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CREDIT FROM TRADERS AND PROCESSORS AND THE PERFORMANCE OF SMALLHOLDER HORTICULTURAL AGRIPRENEURS IN KENYA

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Abstract

Increased need for appropriate credit in the agricultural industry has forced agripreneurs to explore ways to obtain credit with favorable terms to develop and grow their agribusinesses. The provision of sustainable and adequate financial services to resource-poor rural smallholder agripreneurs faces many challenges, including limited capacity of financial service providers in the rural areas. Lack of adequate credit from formal financial institutions has been prominently highlighted as one of the main factors that contribute to underperformance in the agricultural enterprise sector in Kenya. To mitigate this challenge, smallholder agripreneurs have had to explore ways of getting credit from the informal financial sector. This study used descriptive design method which endeavoured to investigate the significance of credit from traders and processors on the performance of the smallholder agripreneurs in terms of production, land expansion, job creation and amount of income realized. The study was guided by credit from traders and processors as the independent variable and performance of smallholder agripreneurs as the dependent variable. The study found out that credit from traders and

processors had a significant influence on the performance of the smallholder agripreneurs in Kenya. The conclusion of the study was that credit from traders and processors is very important for enterprise development and recommended smallholder agripreneurs to try and access credit from traders and processors.

Keywords: Credit, Traders and Processors, Smallholder Agripreneur, Performance

INTRODUCTION

The provision of sustainable and adequate financial services to resource-poor rural smallholder agripreneurs faces many challenges, including limited capacity of financial service providers in the rural areas. The formal financial institutions are reluctant to serve the agricultural sector, given its seasonality and the inherent risks of farming (Kimathi *et al*., 2008; Kloeppinger-Todd and Sharma, 2010; IFC, 2011; FAO, 2012; IFAD, 2011). Agricultural lending in Africa by formal financial institutions is the lowest in the world constituting less than one percent of all commercial formal lending (AfDB/IFAD, 2009). Advocates of credit as a poverty alleviation measure (Adam, 2010; Roodman & Morduch, 2009; World Savings Bank Institute, 2010) contend that limited availability of credit services from formal financial institutions has prevented farmers from adopting improved farming practices because of their inability to purchase the necessary inputs required in the production. Low productivity in agriculture, livestock and fishing is generally attributed to the use of poor technology resulting due to limited access to credit. Wiggins, Kirsten, and Llambı, (2010) notes that with insufficient funds, smallholder agripreneurs cannot invest in new equipment and machinery to enable them reach out to new markets and products.

Globally, 75 percent of the world's poor people live in rural areas and are mostly dependent on agriculture for their livelihoods (World Bank, 2008a). Smallholder agripreneurs involved in agricultural enterprises are the primary source of poverty reduction in most agriculture-based economies and produce 70 percent of Africa's food supply (IAASTD 2009a) and an estimated 80 percent of the food consumed in Asia and sub-Saharan Africa together (IFAD, 2011b; UN, 2012). An expansion and investment in smallholder farming can stimulates at least 2.5 times more growth for the poorest third of the population than investment in other sectors leading to faster rate of poverty alleviation by reducing food expenditure, increasing employment opportunities and reducing income inequality (Koohafkan 2011; ActionAid, 2009; Barham & Chitemi, 2008; World Bank, 2008).

Agriculture remains the mainstay of the Kenyan economy and directly contributes to 26 percent of gross domestic product (GDP). The sector performance greatly affects the poor, as

