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Policy and efficiency nuts in agrifood marketing system: a case study of macadamia nuts in Kenya

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Abstract: *The study sought to assess the efficiency of agrifood marketing system in Kenya, focusing on market concentration, quality control systems, information flow, price policies, margins, promotion and advertising, as well as market organisational structures. To achieve this, the study relied on the world economic triangle model and social marketing theory. The World Economic Triangle Principle was used in providing information on global markets and global value chain, while social marketing theory was used in providing the strategic orientation of macadamia marketing to increase efficiency. 292 respondents were taken from 32 randomly selected markets in the five counties of Embu, Kiambu, Kirinyaga, Murang'a and Nyeri. Each set of questionnaires was tailored to elicit particular information from the respondents who were 162 farmers, 28 middlemen, 7 processors, 30 retailers and 65 consumers. Data from the field was cleaned, coded and saved for processing using SPSS version 20. Both descriptive and inferential statistics were used alongside statistical models such as regression, correlation, Chi Square and ANOVA, in determining the efficiency.Data were categorised into themes and subthemes using thematic content analysis method based on the objectives of the study. Findings from the study showed that lack of proper organisational structures, poor pricing policies, lack of centralised authority for quality control standardisation and certification of macadamia for exports and lack of proper training for traders are some factors of lowering the efficiency.This study recommends proper organisational structures on macadamia systems to be set and good information flow systems be developed to improve efficiency of macadamia marketing system in Kenya. It is expected that, well operationally and efficient developed marketing systems will meet new global marketing models and marketing requirements.*

Keywords: *Efficiency, Agrifood, Marketing System, Macadamia Nuts, Kenya*

I. Introduction

1.1. The background of the study

Agrifood industry in Kenya has been faced with numerous operational marketing challenges in the last one decade forcing the government to impose export ban of raw nuts since 2008.There exists little literature that attempts to investigate the level of efficiency of agrifood marketing systems in Kenya and especially on Macadamia value chain. This is the research gap that this study wants to fill.

According to GOK (2015), agriculture accounts for about 26% of Kenya's GDP with an estimated 75% of the population depending on it directly or indirectly. Majority of this population (80%) live in the rural areas and about 56% of it lives below the poverty line. The agricultural sector is made up of four major sub-sectors, namely; industrial crops, horticulture, livestock and fisheries which make the sector the leading contributor to the Kenyan economy (Horticulture Development Authority, 2013). Macadamia nuts are included in the horticulture sub sector in agricultural sector in the Kenyan economy.

The horticulture sub-sector contributes 36 per cent of Kenya's agriculture's GDP and is a significant contributor to the economy. Therefore, macadamia industry is vital in the transformation of Kenya into a middle-income nation as envisaged in Kenya Vision, 2030 (GOK, 1999). For instance, in the year 2011, the value of production in the horticulture sub-sector amounted to Kshs 205.1 billion compared to Kshs 186.3 billion in 2010 (HCDA,2011).

Macadamia is among key nuts processed and exported in Kenya. This tree nut is of economic importance to Kenya contributing to both local and export markets. The share ratio of export and domestic market for macadamia is 99% and 1% respectively (HCDA, 2011). Promotion and advertising to increase demand in the local market cluster from current 1% to about 10% of total production as in the case of cashew nuts would be necessary. According to GOK (2011), in the year 2011, the area in hectors, production volume and value in monetary terms of macadamia increased by 42.8%, 38.5% and 82.1% respectively compared to 2010 .The leading macadamia producing counties in Kenya are Embu, Meru, Kiambu, TharakaNithi, Murang'a and TaitaTaveta. Other counties are Kirinyaga, Nyeri, Makueni, TransNzoia, Nyamira and Baringo. Seven of

these counties producing macadamia are in the central Kenya highlands and five of these were purposively selected for this study (HCDA, 2011).

The relationship between global buyers, global lead firms, global value chain, global standards and transnational networks have been examined, and incorporated in the local market clusters where necessary to broaden the efficiency of agrifood marketing in Kenya as shown in (figure 1.1 page 5) and explained by world economic triangle concept, (Gereffi, 1995; Dolan & Humphrey, 2000; Helleiner, 2000; Nadvi&Waltring, 2002).

