RESEARCH ARTICLE

THE INSTITUTIONAL AND TECHNICAL CONSTRAINTS TO PEACH MARKETING IN LESOTHO

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ABSTRACT

The study investigated both institutional and technical factors that act as constraints to marketing of peaches in Lesotho. A semi-structured interview schedule was used as a data collection tool in this study and thirty respondents were selected using pilot survey. Both descriptive analysis and multinomial logistic regression model were used for data analysis. The results showed that expertise on grades and standards, storage facilities, value adding and contractual arrangements as major constraints towards peach marketing in Lesotho. Moreover, it was found that 90% of interviewed peach farmers in Lesotho prefer selling their produce in informal market outlets with an intention of reducing transportation costs. For peach farmers to sell their produce even in formal market outlets, it is therefore recommended that they form cooperatives or combine their produce when marketing so as to overcome the problem of transportation which is usually associated with high costs. Also, workshops on universal grading and standards should also be conducted for producers.

INTRODUCTION

Agriculture in Lesotho is mainly subsistence based and is predominantly rain-fed and thus extremely vulnerable to drought conditions. About 80% of Basotho live in rural areas where most of agricultural activities are practiced on the basis of small scale. Most of these people have low income and capital as well as educational standards. Agriculture in Lesotho accounts for 16% of exports and 50% of the country's basic food needs. The crop and livestock enterprise both contributes between 40-60% and 30-40%, respectively to the agricultural Gross Domestic Product (GDP). The main farming practices in Lesotho are traditional (subsistence) and semi-commercial farming systems with traditional as most dominant over the other two (SADC, 2010). All four physiographic regions have over years produced considerable qualities of peaches due to Basotho tradition of peach tree planting. According to Center for World Environment History (2014), the residents of Lesotho have grown trees since the first arrival of Europeans around 1833. However, larger numbers of peach production were recognized by 1896 with every household growing several trees in their gardens, even on the fields but the produce was only meant for home consumption. In the lowlands and foothills, farmers grow several varieties of peaches due to natural endowment, thus is, the soil and climatic conditions are suitable hence significant small-scale peach production for home consumption.

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This is supported by Bureau of Statistics in Lesotho (2014), when stating that the average peach produce serving the national demand is around 75.9%. This is remarkable though the country still imports more of peach products. Arusha (1993), noted that most Non-Wood Forest Products, (NWFP) in Lesotho are in the form of exotic fruits, which is some case are semi-naturalized in Lesotho. Peaches are such fruits which provide important nutrition to some of the poorer members of both the rural and urban areas. A variety of products can be made from peaches such as jam, canned and dried fruits which can make lot of cash thereby improving livelihoods in the short term and long term. Even though Lesotho has potential when it comes to production of peaches the decision towards market oriented production is directly influenced by the price of peaches, scale of operation (as measured by quantity of peaches harvested and quality sold), distance to market and farming mechanization.

According to Makosholo (2005), the technical constraints such as infrastructure, transportation to markets and storage facilities affect the marketing of peaches while those of institutional, including policies regarding the marketing of peaches, culture as well as weak legal protection of peach farmers in Lesotho affect peach marketing. Most of Lesotho farmers have problems in marketing of peaches due to various constraints peach farmers to prefer home consumption and limited sales (Chalwe, 2011). Lesotho is one of the countries with suitable environment to production of various fruits, peaches in particular. Different varieties of peaches do well across all agro-ecological zones of the country which has been attributed

to suitable climate and soil conditions (Center for World Environment History, 2014). This natural endowment has triggered local demand for peaches and some farmers upon realization of this potential market ventured into peach enterprises. These farmers established small to medium sized orchards across the country with the intentions of producing for the market (Durand, 2014). However, some farmers went out of business while others reduced the scale of production and both groups indicated lack of markets for their produce as the motive for their respective decisions. As a result, the study investigates both institutional and technical factors that act as constraints to the marketing of peaches in Lesotho. The study is aimed at investigating the institutional and technical constraints to marketing of peaches in Lesotho (Leribe and Botha-Bothe) with the following objectives designed;

To identify the marketing channels used by peach producers in Lesotho. To identify institutional and technical factors affecting the marketing of peaches in Lesotho.