67 percent of the population and 80 percent of the poor live in rural areas and depend on agricultural activities for their livelihoods (World Bank, 2009; KIPPRA, 2013). The rural economy in Kenya is mainly dependent on smallholder agripreneur agriculture, which accounts for 75 percent of total agricultural output and 70 percent of marketed agricultural production. Smallholder agripreneurs face various constraints, which lead to low returns. Among these constraints is limited access to inputs and financial services (World Bank, 2008). Agricultural productivity is low and declining and its competitiveness, in both domestic and export market, has worsened. Agriculture production especially in dairy and horticulture declined by 5 percent between 2010 and 2011 (KIPPRA, 2013). Concerted efforts are therefore needed to turnaround the sector through private-sector driven development with its ultimate target being low income smallholder agripreneurs (Mercy Corps, 2011). With rising incomes and growing urban markets demanding higher-value products, commercialization of some of the key agricultural sub-sectors is occurring. Commercialization is also arising as agricultural exporters are trying to meet higher public and private standards within the global markets. Both these processes lead to greater use of purchased inputs, greater demand for processing, packaging and transportation, and the increased use of services like finance (World Bank, 2013). In Rwanda and Kenya, the poverty-reducing impact of agricultural growth has recently been found to be as much as three to four times greater than growth generated in other sectors (IFPRI 2012).

Statement of the Problem

Lack of adequate credit from formal financial institutions has been prominently highlighted as one of the main factors that contribute to underperformance in the agricultural enterprise sector in Kenya (Kimathi et al., 2008; Kloeppinger-Todd & Sharma, 2010; IFC, 2011; FAO, 2012;IFAD, 2010; CEA, 2011; Etonihu, 2010).To fill this gap created by the limited number of formal financial service providers, informal financial service providers have stepped in to provide credit to the smallholder agripreneurs (Chisasa & Makina, 2012; Marcoul & Veyssiere, 2010). While the provision of agricultural credit to the smallholder farmers in Africa by non-financial institutions has been recognized (Kamara, 2010; Egyir, 2010; Kloeppinger-Todd & Sharma, 2010; Mann *et al*., 2010; Coates *et al*., 2011), very little and accurate information on the influence of credit on smallholder agripreneurs has been documented (Owuor, 2009; Girabi et al., 2013; Coates, et al., 2011, Reyes & Lensink, 2010).

Most studies have tended to examine other specific constraints to smallholder agripreneurs' activities (Liverpool & Winter-Nelson, 2010; Reardon et al., 2009; Markelova et al., 2009) without a comprehensive analysis of the sector especially influence of credit from traders and processors on the performance smallholder agripreneurs. According to KIPPRA (2013)

economic report, the financial sector in Kenya plays a very critical role in the development process. However, the contribution made by credit from traders and processors was not acknowledged in the report. This study sought to investigate the influence of credit from traders and processors on the performance of the smallholder agripreneurs making an empirical contribution to the available literature by documenting and highlighting their contribution to the development of the financial sector and the growth of GDP in Kenya.

LITERATURE REVIEW

Trade Credit from Traders and Processor

According to Schwartz (1974), trade credit is extended from firms with widespread access to credit from financial intermediaries to credit constrained firms. Papers based on the transaction costs argument posit that suppliers extend credit to buyers because they have advantages over banks in acquiring information about customers' creditworthiness. When information between buyers and sellers is asymmetric, trade credit will be extended to allow clients to check the real quality of the product bought. However, in asymmetric information conditions, suppliers may tighten the terms of credit since buyers' creditworthiness is doubtful. Trade credit is a very important source of financing for firms.

Although it is an old practice, it is not completely understood. The use of trade credit depends on a firm's ability to purchase its goods on credit (Burkart, Giannetti & Ellingsen, 2008). On average trade credit exceeds the primary money supply by a factor of two (Wilson, 2008). In the US, the size of trade credit supply exceeds the credit supplied by the entire banking system (Lee & Stowe, 1993) and remains the single largest source of short-term business credit (Berlin, 2003). Schwartz (1974) theory on trade credit is relevant to this study because many smallholder agripreneurs can appropriately access farm inputs credit in-kind instead of cash which normally is a major constraint among many lenders.

