

CONTRIBUTIONS OF COUNTY LEVIES TO THE TOTAL COST OF FRESH FRUIT AND VEGETABLES' BUSINESS IN TAITA TAVETA COUNTY, KENYA

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Abstract

Fresh fruits and vegetables' (FFV) trade is a promising industry in Kenya. However, different types of levies imposed by the county governments may have a substantial effect on the costs of the FFV business but this is yet to be fully established in Taita Taveta County-which is among the country's major producers of FFV. The study sought to establish the contributions of each individual levy to the total cost of the FFV trade in Taita Taveta County. Using a survey research design and targeting 90 registered dealers in the area through copies of questionnaire and interview schedules, the study established that proportionality, affordability and poor regulation of the levies in that order had strong negative effects on the performance of FFV trade in the County. This implies that the local levy regimes could cripple the FFV trade in the area if not addressed in time. Tentatively, this could affect the compliance rates meaning less local revenue collected for the county government. Therefore, the study recommends that the County government revises its tax regimes and methods of collection so as to avoid levying high taxes and surcharges on the FFV traders as this would discourage them for doing more business in the area.

Keywords: Fresh fruits and vegetables, County levies, Total cost of business, Kenya.

1.0 Introduction

Fresh fruits and vegetables (FFV) are important elements of a healthy diet. Diets that are high in vegetable and fruits help to fight diseases (FAO, 2013). Therefore, the performance of FFV trade has a significant impact on people's health, nutrition, and employment, especially in developing countries. Fruits and vegetables contribute approximately KES 92 billion and 8% of the gross domestic products (GDP) of Kenya annually (Munguti, 2017). The sector continues to grow at between 15 and 20% per year (Kruger, 2016). The sector is among country's foreign exchange earner with 95% of the FFV produced in the country being consumed domestically while 5% of the produce is exported to international markets. For example, in 2011, the industry earned the country KES 91.2 billion from exports. Moreover, the FFV sector provides employment for over

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six million Kenyans (Research Solutions Africa, 2015). As a result, the sector has been earmarked for more investment in the country's development blueprint, Vision 2030. The global fruit and vegetable turnover has been growing steadily at an annual rate of 2% (Kirwan, 2009). This growth is expected to continue (Fernandez-Stark, Bamber & Gereffi, 2011). The production volume is projected to grow by 6.2% between 2009 and 2016 (FAO, 2013). This development promises better economic prospects for producers of and traders in FFV.

In Kenya, the fruits and vegetables market is composed of two key industry players: the processor marketer, and the small and medium scale entrepreneurs (Research Solutions Africa, 2015). The former enjoys industry support incentives like the EPZ to enable it to export its processed products and at the same time has a domestic market advantage due to the value addition and volume traded. The small and medium scale fruit enterprises handle the bulk of the FFV produce and operate for the most part from informal structures as the existing public markets confine them to designated segments (Onyango, 2012). The sector is also characterized by very fragmented supplier base as reported by Kenya vision 2030.

Most of the small and medium scale fruits and vegetable enterprises are in many ways similar to other small and medium enterprises (SMEs) in the country (Olawale & Garvwe, 2010). As such, their ownership and management styles are not considerably different from other SMEs.

The failure rate of SMEs is high with almost two thirds of the businesses failing within the first one year (Sharma, 2012). The likelihood of failure of such SMEs is high due to their low capital base and informal operations (Longenecker et al, 2006). In the FFV trade, the failure rate is also attributed to factors such as high transportation cost, lack of proper storage, poor market infrastructure, seasonality of supply, perishability and wholesale price fluctuations (USAID Report, 2013). Other challenges faced by the FFV traders are limited financial services to the majority of smallholder farmers and limited awareness of insurance products for horticultural enterprises (Mwangi, 2014). Most FFV farmers also lack the technology to harvest and preserve their produce in standard phytosanitary conditions (Onyango, 2012). Artificial barriers such as excessive number of police road blocks along trade routes and extortion from police also threaten the existence of the trade (Dihel, 2011).