MATERIALS AND METHODS

This chapter outlines the methods and procedures to be used to achieve the stated objectives. It presents the type and sources of data and analytical methods that will be employed.

Description of the Study Area

Lesotho is a small land locked country bordered on all sides by South Africa and has a total area of 30 360 square kilometers. She has subtropical to semi-arid climate with four topographical zones namely: the mountainous region in the East, the foot hills in the central parts, the Senqu (Orange) River Valley from North East to South West and the lowlands in the West (Lesotho Bureau of Statistics, 2014). On average she has annual rainfall of 788mm^2. Lesotho has 77 percent of agricultural land of which 11 percent is classified as arable land. The main farming system in this country is rain-fed subsistence farming with low productivity (FAO, 2013).

Research Design and Population Sampling

The study made use of a non-probability convenience sampling technique to select respondents because sampling frame was not known; this is according to De Meyer (2011). The interview schedule was designed to collect data so as to archive the stated objectives of the study. The target population comprised of Leribe and Botha-Bothe peach producers owning orchards with minimum of 100 peach trees as many peach growers in Lesotho do not have larger orchards. The sample size of 30 peach growers was selected with respect to their orchard sizes. Sekaran (2003) stated that in most researches it is applicable to utilize sample sizes between 30 and 500. Besides, the sample of this size was also selected due to the limited number of peach producers with regard to the specified size of orchard.

Data collection Procedures

A semi-structured interview schedule, which contained brief description about the purpose and the significance of the study, was used as a data collection instrument in this study. The pilot survey was used to test validity of research instrument while the consistency was tested using Cronbach's alpha (Tavakol

and Dennick, 2011). Data was coded into Microsoft Excel and then exported to Stata for analysis. For analysis, both descriptive analysis and multinomial logistic regression model were employed.The multinomial logistic regression model was used to test impact of both institutional and technical factors upon the use of potential marketing channels. The regression model of this kind is used when the dependent variable has more than two nominal or unordered categories upon which the dummy coding of independent variable is quite common (Gujaratti, 1992). However, Pundo (2006) indicated that the model does not assume a linear relationship between the dependent variable and independent but demand the independent variable to be linearly related with dependent one. Hill (2001) showed that the model can however allow the interpretations in the same way the linear model can.Since the peach growers in the study are faced with three possible choices: to formally market their peaches, to informally market their produce and not market whatsoever. The assumption is therefore that their decision upon marketing channel choice is based on utility maximization triggered by institutional and technical factors.

Utility maximizing model as adopted from Jari (2009) is as follows

Max U = U (C_k, R_{fk}, R_{jk}; H_u)

Where;

Max U denotes the maximum utility obtained from peach production

C_k reflects the consumption of peaches by family
R_{fk} denotes income earned from formal marketing
R_{jk} represents revenue received from informal marketing
H_u shows a set of constraints to marketing of peaches
Thus the typical logistic regression model to be employed is of the form;
Logit(P_i) = In(P_i/1-P_i) = α + β_1 X_1 + ... +β_n X_n

Where;

In(P_i/1-P_i) indicates logitfor marketing channel choice
P_i represents not participating in markets
1-P_i reflects participating in markets
X represents covariates

In the above model, the market participation choice represents the dependent variable while non-market participation is set as the baseline group. The explanatory variables to be used in the model are Expertise on grades and standards (GSTDs), Contracts (CNTRCTS), Collective Action (CActn), Storage facilities (STOR), Transportation (TRNS), Packaging (PCKG) and Ability to Add Value (ADDVAL).

From Table 1, it can be clearly seen that the explanatory variables are set as dummy variable thus takes one if there is success otherwise zero. All variables are expected to exert a positive impact on marketing of peaches and channels choice.

