



AFRICAN JOURNAL OF BUSINESS AND MANAGEMENT

(AJBUMA)

ISSN 2079-410X



## GROWTH OF HORTICULTURAL EXPORT MARKET: THE IMPLICATION OF QUALITY CONTROL PRACTICES AMONG SMALL SCALE FARMERS IN SOUTH RIFT, KENYA

Cheruiyot Philip and Motari, Y. O<sup>2</sup>

<sup>1</sup>Phd Candidate Department of Business and Economics, Kisii University, P.O Box 408-40200, Kisii, Kenya -  
*Cherykim7@gmail.com*

<sup>2</sup> Lecturer Department of Business and Economics, Kisii University, P.O Box 408-40200, Kisii, Kenya

Date Received | Date Accepted  
11/01/2024 | 05/02/2024

### Abstract

*The inclusion of rural smallholder farmers in the export of horticultural products has two major implications: increased household income through a promising global market, which is a catalyst for productivity, cumulatively growing Gross Domestic Product (GDP) and foreign exchange. So far, there are an estimated 2500 smallholder farmers who participate in the export of horticulture in Kenya. As a result, the current study sought to establish the nexus between quality control practices by the small holder farmers and the growth of the horticultural export market in Kenya. The study collected quantitative data using a structured questionnaire from a sample of 334 small-scale horticultural farmers who were randomly selected. Validity and reliability tests were performed before the main study. Then, descriptive and simple linear regression was used to analyze the data. Quality control practices can be measured through the Pre-production measures, Production and post-production control measures. Findings indicated that there was a statistically significant relationship between quality control practices and the growth of horticultural export markets. It was however observed that, there are weak quality control practices among the farmers which lead to non-conformities of products. This implies that the exports from Kenya become less attractive and make the smallholder farmers less competitive.*

**Key Words:** *Quality Control Practices, Production, Contractual, Growth, Export , Markets.*

## Background

The inclusion of rural smallholder farmers in the export of horticultural products has two major implications: increased household income through a promising global market, which is a catalyst for productivity, cumulatively growing Gross Domestic Product and foreign exchange. The on boarding of the farmers is done through a contractual process that ties the production of horticulture to exports (Gramzow & Sefa, 2018). The contract spells out the quantities and quality of products that meet the threshold for exports, and farmers are under obligation to comply. So far, Kenya has estimated 2500 smallholder farmers under this program who are mainly from the lower Eastern and South Rift parts of Kenya.

The farmers who enter into these contracts operate on meagre incomes (Ruiz and Laura, 2015) and engage in horticulture with the hope of supporting their livelihoods. A number of them have small farms and struggle to comply with the contract specifications such as chemical inputs, or attract extension services. Sometimes, the farmers fail to meet production schedules (i.e., weekly or semi-weekly). The small holder produce is then aggregated in readiness for export. The aggregated products are bound to have quality variability or non-conformities as observed by Ulrich (2014). The non-conformities are generally termed as poor quality products which lower the attractiveness and indeed competitiveness of the Kenyan horticultural products.

Quality control is a concept drawn from Total Quality Management (TQM); it refers to practices that lead to conformity to established standards (Bloom & Reenen, 2013). In the agricultural set up, it is an elaborate process that starts with preparing farms, inputs, planting program technical advice, training in good agricultural

practices, and compliance with food safety and quality standards. The current study picks the major stages of the production process: Pre-production and production controls as well as post-production controls. The growth in the export market is driven and sensitive to compliance with set standards. Smallholder farmers, therefore, recognize the need to comply with the numerous regulations on standards set up by destination markets, which are commonly referred to as “license to trade” among players. As such, the Kenyan government instituted measures to promote quality by establishing institutions such as Kenya Plant Health Inspectorate Services (KEPHIS) and broadened regulations for supporting quality production such as the Horticulture Regulation of 2020 and the Crops Act 2013 (McEwan, Spielman & Okello, 2021).

As interest among stakeholders on this subject increases, so does that of scholars who have sought to establish a link between quality control practices and the growth of the export market (Zhou & Yuan, 2015, McEwan, Okello & David, 2021; Du Plessis and Gerber, 2023). However, there is a dearth of knowledge regarding the influence of quality control practices on the growth of the export market for smallholder farmers. In our view, small holder farmers struggle to circumvent hurdles such as weather, access to information on plot-specific inputs and planting techniques (Cheng & Kristinn, 2021) which impedes production and leads to quality variability and non-conformities. In the absence of stakeholder (i.e., the state, exporters, private sector, civil society) support, the factors continue to shape the small holder production ecosystem hindering efficiency, productivity and growth of the sector.

