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DETERMINANTS OF SALE RESPONSE PROBABILITY AND TOURISM BACKWARD LINKAGE WITH LOCAL MICRO AND SMALL ENTERPRISES OF KISUMU COUNTY – KENYA

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ABSTRACT

Tourism backward linkage with local enterprises in an economy enhances its economic impact. However, high income leakages experienced in Sub Sahara Africa especially in Kisumu County in Kenya indicate limited tourism linkage. The aim of the study was to find significant factors explaining extent of tourism backward linkage with economy of Kisumu County and factors influencing probability of local sales as proportion of total sales surpassing a national government threshold of 30%. Across section survey of 106 randomly selected tourism enterprises was conducted in Kisumu County. Linear probability and multiple linear regression models were developed to explain variables with significant effect on changes in response probability and local purchase ratio respectively. It was established that local purchase ratio in rural area of Kisumu County was higher than that obtaining in the outskirts of Kisumu Town and CBD of Kisumu Town by 15.3%. Increasing number of employees in local supplier business and rate of weekly local supplies reduced the probability of sale of such supplier exceeding 30% of all purchases made by tourism enterprise by 7.4% and 5.3% respectively. But quality of local supplies enhanced probability of exceeding 30% threshold by 8.8%. In conclusion location of tourism enterprises affected tourism backward linkages with local businesses. Though quality of local supplies enhanced penetration of local business activities in tourism sector, number of employees in suppliers` enterprise and higher weekly rate of supplies depressed it.

Contribution/Originality: The paper`s primary contribution is the finding that location of tourism enterprises affect tourism backward linkage with local economy and local sale response probability is enhanced mainly by quality of local supplies. Visitor length of stay effect on economy depends on strength of linkage between tourism and local economy.

1. INTRODUCTION

Tourism is a significant export product for many countries across the world (Edgell, 2008). According to United Nation Commission for Africa (UNECA) tourism presents a positive future growth prospect for both developed and developing countries (UNECA, 2011). The mechanism through which tourism development contribute to economic well – being of economies of many nations is a sustainable backward linkages with economies (Nepal & Lancher, 2010). The supply connection that local enterprises in the value chain form with tourism enterprises constitutes tourism backward linkage (Battat, Frank, & Shen, 1996; Frank, Guinereas, & Paulo, 1999) and it is quantified as annual proportion of total value of raw material and components sourced from local

economy (McDonald & McAleese, 1978) . Backward linkage of tourism with local economy, therefore, signifies the economic impact of tourism on local economy (Mak, 2004).

Kenya government through its *Economic Recovery Strategy for Wealth and Employment creation 2003 – 2007* identified tourism as one of key determinant of economic activity (Ministry of Industrialization and Vision 2030, 2002). Its main intention was to use pro poor tourism as a strategy for strengthening linkages of tourism with the rest of economy (Ministry of Industrialization and Vision 2030, 2002). However, tourism is yet to develop significant backward linkage with extractive activities which support majority of population (Valle & Yobesia, 2009). About 67% of total tourism revenue is lost through leakages and local residents at the grass root level appropriate negligible proportion of the overall tourism economic benefits (Akama, 1997; Bachamann, 1988). At regional level within Kenya, Kisumu County register low rate of local participation in tourism activities (Babu, Haghiri, & Oketch, 2012; Odege, 2014) and niche tourism ventures located at Kit Mikayi in Kisumu County are operating ineffectively because of limited capacity and insufficient support from County Government (Misio, 2013). Further, lack of managerial skills amongst local tourism operators within the County has undermined ability of local community in running cottages and other facilities put up by Tourism Trust Fund Project at *Got Ramogi* (Ministry of East Africa Affairs Commerce and Tourism, 2013). Linkage between tourist hotels and nearby municipal market in Kisumu City based on fresh farm produce is unreliable and weak (Agong, Bwana, Olima, Andika, & Hayombe, 2015). Hotels and other accommodation facilities register low occupancy rate (Kenya National Bureau of Statistics, 2012) thus, do not guarantee optimum linkages. Some of the guest houses do not meet expectation of international tourists because they lack amenities and have poor hygiene standards (Oketch, Haghiri, & Babu, 2012). Lastly, most of craftsmen and women in the County have abandoned their artistic craft due to lack of market locally (Communication Economic Planning and Development Executive Committee, 2018). Therefore, the main aim of the study is twofold: First to explain factors which significantly drive tourism backward linkage with local micro and small enterprises within Kisumu County and second to explain factors which influence the probability of sales from local suppliers exceeding national policy threshold of 30%. The following section covers findings from Republic of Island based on econometric analysis involving electronic firms and *Barabarani* Village in Tanzania based on a study which involved household survey. The section also includes findings from a study conducted in *Tioman* Island in Malaysia and Murchison Falls Conservation Area in Uganda.