The world economy is marked by competition between local clusters,export market and global value chain (Menssner, 2002). Marketing no longer knows national boundaries hence the need of considering and adopting the World Economic Triangle Concept (Nadvi&Schmiz, 1999; Gereffi, 1995). It was on this basis and interest on agrifood marketing in Kenya that this study was planned and formulated to examine and assess macadamia marketing system as a sub sector of agrifood industry in Kenya. The analysis adopts social marketing theory and world economic triangle concept using macadamia nuts value chain in the central Kenya highlands as a case study to suggest ways of meeting and solving these relatively new marketing challenges.According to Ministry of Agriculture(2011) survey done showed that macadamia nut contributed 38.8% of overall nut value produced in Kenya. This makes it to be economically very important nut in Kenya

According to some scholars (Perloff, 1993, Messner2002, and Shaffer1970), localbuyers have low purchasing powerunlike international buyers. This translates to better prices for the producers and therefore the need to assess global market. The main players at the local level of the market chain are processors who require huge capital outlay to build processing plants. The segment is also labour-extensive. These factors have acted as market barriers to the export market because of high cost involved. The ban of export of nut in shell by Ministry of Agriculture in 2010, (Kenya Gazette, 2010) directly affected this segment of the market and it is likely to have impacted negatively on the whole value chain. The ban of export of raw nuts impacted on the efficiency of agrifood marketing system.

According to Waithaka (2001), despite the good global macadamia prices at the time, marketing the nut in Kenyastill facednumerous local challenges. These problems ranged from lack of adequate promotion and advertising, lack of proper development of domestic market, absence of pricing policies to guide the traders' profit margins, lack of quality control systems, lack of intelligent information flow and lengthy marketing chains. All these problems required proper assessment to improve market efficiency. These problems have been compounded by the import ban of the Kenyan kernel by the USA which has been the highest importer of macadamia from Kenya. Failure to pinpoint, identify and analyse the specific problems and challenges, prompted the Kenyan government to impose export ban of raw nuts from 2008. According to a government report (GOK, 2011) of macadamia and as a result a task force was appointed in 2011 to look and analyse the teething problems in macadamia marketing and give a recommendation. All these mentioned problems reduce efficiency of macadamia marketing chain and requires to be addressed to by this research.

A trend of market loss in the international market is a problem and a big challenge to the macadamia industry which requires proper marketing understanding. These problems require proper market investigation, assessment and a detailed analysis to establish the root cause of the problems to reverse the downward trend. However, what is needed is proper policy framework, as a bulwark for the nascent nut industry. Kenya has dropped from second to fifth position in world production volume in the last few years.The cause of the drop requires to be known and analyzed. It is against these challenges that the study was formulated as an attempt to empirically analyze the marketing value chain in selected counties in relation to the global macadamia markets, with a view of seeking ways of improving the efficiency of macadamia marketing chain to regain the lost export market and retain local market segment as well.

1.2.Research methodology

The study adopted an exploratory approach using a descriptive survey design because it describes the state of events based on the responses from the respondents. Descriptive research design relies on both qualitative and quantitative methods of data in describing phenomena. The research design involves observing and describing the behavior of a subject without influencing it in any way (Shuttleworth, 2008).Descriptive survey is concerned with current or past status of phenomena and allows for making of preliminary identification of outcomes. The design also allows for the description of causal relationships between variables under study (Sproll, 1998).

The study was carried out in five counties of the Central Kenya highlands purposively selected because they are the counties where macadamia farming is widely practised. The five counties were also selected because they have close related economic, infrastructural development and also all targeted population exists in the area. The target population of the study included the 1620 macadamia farmers, 280 middlemen, 7 macadamia processors, 30 distributors and 650 consumers. 292 respondents were taken from 32 randomly sampled market centres in Embu, Kiambu, Kirinyaga, Murang'a and Nyeri counties. Each set of questionnaires

was tailored to elicit particular information from the respondents who were 162 farmers, 28 middlemen, 7 processors, 30 retailers and 65 consumers.