The study's contribution will be theoretical, empirical, and practical. Theoretically, the research study will build on the Actor-

Network Theory (ANT) proposed by Godman in 1999. In the ANT framework, networks are built from relations or associations, which are the links or ties between the parts that confer agency rather than any essential (natural, social characteristics held by a particular subject or object). In this theory, the stakeholders play a significant role in creating a favourable environment for producing quality horticulture that leads to the growth of the export market. Their actions include extension services, laws and regulations and incentivizing production. From a practical standpoint, the study seeks to identify critical leverage points on quality controls that can be productively applied to achieve significant improvements that catalyze the growth of the horticultural export market. Empirically, the study will identify and fill the empirical gaps relating to the study constructs and indeed establish the nexus between quality control and growth of export market.

### **Statement of the Problem**

In an ideal scenario, small-scale horticultural farmers in South Rift, Kenya would thrive in the export market, benefiting from their ability to expand and meet stringent global market standards. These standards encompass pre-harvest and post-harvest quality controls and responsiveness to consumer demands. Authors such as Bien & Soehn (2022) and Match Maker Associates (2017) highlight the potential for significant contributions to the Kenyan economy through the export of fruits and vegetables. However, challenges persist, as noted by Onwude et al. (2020), Fulano, Lengai, and Muthoni (2021), and Matui et al. (2016), including pesticide residues, harmful organisms, and non-compliance with technical standards, leading to limited market access and high levels of loss within the supply chain. Thus, the research aimed at the factors influencing market standards and

growth in horticultural products among small-scale farmers in South Rift, Kenya, focusing on quality controls.

### **Literature Review**

In a series of articles and books, scholars have sought to establish how export markets grow. The works of Kazantseva (2020) and Nosirov (2023) serve to illustrate the increased demand among scholars to link quality to operational outcomes. For example, Cho & Pucik, (2005) linked quality controls to market size in the service sector in Switzerland; Da Silva (2021) quality controls on the market size of the pharmaceutical firms in the United States of America; Da Silva (2021) on quality controls on market size of stocks in Brazil; (Lin & Weng, 2019) on quality control and market size of financial services in South Korea. The studies established a link between quality control measures and market size. Therefore, we can observe that there is growth in the literature on this subject. While addressing the reason for the increasing interest in this area, De Giovanni, and Pietro (2020) and Saragih (2020) observed that the search for quality in production pushes firms to compete on efficiency and differentiation, which leads to the growth of markets. In the process of literature review, it is easy to notice that the construct “quality control practices” also refer to “standardization”, as observed in the study done by Kazantseva (2020) and Suman(2021).

However, few studies have tried to examine all aspects of production, particularly in agriculture. It is on this basis that the current study investigated the Pre-production and production controls as well as post-production controls control measures. In the past, scholars have addressed quality practices piecemeal, as observed in investigations of Odhiambo (2022) and Ekwe and Morari(2023) who dealt with the training component and McEwan(2021) on

regulations and laws. Zhou (2015), on the other hand, dealt with production processes such as using inputs and chemicals. Nevertheless, there has been inconsistent empirical review with varying contexts of investigations.

As already observed, investigation into the relationship between quality control practices and the growth of the export market in the agricultural sector is still limited. It is also important to note that most investigations do not address the challenges that bedevil the small-scale farmers in Sub-Saharan Africa. This gap shows those stakeholders are unable to acquire sufficient knowledge in this area of investigation. On this basis, the study sought to investigate the role of quality control practices on the growth of the export market among small-scale holder farmers in Kenya.

## **Methodology**

### ***Population and Sampling Characteristics***

The investigation was based on an explanatory research design. A population of 1891 small-scale farmers was identified from Bomet and Narok Counties in the South Rift art of Kenya. The study area was chosen because farmers produce fruits and vegetables for the export market. In Kenya, there has been an increase in horticultural production over the years, with an estimated 9% increase in export of this product in 2023 alone. The product represents one of the main economic activities of the residents in the South Rift. As a result, any intervention, such as research meant to support horticulture in the region, will boost the livelihoods of these residents.