2. LITERATURE REVIEW

Backward linkage is defined by Turok (1993) as proportion of material input sourced from local economy. What are the key determinants of such proportion of material input? Between 1982 and 1995 (Ruane & Görg, 1997) conducted an econometric analysis of firms in the electronics sector of Irish Republic. They analyzed the determinant and extent of backward linkage between multinational firms and local firms using panel data. They used a total of 495 observations of 215 firms with thirty or more employees. They used panel data regression technique to model backward linkage using such firm characteristics as firm nationality, firm growth and size (determined by average employees), time, export ratio, growth of total input and sub sector dummy. The key findings from the study were fivefold: Though domestic firms tended to out - perform foreign firms in developing backward linkages, firms generally increase their backward linkage with local economy over time. Secondly, large and expanding firms tended to have lower linkages than other firms. The finding was consistent with a study conducted in Scotland in which small enterprises were found to be favorable to local economy because they were biased towards local produce in purchasing inputs (Beech & Chadwick, 2006). Thirdly, there was no relationship whatsoever between export ratio and growth of total input purchase variable and the extent of firm backward linkage with local suppliers. Lastly, it was found out that as foreign firms increase their total input purchase the proportion of local inputs decreased. However, because the study was conducted in Ireland and was biased toward electronics sector it could not be generalized to tourism industry of Kisumu County. Moreover, in modeling

backward linkage, the location, rate of patronage, type and number of tourism firm and length of visitor stay in tourism firm do not feature in their econometric model. The only variable that features in the model is firm size. The study will address this gap by revealing the impact of the missing variables on backward linkage of tourism with local economy of Kisumu County.

Muganda (2009) carried out a study in Tanzania in *Barabarani* village located in Arusha in which he sought to establish Community involvement and participation in tourism development. The researcher adopted a case study approach of the village using multi method strategy which incorporated amongst others household survey, interviews, informal discussion and field observation. The sample size was 139 households derived from target population of 2480 households using stratified random sampling technique. A stratification criterion was sub village. The study revolved around finding out views of local people regarding their involvement in tourism development and their views on tourism contribution to poverty reduction. It also sought to establish extent to which tourism businesses had developed schemes for benefit sharing. From the findings it was established that local people valued their active participation in decision making which they were not willing to entrust to external party. However, local people felt sidelined in decision making even though they were represented by their leaders. It was also found out that local people looked at involvement in terms of appropriation of optimal tourism benefits which, on contrary were skewed against villages located away from the main road. Further, unlike public and community based businesses, private businesses in tourism did not have any benefit sharing schemes with local inhabitants. Lastly, it was found out that though tourism contributed to general reduction to poverty, it had little impact on socio economic welfare of a greater proportion of village population comprised of peasants. However, the study though alluded to tourism backward linkage with local economy; it did not directly associated dismal tourism backward linkage with any of the variables included in the current study.

In Malaysia the situation of local participation in tourism development attracted the interest of Azma, Mustapha, and Yahaya (2013). The two sought to find out the factors constraining participation of local people in decision making process pertaining to tourism development in the Island. Questionnaires were used to collect data from a sample of 346 villagers from a target population size of 3500. Stratified random sampling technique was used to draw sample from the target population. Based on descriptive statistics, the constraints were classified into cultural, operational and structural limitations. From the findings, domination of elite and their cronies in project management, inadequacy of funds amongst local business people and superiority complex amongst tourism professionals characterized structural limitations. Limited local capacity, lack of awareness and apathy amongst the local people constituted cultural hindrance. Lastly, operational limitation was typified by monopoly of public administration in tourism planning and the secrecy with which expert implement various tourism project. Though the study of Azma et al. (2013) suggests that tourism backward linkage with local economy is undermined by operational, structural and cultural limitations, their dependence on descriptive statistics in data analysis did not enable them to directly explain or correlate tourism backward linkage with respects to socio economic variables associated with local businesses. Also, the study findings applied to the sampled inhabitants of the Island but could not be generalized to even the entire population of Tioman Island. Thus, the relevance of the findings to situation in Kisumu County in Kenya is disputable.