Another area which could have a considerable impact on the performance of the fruits and vegetables sector is the legal framework and in particular levies imposed on traders (Nyoro et al., 2008). Levies charged on the trade could considerably affect the FFV business, however, this is yet to be fully established. There are multiple taxes, licenses, levies, fees, cess and surcharges in the horticultural industry but because the domestically bound fresh vegetables trade in Kenya is largely informal and non-transparent it is difficult to estimate the exact amount of taxes paid by the FFV traders (RSA, 2015). Most of the taxes are levied on transit and at the point of entry to the market. No tax incentives exist (Dihel, 2011). Moreover, the introduction of the county governments brought with it new regulations empowering the county governments to collect taxes, surcharges, cess, tolls and other levies for their budgetary purposes (Mwangi, 2014). Indeed, the Constitution of Kenya (2010) gives counties mandate to collect revenue (Ndegwa, 2013). The authority is given in Chapter 12 Article 209 of the constitution which states that revenue should be collected in form of property tax, entertainment tax and any other tax that is authorized to be imposed by an act of parliament. Thus, it is evident that the farmer and dealer of FFV alike have to abide by the aforementioned regulations in addition to the taxes and tolls levied on them, failure of which penalties will be imposed on them.

1.1 Statement of the Problem

The fresh fruits and vegetables sector is one of the agricultural sectors in the country that show a lot of promise in the future in terms of revenue and employment. However, like other business sectors in the country, it is beset with several challenges among them the levies imposed by both the national and county governments. Different types of levies imposed by the county government combined with factors such as high transportation costs, police road blocks, seasonality of supply and perishability as mentioned by a USAID Report (2013) may have a substantial effect on the costs of the FFV business and, subsequently, the overall performance of the businesses. However, the exact impact of these factors notably county levies on the FFV business performance is not yet fully known in Taita Taveta County. Presently, the County government of Taita Taveta is imposing levies on the FFV sector. For a county which has benefitted from the FFV trade and still stands to gain from the trade, the contributions of the county levies on the performance of the FFV sector needs to be established.

1.2 Research Question

What contributions does each levy make to the total cost of the FFV business in TaitaTaveta country?

1.3 Objective of the Study

The objective is to establish the contributions of each individual levy to the total cost of the FFV business in TaitaTaveta country.

2.0 Literature Review

2.1 Contributions of Each Individual Levies to the Total Cost of the FFV Business

In India, a Report of Task Force on Agricultural Marketing Reforms found that the Agricultural Produce Marketing Committee (APMC) Act treats APMC as an arm of the state and the market fee as the tax levied by the state, rather than as a fee charged for providing services, which acts as a major impediment in creating a national common market (Gandhi & Namboodiri, 2015). Various taxes, fees/charges and cess levied on the trades conducted in the markets or Mandis are also notified under the APMC Act. APMCs charge a market fee from buyers, and a licensing fee from the commissioning agents who mediate between buyers and farmers. They also charge small licensing fees from a whole range of functionaries (warehousing agents, loading agents etc.). In addition, commissioning agents charge commission fees on transactions between buyers and farmers. The levies and other market charges imposed by states vary widely. Statutory levies/mandi tax, VAT etc. all add up to hefty amounts, create market distortions with cascading effects and strong entry barriers. Further, multiple licenses are necessary to trade in different market areas in the same State.

All this has led to a highly fragmented and high-cost agricultural economy, which prevents economies of scale and seamless movement of agri-goods across district and State borders. Moreover, a study by Abraham and Gaurr (2006) established that APMC operations were hidden from scrutiny as the fee collected, which are at times exorbitant, is not under State legislature's approval. Agents in an APMC may get together to form a cartel. This creates a monopsony (a market situation where there is only one buyer who then exercises control over the price at which he buys) situation. Produce is procured at manipulatively discovered price and sold at higher price, defeating the very purpose of APMCs. As a result, the system serves a disincentive for farmers to produce large volumes as they have no direct access to the markets.

Exporters, processors and retail chain operators cannot procure directly from the farmers as the produce is required to be channelized through regulated markets and licensed traders. There is, in the process, an enormous increase in the cost of marketing and farmers end up getting a low price for their produce. Monopolistic practices and modalities of the state-controlled markets have prevented private investment in the sector.