Data from the field was cleaned, coded and saved for processing using SPSS version 20. Both descriptive and inferential statistics were used alongside statistical models such as regression, correlation, Chi Square and ANOVA, in determining the efficiency. The respondents to this study included randomly sampled farmers, middlemen, and consumers as presented in table 3.2 above. All these respondents were randomly sampled in such a way that they represented not less than 10% of the total target sample in the 32 selected market centres. The primary data for analyses were obtained from the respondents through the use of questionnaires and individual interviews. Secondary data were obtained from library which involved reading written sources such as books, dissertations, journals, periodicals, seminar papers, public documents, bulletins, and official records.

II. Results

Market Integration

This study sought to assess the macadamia market integration level which was determined by price spread and harmonized price patterns across the market centres. An integrated market is characterized by harmonized macadamia price patterns in the various market location centres number of traders and factories. When average farm selling prices per kilogram of macadamia for the year 2012 were compared across the five counties, the result indicated wide variation between the markets which reflected dissonance. The assessment revealed that the level of integration of the macadamia prices between the counties was low that is the Law of One Price" does not hold as indicated in figure1.1. These results indicated a poorly integrated market system. The results indicated that there was a high diversity in price between the markets especially between Kiambu and Murang'a, and Kiambu and Kirinyaga.

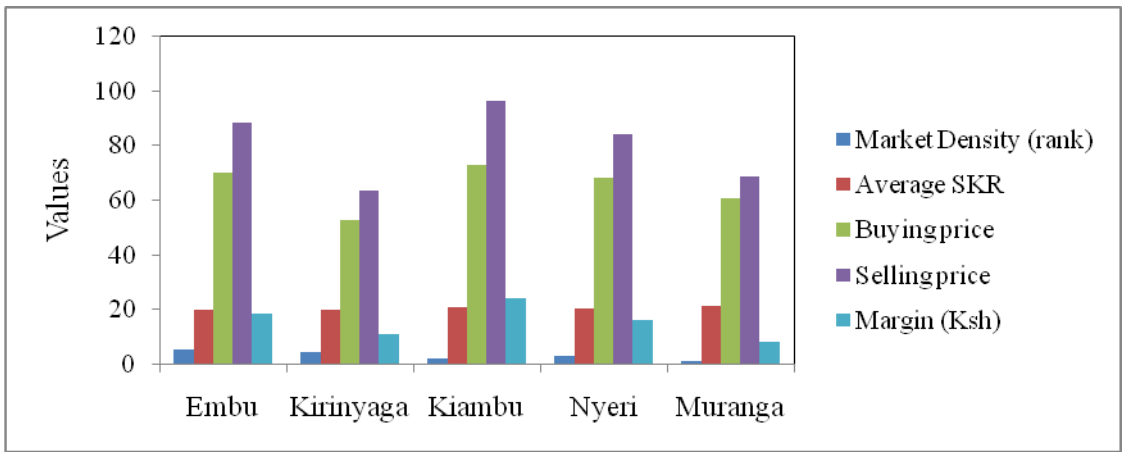

Figure 1.1: Pooled data graph of intervening variables across the counties Correlationof sales/production(dependent variable)verses independent variables

Using a correlation analysis to establish the relationship between the various independent variables and the sales/production volumes of macadamia in the counties, the result showed that even though there was a moderate to strong correlation between the variables, the relationships were not significant for all the tested intervening variables except for the number of market (r = 0.937, P = 0.020) as indicated in table 1.1. This implies that macadamia production is influenced by the number of buying centres, increasing the number of buying sales centres would improve efficiency as indicated by table 1.1 .