A number of scholars are in agreement with Schwartz study that trade credit is extended from firms with widespread access to credit from financial intermediaries to credit constrained firms with limited access. Marcoul and Veyssiere (2010) identified contract farming as a major source of credit for the smallholder agripreneurs. An important characteristic of this form of lending is that the loan contract often involves much less collateral than would a similar bank loan, and at times, no collateral other than a crop pledge. Contract farming firms are also often able to better value some of the items a farmer might provide as collateral. A contract farming firm for instance will be much more willing to accept a farmer's crop as collateral than a bank.

Contract farming arrangement allows farming entrepreneurs to realize positive impacts by accessing an array of agricultural services including credit which they would otherwise not

have access to (Bellemare, 2010; Miyata et al., 2009). Wiggins and Keates (2012) confirm that large and formal firms (processors, exporters, retail outlets) often take responsibility for organizing value chain linkages including financial linkages. Leturque and Wiggins (2011) states that Thailand's government has been instrumental in establishing public and semi-public agribusiness companies to facilitate agricultural exports through contract farming schemes. Contract farming is seen to sit under a broader umbrella term of inclusive business models where smallholder agripreneurs are engaged by firms on 'equitable' terms through backwards integration by processors and forwards integration by input providers with efforts being made by retailers such as supermarkets, to include smallholder agripreneurs in their supply chains (Kelly, 2012). Smallholder agripreneurs who enter into contract farming almost unambiguously achieve higher yields, incomes, and high input usage (Barrett et al., 2012).

According to UNCTAD (2010) and Prowse (2012), there are five different basic models of contract farming: centralized, nucleus estate, multipartite, informal and intermediary. These models have been derived from Eaton and Shepherd (2001) and Bijiman (2008). Transitional companies in downstream stages of value chains, such as food manufacturers and retail companies secure agricultural inputs in host countries by entering into contracts with local farmers. These contracts can be negotiated and managed by the parent company, agents or local affiliates. The central model is the classical model for contract farming in which a company buys produce from a large number of smallholder agripreneurs through a very tight vertical integration in which quality and quantity is determined at the beginning of the growing season.

The nucleus model differs from the centralized model in that the contractor (company) not only sources from independent farmers but has also its own production estate. Under the nucleus model, the central estate is normally used to guarantee throughput but at times for research and breeding purposes. Out-growers are allowed to produce and deliver to the central company on contract. In the Multipartite model, the contract is a joint venture between a statutory entity and a private company. Under this model, public or private providers of credit, extension services and inputs suppliers may be part of the arrangement. For this model, vertical coordination increases once the joint venture has sufficient control over its transactions with the farmers.

At harvest time, the company pays growers the contract price, but check off a sum that goes to the bank (the private company) to repay its loan (Vermeulen & Cotula, 2010).The informal model is classically characterized by individual traders or companies contracting informally with the smallholder agripreneurs on seasonal basis. The successes of this model largely depend on availability of supporting services sometimes provided by government agencies. In the intermediary model contractual arrangements are made between at least three

levels: a processor or a major trader formally contracts with a collector (middle agent) who then informally contracts with a number of farmers. The model has elements of both centralized and informal models. Vertical coordination is difficult as there are no direct links between the principal contractor and the farmers.

METHODOLOGY

This study used descriptive design method which endeavored to investigate the significance of credit from traders and processors on the performance of the smallholder agripreneurs in terms of production, land expansion, job creation and amount of income realized. The study was guided by credit from traders and processors as the independent variable and performance of smallholder agripreneurs as the dependent variable. This study targeted the smallholder agripreneurs involved in horticulture farming in Kenya. This study focused on a sample drawn from the target population of 337 smallholder horticultural agripreneurs who were carrying out farming in Yatta division in Machakos County. Out of the total 337 agripreneurs, 110 were female representing 33% and the rest 227 were male agripreneurs representing 67%. Using the simple random sampling method, Yatta division was chosen for the study out of four areas namely Sagana, Mwea and Kibwezi.

The sample size of 100 smallholder agripreneurs was computed using Glenn (1992) formula $n=N/1+N(e)^2$

n = Sample size

N = Target population

e = Level of precision considered at 90% confidence level.