In a bid to lower the cost of inputs, the Kenya Government in 2002/03 eliminated duties on all raw materials not produced locally (previous duties were from 3% to 5%). The agricultural sector is now able to obtain all capital goods, fertilizer and chemicals, and other input requirements duty free. However, interviews conducted by Muendo, Tschirley and Weber (2004) involving seven agricultural input companies indicated that the tax concession benefit was not passed over to farmers. Some companies indicated that the tax exception was too minor to be passed over. Others reasoned that since they are incurring some costs to provide extension services to farmers, this exception boosts their agricultural service provision budget. Hence the need to reduce the cost of these inputs for farmers persists. The study also found that the use of inputs such as fertilizers and agrochemicals contribute significantly to increased horticultural output. The cost of these inputs makes up a sizable component of the cost of horticultural production. In the case of onions, the cost share of fertilizers and other chemicals was 17%, 34%, 21% and 15% in Mang'ola -Tanzania, Oloitoktok, Narok/Laikipia/Meru and Taveta in Kenya respectively.

2.2 Levies Charged on Fresh Fruit and Vegetable Trade by County Governments in Kenya

There are a host of taxes, levies, cess and fees charged by the central government and the local authorities on farm produce and other rural services in Kenya (Talam, 2014). They include market cess, market entrance fees and market stall fees. The above levies might contribute greatly to the cost of doing business (Gabagambi, 2013). Produce cess is fees charged at roadblocks mounted within the jurisdiction of the local government. They are imposed on FFV dealers and are levied at predetermined points and rates to facilitate fair trade. Market entrance levies are taxes or surcharges imposed on goods entering a designated market area. Market entrance levies are designed to improve market infrastructure and regulations so as to promote the growth of business in the area. Market stall fees are surcharges paid by traders for stall owned in the market areas. They can either be on a monthly or yearly basis (Adebisi & Gbegi, 2013).

Market cess and other indirect taxes may distort market prices and make the indigenous vegetables produce uncompetitive in most urban markets. The levies also make the vegetables expensive and a preserve of the upper income class, hence limiting access by the poor to these nutritious food items. The uncertainty of the market levies may lead to high commodity prices in the market as the vendors seek to recover their tax expense (Wanjohi, 2012). It may also make non producers to lower the prices at source citing high levies and this could serve as a powerful disincentive to farmers who may make only minimum gains from their produce (Tegemeo Institute, 2005).

2.3 Theoretical Review

The study will be guided by the Producer and Consumer Surplus Theory. The Theory of Producer and Consumer Surplus was first formulated by Dupuit in 1844 to measure social benefits of public goods such as bridges, canals and national highway. The theory was further

refined and popularized by Alfred Marshall in his “Principles of Economics” in 1890. The concept of consumer and producer surplus later became the basis of old welfare economics. Marshall defined consumer surplus as excess of the price which a consumer would be willing to pay rather than go without a thing over that which he actually does pay. He defines producer surplus as the amount that producers benefit by selling at a market price that is higher than the least that they would be willing to sell for. Ehrhart and Guerineau (2011) observed that while a tax on a commodity raises its price and reduces consumer’s surplus it brings revenue to the state. A tax is justified only if the gain in state revenue is greater than the loss in consumer’s surplus. However, the effect on price and hence on consumer’s surplus will differ accordingly as the industry is operating under the law of increasing returns, diminishing returns or constant returns.

Several economists have made theoretical examinations on the effects of taxation on both the producer (supplier) and the consumer (demander) side. Among these are Cournot (1838), Marshall (1890) and Jenkins (1870). Cournot who some claim was the inventor of the tax-incidence analysis was the first to show that given a positively sloped supply curve the portion of an excise tax shifted to buyers in the form of higher prices varies inversely with demand elasticity, being nil at infinity and complete at zero values of that parameter (Vatin, Simonin, & Marco, 2016). Jenkins’ (1870) work, however, showed that the steeper the demand curve or the flatter the supply curve the greater the share of the tax shifted to demanders. Conversely, the steeper the supply curve and the flatter the demand curve the greater the share borne by suppliers.

Dupuit (2009) posited that the imposition of a tax results in a loss in consumers’ surplus that exceeds the yield of the levy. He further posited that the deadweight loss of the tax consisting of the tax-induced distortion of relative prices and consumption patterns, persists even if the government returns the proceeds to the taxpayers. Marshall (1890) concluded that aggregate welfare can be increased if the government imposes a tax on diminishing returns or increasing cost industries (where tax receipts are greater than the loss in consumers’ surplus) and spends the proceeds to subsidies increasing returns or diminishing cost industries where the gain in consumers’ surplus is more than subsidy payments.