Table 1.1: Correlation of the dependent variable (production volume) versus the intervening variables

		# market	# factories	Market conc./Density (Km)	Average SKR	Buying price	Selling price	Margin (Ksh)	%margins
Production	r-value	0.937	0.362	0.279	0.172	0.369	0.172	0.115	0.131
	P-value	0.020*	0.549	0.649	0.783	0.542	0.783	0.980	0.839

*indicates correlation coefficient(r) relationship is significant at 95% Confidence level

Correlation matrix of the Tested Intervening Variables

The study also sought to determine whether pairs of intervening variables had any relationship with the others as shown in the table 1.2. This correlation matrix indicates high positive correlation between: Sales volume to the number of markets (r = 0.937); Sales volume and number of traders(r=0.963; Number of markets and the number of traders (r = 0.938);Average SKR and market concentration (r = 0.828); Buying price and selling price (r = 0.971); Selling price and margin (r = 0.950); Margin and % margin (r = 0.982).There was also a moderate positive relationship between various variables, between margins % and factories(r=0.662; selling Price and factories(r=0.542); There was also a weak positive relationship between factories and buying prices(r=0.414; average SKR and factories(r=0.318); sales volume and buying volume (0.369).The above information could assist in making informed and intelligent decisions in macadamia marketing in Kenya

Table 1.2: Correlation of coefficients matrix for tested intervening variables

	Sales vol./ Production	# market	# traders	Factories	Market conc./Density (Km)	Average SKR	Buying price	Selling price	Margin (Ksh)	%margins
Production	1									
# market	0.937*	1								
#traders	0.963*	0.938*	1							
#factories	0.362	0.211	0.517	1						
Market conc.	0.051	0.050	0.203	0.034	1					
Average SKR	0.172	0.249	0.353	0.318	0.828*	1				
Buying price	0.369	0.200	0.153	0.414	0.023	0.092	1			
Selling price	0.211	0.090	0.014	0.542	0.068	0.015	0.971*	1		
Margin (Ksh)	0.115	0.063	0.169	0.610	0.181	0.153	0.848*	0.950*	1	
%Margin	0.131	0.142	0.246	0.662	0.278	0.267	0.738*	0.877*	0.982*	1

NB: * Indicate the correlation coefficient (r) at 95% Confidence level significant

This means that sales volume will increase with increase in the number of markets. Again increasing buying centres increases number of traders and the more the number of buying centres the better the quality of macadamia.

Quality Control Standards and Specifications

Traders were asked to indicate whether they used control standards and specifications to assess the value of their produce which show that there was very little feedback which was received on this area .There was a weak positive correlation between SKR and other intervening market variables except with market distance/density .There was also a weak positive relationship between SKR and number of factories, number of markets.

Quality Categories in the Market

The middlemen/brokers determine the quality of raw nuts from the farmers by cracking the nuts open and assessing the content to establish the quality and thereby sorting out the various quality grades. The middlemen prefer nuts which are generally big in size, and white in colour. During assessment, they look at the colour of the nuts, insect infestation, shell colour patterns, dryness and moulds, sizes and taste of the nuts. According to the findings, farmers indicated that they sell macadamia nuts mainly in two grades or three grades.36% identified three grades 20% identified two grades while only 11% sold onegrade of macadamia quality in the market, 16% indicated that they don't know, while 17% of the respondents did not provide any response.

Problems in marketing macadamia

The study sought to identify and establish the problems facing the marketing of macadamia by farmers. To that end, a question was posed to the respondents seeking to elicit information on the problems they face in marketing macadamia. 35.8% of farmers for instance noted that interferences by brokers and middlemen was the main problem while other problems included lack of reliable markets (27.2%) and lack of organized marketing bodies (13.6%) as shown in table 1.3.

Table 1.3: Problems that farmers face in marketing their produce

Problems of marketing	Frequency	Percentage
Lack of organized marketing body	22	**13.6**
Lack of reliability of market	44	**27.2**

Interference by brokers/middlemen	58	**35.8**
High cost of organization	22	**13.6**
Storage	6	**3.7**
High cost of transport	2	**1.2**
Non-committal	8	4.9

A further analysis was conducted to establish whether there is a relationship between problems farmer experiences and the level of trading of the farmers, According to the findings, it was noted that there was a significant difference by the respective farmers' macadamia trading levels (χ^2 = 158.82, df = 18, P = 0.000). Majority of the Sole traders (38.4%) experienced problem of interference by brokers and middlemen; those in partnerships had mainly experienced problems of lack of organized marketing bodies while those trading through companies had a problem of lack of reliability in market as shown in table 1.4.