Hence the model can be specified as follows;

In(P_i/1-P_i) = β_0 + β_1GSTDs + β_2CNTRCTS + β_3CActn + β_4STOR + β_5TRNS + β_6ADDVAL + $_t$

Table 1. Description of the variables to be used in the model

VARIABLE LABEL	VARIABLE NAME	CODING OF VARIABLE	EXPECTED RELATIONSHIP
GSTDS	Expertise on grades and standards	1 if access, otherwise 0	+
MInfo	Access to market information	1 if yes, othewise 0	+
CNTRCTS	Availability of contractual agreements	1 if yes, otherwise 0	+
ColActn	Collective Action (group or individual participation)	1 if group, 0 if individual	+
STOR	Storage facilities	1 if good, otherwise 0	+
TRNS	Market transport	1 if have own transport, otherwise 0	+
ADDVAL	Ability to add value	1 if yes, otherwise 0	+
TELComm	Availability of telecommunication	1 if yes, otherwise 0	+

Table 2. Distribution of demographic characteristics of peach producers

| Variable	Frequency	Percentage (%)	Cumulative Frequency
GENDER			
Male	20	66.67	66.67
Female	10	33.33	100
AGE			
21-25	0	0	0
26-35	2	6.67	6.67
36-45	12	40	46.67
>45	16	53.33	100
MARITAL STATUS			
Yes	27	90	90
No	3	10	100
FAMILY SIZE			
1-5	18	23.33	60
5-10	7	60	83.33
10-15	5	16.67	100
EDUCATIONAL LEVEL			
Below COSC	14	46.67	46.67
COSC-Certificate	12	40	86.67
Diploma	2	6.67	93.33
Bachelor's degree	2	6.67	100
Postgraduate	0	0	100
OCCUPATION			
Full-time farmer	12	40	40
Part-time farmer	13	43.33	83.33
Formally employed	1	3.33	86.66
Pensioner	2	6.67	93.33
Unemployed	2	6.67	100

Source: Survey 2016
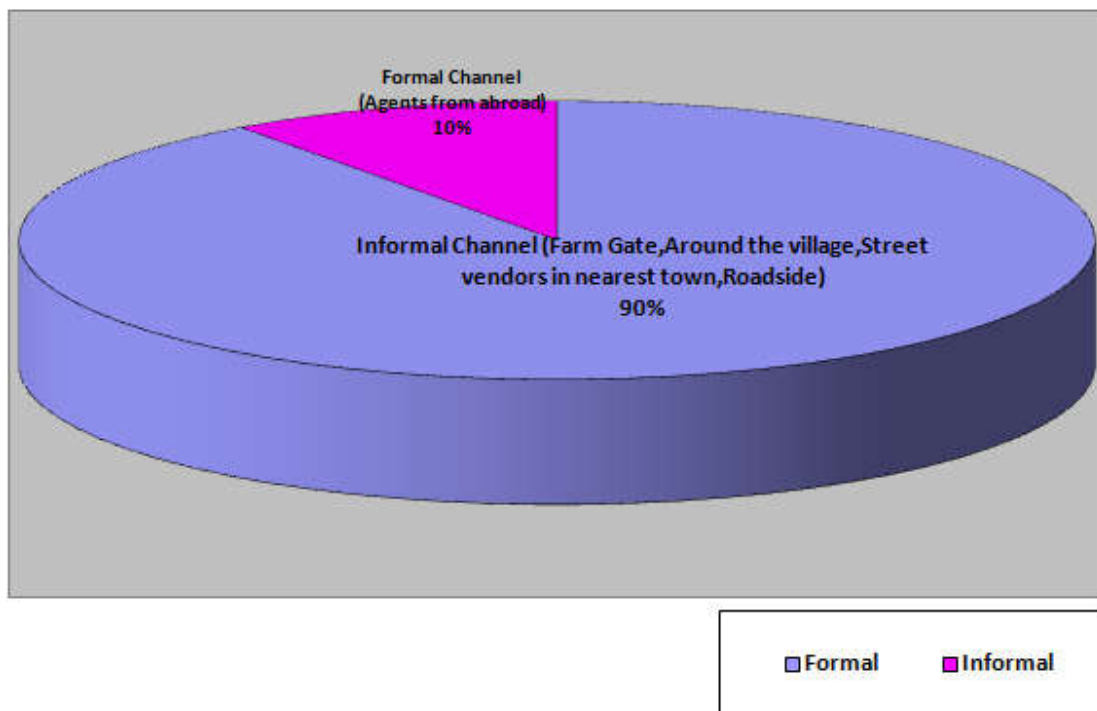
Figure 1. Distribution of market outlets used by respondents Source: Survey 2016