Out of the population of 1891, the study used the Yamane 1967 formula to arrive at a sample of 363 small-scale farmers. The sample was then stratified according to counties, and respondents were then selected using a simple random sampling technique.

### ***Survey Instruments and Validation***

The study variables were tested using a multi-item scale to test the hypothesis. The data analysis constructs were measured with a 5-point Likert scale that ranged from "strongly Disagree" (1) to strongly Agree (5).

The instrument was taken through the process of validation where data collected from a pilot study conducted on 36 small-scale farmers in Kericho County was analyzed for validity and reliability. The standardized factor loading, Cronbach Alpha, averaged variance explained (AVE), and composite reliability of the instruments were presented. Each of the indicators' loading must be above 0.50 at the t-value. The entire factor loading in the study was above 0.50 and retained for further analysis. Data was analyzed using means, standard deviation and regression analysis.

### ***Data Management***

At the onset of data analysis, the researcher went through the data, ensuring it was complete, consistent, and right. A decision was made on whether or not to continue with data processing. After these preliminary checks, data was entered into the Statistical Package for Social Sciences (SPSS V21) for analysis. The study checked for missing values to avoid messing up the inferential analysis. Afterward, the study checked for any missing data, whereby 13 cases were identified. Outliers were also deleted and excluded from the analysis and cleaning of the data from outlier and missing cases, and thus, the study retained 334 units of inquiry.

## **Findings**

### ***Demographics***

Demographic variables such as nature of producer, age, gender, period of export, level of education, type of product, land size under production were examined. The findings of these demographics are presented in Table 1.

**Table 1. Demographic representation of horticultural producer in Kenya**

Variable	Measures	Frequency	Percent
Nature of producer	Self-help group	40	12.0
	Cooperative society	294	88.0
	<b>Total</b>	<b>334</b>	<b>100.0</b>
Range of Age	30 years and below	24	7.2
	31-40 years	39	11.7
	41-50 years	109	32.6
	51 years and over	162	48.5
	<b>Total</b>	<b>334</b>	<b>100.0</b>
Gender	Male	236	70.7
	Female	98	29.3
	<b>Total</b>	<b>334</b>	<b>100</b>
Period in export business	Less than 1 year	59	17.7
	1-2 years	58	17.4
	3-5years	142	42.5
	6-10 years	71	21.2
	more than 10 years	4	1.2
	<b>Total</b>	<b>334</b>	<b>100.0</b>
Level of Education	Primary	88	26.3
	Secondary	116	34.7
	Tertiary	83	24.9
	University	47	14.1
	<b>Total</b>	<b>334</b>	<b>100.0</b>
Type of crop grown	Fruit	303	90.7
	Vegetable	31	9.3
	<b>Total</b>	<b>334</b>	<b>100.0</b>
Land size	Below 1 acre	238	71.3
	1-2 acres	81	24.3
	2-3 acres	13	3.9
	Over 3 acres	2	.6
	<b>Total</b>	<b>334</b>	<b>100.0</b>

Source: Survey Data (2023)

Findings show that 88% of the respondents were members of cooperative societies, while 12% belonged to self-help groups. On land size under horticulture, it was observed that

71.3% of farmers owned below 1 acre of land, 24.3% owned between 1 and 2 acres, and 3.9% owned between 2 and 3 acres. Only 0.6% own over 3 acres. Thus, horticultural

production was on small scale, to sustain the global demand, there was need for the farmers to undertake aggregation of their produce through cooperative and self help groups. On age, majority (48.5%) of the small-scale farmers was above 51 years; they were followed (32.6%) by those between 41-50 years. The number of farmers decreased with age as 11.7% were between 31-40 years and while 7.2% were 30 years and below. These findings show that farming was not attractive to the younger generations, and they pursue alternative forms of employment. On gender, male farmers comprised 70.7%, while 29.3% were female.

The small scale farmers were generally new in horticulture as majority (42.5%) of them had engaged themselves for a period between 3-5 years, whereas 21.2% had 6-10 years, 17.7% had < 1 year, 17.4 % of them had 1-2 years while 1.2% had >10 years of

experience. On education, it was established that most farmers had basic education (i.e., 34.7% had Secondary level of education and 26.3% primary). Another sizable number had tertiary level of education (24.9% had college education with 14.1% University) indicating that they could comprehend the market dynamics and respond to the questions adequately. On the type of product, it was established that the majority (90.7%) of the farmers grew fruits while 9.3% grew vegetables.