Table 1.4: Problems noted by farmers trading at various marketing trade levels

	Level of Macadamia trade		
Problems in marketing	Sole trader	Partnership	**Company**
Lack of organized marketing body	13.7% (20)	40% (2)	**0% (0)**
Lack of reliability of market	28.1% (41)	20% (1)	**100% (1)**
Interference by brokers/middlemen	38.4% (56)	20% (1)	**0% (0)**
High cost of organization	14.4% (21)	20% (1)	**0% (0)**
High cost of transport	1.4% (2)	0% (0)	**0% (0)**
Storage	4.1% (6)	0% (0)	**0% (0)**
Total	100% (146)	100% (5)	**100% (1)**
Chi value	158.82		
P-value	**0.000**		

On their part, 43.3% of retailers indicated that the major problem in marketing macadamia was lack of an organized marketing body, 26.7% of the retailers reported unavailability of ready markets while 20.0% said they had problems of interference by brokers/middlemen as shown in table 1.5.

Table 1.5: Marketing problems faced by distributors/ retailers

Problem experienced	**Frequency**	**Percentage**
Lackof organized marketing body	13	43.3
Lack of reliability of market	8	26.7
interference by brokers/middlemen,	6	20.0
Others	3	9.9
Total	30	100

A cross tabulation table of the problems experienced by the retailers with their levels of trade was also conducted. The findings showed a slight difference but not significantly in the type of trade they are in (χ^2 = 9.937, P = 0.446). Those in company trade experience lack of an organized marketing body (52.6%) as their major problem; those in sole trade reported unreliable markets (37.5%); whereas those in partnership reported interference by brokers/middlemen (66.7%) as indicated in table 1.6.

Table 1.6: Marketing problems faced by retailers/distributor trading at various trading levels

	Level of Macadamia trade		
Problems in marketing	Sole traders	Partnership	**Company**
Lack of organized marketing body	37.5% (3)	0% (0)	**52.6% (10)**
Lack of reliability of market	37.5% (3)	33.3% (1)	**21.1% (4)**
Interference by brokers/middlemen	12.5% (1)	66.7% (2)	**15.8% (3)**
High cost of organization	0% (0)	0% (0)	**5.3% (1)**
High cost of transport	0% (0)	0% (0)	**5.35 (1)**
Storage	12.5% (1)	0% (0)	**0% (0)**
Total	100% (8)	100% (3)	**100% (19)**
Chi – value	9.937		
p-value	**0.446**		

For the middlemen, the major problem in marketing is unreliable market (32.1%), followed by lack of an organized marketing body (28.6%) and interference by brokers (28.6%) as indicated in table 1.7.

Table 1.7: Problems experienced by middlemen in marketing

Problem experienced	**Frequency**	**Percentage**
lack of organized marketing body	8	28.6
Lack of reliability of market	9	32.1
Interference by brokers/ middlemen,	8	28.6
Others	3	10.8
Total	28	100

A cross tabulation ofproblems experienced by middlemen in marketing products against their level of trade was also conducted. The findings showed that there was no significant association to the middlemen type of trade ($\chi^2 = 5.542$, df = 5, P = 0.353) as indicated in table 1.8.

Table 1.8: Problems noted in marketing by middlemen at various trade levels

	Level of Macadamia trade		
Problems in marketing	Sole traders	Partnership	**Company**
Lack of organized marketing body	29.2% (7)	25% (1)	-
Lack of reliability of market	37.5% (9)	0% (0)	-
Interference by brokers/middlemen	20.8% (5)	75% (3)	-
High cost of organization	4.2% (1)	0% (0)	-
High cost of transport	4.2% (1)	0% (0)	-
Storage	4.2% (1)	0% (0)	-
Total	100% (24)	100% (4)	-
Chi value	5.542		
P value	**0.353**		

III. Conclusions

From the study findings, it can be concluded that the five interlinked multifactor variable market activities and the five market chain players which were analysed, as a whole affected efficiency of macadamia marketing system in the central Kenya highlands. Using regression analysis it was found that management organational structure as variable contributed negative of-0.035 on efficiency of macadamia marketing system in Kenya, while the other four valuables contributed positively.