3.0 Methodology

3.1 Research Design

The study adopted a survey research design. The research design is a survey of fresh fruit and vegetable traders in Taita Taveta County. The design was deemed to be appropriate to achieve the objective of this study as it allowed detailed investigation of the contents of the study. The study also used both qualitative and quantitative research methods. Quantitative research method enabled the study to use highly structured methods such as questionnaire, surveys and structured observations to address the research question (Fraenkel & Wallen, 2000). Qualitative method in this study involved obtaining explanations about phenomenon from the respondents and other documentary literature while quantitative methods were used to assess the statistical occurrence of the subjects under investigation.

3.2 Target Population

The study was conducted in Taita Taveta County towns of Voi, Mwatate and Wundanyi due to their accessibility. In this study the target population comprised the FFV dealers entering the designated areas of the main market within the aforementioned towns. This population was chosen because of its diverse demographic pattern that could be generalized to many areas of the

country. According to the Taita Taveta County government records, there are about 126 main suppliers of fruits and vegetables to the markets in the area (Taita Taveta County Government, 2015). This brought the total accessible population for the study to 126 registered fresh fruit and vegetable traders.

3.3 Sample Size and Sampling Procedure

Since the target population was small, about 116 main suppliers of fruits and vegetables to markets in Taita Taveta County, the sample size was computed using the formula proposed by Singh and Masuku (2012) yielding a sample size of 99 at $\pm 5\%$ margin of error and 50% variability. Cluster sampling was further used to select the appropriate sample size for the study according to the four respective sub-counties in the area (Cooper & Schindler, 2008).

3.4 Data Collection Instruments

Both primary and secondary data were used in this study. Primary data were obtained by the use of copies of questionnaire and interview schedules designed by the researcher and which were administered as the main instruments of collecting data from the respondents. The copies of questionnaire that were used in this study contained closed ended questions that were measurable on a Likert scale. They were divided into sections according to the research objective. Secondary data were obtained from abstracts of various scholars relating to the topic of discussion, libraries, archived records from Taita Taveta county government, online information, government publications, newspapers, textbooks and unpublished research reports. Further, an interview was conducted among six FFV traders who were selected purposively from the sample based on their many years of experience in FFV trade in the area. Typical Case Sampling method was used to select three male and three female traders from a different markets in the area. According to Kombo and Tromp (2009), typical case sampling uses one or more typical cases to provide a local profile and such typical cases are selected with the co-operation of local people, extension workers etc. In the present study market officials and other FFV traders were used to identify the traders who had the most experience in the markets. The aim of the interview was meant to give an in-depth view of the subject being investigated and complement the responses gathered from the questionnaire.

3.5 Validity and Reliability of the Instruments

This study used questionnaire after pilot testing them for correctness and accuracy on 10 non-participatory respondent sample. Piloting was done in Kwale town in Kwale County which also had similar characteristics to Taita Taveta County. Validity and reliability was established for standardization of the research instruments used in the study. Validity was established by giving the questionnaire to independent experts to evaluate it for face and content validity as well as for conceptual clarity and investigative bias after which corrections were made and helped in improving the validity of the questionnaire. Reliability was done using the test-retest administration of the instruments after which the results from the two administrations were correlated using the Pearson's moment correlation formula. An instrument reliability coefficient of 0.831 was established and, therefore, the instrument was adopted upon further improvements.

3.6 Data Analysis

Data were analyzed using both descriptive and inferential statistics. Measures of central tendency such as frequencies and percentages were used as descriptive statistics (Sekaran, 2003). The study also used the multiple regression analysis to establish the contributions of each individual levy to the total cost of the FFV business and also to determine the effect of levies on

performance of FFV trade in Taita Taveta County. The regression model used in the study was assumed to hold under the equation below;

$$T = \alpha_0 + \alpha_1 Y + \alpha_2 W + \alpha_3 A + \alpha_4 S + \alpha_5 E + \varepsilon$$

Where;

T = Total Levies / Total Volumes Sold

α_0 = Constant

$\alpha_1 + \alpha_5$ = weights crested from the variables (Y,W,A,S,E) as shown below

Y = Market Levies

W = Other Costs

A = Age

S = Size of Family

E = Education Level

ε is the estimated error of the model that has a mean of zero at constant variance.

Thematic analysis was used to analyse the data from interviews along topics and themes of the study. Exact transcriptions were used and the topics of interest in them exatracted. These were then analysed against the background information for explanation.