### 5.2 Descriptive Statistics

To understand the perception of quality Control practices in small scale farms, the study used Means and Standard Deviation (SD) as presented in Table 2

**Table 2: Quality Control Practices**

Item	N	Mean	SD
<b>Production Controls</b>			
There are protocols for management of diseases and pests in farms	334	2.77	1.144
Approved chemicals are used while controlling for residues	334	2.75	1.124
<b>Post-Production Controls</b>			
The cooling systems are sufficient	334	1.77	0.640
There are hygiene protocols for harvested products	334	3.00	1.128
<b>Pre-Production Controls</b>			
There is professional advisory services by extension before contracting	334	2.99	1.038
The regulatory regime support quality production of horticulture	334	2.82	1.119

**Source: Survey Data (2023)**

This section presents descriptive statistics on Pre-production, production and post-production quality control practices. On production controls, findings show that there

were weak protocols for the management of diseases and pests in farms (Mean=2.77, SD=1.144), just like the use of approved chemicals and control for residues

(Mean=2.75, SD=1.124). To reduce the number of pesticides, farmers are advised to adopt Integrated Pest Management (IPM), where biological control agents are used in production (Baker, 2019). On post-production controls, the study established that the small-scale farmers did not have sufficient cooling systems for the horticultural products (Mean=1.77, SD=.640); this confirms the findings of Binge, Brenda., Jalango, Dorcas., Tesfaye, Lidya., Zulu, Mercy-Fassie., Nguvi (2023), who observed that smallholder farmers have challenges with the preservation of products. Nevertheless, it was observed that the small-scale farmers were fairly handling the

hygiene of the horticultural products (Mean=3.00, SD=1.128). On Pre-production controls, it was observed that there were professional advisory services by extension before contracting to some extent (Mean=2.99, SD=1.038), there was a fairly developed regulatory regime for quality management of horticulture (Mean=2.82, SD=1.119).

**Hypothesis Testing Results**

Simple linear regression was used to test the relationship between quality control Practices and growth of horticultural export markets. The results of the regression analysis are presented in Tables 3-5.

**Table 3: Model Summary for Quality Control**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.635 <sup>a</sup>	.403	.402	.31602	.403	224.414	1	332	.000

The results in Table 3, show that quality control practices explain 40.3% of the changes in growth of horticultural export markets. This was indicated by an R square of 0.403

ANOVA presented in Table 4 shows coefficients indicating the predictive strength of quality control practices on growth of horticultural export markets as represented by F coefficients and significant levels.

**Source: Survey Data (2023)**

**Table 4 : ANOVA<sup>a</sup> for Quality Control**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.412	1	22.412	224.414	.000 <sup>b</sup>
	Residual	33.157	332	.100		
	Total	55.569	333			

As depicted in table 4, quality control practices were found to possess sufficient predictive power on the growth of horticultural export markets as shown by F=224.414; df =1, sig.=.000<0.05).

Table 5 illustrates indices (*t* coefficients and sig. levels) that were utilized to test the hypothesis (*the study accepted or rejected the hypothesis when the p-value was p<0.05 and vice versa*).

**Table 5: Coefficients on quality control practices and growth of horticultural export markets**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.207	.079		27.921	.000
	Quality Control	.404	.027	.635	14.980	.000

**Source: Survey Data (2023)**

On the basis of Table 5 the null hypothesis was rejected. This was based on the score:  $\beta = .635$ ,  $t=14.980$ ;  $p<0.05$ . The findings show that there is a statistically significant relationship between quality control practices and the growth of horticultural export markets. The study established that the relationship between quality control practices and growth of horticultural export markets was positive and significant. The findings were consistent with those of Da Silva (2021) and Lin & Weng (2019)

### Implication to Theory

The study concludes that the actions of stakeholders contribute to quality control. As a result, Actor-Network Theory (ANT), which was proposed by Godman in 1999, holds that each of the stakeholders has a responsibility to play in the quality control ecosystem. They can collaborate in the Pre-production, Production and post-production phases of horticulture processes. The player can contribute to policy formulation, litigation, regulation, and capacity building, among other actions. Therefore, the current study confirms the interconnections of sub-systems in horticulture production.

