers can afford access to agricultural information. The study indicates that despite financial limitations, farmers with lower incomes still find ways to access information, although potentially through more limited channels or sources. This finding echoes the findings of Yaseen *et al.* (2016), who highlighted that rural farmers with lower levels of formal education may rely on traditional sources of information due to their limited literacy levels.

When asked to indicate if they agreed with the statement that "farmers whose main income comes from farming have access to agricultural information" many of the respondents were undecided (M = 3.3, SD = 1.2). This implied that the resources that farmers utilized for seeking agricultural information may or might not have been gotten from farming activities. In most cases farmers utilize resources generated from both on- and off- farm activities to run their agricultural enterprises. The findings contradict Wanyama's *et al.,* (2016) result that farmers who heavily rely on farming as their main income source are more motivated to seek information that can improve their agricultural practices and ultimately contribute to their income growth.

Association between Social Status and Access to Agricultural Information

The first objective sought to determine the association between farmer social status and access to agricultural information. The social status of the farmer is the position he/she hold in the society. It is determined by a combination of social and economic factors such as income, education, occupation, wealth among other factors. This study had hypothesized that the social status of the farmer is defined by three main factors income, farm size and education. Multiple linear regression was used to determine if there was a significant relationship between social status (income,farm size, and education) and access to agricultural information. Table 10 present regression analysis results involving the three key variables.

Table 10: Regression Analysis for Social Status and Access to Agricultural Information (N = 377)

Predictors	*B*	*SE B*	*B*	*t*	*P*
(Constant) 20.76 3.17 - 6.56 0.00 Education level 0.33 0.08 0.20 3.94 0.00 Farm size 0.13 0.14 0.06 0.94 0.35					
Farm income	0.30	0.15	0.12	1.96	0.05

Note: [a] = 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; [b] *= 1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = always; F (3, 373) = 9.81*, p = 0.01, R^2 = 0.07, R^2 Adjusted = 0.06

As shown in Table 16, education level had a significant positive relationship with access to agricultural information (β = 0.20, $p < 0.05$). This indicates that higher levels of education were associated with better access to agricultural information. The coefficient (B) of 0.33 suggests that for each unit increase in education level, there was a corresponding increase in the access to agricultural information by 0.33 units.

On the other hand, farm size did not exhibit a significant relationship with access to agricultural information (β = 0.06, p = 0.35). The non-significant coefficient of 0.13 implies that farm size had a negligible effect on access to agricultural information. Regarding farm income, the regression analysis results indicated a marginally significant positive relationship with access to agricultural information (β = 0.12, p = 0.05). This suggests that higher farm income was associated with slightly better access to agricultural information. The coefficient of 0.30 indicates that for every unit increase in farm income, there was an increase in access to agricultural information by 0.30 units.

Overall, the social status of the farmer (educational level, farm size, and farm income) had a significant relationship with access to agricultural information, F (3, 373) = 9.81, $p < 0.05$, R^2 = 0.07. This indicated that educational level, farm size, and income collectively accounted for 7% of the variability in access to agricultural information among farmers (R^2 = 0.07). The F-statistic value of 9.81 (df = 3, 373) was significant at $p < 0.05$, indicating that the regression model as a whole was able to explain a significant proportion of the variance in access to agricultural information. The regression model was summarized as indicated in Equation 2.

Access to agricultural information = 20.74 + (0.33Educational level) + (0.13Farm size) + (0.3Farm income) + 0.03 ……2

Among the three independent variables, education level was the most important factor in determining the level of access to agricultural information. Education is the gateway to unlocking the vast scope of information accessible through phones, computers, and the internet. With knowledge comes the ability to navigate these technologies effectively, empowering farmers to seek, understand, and utilize information for personal growth. Education fosters digital literacy, enabling farmers to grasp the potential of these tools (phones, computers, and the internet) and make informed decisions. The findings supported the idea that education is critical in enhancing farmers' access to

information, which is crucial for improving their agricultural practices, increasing productivity, and, ultimately, their income (Zhanga *et al*., 2016; Yokamo, 2020).

CONCLUSION AND RECOMMENDATIONS

The social statuses of the farmers in the sub-county varied from one person to another based on their land sizes, educational, and income levels. Many of the farmers had formal schooling and they had completed tertiary education. It emerged that the social statuses of the farmers were highly likely to influence access to adequate agricultural information. Education level was significantly and positively correlated with access to agricultural information. Therefore, there is need for the county government to widen the coverage of adult education programs so as to reach all those without formal education. This will raise the literacy levels of the farmers and thus enhance their capabilities to access agricultural information. There is also need to expand the coverage of extension services by reducing the farmer/staff ratio and also providing agents with the needed resources to efficiently execute their duties. Most farmers without formal education relied on traditional sources such as television, radio, extension agents, relatives, and friends. Income level and farm size of the farmers were not significantly related with access to adequate information although the relationship was positive. Therefore, there is need for farmers to diversify their on- and off-farm enterprises to generate more income that could help them afford extension services.

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