Odege (2014) carried out a study to establish factors influencing Community Participation in Cultural Tourism at Kit Mikayi in Kisumu County. The study adopted exploratory and descriptive research design. A sample size of 70 households was drawn from a population of 1678 household using systematic random sampling. Data collected using questionnaires were analyzed based on descriptive statistics. The findings was that low income, low level of education and limited community involvement in tourism development process were some of the main influences of community participation in cultural tourism development. However, like Azma et al. (2013) the findings of the study were not useful in definitively making inferences regarding tourism backward linkage because the analysis was based on descriptive statistics. Further, though low income, low level of education and low level of community

involvement was associated with limited community participation in tourism, the study did not directly explain the effect of the factors on tourism backward linkage with local economy.

Lastly, a study carried out in Murchison Falls Conservation Area in Uganda by Mugizi, Ayorekire, and Obua (2017) found out that income, land ownership, level of education, engagement in farm labour and service provision to tourists by local were key factors affecting local participation in tourism. The study was based on a sample size of 335 households drawn from a population comprised of inhabitants of five sub counties neighboring Murchison Falls Conservancy Area. The qualitative and quantitative data collected using interview and questionnaire was analyzed using Pretty and Logit Model respectively. In the study outcome, importance of local people socio economic profile in enhancing their participation in tourism for betterment of their welfare was key emphasis. The implication of the study is that tourism backward linkage with local economy of Murchison Falls Conservation Area was indirectly affected by household income, education levels, land ownership and participation in farming activities, and provision of tourist service by local population. However, the finding of the study cannot be generalized to the entire regions of Uganda, to Kenya or even Kisumu County. While the study was based on a sample drawn randomly from Sub Counties surrounding Murchison Falls Conservation Areas, the current study, on the contrary, was based on sample drawn from tourism enterprises operating within Kisumu County.

In summary, the determinants of the extent of backward linkage in electronic sector of Republic of Ireland are nationality of firms, size of firms, and the length of time that a firm operates in the industry and level of total input purchased by foreign firms. The study by *Barabarani* Village in Tanzania confirmed that tourism backward linkage in rural areas was weak as based on the experiences of local population. In *Tioman* Island of Malaysia tourism backward linkage with local economy is undermined by operational, structural and cultural limitations. Lastly in Uganda, the findings from Murchison Falls Conservation Area established that income, land ownership, level of education, engagement in farm labour and service provision to tourists by local were main factors influencing local participation in tourism.

3. RESEARCH METHODOLOGY

3.1. Target Population, Sampling Technique and Sample Size

The target population for the study was 266 tourism enterprises which included guest houses, restaurants and clubs, hotel and lodges. From the target population, based on a sampling frame obtained from tourism regulatory authority in Kisumu, a random and stratified sample was drawn using Fisher`s Formulae: $n = z^2 \times P \times (1-P)/e^2$ where P is the proportion of population with desired characteristics, e is the margin of error of 0.075 and z is quantile on a standard normal distribution corresponding to probability of 0.95. Since the population under study was less than 10,000, the calculated sample size was adjusted using the formulae: $N \times n/(N + n)$, where N and n is population and sample size respectively. The stratification criterion was category of tourism firms as listed in the sampling frame. A multiplier of 0.3985 was obtained by dividing sample size by target population. The Table 1 below shows sizes for each category of tourism enterprises consistent with 0.07 margin of error and confidence level of 95%.

Table-1. The target population and sample size categories

Categories of Tourism Enterprises	Population Size	Multiplier	Sample Size
Hotels, Motels and Lodges	128	0.3985	51
Guest Houses	70	0.3985	28
Restaurants	68	0.3985	27
Total	266	0.3985	106

3.2. Research Authorization

Permission for conducting research in Kisumu County was sought and granted from National Commission on Science Technology and Innovation, Kisumu County Commissioner and County Director of Education. Authorization documents were attached to the questionnaires which were distributed to the 106 Tourism Enterprises.