### Implication to Practice

Smallholder horticultural farmers play a critical role in the sector. Contractual farming plays an important role in the inclusion of farmers in the export market. However, there are weak quality control practices among the farmers which lead to non-conformities of

the Kenya products. This implies that the exports from Kenya become less attractive and make the smallholder farmers less competitive.

### Conclusion

Findings showed that there were weak protocols for the management of diseases and pests in farms, just like those deployed in the use of chemicals and control for residues. Small-scale farmers did not have sufficient cooling systems for the horticultural products, although they had developed fairly good hygienic practices. It was also observed that some farmers were involved in professional advisory services by extension officers and operate in a relatively developed regulatory regime for quality management. Finally, it was established that there was a statistically significant relationship between quality control practices and the growth of horticultural export markets.

### Recommendations for Further Research

We confirm that there are only three quality control constructs, i.e., Pre-production measures, production and post-production control measures. It was noted that understand that several factors were not covered in the study. Therefore, we recommend further investigations of other quality control measures, and a qualitative study is equally suggested to complement quantitative data and bring out qualitative insights from small scale farmers and stakeholders on how they have been able to



respond and mitigate on export market challenges surrounding horticultural product quality control practices. Further, study sampled only registered small-scale farmers in organized producer organizations, leaving out small scale farmers who were not in any organised producer groups and yet carrying out production and exportation of fruits and vegetables. A study is suggested to be carried on this category of farmers who are not organised in any group and relate the findings to this study.

## References

- Binge, Brenda., Jalango, Dorcas., Tesfaye, Lidya., Zulu, Mercy-Fassie., Nguvi, C. 2023. (2023). *Post-Harvest Losses Management through Climate Smart Innovations: A collaborative Approach Among Value Chain Actors*.
- Bloom, N., & Reenen, J. Van. (2013). 済無No Title No Title No Title. *NBER Working Papers*, 28, 89.
- Bien J. & Soehn I. (2022) Unlocking the Kenyan mango value chain, In fulfilment of the requirements for the degree of Master in Public Administration in International Development, John F.Kennedy School of Government, Harvard University..
- Cheng, H. W. J., S. H. Kristinn, and L. M. (2021). *Frontier Technology Issues: Frontier technologies... - Google Scholar*. Frontier Technology Issues, Department of Economic and Social Affairs, United Nation. [https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=Frontier+Technology+Issues%3A+Frontier+technologies+for+smallholder+farmers%3A+addressing+information+asymmetries+and+deficiencies&btnG=](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Frontier+Technology+Issues%3A+Frontier+technologies+for+smallholder+farmers%3A+addressing+information+asymmetries+and+deficiencies&btnG=)
- Cho, H. J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555–575. <https://doi.org/10.1002/smj.461>
- da Silva, M. Z., da Rosa, M. P., & Júnior, R. P. S. (2021). Risk Management, Hedge Disclosure Quality and Market Performance in B3's Novo Mercado Companies. *International Journal of Advanced Engineering Research and Science*, 8(1), 115–123. <https://doi.org/10.22161/ijaers.81.18>
- De Giovanni, P. (2020). When feature-based production capabilities challenge operations: Drivers, moderators, and performance. *International Journal of Operations and Production Management*, 40(2), 221–242. <https://doi.org/10.1108/IJOPM-04-2019-0309>
- du Plessis, F., Goedhals-Gerber, L. L., & van Eeden, J. (2023). Forecasting Fruit Export Damages and Enhancing Food Safety through Risk Management. *Sustainability*, 15(21), 15216. <https://doi.org/10.3390/su152115216>
- Ekwe, A., Suvedi, M., Chanza, C., Davis, K., Oywayankurumwa, A., Mangheni, M. N., Sasidhar, P. V. K., Africa, S., Chanza, C., & Oywayankurumwa, A. (2023). *Agricultural Extension and Advisory Services in By Agricultural Extension and Advisory Services in Nigeria . April*.
- Fulano, A.M, Lengai G.M., and Muthomi J.W., (2020), AO, (2020), Phytosanitary and Technical Quality Challenges in Export Fresh Vegetables and strategies to compliance with market Requirements: Case of Smallholder snap Beans in Kenya,MDPI, Basel, Switzerland.
- Gramzow, A., Batt, P. J., Afari-Sefa, V., Petrick, M., & Roothaert, R. (2018). Linking smallholder vegetable producers to markets - A comparison of a vegetable producer group and a contract-farming arrangement in the Lushoto District of Tanzania. *Journal of Rural Studies*, 63(July), 168–179. <https://doi.org/10.1016/j.jrurstud.2018.07.011>
- Kazantseva, T. V., Kazantseva, N. K., Tkachuk, G. A., Nevolina, A. L., Baganov, N. A., Aleksandrov, V. A., & Kukhar, V. S. (2020). The necessity and complexity of standardization. *WSEAS Transactions on Systems and Control*, 15, 568–575. <https://doi.org/10.37394/23203.2020.15.56>
- Lin, S. H., & Weng, Y. (2019). Market size, productivity and product quality regarding firm heterogeneity. *Economic Research-Ekonomska Istrazivanja*, 32(1), 2918–2934. <https://doi.org/10.1080/1331677X.2019.1653781>
- McEwan, M. A., Spielman, D. J., Okello, J. J., Bartle, B., Mbiri, D. G., Atieno, E. O., Omondi, B. A., Wossen, T., & Cortada, L. (2021). Exploring the regulatory space for improving availability, access and quality of vegetatively propagated crop seed: potato in Kenya.

