

*Full length Research*

# Consumer Preference Analysis on Local and Imported Citrus Fruit Juice in Kano Metropolis, Kano State Nigeria

<sup>1,2</sup>Mukhtar, B.G., <sup>4</sup>Gambo, B.A. and <sup>2,3</sup>Mukhtar U.

<sup>1</sup>Department of Agricultural Economics and Extension, Faculty of Agriculture, Federal University Dutse, P.M.B. 7156, off- Ibrahim Aliyu Bye-Pass, Jigawa State-Nigeria

<sup>2</sup>Department of Agricultural Technology, Faculty of Agriculture, Universiti Putra Malaysia, 43400 Serdang, Selangor-Malaysia.

<sup>3</sup>Department of Agribusiness & Information Systems, Faculty of Agriculture, Universiti Putra Malaysia, 43400 Serdang, Selangor-Malaysia.

<sup>4</sup>Department of Crop Production, University of Maiduguri. Borno State, Faculty of Agriculture. P.M.B. 1069, Bama road, Nigeria.

Corresponding Author's E-mail: bashgumel@yahoo.com

Accepted 23<sup>rd</sup> November, 2015

Low fruits and vegetables (F&V) intake has been recognized as key risk factors for non-communicable diseases in sub-Saharan Africa, where the recommended intake of 146/kg/ capita per annum is not met. Recently in Nigeria there is an increase rate in consumption of F&V. The country is rated as the 9<sup>th</sup> largest producer yet there is a fierce competition between locally produced Fruit juices and the imports in the country. This is fuelled by identified great penchant for consuming imports of an average Nigeria. The study attempts to investigate the consumer preference of the processed fruit juice in the six local governments in Kano Metropolis Nigeria. A total of 18 public places were visited and 180 consumers were interviewed. The 18 public places include Learning institutions, shopping Complexes and Public offices. Result of the study reveals respondents with a mean age of 33 years (61%), high level of literacy (68.7%), low household membership (1-5 members), an average earning 1,000-100,000.00 Naira (80.9%) have high rate of consumption of citrus fruit juice. The consumers exhibited a strong affinity to locally produced citrus juice (69.2%) with a frequency of consumption of (60.5%). The imported citrus juice was preferred by (30.8%) of the respondents with a consumption frequency of (39.5%). It is discovered that preference was due to affordability and access, hence it is recommended that the quality of the juice be improved to compete favorably with imports and regulatory bodies like NAFDAC and SON be more proactive in ensuring quality of the local fruit juice.

**Keywords:** Consumer, preferences, Citrus Fruit, Juice, imported, Local.

## INTRODUCTION

The World Health Organization (WHO) and Food and Agriculture Organization of the United Nations (FAO) recognized low fruits and vegetable intake as a key risk factor for several non-communicable diseases, therefore recommend a minimum daily dietary intake of 146 kg Fruits and Vegetables (Miner and Kehane, 2008). Fruit consumption was determined to be low in sub-Saharan Africa (27–114 kg/capita per year), according to a multi-country comparison research of Patterns (Ruel in 2004).

This is far below the WHO/FAO recommendation of 146 kg/capita per year.

Nigeria is identified as the 9<sup>th</sup> largest producer of citrus by FAO (2006) with 1.2 million MT per year, yet its export was only a meagre nine (9) metric tons of fresh/dried horticultural produce/products in 2002, 3.2 MT in 2003, fetching one Million and five Million US Dollars, respectively (Sanago, 2007). It is reported that between the year 2002-2004 Nigeria produced a total of

3% of the entire world citrus production, pointing to a capacity to satisfy its market and beyond if given due commitment. However, the infancy stage of fruit juice and lack of processing capacity compel the importation of concentrate to the country (Oluwalana, 2006). Although, it can be observed that the last few decades witness the sprouting of many local industries across the country in the past decade.

Fruits are consumed in many forms either as fresh fruit, in processed forms of jam, jellies (used to garnish snacks) and juices (as drinks). The processed jam, jellies and juices in Nigeria are being faced with very fierce competition which is harbored by trade liberalization. Developing countries that were hitherto limited in choices of goods and services are now flooded with an array of imported and local products, thereby giving the consumer vast options among varieties (Udin *et al.*, 2008).