According the formula, this was the minimum sample size that needed to be considered in the study. Sample sizes larger than 30 and less than 500 are appropriate for most research (Roscoe, 1975). Stratified sampling method was used to obtain a sample from the target population. Stratification was done to categorize members of the population into homogeneous subgroups before sampling. Thereafter, the systematic sampling technique was applied in each stratum to select items for the sample (Kothari, 2012). The strata sample sizes were obtained through proportional allocation. The sampling frame was the list of all the 337 agripreneurs registered with Horticultural Crop Development Authority office in Yatta division in Machakos County.

Based on the sampling formulae, this study used the stratified systematic random sampling technique to draw out a sample from the population of smallholder agripreneurs stratified in terms of gender and groups in each of the geographical areas. According to Kothari, (2012); Locke et al., (2010), this technique aimed at ensuring proportionate representation with

a view of accounting for the differences in stratum characteristics. Based on the sampling formulae, this study targeted to work with a minimum sample of 100 agripreneurs who were proportionally and scientifically selected. The researcher provided respondents with structured questionnaires with guided questions with a fixed set of choices, often called closed questions. There were a few open-ended questions that gave room for any suggestions and opinions that the respondents might have had.

To ascertain the validity and reliability of the questionnaires, the researcher carried out a pilot test on a few smallholder agripreneurs who were selected from the target population. After the pilot study, the questionnaire was revised. And, reliability test using Cronbach's Alpha Coefficient carried out on the tool to ensure it gave reliable results. Amongst all the variables, the lowest Alpha coefficient was 0.741 while the highest was 0.865. This reliability test results indicated that the individual components and overall coefficient were above the 0.7 Cronbach's. For inferential analysis, several statistical methods were used including the Ordinal Logistic Model and the Two-Way ANOVA to analyze the data. Since the responses to the variables were scaled to more than two responses, the Ordinal Logistic model was the most appropriate for necessary computation of data in this study.

Research null hypothesis: Credit sourced from traders and processors does not influence smallholder horticultural agripreneurs' performance.

ANALYSIS AND RESULTS

The findings from this study established that 49 respondents obtained credit from traders and processors who were mainly French beans exporter companies. As is highlighted in Table 1, this represented 46.7% of all the respondents who participated in this study. The mode of credit under this category was mainly delivered to agripreneurs in-kind as farm inputs (seed, fertilizer and pesticides). The descriptive statistical finding of this study on the popularity of credit from traders and processors was found to be in agreement with other similar research findings established by other scholars on the provision of credit in Africa by non-financial institutions. Some of the other studies whose findings established that informal credit was popular with smallholder agripreneurs were found to have been carried out by Kamara, (2010); Egyir, (2010); Kloeppinger-Todd and Sharma, (2010); Mann *et al*., (2010) and Coates *et al*., (2011). The finding of this study is also comparable to that carried out by Yiu, *et al*., (2012) whose study in Asia confirmed that alternative financing especially from traders and processors, positively influences enterprise performance.

Table 1: Number of Agripreneurs who obtained credit from traders and processors

Credit Source	Number of respondents	% number of respondents
Traders and Processors	49	46.7%
Totals	49	46.7%

Effect of credit from traders and processors on production

The Chi-Square test for independence was used to test whether there was a relationship between the categorical variables namely credit from traders and processors and the performance of the smallholder horticultural agripreneurs in terms of change in production. The chi-square statistic test as is highlighted in Table 2 established a result of 81.920a with a p-value of 0.017 at 95% confidence level. Since the p-value of the change in production was found to be less than 0.05, it was concluded that, statistically, there was significant association between the two categorical variables namely credit from traders and processors and production. This means that credit sourced from traders and processors caused a substantial increase in the horticultural crop production. Hence credit from traders and processors play a key role in influencing crop production.