Table 3.The distribution of type of ownership and mode transport as utilized by peach producers

Type of transport	Label attached to Type of transport	Rate or frequency (%)
Own transport	A	0
Hired vehicle(individual)	B	6.67
Hired vehicle(group)	C	0
Public transport	D	0
Buyers transport	E	33.33
Animal power	F	0
No transport at all	G	16.67
Combination	H	43.33

Source: Survey 2016

Table 4.The Multinomial Logistic Regression Results

Market outlet Choice	Coefficients	Standard Errors	|z|	Pvalue>z	[95% Confidence] Level	Interval
0[FORMAL OUTLET]						
Stor	-2.110681	.6769002	-3.12*	0.002	-3.437381	-0.783981
Trans	2.056093	.5166595	-3.98*	0.000	-3.068727	-1.043458
AddVal	1.624387	.5242888	-3.10*	0.002	-2.651974	-0.5967999
ColActn	12.35763091	.3279	0.0031	0.995	-978.65	-568.684
Contcts	1.738905	.6585166	-2.76*	0.003	-1.1167778	1.464559
Gstds	-2.9964165	.5037562	-1.98*	0.048	-1.98376	-0.0090725
_Cons	2.707268	.6092091	4.44	0.000	1.51324	3.901296
1[INFORMAL OUTLET]						
Stor	-.2596331	.4059556	-0.64	0.522	-1.055291	3.640419
Trans	20.16327 844	.8079	0.02	0.981	-1635.63	0.5360252
AddVal	-3.321009	.5857346	-5.67*	0.000	-4.469027	1675.956
ColActn	2.47943	.6423701	-2.46*	0.001	-2.674351	-2.17299
Cntrcts	-2.646225	.5072511	5.22*	0.000	-1.652031	-1.235167
Gstds	-2.8828171	.5471426	1.91*	0.026	-1.895627	1.955197
_Cons	-19.76531 844	.808	-0.02	0.981	-1675.559	1636.028
2[NOT MARKETING]	(BASE OUTCOME)					

SOURCE: SURVEY 2016
* Statistically significant at 5% significance level.Number of observation = 30
LR chi2(10) = 296.14Prob> chi2 = 0.0000
Pseudo R2 = 0.4284
Log likelihood = -197.56605

All these variables are expected to influence marketing positively; that is peach producers with relatively adequate access to these explanatory variables are at higher chances to market their produce.

RESULTS AND DISCUSSION

Introduction

This section outlines the study chapter four which presents the results of the study. It first highlights on various demographic characteristics of the sampled peach farmers and further discusses the multinomial logistic regression results on both factors affecting the marketing of peaches as well as the extent to which they affect marketing of peaches.

THE DEMOGRAPHIC CHARACTERISTICS OF SAMPLED PEACH PRODUCERS IN LESOTHO

This section gives an overview of the producers' demographics which include in particular; gender, age, marital status, educational level and occupation which are therefore analyzed and interpreted with regard to their impact on the marketing of peaches in Lesotho. These aspects are very critical as the core household activities revolve around them that is, the decision taken by the farmers with regard to marketing are likely to be influenced by such demographics (Jari, 2009).

The majority (53%) of peach producers in Botha-Bothe and Leribe were those in the age category of 45 and above while the age group of 21-25 was found have no representative which could possibly be related to the fact that most people falling in this age group are still engaged in schooling related activities and also that, they don't have land upon which they can farm. The age group (36-45) was found to be represented by only 40% of the sampled producers while. 6.67% fell in that one of 26 to 35.