- Www.Rtb.Cgiar.Org/*, 1–38.  
<https://doi.org/10.4160/23096586RTBWP20211>
- Match Maker Associates (2017), Horticulture Study, Mapping of Production of Fruits and Vegetables in Kenya, Kingdom of the Netherlands.
- Matui, M. et al (2016). From old to sustainable trade: Driving competitive horticulture sector development, a quick scan of the horticulture sector, wagening.
- Nosirov, J. T., Kukaeva, L. I., Hussein, B. A. A., & Ustenko, V. S. (2023). Disclosure of the Export Potential of High-Tech Enterprises in the Context of Industry 4.0 Through Quality Management. *Proceedings on Engineering Sciences*, 5(S2), 295–310. <https://doi.org/10.24874/PES.SI.02.009>
- Onwude, D. et al. (2020). Recent Advances in Reducing Food Losses in the Supply Chain of Fresh Agricultural Produce, Processes 2020,8,1431, DOI 10:3390/pr8111431.
- Odhiambo, R. O., Masinde, P., Arimi, J., Owiti, B., Maitethia, D., Nawiri, P., Wesonga, J., De Groote, B., & Koomen, I. (2022). Enhancing partnerships for industry-led vocational training and education (e-pivot) in the horticulture value chains of Kenya. *African Journal of Science, Technology and Social Sciences*, 1(1), 2022. <https://doi.org/10.58506/ajstss.v1i1.59>
- Ruiz Meza, L. E. (2015). Adaptive capacity of small-scale coffee farmers to climate change impacts in the Soconusco region of Chiapas, Mexico. *Climate and Development*, 7(2), 100–109. <https://doi.org/10.1080/17565529.2014.900472>
- Saragih, J., Tarigan, A., Pratama, I., Wardati, J., & Silalahi, E. F. (2020). The impact of total quality management, supply chain management practices and operations capability on firm performance. *Polish Journal of Management Studies*, 21(2), 384–397. <https://doi.org/10.17512/pjms.2020.21.2.27>
- Suman, K. M., Gupta, A., Vaidya, D., & Ranjan, K. (2021). Standardization of formulation for the preparation of ginger supplemented jelly candies. *The Pharma Innovation Journal*, 10(2), 608–613.
- Zhou, Y. (2015). Kenya Horticultural Exporters: Linking Smallholders to Market. *Knowledge Driven Development: Private Extension and Global Lessons*, 91–104. <https://doi.org/10.1016/B978-0-12-802231-3.00005-X>

Cheruiyot P	Phd Candidate Department of Business and Economics, Kisii University, P.O Box 408-40200, Kisii, Kenya, E-mail: <a href="mailto:Cherykim7@gmail.com">Cherykim7@gmail.com</a>
Motari Y.O	Lecturer Department of Business and Economics, Kisii University, P.O Box 408-40200, Kisii, Kenya. E-mail: <a href="mailto:ymotari@kisiiuniversity.ac.ke">ymotari@kisiiuniversity.ac.ke</a>

### AJBUMA Knowledge Sharing Partners

EBSCO, Open Access and Google Scholar