The finding of this study is in line with other similar research findings established by other scholars on the provision of credit in Africa by non-financial institutions especially traders and processors (Kamara, 2010; Egyir, 2010; Kloeppinger-Todd and Sharma, 2010; Mann *et al*., 2010 and Coates *et al*., 2011). This study finding is also in tandem with findings from a study carried by Yiu, *et al*., (2012) who confirmed that alternative financing especially from traders and processors, positively influences enterprise performance. This study finding was further validated by another research finding by Marcoul and Veyssiere (2010) whose study carried out in South Africa identified traders and processors as one of the major source of credit for enterprises growth for smallholder agripreneurs.

Table 2: Credit from Traders and Processors and performance of Agripreneurs in terms of Change in Production

Chi-Square Tests at 95% Confidence Level			
	Value	Df	Asymp.Sig. (2-sided)
Pearson Chi Square	81.90a	57	.017
Likelihood Ratio	105.090	57	.000
Linear-by-Linear Association	18.594	1	.000
N of Valid Cases	105		

Effect of credit from traders and processors on land under crop production:

The Chi-Square test was used to validate whether there was a relationship between the two categorical variables i.e. credit from traders and processors and the performance of the smallholder horticultural agripreneurs in terms of change in the acreage of land under horticultural crop production. The chi-square statistic test established a result of 21.679a with a p-value of 0.017 at 95% confidence level as shown on Tables 3. Since the p-value of change in land under crop production was found to be less than 0.05, it was recognized that statistically there was significant association between the two categorical variables namely credit from traders and processors and acreage of land under horticultural crop production. The finding established that credit sourced from traders and processors helped the agripreneurs to increase the land size through leasing for more horticultural crop production. This shows that credit from traders and processors is important for the expansion of agripreneurs horticultural enterprises.

Table 3: credit from traders and processors and performance of agripreneurs in terms of change in land under crop production

Chi-Square Tests at 95% Confidence Level			
	Value	Df	Asymp.Sig (2-sided)
Pearson Chi-Square	21.679[a]	10	.017
Likelihood Ratio	27.826	10	.002
Linear-by-Linear Association	11.861	1	.001
N of Valid Cases	105		

Effect of credit from traders and processors on permanent employees:

The Chi-Square test was carried out to establish whether there was a relationship between credit from traders and processors and the performance of the smallholder horticultural agripreneurs in terms of change in the number of permanent employees. In table 4 the Chi-Square statistical test results showed 13.797a with a p-value of .182. This implied that there was no significant relationship between the two categorical variables since the p-vale was higher than 0.05. This showed that credit sourced from traders and processors did not contribute to agripreneurs engaging more permanent employees. Normally due to the seasonal and informal nature of agricultural micro and small enterprises, agribusiness owners tend not to engage new permanent workers. Instead, agripreneurs tend to engage casual workers. Typically most of these types of enterprises especially in agriculture tend to have only one permanent employee who customarily is the business owner-manager (Mead & Liedholm,1998).

Table 4: credit from traders and processors and performance of agripreneurs in terms of change in number of permanent employees

Chi-Square Tests at 95% Confidence Level			
	Value	Df	Asymp. Sig.(2-sided)
Pearson Chi Square	13.797a	10	.182
Likelihood Ratio	16.770	10	.080
Linear-by-Linear Association	101	1	.750
N of Valid Cases	105		

Effect of credit from traders and processors on casual employees:

The Chi-Square test was applied to investigate whether there was a significant association between credit from traders and processors and the performance of the smallholder horticultural agripreneurs in terms of change in the number of causal employees. Table 5 on the change in the number of casual employees revealed a statistical test result of 42.691a with a p-value of .002 implying that there was a significant relationship between the two categorical variables. The results show that credit sourced from traders and processors contributed significantly to the increase in the number of casual workers that were hired by the agripreneurs as they expanded their horticultural enterprises. Horticultural farming is normally labour-intensive. During peak seasons, agripreneurs tend to engage more casual workers and few permanent workers, if at all. This is purely based on the cost outlays anchored on the nature of the business model. The engagement of casual workers is usually facilitated better when the agripreneurs have ready cash especially when they obtain loans either from the formal or informal sources to enable them to effectively engage and pay casual workers (Mead, & Liedholm, 1998).