3.3. Assumption of Linear Model and Diagnosis

To explain effects of tourism physical location, size and type of tourism enterprises, competition amongst tourism enterprises, number of income streams within tourism enterprises, weekly rate of patronage of tourism enterprises and visitor length of stay on extent of tourism backward linkage with local micro and small enterprises, a linear modeling of local purchase ratio was done. *Regression Specification Test* was conducted to ascertain that the model was not misspecified by ignoring independent variables, *Residual Analysis* was conducted and *heteroscedasticity* was detected. Result of residual analysis was confirmed by *Lagrange Multiplier Test*, whose calculated value of 25.44 exceeded χ^2 critical value of 2.167. Therefore, all variables in the model were transformed to make residual variance *homoscedastic*. Generalized Least Square Estimation was used to estimate the model parameters and p values compared with significant Level of 0.05 prior to interpretation.

3.4. Assumption of Probability Linear Model and Diagnostics

The second objective was to analyze socio economic characteristics explaining sale response probability. Sale response probability is the chance of local suppliers' sale exceeding 30% of total weekly purchase made by tourism enterprises. A linear probability model was used to model sale response probability using such socio economic variables as age of local supplier (dummy variable), supplier education level (dummy variable), gender of supplier (dummy variable), number of employees in supply business, supplier employment status (dummy variable), promptness in supplying, length of time in commercial relationship with tourism enterprises, quality of supplies, pricing level of local supplies and frequency of supply per week. The response probability was a binary variable indicating whether proportion of weekly local supply exceed 30% of total supplies procured by tourism enterprise in a week or not.

The estimation of multiple linear model parameters was based on such assumptions as linearity in parameters, random sampling, lack of *multicollinearity* amongst independent variables, zero error mean given values of explanatory variables, error term and dependent variable follow normal distribution and constant error variance conditional on values of set of explanatory variables. According to *Cook*'s distance and Z-Scores obtained on all variables, there was neither influential nor outlier observations respectively amongst the variables. However, since linear Probability Model had binary response dependent variable the requirement of constant error variance and normal distribution was violated. The requirements of linearity, random sampling and lack of perfect *multicollinearity* were, however, observed. The Variance Inflationary Factor for all independent variables was less than 2 as shown in the Table 4 below. Since error variance was *heteroscedastic*, Weighted Least Square estimation of model parameters was adopted. The Model was initially estimated by Ordinary Least Square (*OLS*) estimation and predicted probabilities were then obtained from the estimated model. The variance of residuals were determined as $(b_0 + b_1x_1 + \ldots + b_nx_n)(1 - b_0 - b_1x_1 - \ldots - b_nx_n)$. The reciprocal of standard deviation of the residual was used as weight to transform all variables from which parameter estimates were determined by OLS estimation (Wooldridge, 2013). To ensure that the predicted probabilities were bounded between 1 and 0, the predicted values which were less than 0 were approximated to be 0.05 while those probabilities that exceeded 1 were approximated to be 0.99 (Wooldridge, 2013). Out of 106 predicted probabilities only three fell outside the boundary of 1 and 0. All independent variables closely followed normal distribution according to boxplots of all the variables. Also, the

skewness and *kurtosis* coefficients for all variables were less than one. Lastly, observations made on each independent variable fell along diagonals of *Q-Q Normal Plots* generated from SPSS Version 22.

4. RESULTS

4.1. Results on Modeling of Tourism Backward Linkage with Local Economy

The result shown in Table 2 indicates that only 14.8% of variation in local purchase ratio was explained by the Multiple Regression Model with standard error of estimate of approximately 0.28.

Table-2. Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.384ª	.148	.068	.27560

Results from Table 3 indicate that all independent variable were jointly insignificant in explaining the variation in local purchase ratio (F value = 1.847, p value = 0.07). Thus length of visitor stay in tourism enterprises, size of tourism enterprises, and rate of weekend patronage to various tourism enterprises had no significant combined effect on local purchase ratio. This is also the case with number of revenue points in tourism enterprises, level of competition and type of tourism enterprises.

Table-3. ANOVA for Local Purchase Ratio.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.262	9	.140	1.847	.070ᶜ
Residual	7.292	96	.076		
Total	8.554	105			