Educational Level of the respondents

The study showed that most (46.6%) of the peach farmers did not reach matric level, 40% got up to matric level while only 6.67% of respondents went as far as diploma level as well as Bachelor's degree (6.67%). However, no record was found for postgraduate level of qualification representation in the sampled peach farmers. Chalwe (2010), indicated that educational status sometimes affect marketing of any product positively as it reflects the farmer's ability to read the written information concerning marketing and shows how efficient and effective farmer can be able to communicate on behalf of his enterprise; be it on advertisement or promotional perspective.

Marital Status of Respondents

The survey also reflected that, almost (90%) of all the interviewed peach farmers are married while only 10% are not.

This aspect is very essential because it is claimed by Ani*et al* (2004), that married farmers are eager to produce and sell so as to maintain or achieve stability in terms of income for household welfare.

Respondents' family size

About 60% of the peach farmers have families with size ranging between five and ten. This range is relatively large, hence it can potentially restrict marketing efficiency of the producers as they could produce and sell while consuming more of what is expected to be sold (the peaches). However, the labor costs in particular, could also be cut down as more of family members will be engaged in production and Marketing activities thus improving efficiency by doing activities such as washing and packaging of peaches prior to sale (Berhanu, 2012).

Employment status of peach producers

It is essential to analyse the occupational status of the farmers (peach producers) as it might affect the managerial functions of the farm (Government of Mantola, 2012). The survey therefore showed that many (43.33%) of the interviewed farmers was part-time farmers; followed by full-time farmer at 40% while minority (6.67%) falls under formally employed group. Since many (43.33%) are part-time peach farmers, it could be possible that they are engaged in other activities so as to bring in more income for family sustainability in terms of welfare thus failures to adequately submit to peach enterprises.

THE MARKETING CHANNELS

Figure 1` shows the marketing channels as used by the interviewed peach farmers in Botha-Bothe and Leribe. Of all the interviewed peach farmers 90% market their produce informally of which 33.33% use only farm gate, 20% only sell to the street vendors in the nearest town as the main channel while the rest (36.67%) use the combination of both channels. The farmers mentioned amongst other reasons that their choice of informal outlet to marketing is low costs in terms of transportation hence best returns and familiarity of their potential buyers hence avoidance of spoilage. However, only few interviewed farmers indicated that they use farm gate and around village (vendors) to sell what they consider to be second grades. Only 10% of the interviewed were found to be marketing their produce formally and these farmers are those who even export their produce with the aim of getting better prices for their produce.

Peach Marketing Issues

Group and Individual marketing
Only 70% of the respondents do not combine their produce when selling and they mentioned that they still make sufficient profits. This contradicts with what Bingen (2003), who claimed collective actions to be reducing transaction costs, being vast means of benefit to producers including in particular, high revenues, savings and information exchange platform as well as improving smallholder market power. However, about 30% of the peach farmers interviewed combine their produce when selling their produce.

These farmers indicated that this kind of collective action aid them in cost reduction while at the same time is increasing their bargaining power.

The expertise on Grades

The survey showed that majority (60%) of respondents does not grade their produce before marketing. Only 40% of the peach farmers were found to be grading their produce before marketing. This could impact consumers' willingness to purchase the product as there will be no information on it conveyed to them, such as directions on how to use the product, its nutritional value and others, (Berkowitz, 1986).

The contractual arrangement available amongst peach farmers

The surveys showed that majority (93.33%) of the interviewed peach farmers do not have guaranteed market with any agribusiness outlet. This could probably be because most cannot meet grades and standards beside; farmers mentioned that they only know of the local demand (vendors). Only 6.67% have contractual arrangements with agribusiness units.

The value adding activities done by famers prior to sale

The survey reflected a range of activities that farmers use as to add value to the peaches. Some (6.67%) perform only washing prior to marketing, 26.67% of all interviewed peach farmers do packaging only, 6.67% performs processing, and another 6.67% only separate peaches according to their sizes and attach prices based on the size of the peach. However 23.33% do not perform any value adding activities. Though some use a single activity, only 30% performs a number of activities prior to marketing. Of this 30%, about 25% wash and package the peaches, 3% package and process the peaches prior to marketing while only 2% perform washing (cleaning), package and process their produce. Farmers also mentioned that they wash their peaches to reduce spoilage, pack their produce to ease transportation while avoiding physical damage.