4.0 Data Presentation and Analysis

4.1 Return Rate of Questionnaire

Of the 99 copies of questionnaire issued, 90 were returned implying there was a 91% questionnaire response rate. The high questionnaire response rate resulted from the method of administration of the instrument, which was in this case researcher-administered. This was acceptable according to Mugenda and Mugenda (2003).

4.2 Contributions of Levies to the Total Cost of the FFV Business

The study first sought to determine the contributions of each individual levy to the total cost of the FFV business in TaitaTaveta County. The results are presented in Table 1.

Table 1: Contributions of Levies to the Total Cost of the FFV Business

Statement	SA Freq(%)	A Freq(%)	N Freq(%)	D Freq(%)	SD Freq(%)
The levies are very expensive for our type of businesses	16(18)	29(32)	25(28)	12(13)	8(9)
The tolls levied on our businesses are not proportional at all	18(20)	40(44)	13(14)	17(19)	2(2)
At times we find ourselves paying tolls more than once for the same consignment of goods	17(19)	33(37)	16(18)	22(24)	2(2)
At times the officials manning the toll stations disregard our pleas that we have already paid for the levies elsewhere	22(24)	28(31)	14(16)	20(22)	6(7)
The levy rates are not proportionally applied to our type of business	11(12)	45(50)	10(11)	20(22)	4(4)
I would have preferred if the modes of payment of the levies was made convenient for us	34(38)	38(42)	6(7)	5(6)	7(8)
The lack of clear guidelines on payments makes it hard to estimate the costs of the levies and also do adequate financial planning	18(20)	35(39)	14(16)	18(20)	4(4)
I think levies in the county are not well regulated	19(21)	37(41)	14(16)	10(11)	10(11)

The findings in Table 1 suggest that the levies were considered very expensive for the FFV type of businesses as indicated by majority (50%) of the respondents who agreed with the statement posited. Most of the traders were of the opinion that the tolls levied on their businesses were not proportional at all (64%). At times the traders found themselves paying tolls more than once for the same consignment of goods in terms of other levies (56%) with most citing that the officials manning the toll stations were often insensitive to their pleas when they claimed that they had already paid for the levies elsewhere (55%). Most respondents also claimed that the levy rates are not proportionally applied to the FFV type of business (62%). Other findings also suggest that most FFV traders would have preferred if the modes of payment of the levies were made convenient for them (80%). The FFV traders were also of the view that the lack of clear guidelines on payments made it hard to estimate the costs of the levies and also do adequate financial planning (59%). Most of the traders also said that the levies in the county are not well regulated (62%).

4.3 Performance of FFV Trade in Taita Taveta County

The study also sought to determine the performance status of FFV trade in Taita Taveta County. These results are presented in Table 2.

Table 2: Business Performance of Fresh Fruits and Vegetables Businesses

Statement	SA Freq(%)	A Freq(%)	N Freq(%)	D Freq(%)	SD Freq(%)
My business has been operating well throughout the year without undue expenses	11(12)	18(20)	15(17)	40(44)	6(7)
My business has incurred less debts in the last two years due to the taxation regime	4(4)	30(33)	23(26)	25(28)	8(9)
I have seen better sales performance of my business because of the state of infrastructure	3(3)	25(28)	28(31)	26(29)	8(9)
My business has been able to expand and offer more products	5(6)	21(23)	25(28)	33(37)	6(7)
I have been able to acquire value adding equipment to improve the quality of my products	4(4)	13(14)	27(30)	32(36)	13(14)
My business always achieves the break-even sales within the anticipated time	1(1)	18(20)	30(33)	31(34)	10(11)

It is evident from the results in Table 2 that most of the FFV business have not been operating well throughout the year without undue expenses as indicated by most (51%) of the traders. However, the respondents were evenly split (37%) over the statement “My business has incurred less debts in the last two years due to the taxation regime” implying that they could not directly attribute their debt accrual to the taxation regime. Most of the respondents also said they had not seen better sales performance of my business because of the state of infrastructure in the area (38%). Other findings indicate that the traders have not been able to expand businesses and offer more products (44%). Further, most of them had not been able to acquire value adding equipment to improve the quality of their products (48%) and had not been able to break-even sales within the anticipated time (45%). These findings imply that the fresh fruits and vegetables

businesses in the area had not been doing well in the recent past, a development that could be partly attributed to increased expenditures in terms of county levies.