From Table 4 changes in all independent variables except location variable had no any individual effect on change in Local Purchase Ratio (p value > 0.05). Local purchase ratio in the outskirts of Kisumu Town was not significantly different from that of Kisumu CBD (t value = -0.267, p value = 0.790). However, local purchase ratio in rural area of Kisumu County was higher than that obtaining in the outskirts of Kisumu Town and CBD of Kisumu Town by 15.3% (t value = 1.998, p value = 0.049). Interestingly, even length of stay variable which was theoretically expected to positively affect local purchase ratio had insignificant negative effect (t = -1.823, p value = 0.071). Lastly, though it appears that local purchase ratio in restaurant and club are lower than in hotel and lodges by 8.9% and local purchase ratio attributed to guest houses are higher than hotel and lodges by 5.7%, all such differences in purchase ratio amongst types of tourism enterprises generally occurred merely by chance (p value > 0.05). Therefore, the null hypothesis that location, rate of occupancy, size, type and number of tourism firms, number of revenue points and visitor length of stay has no significant partial and joint effect on variation in the proportion of local purchase is by and large not rejected at significance level of 0.05. However, location of tourism enterprises affects extent of tourism backward linkage with local economy.

4.2. Factors Influencing Local Sale Response Probability

From the Table 5 suppliers whose age bracket fell within 26 − 30 and 31 − 35 had lower probability to make sales whose proportion exceed 30% of all sales made to tourism enterprises than suppliers whose age is 36 and above. However, this observation was not significant (p value > 0.05). While on average local supplier with primary education had a higher probability of making sale proportion in excess of 30% of all total sales than a supplier with college level education, local suppliers with secondary and university level education had lower probability of the their sales exceeding 30% of total sales made than supplier with college level education. However, these observations had also occurred by chance (p value > 0.05). In terms of supplier gender, male and female had same

probability of making sales in excess of 30% of total sales made to tourism enterprises (p value = 0.334). Local suppliers employment status had no differential effect on response probability (p value = 0.332).

Table-4. Generalized least square estimates for the local purchase ratio equation.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.564	.176		3.198	.002
	Length of Stay	-.052	.028	-.230	-1.823	.071
	Log of Enterprise Size	.052	.035	.167	1.491	.139
	Weekend Patronage Rate	-.001	.002	-.089	-.871	.386
	Income Streams	-.027	.037	-.089	-.710	.480
	CBD KSM	-.019	.070	-.029	-.267	.790
	Rural Areas KSM	.153	.077	.216	1.998	.049
	Number of rivals	.014	.011	.127	1.293	.199
	Restaurant and Club	-.089	.098	-.134	-.914	.363
	Guest House	.057	.084	.087	.680	.498

Table-5. Weighted least square estimate for the sale response probability equation.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.541	.335		1.612	.110	-.125	1.207		
	AgeBracket_31 and 35	-.002	.095	-.002	-.017	.986	-.191	.188	.796	1.256
	AgeBracket_26 and 30	-.056	.147	-.038	-.377	.707	-.348	.237	.813	1.229
	Primary Educ	.075	.144	.061	.521	.604	-.211	.362	.606	1.649
	Secondary Educ	-.056	.106	-.057	-.531	.597	-.266	.154	.727	1.375
	University Educ	-.155	.152	-.103	-1.023	.309	-.456	.146	.829	1.206
	Gender_Male	.088	.090	.097	.971	.334	-.092	.268	.842	1.188
	Employ Status_	.132	.136	.103	.975	.332	-.137	.402	.754	1.326
	Employed	-.074	.028	-.263	-2.646	.010	-.129	-.018	.850	1.177
	No of Supplier Employees	-.010	.028	-.040	-.355	.723	-.067	.046	.668	1.497
	Promptness Rating	-.001	.003	-.041	-.399	.691	-.006	.004	.788	1.269
	Longevity in Commercial Relation	.088	.034	.299	2.629	.010	.022	.155	.648	1.543
	Supplies Quality Rating	-.017	.025	-.073	-.685	.495	-.068	.033	.730	1.370
	Prices Level Rating	-.053	.022	-.239	-2.417	.018	-.097	-.010	.856	1.168

Increasing number of employees in local supplier business reduced the probability of sale of such supplier exceeding 30% of all purchases made by tourism enterprise by 7.4% (t value = -2.646, p value = 0.01). While promptness with which local suppler responds to orders from customer and his or her long relation in business with customer had no effect on probability of sales ever exceeding 30% of total sales made (p value > 0.05), quality of local supplies enhanced probability of exceeding 30% threshold by 8.8%(t value = 2.629, p value = 0.010). Last but not least, pricing of local supplies had no effect on probability of local supplier sale exceeding 30% of total supplies (p value = 0.495) but frequency of weekly supply reduced probability of sales of local supplier exceeding 30% of

total sales made by 5.3%. The null hypothesis that there no any socio economic characteristics with significant explanatory power on the probability of local suppliers` sale exceeding 30% of total weekly purchase made by tourism enterprises was not rejected for all variables other than dummy variables on physical location, number of employees in supplier`s business and quality of local supplies. Therefore, the socio economic variables with significant effect on response probability are number of people employed by local supplier, quality of local supplies and frequency of weekly supply.