Access to Storage facilities

The study showed that only 70% of the respondents have poor and inadequate storage facilities while the rest have fine storage facilities. The farmers said that the absence of this kind of facility affects them as they cannot be able to store their produce during time of plenty so they can sell at better prices during time of scarcity. This is supported by Perreault (2002) when indicating that it is essential for holding the commodity until consumer needs it. However, those who indicated that they have fine storage facilities mentioned the use of underground coolers whereby they dig a whole and place the peaches overnight so as to keep them fresh.

Market transportation

The table below shows the way in which the producers of peaches and buyers attain the place utility. Of all the interviewed peach farmers, 6.67% use hired vehicle, 33.33% indicated that produce is transported via buyers' transport while 16.67% have no transport at all and these are farmers who sold only to the villagers.

However, some producers (43.33%) combine several ways of transporting produce to market points. Of this 43.33%, only 10% used B and C; 6.67% used B, E and F; 3.33% used A, B and C; 6.67% used A and B only; 10% used A and E while 6.67% used B and E as their transport combination.

Results and Interpretation of the Estimated Multinomial Logistic Regression Model

The results for the model are presented in the table below. It reflects the estimated coefficients (β values), standard error, significance values, and multinomial log odds of the variables in the model. Gujarati (1992), stipulated that the coefficients values measure the anticipated response in the logit for a unit change in the corresponding independent variable, other independent variable being held constant. The significance values (also known as p-values) show whether a change in the independent variable significantly influences the multinomial log odds at a given level (Gujarati, 2007).Basically, the signs of the coefficients indicate the direction the independent variable favours with regard to marketing of peaches. Therefore, the positive sign implies an increase in the likelihood that a peach farmer will change to alternative option from the baseline group (Pundo and Fraser, 2006).BIn this study therefore, a positive value indicates an increase in the likelihood of changing from not operating in the marketing of peaches to either selling formally or informally. Some regressors impact the market significantly, while others were found to have inadequate evidence in supporting the change expected. Of all six predictor variables used in the model, five and four variables in both formal and informal markets channel choices respectively, were found to be significant at five per cent level of significance.

The Institutional and Technical Constraints and the Extent to which they affect marketing of peaches

Expertise on grades and standards was found to be significant with significant values of 0.048 and 0.026 for both formal and informal market outline choices respectively. A positive sign on the formal marketing outlet coefficient indicates that an improvement in expertise on grades and standards results in an increase in the formal marketing of peaches. When farmers acquire expertise in grades and standards, they would prefer selling their produce in the more paying formal market in order to cover costs associated with acquiring the expertise (Reardon and Barrett, 2002). The results also show that when increasing the level of expertise on grades by one per cent the multinomial log odds of a farmer selling peaches in formal markets will increase by 2.9964 regardless of the value in the other factors (independent variables). However, expertise on grades in informal marketing of peaches was found to be in contrary with the *a priori* anticipations. The negative sign of the coefficient shows that *ceteris paribus*; increasing level of expertise on grades will reduce the multinomial log odds of a peach producer to sell peaches in the informal marketing channel relative to not marketing at all by 2.883. As in the *a priori* anticipation, the availability of the contractual arrangements was expected to have a positive impact on the marketing of peaches both on formal and informal markets. However, the *a priori* expectation only hold true for formal marketing of peaches while in the informal marketing channel, a negative and significant value (0.003) is in contradiction with