The study also sought to determine in quantitative terms, how much of the commodity (what the traders sold) they were able to purchase for sale in 2016. The findings are given in Figure 1

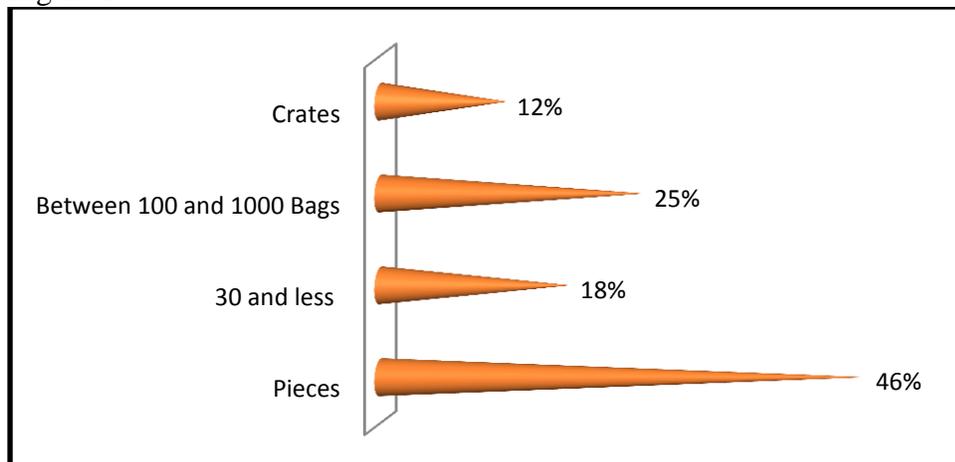


Figure 1: Quantity of Commodities Purchased for Sale by the Traders

The results in Figure 1 suggest that most of the traders bought their wares in terms of pieces (46%) while the rest bought their commodities for sale in terms of bags and crates (54%). This suggests that the FFV traders in the area operated on a micro-scale and small scale level. The commodity prices ranged from Kshs. 300 for a bag of kales to Kshs. 4400 for a crate of tomatoes. The total volumes of tradable commodities bought by the FFV traders were valued at Kshs. 65,620,692. It was also important to establish the quantity purchased, how much was actually sold within the year. The findings are summarized in Table 3.

Table 3: Quantity of FFV Sold Per Year in Percentage

Percentage Sold	Frequency	Percentage (%)
100%	46	51%
90% - 99%	23	26%
80% - 89%	12	13%
70% - 79%	5	6%
60% - 69%	3	3%
50% - 59%	1	1%
Less than 50%	0	0%
Total	90	100%

The results in Table 3 suggest that majority (51%) of the FFV traders surveyed were able to sell up to 100% of their produce annually valued at Kshs. 67,742,719. This compared to the amount of good bought for sale constituted a marginal profit of Kshs. 2,122,027 that could be attributed to impairments brought by lack of adequate storage facilities that led to the products being exposed to pests, theft and even expiry due to lack of preservatives. The summary of these losses on the FFV traders in terms of percentage volumes lost is given in Table 4.

Table 4: Quantity of FFV Lost Per Year in Percentage

Percentage lost due to pest, expiry	Frequency	Percentage (%)
None	45	50%
1%-10%	31	34%
11%-20%	12	14%
21%- 30%	2	2%
31% - 40%	0	0%
41%-50%	0	0%
More than 50%	0	0%
Totals	90	100%

Looking at the findings in Table 4, it is evident that up to (50%) of the respondents reported loss of their products due to adverse conditions like being exposed to pests, theft and even expiry due to lack of preservatives with majority (34%) of these losing less than 10% of their produce. This means that their operating efficiencies were still low and could be attributed to among other things inadequate market infrastructure that exposed their produce to the elements leading to their losses. The total cost of these losses was estimated to be around Kshs. 5,596, 954 which was quite high in comparison to the profit margins.

4.3 Regression Analysis

Multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. The independent variables of interest in this case were the contributions of levies identified in Table 5. This analysis was used to answer the questions; how do the county levies collectively affect the business performance of the FFV trade; to what extent does each individual levy affect business performance of the FFV trade in such a collective set-up, and; which are the most influential levies in the area?