Results of the study show that various players involved in macadamia marketing system play a positive or negative role in its value chain. It was clear from the findings that farmers, middlemen, processors and distributors contribute directly in the value addition and to the efficiency of macadamia marketing system. For instance, when farmers harvest immature raw nuts, and fail to observe the hygiene in storing the nuts after harvesting, they lower the quality of the produce reducing value addition hence reducing the market efficiency of macadamia value chain. The consumer makes an independent judgement and gives verdict on the product to continue or stop selling and trading in macadamia which is a measure of market efficiency.

Institutional challenges have also impacted negatively on the efficiency of macadamia marketing system. Government institutions such as the Ministries in charge of Agriculture and commerce have over the years failed to sensitize and help develop the macadamia industry. For instance, the Ministries in charge of Agriculture and commerce over the years have not been able to provide the necessary support to farmers in order to develop the industry. The ministries should find a way of supporting macadamia farmers with incentives, research information, farm inputs and other extensive services to farmers in order to improve the efficiency of macadamia production

1.7. Policy Recommendations

On the basis of findings and conclusions of this study, the following recommendations are made to improve the efficiency of marketing of macadamia value chain.

1. 7.1. Formation of efficient and operational farmer's organizations

Farmers to be organised to form companies which would own factories and have professional managers run them as their agents/employees which would reduce the chain to tow levels(farmer/factory and broker) from current five (farmer ,middleman ,processor ,retailer and consumer levels. Brokers would be appointed as agents of famers to sell dried nuts to international buyers and also buy as appointed agents for global buyers in auction room .The premises of having auction room is to increase the value chain by improving efficiency. The system of auction is currently applicable in tea industry and also in coffee at Mombasa and Nairobi respectively.

1.7.2: Formation of auction board

A marketing board to be formed and organised by the GOK with a time framework of three years and thereafter to be managed by macadamia trader's representatives. There is need to establish a body to oversee and to be directly charged with the managing and marketing of macadamia products both locally and internationally for the benefit of small scale farmers. A good example where the system is operational at Mombasa tea auction managed by East African Tea Trade (EATTA, 2001).Kenya Tea Development Authority is also another good example where small scale farmers are assisted by Government of Kenya to build and manage tea factories, this system is highly recommended to be introduced adopted, and implemented in the macadamia industry.

1.7.3. Development policy

The government should prioritize organisation and construction of market centres for macadamia in areas where they are produced Establishing an independent body that is directly charged with maintaining the quality standards and specifications of macadamia products for both local and export markets. Setting up of Macadamia Board of Kenya to be managed independently by nut traders, is recommended just like in case of the tea industry where we have Tea board of Kenya. We have also milk board and coffee board which are all established and registered by GoK to regulate relevant industries.

1.8. Suggestions for further studies

This study focused on the multi-factors that influence and affect the efficiency of agrifood marketing system focusing on macadamia nuts value chain in the five selected counties from central Kenya highlands. It is therefore suggested that the following areas be considered by researchers and scholars for further investigation:

(i) A comparative study on the efficiency of agrifood marketing system in Kenya and other agricultural food producing countries such as South Africa, China, USA and Australia may be conducted to establish points of confluence and divergence, and in the process, suggest ways of improving macadamia marketing structures in Kenya. It is proper to find why is Kenyan's average (sound kernel recovery) so low which averages at 20. 67% in year 2012 compared to SA and Australia 33% and 30% respectfully .A future research should address problem.

(ii) A comparative study on the efficiency of macadamia marketing systems and other agrifood products in Kenya needs to be conducted to identify areas where improvements are required.

References

[1]. Dolan, C., & Humphrey, J. (2000). Governance and Trade in Fresh Vegetables: The impact of UK supermarkets on African Horticulture industry, Journal of Development Studies, Vol 37, No 2, pp.18-22.

[2]. Gereffi, G. (1995). Global Production Systems and Third World development. In B. Stallings (Ed.), Global Change, Regional Response: the New International Context of Development. Cambridge. Cambridge University Press.