5. CONCLUSION

Though local purchase ratio obtained as a result of trading activities amongst enterprises in Kisumu Central Business District were not different from the same activities amongst enterprises in the outskirts of Kisumu City, local purchase ratio among enterprises in rural areas significantly surpassed those based in both Kisumu Central Business Districts and outskirts of Kisumu City. The current study finding confirmed the weak and unreliable linkage between hotels and nearby municipal market in Kisumu City as established by Agong et al. (2015). The length of visitor stay in tourism enterprises such as guest houses and hotels did not have significant effect on economic relationship between the tourism enterprises and local economy. The finding is contrary to the view held by Menezes, Moniz, and Vieira (2009) that the general socio economic impact on economy is conditioned by visitor length of stay. To reconcile the apparent contradiction, length of visitors stay within tourism enterprises in Kisumu County had no effect on tourism backward linkage with economy of Kisumu County owing to leakages occasioned by imports by tourism enterprises from other counties or countries. Unlike the previous studies of Muganda (2009); Odege (2014) and Mugizi et al. (2017) which focused on local community participation in tourism, the current study`s main emphasis was on economic linkage between tourism economy and local economy in which location of tourism enterprises was found to be important factor. The implication of this finding was that tourism enterprises located in rural areas have either greater impact on local economy or had greater potential to create economic linkage with local businesses than those found in both CBD and outskirts of Kisumu City. Thus, development policies geared toward rural areas should be encouraged and prioritized. Limited local capacity which detracts from effective management of enterprises by local people in rural areas (Misio, 2013) and low rate of local participation in tourism activities (Babu, Shim, Shea, & Oh, 2014) should be addresses in conjunction with measures to attract tourism investment and diversification of local production by local people.

In order to find out the effect of suppliers socio economic characteristics on probability of proportion of local sale exceeding a policy threshold of 30% such factors were considered as supplier age bracket, supplier education level, supplier gender, number of employees in supplier business, supplier employment status, promptness of making delivery, length of time the supplier had been in commercial relationship with tourism enterprise, perceived quality of supplies, pricing level of supplier`s products and rate of weekly supply. It was found that increasing number of employees in local supplier business and increasing rate of weekly supply reduces chances of local supplier exceeding policy threshold of 30%. However, improving quality of local supplies enhances chances of exceeding the policy threshold. The finding that education had no effect on sale response probability did not deviate the current study finding from the earlier findings by Popescu (2007) who stated that professional and practical education enhances local entrepreneurship in tourism. Also, the new finding did not contradict the findings of Babu et al. (2012) who stated that very low income level and low education were hindrance to local participation in tourism. The only difference between current study finding from that of Babu et al. (2014) and Popescu (2007) was that the current study focused on local suppliers already participation in tourism by looking at the probability of proportion of their sale exceeding policy requirement of 30%. The current study established that education, employment status, gender amongst other characteristics amongst local suppliers did not affect their probability of exceeding the sale threshold. On the contrary, while the increase in number of employees in supplier business depresses probability of making sales in excess of policy threshold, higher weekly frequency of local supplies and

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increased quality of supplies enhances probability of exceeding policy threshold. As business increase in size, supplier efficiency is compromised because of owner`s limited ability and skill to manage many employees beyond a critical size and, as a result, the output is compromised. This is in agreement with the hypothesis of diseconomies of scale and the associated law of diminishing return propounded by Chrystal and Lipsey (1995). Improved quality of supplies enhance probability of exceeding 30 % threshold because, as explained in the Service Profit Chain Theory (Heskett, Sasser, & Schlesinger, 1997) it lead to customer satisfaction and thus positive biasness of tourism enterprises towards local supplier. Because the role of practical and professional education had been found to be important in tourism entrepreneurship, it is counterintuitive that it has got no significant role in enabling local supplier sales exceed proportion of 30% policy threshold. However, the study limitation is in the extent to which the findings can be generalized. The study was based on a random sample of tourism enterprises located within Kisumu County to which the findings can be generalized. Therefore, the study does not give a general national picture of similar situations in other regions within the republic of Kenya.

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