the *a priori* expectations. The implication is therefore that the multinomial log odds of the peach farmer to market peaches in a formal market outlet would increase by 1.739 relative to not marketing his peaches. Similarly, the multinomial log odds of the farmer to sell his peaches in the informal markets would decrease by 2.646 relative to not marketing at all. Moreover, the ability to add value to peaches was anticipated also to influence marketing of peaches positively regardless of the channel utilized by the farmers. For formal peach marketing channel, the results are significantly (3.10) supporting that there is an increase in the multinomial log odds of the peach producer who is selling peaches informally by 1.624 relative to not marketing the produce at all. However, with regard to informal marketing channel, the results are found to be contrary to the *a priori* expectation. Hence a negative and significant value (5.67) implies that the multinomial log odds of a farmer who is utilizing the informal marketing channel will decrease by 3.321 relative to not marketing at all. The reason behind could be the little knowledge regarding consumers' preferences with respect to taste and packaging. A positive and significant relationship was found between the informal marketing outlet and collective action. A positive significant value of (2.46) show that an increase in the degree of group action amongst farmers would increase the multinomial log odds of the peach farmer to market the peaches in the informal market outline by 2.479 relative to not marketing at all.

The accessibility of transportation facilities was found to be significant (3.98) with a positive sign, thus an indication that the multinomial log odds of the peach producer will increase by 2.0561 when marketing the produce in the formal markets relative to not marketing at all. Meaning that the transportation expenses would increase thus increasing to the size of the peach marketing margin as well as impacting both farm and consumer food prices. A negative and significant (3.12) relationship was found between marketing and storage facilities. Thus the storage facility will decrease the farmers' multinomial log odds by 2.111 when marketing peaches in the formal marketing outlet relative to not marketing at all. This could imply that the farmers who do not have access to storage facilities that are normally associated with high prices would fail to market their produce in the formal market outlet. The explanation to these relationship described under Table 4 may be that marketing environment is ever changing (Kherallah and Kristen, 2001); hence if farmers are to be selling or using either formal or informal marketing channel, they have to be receptive to changes.

Conclusion and Recommendation

This chapter outlines the conclusions and recommendations of the study based on the findings and interpretation of the results which are based on the major insights brought out by the study.

Conclusion

The study examined the institutional and technical constraints to marketing of peaches in Lesotho. Although peach marketing has received little attention with regard to research and policy locally, it has been proved by this research to be a crucial part to peach producers and poverty reduction in Lesotho. This has been reflected by the findings that on average more peach farmers in sample produce and market their produce.In terms

of the marketing channels employed by the subjects, majority (90%) preferred selling their produce to street vendors and at farm-gate. Therefore it can be concluded that Lesotho small scale peach farmers generally market their produce in informal markets with the aim of reducing transportation cost as well as spoilage which is usually experienced when the peaches are transported over long distances as they are highly perishable. Furthermore, the findings reflected some challenges producers faced in the market environment which discourages them from marketing their peaches either formally or informally. There were statistically significant variables at 5% level of significance that were found to constrain (negatively affect) peach marketing in Lesotho. The results showed that expertise on grades and standards and storage facilities are major constraints in formal markets while the same constraints together with value adding ability as well as contractual arrangement discourage peach farmers to sell their produce in Informal markets. Moreover, based on the multinomial logistic regression model, it can be concluded that farmers market their produce based on the availability of contractual arrangements, expertise on grades and standards, collective action, storage facilities, transport as well as the value adding.

Recommendation

- The peach producers should form cooperatives or combine their produce when marketing so as to overcome problem of transportation which is normally associated with high costs.
- To help peach farmers with limited networks and contracts, their access to market information should be improved.
- Workshops on universal grading and standards should also be conducted for producers. Lastly, the peach producers should also be encouraged to process what they consider to be second grades via canning and sun drying. These recommendations, together they are believed to have ability of increasing the marketing efficiency of the peach farmers in Lesotho.

REFERENCES

Ani, A.O., Oqunnika O. and Afah, S.S. 2004. Relationship Between Socio-Economic Characteristics of Rural Women Farmers and Their Adoption of Farm Technologies in Southern Ebonyi State, Nigeria. *International Journal of Agriculture and Biology*.**6(5)**.

Arusha. 1993. Non-Wood Forest Products: A regional Expert Consultation on Non-Wood Forest Products.