Table 5: Credit from traders and processors and the performance of agripreneurs in terms of change in casual employees

Chi-Square Tests at 95% Confidence Level			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.691a	20	.002
Likelihood Ratio	47.288	20	.001
Linear-by-Linear Association	6.044	1	.014
N of Valid Cases	105		

Effect of credit from traders and processors on the amount of average net income:

Chi-Square test was administered to examine whether there was a significant association between credit from traders and processors and the performance of the smallholder horticultural agripreneurs in terms of change in the amount of annual average net income. Table 6 highlights the Chi-Square test results on the change in the amount of average net income which generated a statistical result of 54.281a with a p-value of .042. This indicated that there was a significant relationship between the two categorical variables. This finding showed that credit sourced from traders and processors by the smallholder agripreneurs led to an expansion of the horticultural enterprise resulting in a substantial increase in the average net income. Several research studies carried out in Nigeria showed that when agricultural credit is used, it stabilizes farming enterprise and often leads to increases in productivity, agricultural production, value addition and net incomes for smallholder farmers, thus fulfilling the main objective of taking credit (Nwaru & Onuoha., 2010; Omonona *et al*., 2010; Nguyen *et al*., 2014).

Table 6: Credit from traders and processors and the performance of agripreneurs in terms of change in average net income

Chi-Square Tests at 95% Confidence Level			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi Square	54.281a	38	.042
Likelihood Ratio	70.504	38	.001
Linear-by-Linear Association	0.999	1	.317
N of Valid Cases	105		

Hypothesis Testing - H_0

The hypothesis for credit from traders and processors was earlier stated as:

H_0: Credit sourced from traders and processors does not influence smallholder horticultural agripreneurs' performance.

This study sought to find out whether credit from traders and processors has any effect on the performance of the smallholder horticultural agripreneurs in terms of crop production, acreage of land, number of employees engaged and the amount of net income being realized by the horticultural enterprise. The research analysis established that 46.7% of the respondents had taken credit from traders and processors. The Chi-Square tests on the two categorical variables and sub-variables revealed telling results whose significance is clearly highlighted. The relationship test between the credit sourced from traders and processors and horticultural crop production revealed a result of 81.920a with a p-value of 0.017 which is less than 0.05 meaning

that the credit sourced from traders and processors had a substantial influence in increasing agripreneurs' crop production. The Chi-Square test on the effect of the traders and processors credit source on land acreage brought in a result of 21.679a with a p-value of 0.017 meaning that credit sourced from traders and processors contributed significantly to the agripreneurs' business expansion in terms of increase in land size that was put under horticultural crop production.

However, the statistical test on the relationship between the credit source and the agripreneurs' permanent employees presented an outcome of 13.797a with a p-value of 0.182. Since the p-value was higher than 0.05, this showed that credit sourced from traders and processors did not contribute significantly to the engagement of permanent employees by the agripreneurs. A similar test on casual employees revealed a result of 42.691a with a p-value of 0.002 showing that the credit sourced from traders and processors contributed significantly to the increase in the number of causal employees engaged by agripreneurs. The Chi Square test result for the agripreneurs' average net income revealed an outcome of 54.281a with a p-value of 00.042. This indicated that credit sourced from traders and processors contributed significantly to the increase in the average net income for the agripreneurs.