Table 5: Multiple linear regression analysis model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.788 ^a	.621	.594	1.935021

a. Predictors: (Constant), Educational Level, Age of owner, Size of owner's family, Market Levies, Other Costs

The results in Table 5 show that the value obtained for R, which is the model correlation coefficient was $r = 0.788$ which was higher than any zero order value in the table. The adjusted r-square value of, $r = 0.594$, also indicates that the multiple linear regression model could explain for approximately 59.4% of the variations in the performance of the FFV sector defined by Total Levies/ Total Volumes Sold. This indicates that the model could improve when more variables were incorporated in it when trying to analyze the effects of the county levies on the performance of the FFV sector. To answer the question about which of the variables is more important in influencing the performance of the FFV sector, the beta value was used as shown in Table 6.

Table 6: Summary of Multiple Regression Analysis

Variables	Unstandardized Coefficients Beta	Standardized Coefficients Beta	t
(Constant)	20.903		6.573*
Market Levies	0.789	0.596	2.994**
Other Costs	0.416	0.396	2.375**
Age of owner	0.033	0.187	0.572
Size of owner's family	-0.453	-0.377	-1.25
Years of formal schooling	0.001	0.002	0.01

**Significant at the 0.01 level

*Significant at the 0.05 level

The results in Table 6 indicate that the most important effect of the county levies on the performance of the FFV sector was Market Levies ($\beta = 0.596$, $p < 0.05$) followed by Other Costs ($\beta = 0.396$, $p \leq 0.05$). The other variables in the model associated with the demographic characteristics of the respondents such as Age of Owner ($\beta = 0.187$, $p > 0.05$, Size of Owner's Family ($\beta = -0.377$, $p > 0.05$ and Educational Level ($\beta = 0.02$, $p > 0.05$) were, however, not found to contribute to business performance of the FFV trade in the model. Therefore, it is evident that only two variables, that is, Market Levies and Other Costs could be seen having a significant effect on the performance of the FFV sector in the area as per the model. The model further indicates that the dependent variable would change by a corresponding number of standard deviations when the respective independent variables change by one standard deviation. Therefore, the resulting model can be explained by the equation;

$$\text{Business Performance of FFV} = 20.903 + 0.789 \text{ Market Levies} + 0.416 \text{ Other Costs} + 0.033 \text{ Age of Owner} - 0.453 \text{ Size of Owner's Family} + 0.001 \text{ Educational Level}$$

$$\text{Or simply; BP} = 20.903 + 0.789 \text{ ML} + 0.416 \text{ OC} + 0.033 \text{ AO} - 0.453 \text{ SOF} + 0.001 \text{ EL}$$

4.4 Interview Results

Five traders drawn from various markets in the area were asked to give their views concerning the question: Has your business been operating well throughout the year without undue expenses? The results of the interview revealed general dissatisfaction with the performance of the respondents FFV trade. Statements like "Business has been slow this year" (Male Trader A), "Customers are not coming" (Male Trader B), "I can't see the money I put in this business" (Female Trader A), "Expenses have consumed all my profits" (Male Trader C), "For the last three years, business has been bad" (Female Trader B) and "I wish they could lower the taxes, they are making me rethink this business idea" (Female Trader C) emerged from the traders. The responses all seemed to point to the fact that businesses in the area had been affected by the increasing operating expenses. However, only one trader (Female Trader C) directly linked the expenses with the county levies.

The respondents were also asked to react to the question: How does paying of levies mainly affect your business? The responses were: "I cannot save much nowadays as most of the profit goes to the *kanju* (County revenue collectors)" (Male Trader A), "My goods have been

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confiscated by the County Askaris (County law enforcers) before due to non-payment of taxes. In the process I lost a significant portion of my goods and income when paying the fines and this really set me back for some days” (Female Trader A), “I have had to increase the price of my goods *kiasi* (Substantially) in order to compensate for the taxes, though this has not gone down well with some of my customers” (Male Trader B), “The application of the taxes forces me to make extra cash arrangements daily and that will sometimes involve borrowing so as to enable me access the markets” (Female Trader B), “The increased taxes mean I must transfer the cost to the customer and this is not desirable” (Male Trader C) and “The increasing taxation means I’ll have to start looking for alternative markets” (Female Trader C). These responses indicate that the increasing taxes in the form of county levies was eroding the saving power of the traders and hindered their market access. The main effect, however, was the transferring of costs to customers and this was cited as being risky for their businesses.