Bengen, D.G. and Dutton, I.M. 2003. Interactions between mangroves and fisheries in Indonesia.*In Fishes and Forestry-Worldwide watershed Interactions and Management*.Northcote T.G., Hatman G.F (Eds.). Oxford: Blackwell Scientific.Pp 635-653.

Berhanu, G and Moti, J. 2012.Market Orentation and Market Participation of Smallholder in Ethopia.Impilications for Commecial Transformation. Brazil, 18-24 August.

Berkowitz, N.E., Kerin, A.R., Hartley, W.S. and Rudelius, W. 1986. *Marketing*.3rd Ed. Richard D.IRWIN, Inc.. United States.

Bureau of Statistics. 2014. 2009/2010 Lesotho Agricultural Census.Urban Report.**3**. http://www.bos.gov.ls/nada/index.php/catalog/1/accesspolicy.Retrived 18th October 2014.

Centre for World Environment History.2014. History of tree planting in Lesotho.http://m.sussex.ac.uk/cweh/research/forestingagrassland/treeplanting. Retrieved; 15th October 2014

Chalwe, M. 2011.Factors influencing Bean Producers' choice of marketing channels in Zambia. http:// www. google.com/url?q=http://valuechains.k=state.edu/chalwe%2520sunga.pdf&sazU&ei=7xNOVMWzOMzZauWugIAB&ved=OCBIQFjAA&Sig2=lkgo9BrSbMeqwW0AliSLQ&Usq=AFQjCNEMSPRpjwAD9yn2QCAB3hnqqPEVTA.Retrieved: 26th October 2014.

De Meyer, C., F. and Petzer, D. J. 2011. The perceived Service Quality, Satisfaction and Behavioral Intent TowardsCell phone Network Service Providers: A generational Perspective. *African Journal of Business Management*.**5(17):** 74461-7473.

Durand, M. 2014. Zaytuna Farm Permaculture Plant Nursery Paper Pots.http://permaculturenews.org/ author/miles%20durand/. Retrieved: 20th October 2014.

FAO. 2013. Lesotho's Bio-energy Food Security (BEFS) Country Brief.http://www.fao.org/bioenerge/ food security/befsRetrieved: 25th October 2015.

Government of Manitoba. 2012. Human Resource Management for Farm Business in Manitoba. Manitoba, Canada.

Gujarati, D. 1992. *Essentials of Econometrics*.MacGraw-Hill, New York.

Gujarati, D.N.Sangeetha. 2007. *Basic Econometrics*.4th Ed. Tata MacGraw-Hill publishing company limited, New York.

Hill, R. C., Griffiths, W. E., and Lim, G. C. 2001. *Econometrics*. 2ndEd.,. John Wiley and Sons, New York.

Jari, B., and Fraser, G.C. 2009. An Analysis of Institutional and technical factors influencing agricultural marketing amongst smallholder farmer in the Kat River Valley Cape Province South Africa.*African Journal of Research*.4(11):1129-1137.October 22.http://www.academicjournals.org/ajar.

Makosholo, L.M. 2005. The Comparative Advantage to Long-term crops in Lesotho. University of Free State, Bloemfontein.

Molefe, N. 2009. Socio-Economic impacts of Mine retrenchment on household livelihoods in Lesotho. University of Witwaterand.

Mphahama, L.E. 2011. Institutional Constraints to Hoticulture Production and Marketing in Lesotho. University of Fort Hare.

Perreault, D.W. and McCathy, E.J. 2002. *Basic Marketing Global Management Approach*.14th, Ed.,.McGwa-Hill Irwin, New York.

Pundo, M.O. and Fraser, G.C.G. 2006. Multinomial logit analysis of househlod cooking fuel choice in rural Kenya: The case of Kisumu district. *Agrekon* 45(1): 24-37.

Sekaran, U. 2003. *Research Methods for Business: A Skill Building Approach.* John Wiley and sons, Inc., New York.

Southern African Development Community. 2010. Regional Agricultural Policy Country Summary Agricultural Policy Review Reports, United Nations.

Tavakol, M. and Dennick, R. 2011. Making Sense of Cronbach's alpha. *International Journal of Medical Education*.2:53-55.

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