Since four out the five depended sub-variables were found to have significant relationship with the independent variable, the null hypothesis which stated that there were no significant relationships was therefore generally rejected. Overall, the Chi-Square tests clearly revealed that credit from traders and processors had significant influence on the performance of the smallholder horticultural agripreneurs because it led to substantial increase in crop production, increase in land size, increase in the number of casual workers as well as an increase in the average net income for agripreneurs in Yatta division, Machakos County. Example, Jane W. Waweru who started her horticultural business took an in-kind loan from Vert Fresh, the French bean buyer and exporter. At the end of the season she realized an increase of 4500 kilos in French bean production. She increased the size of land crop under crop from 0.8 acre to 1.5 acres and added casual employees from 1to 4 realizing an increase of Ksh 20,000 net income.

The important role that financing of smallholder agripreneurs through traders and processors plays has been reinforced by Wiggins and Keates (2012) on their study findings in Africa. The scholars confirmed that large and formal firms (processors, exporters, retail outlets) often take responsibility for organizing value chain linkages including financial linkages for the smallholder agripreneurs. Other scholars like Marcoul and Veyssiere (2010) states that traders and processors, unlike banks, normally avail credit to smallholder agripreneurs without any collateral but only with a pledge on crop under cultivation. Smallholder agripreneurs who enter

into contract farming and access credit from traders and processors almost unambiguously achieve higher yields, incomes, and high input usage (Barrett *et al.,* 2012; Kelly, 2012; Yiu, *et al.,* 2012). Access to credit from traders and processors through contract farming arrangement allows entrepreneurs to realize positive impacts by accessing an array of agricultural services including credit which they would otherwise not have access to (Bellemare, 2010; Miyata *et al*., 2009).

CONCLUSION AND RECOMMENDATIONS

The study sought to investigate whether credit from traders and processors had any influence on the performance of smallholder horticultural agripreneurs. The study statistical analysis revealed that credit from traders and processors had significantly influenced the performance of the smallholder horticultural agripreneurs in Kenya in terms of increased production, land size, number of casual employees and the average net income realized by the horticultural enterprises.

The study concluded that credit sourced from traders and processors was also very key to the performance of agripreneurs just like credit from formal financial institutions in terms of effectiveness. Based on the fact that a big number of the agripreneurs who had taken credit from traders and processors had experienced significant growth and profitability in their agri-businesses, it was therefore concluded that sourcing of credit from traders and processors by agripreneurs should be encouraged and supported.

This study established the significance and the critical role that credit from traders and processors play in influencing the performance of the smallholder horticultural agripreneurs. This was demonstrated by the impressive finding that a big number of the agripreneurs were found to be sourcing credit from traders and processors with an overall positive change in enterprise growth. Based on this finding, this study came up with the following recommendations:

Recognition and documentation of traders and processors as financial service providers

This study finding has demonstrated that credit from traders and processors is widespread among the smallholder horticultural agripreneurs. Yet, despite the fact that this source of credit is popular and effective in influencing enterprise growth, traders and processors are not formally recognized as critical financial service providers. As is highlighted in this study on the problem statement, very little, if any, documentation has been done on this source of credit. Based on these findings, the study is recommending for a formal recognition, registration and legislation of this source of credit by the relevant government agencies. This will provide the government and

the development partners with a clear infrastructure in which to provide and strengthen support for traders and processors to continue to provide financial services to the smallholder agripreneurs more effectively.

Support other agricultural sub-sectors to access credit from traders and processors

As is depicted in the study analysis, credit from traders and processors is basically being provided to smallholder horticultural agripreneurs only. It is not clear whether other agricultural sub-sectors are receiving the same services from their respective traders and processors that they are engaged with. There is therefore a need to carry out more research on credit provision in the other agricultural sub-sectors. This will help in identifying the level of credit service provision to the other agricultural sub-sectors to appreciate the type and size of credit gaps that need interventions.

LIMITATION OF THE STUDY

Some of the smallholder horticultural agripreneurs who participated in the study were not able to read and write. The respondents required assistance from the research assistants to read and interpret the questions in the questionnaires. This affected the confidence and willingness of some of the agripreneurs to participate fully and therefore increased the rate of respondent attrition. As a result, this challenge may have affected the accuracy of the information that was given by the respondents.

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