[3]. Gereffi, G. (1995). Global Production Systems and Third World development. In B. Stallings (Ed.), Global Change, Regional Response: the New International Context of Development. Cambridge. Cambridge University Press.

[4]. Government of Kenya (1999).Vision 2030, Department of Development Co-operation.National Poverty Eradication Plans 1999-2015. Nairobi: Government Press.

[5]. Government of Kenya (2007).Ministry of Agriculture (2007).The Kenya Agricultural sector data compendium.Vol 3. Kenya Institute of Public Policy, Research and Analysis (KIPPRA) pp.1-12.

[6]. Government of Kenya (2011).Ministry of Agriculture, National Horticulture Task Force.Nairobi, Kenya: Government Printers

[7]. Government of Kenya (2015).Economic Review of Agriculture (ERA) 2015.Central Planning and Project monitoring Unit, Livestock and Fisheries.9th Edition.

[8]. Harris, M. (2004). Involvement of the Harries Family in the Development of Macadamia in Kenya 1946-1974). Proceedings of the Macadamia Stakeholders' Meeting, 15th June. Nairobi, Kenya, pp. 3-6.

[9]. Helleiner, G. (2000). Markets, Politics and Globalization: Can the Global Economy be Civilized', Global Governance, Vol 7 No 3: pp. 243- 263.

[10]. Helleiner, G. (2000). Markets, Politics and Globalization: Can the Global Economy be Civilized', Global Governance, Vol 7 No 3: pp. 243- 263.

[11]. Horticultural Crops Development Authority (2013).National Horticulture Validated Report, 2013. HCDA,USAID, Nairobi, Kenya.

[12]. Messner, D. (2002).The concept of the "World Economic Triangle". Governance, patterns and options for the Region, IDS Working paper 173, Brighton: Institute of Development Studies.

[13]. Messner, D. (2002).The concept of the "World Economic Triangle". Governance, patterns and options for the Region, IDS Working paper 173, Brighton: Institute of Development Studies.

[14]. Nadvi, K. &Waltzing, F. (2002).Making sense of Global Standards, INEF- Report, No 58, Duisburg, Institute of Development studies.

[15]. Nadvi, K.& Schmitz, H. (eds.), (1999), Industrial Clusters in Developing Countries:Special Issue of World Development, Vol 27, No 9.

[16]. Perloff, R. (1993). The Dynamics of Persuasion. New Jersey: Lawrence Elburn, Associates Publishers.

[17]. Porter, M. and Caves R. (1977). From entry barriers to mobility barriers: Conjectural Decisions and contrived deterrence to new competition. The Quarterly Journal of Economics, Vol. 91, No. 2.(May, 1977), pp. 241-262.

[18]. Porter, M., Millar, E. (1985). How Information Gives You Competitive Advantage. Harvard Business Review. July-August, pp.149-160.

[19]. Power, A. (2004).Pricing Transparency Top of List.The Sunday post.Downloaded from The Sunday Business Post website on July 14th 2012.Retrieved from April 15th 2012 from http://archives.tcm.ie/businesspost /2004/01/18/story 308737243.asp.

[20]. Shaffer, J. (1970). On the concept of sub-sector studies. Paper presented at theTechnical Seminar on Sub-sector Modeling of Food and AgriculturalaIndustries, Department of Agricultural Economics, University of Florida, March 30. Department of Agricultural Economics, Michigan State University, East Lansing, Ml.

[21]. Shuttleworth, M. (2008).Qualitative Research Design.Retrieved fromExperimental Resources.

[22]. Sproll, N. (1998). Handbook for Research Methods: A guide for Practitioners and Students in the Social Sciences. New Jersey: Scarecrow Press Inc.

[23]. Waithaka, J. (2001). Sustainable commercial tree crop farming: A case for Macadamia nuts. Paper presented at the USAID African Sustainable Tree Crops Programme Conference 18th April 2001,pp 1-7.Un published.

[24]. Wambugu, K. (2005). Analysis of The Nature and Extent of Integrationof Kenya's Maize Market in the Post Liberalization Era. A PhD thesis, submitted to the school of humanities and social sciences, Kenya University ,September, 2005. Kenya.