5.0 Discussion of Findings

5.1 Contributions of Levies to the Total Cost of the FFV Business

The study findings revealed that the levies were considered very expensive for the FFV type of businesses and that the tolls levied on their businesses were not proportional at all. Severally, the traders found themselves paying tolls more than once for the same consignment of goods in terms of other levies with most citing that the officials manning the toll stations were often insensitive to their pleas when they claimed that they had already paid for the levies elsewhere. This finding is consistent with Dihel (2011) who found that government officials manning trade routes often exacted levies from the traders regardless of whether they had paid elsewhere. The unpredictability of levies was also cited by Wanjohi (2012) who also pointed out that the uncertainty of the market levies may lead to high commodity prices in the market as the vendors seek to recover their tax expense. The findings also revealed that the modes of payment of the levies were not convenient for most of the FFV traders who would have preferred a different approach to paying the levies. In addition, the FFV traders were also of the view that the lack of clear guidelines on payments made it difficult to estimate the costs of the levies and also do adequate financial planning. Most of the traders also said that they thought the levies in the county were not well regulated. This was in agreement with Nyoro et al. (2008) who found that there were inconsistencies in the legal framework and in particular levies imposed on traders. These findings also agree with Gandhi and Namboodiri (2015) whose study revealed that levies and other market charges imposed by states vary widely.

5.2 Effect of Levies on Performance of FFV Trade in Taita Taveta County

The study findings revealed in relation to the effect of levies on performance of FFV trade in the study area that the county levies had considerably added to the operational expenses of most FFV traders. As a result, most of the traders had opted to raise the prices of their goods to offset the effect of the levies. This was evident in the traders’ statements such as: “I have had to increase the price of my goods *kiasi* (Substantially) in order to compensate for the taxes, though this has not gone down well with some of my customers” and “The increased taxes mean I must transfer the cost to the customer and this is not desirable.” These findings agree with Wanjohi (2012) who found that the levies distorted market prices and made the indigenous vegetables produced uncompetitive in most urban markets. The levies had also made it difficult for the local producers to compete in the market and extra costs of county levies together with other levies had lowered the traders’ sales revenues. For instance, remarks such as, “The increasing taxation

means I'll have to start looking for alternative markets” means that the levies were creating market barriers by making the FFV products less competitive. This is in agreement with Gandhi and Namboodiri (2015) who found that increasing levies created market distortions with cascading effects and strong entry barriers. The findings further revealed that most traders had not been able to purchase value adding inputs for their business due to the loss of revenue due to the cost of county levies while also claiming that they were yet to benefit from any infrastructural gain resulting from paying county levies. A previous study by Onyango (2012) had established that most FFV farmers lacked the technology to harvest and preserve their produce. Nevertheless, the study did not trace the capital inadequacies to levies imposed by the state. The present study, however, went further to attribute lack of capital for investment in the FFV trade to county levies.

The study thus established that indeed county levies had an impact on the performance of FFV business in Taita Taveta County. Specifically, it led to diminishing returns for traders in the area consistent with the Producer and Consumer Surplus Theory as indicated by Ehrhart and Guerineau (2011) who found that tax on a commodity raises its price and reduces consumer's surplus. Vatin, Simonin and Marco (2016) citing Cournot also observed that an excise tax shifted to buyers in the form of higher prices and this led to lower demand.

5.3 Conclusion

In the light of the foregoing findings, it can be concluded that the county levies, particularly market levies, had considerably added to the operational expenses of most FFV traders thereby affecting the performance of FFV trade in the study area. The levies had made it difficult for the local producers to compete in the market and lowered the traders' sales revenues. It can also be concluded that the management of levies negatively affected the performance of the FFV businesses in the area with most traders ending up paying high amounts of money into a system that most felt was not well regulated. In particular, proportionality, affordability and poor regulation of the levies had strong negative effects on the performance of the businesses. Therefore, the study finds that market levies contributed significantly to the total cost of the FFV business and had considerable effects on performance of FFV trade in Taita Taveta County.

5.4 Recommendations

It is therefore recommended that:

1. The county government needs to revise its tax regimes and methods of collection so as to avoid levying high taxes and surcharges on the FFV traders as this would discourage them for doing more business in the area. The tax policy makers in the county should consider other challenges the FFV traders face when doing their businesses in order for them to come up with applicable rates.
2. The FFV traders in the area need to look into various financing options that can help them acquire value adding equipment as it was evident that poor handling and preservation led to considerable losses among many traders. In the same vein, the county government needs to invest in infrastructure that will enable the traders to gain quick access to the market and also be able to store their produce in the most reliable way.

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