In Nigeria foreign products consumption is viewed as a status pointer, hence the natives seems to have developed a great penchant for foreign products. This is evident in the quantity of import both of materials and food items into the country. For example, according to Census Bureau of the United States, Nigeria bought \$2.2 billion worth of goods from the US in 2006 alone, and the top import was wheat worth \$458.8 million. In 2008 also, goods worth \$4 billion were purchased from the US by Nigerians (Bureau of African Affairs, 2009). The Nigerian senate president David Mark was quoted by Akinsuyi (2012) as saying in Nigeria spends 24.5 trillion Naira on food imports annually (Ahungwa *et al.*, 2014). In Nigeria there is an evident rise in fruit juice consumption as reported that consumption rose from 200 million liters in 2002 to about 320 million liters in 2007 (Olife, *et al.*, 2015). This would increase demand of the juice and a need therefore is evident to determine how well Nigeria product compete with the imports, hence consumer preference study, to describe the nature and magnitude.

Consumer preference study is the study of individuals, groups or organizations and the processes they follow to select, secure, use and dispose the product or services, experience or ideas to satisfy needs and the impacts these processes have on the consumer and the society (Islam *et al.*, 2009). Also viewed by Arens (1996) as the mental process and the physical activities of people who purchase and use goods and services to satisfy particular needs and wants. Studies have shown that the consumers are the beginning of a value chain of agricultural products (Kinsey, 2001), their perceptions, taste and attitudes determines the success of food production (FAO, 2002), and their acceptance of local products develop domestic manufacturing sector of a free economy like Nigeria (Okechukwu, *et al.*, 1999). Consumer preferences have been known to directly affect producer's decisions as goods with high demands are more likely to be produced (Adaighofua, 2010). Consumer production-marketing chain i.e. value chain

studies is thus recommended to respond to consumers changing taste that can respond to their changing tastes (FAO, 2005). Also the greater uptake of the imports has posed a lot of challenges to the local producers and manufacturers alike. A close observation point to the possibility of the fruit juice market being shared between import and local by at least 50% or dominated by imported fruit juices, this is after the government has banned the importation of juices into Nigeria for over a decade (Olife *et al.*, 2015) this therefore necessitate the need to measure the consumer's preference toward local and imported food products (Natermayer *et al.*, 1991), this will describe the current situation regarding compliance of the ban on import and how well the populace have accepted or otherwise the locally produced citrus fruit juice (figure 1).

Findings will go a long way in directing Nigeria's governments on policy and campaign strategy for consuming local products which is aimed at helping the economy and boost marketability of local products and socio-economic well-being of local producers. It therefore is pertinent to determine the consumer preference. This exploratory study therefore attempted to look at views and preference of consumers towards imported and local fruit juices by;

- i. Describing the socio economic characteristics of the consumers in the study area;
- ii. Describing the consumer's preference with regard to local or imported citrus juice products.

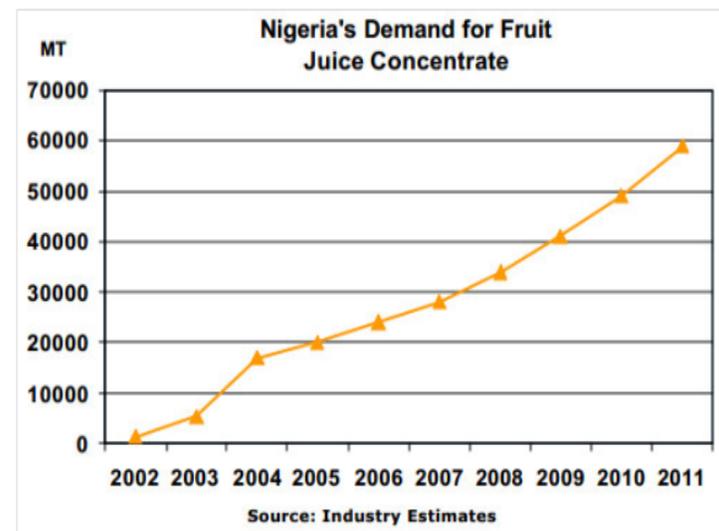


Figure 1: Trend of fruit juice concentrate demand 2002-2011

### Theoretical framework

The theory of consumer behavior is the fundamental theory on which this research will be conducted. The basic assumption on which the theory of consumer behavior and demand is built is that a consumer

attempts to allocate his limited income among available goods and services so as to maximize his satisfaction (Fergusson et al, 1975). Thus, according to the theory, the amount of a commodity that a consumer would purchase therefore depends on the prices of the commodity and the monetary income of the consumer. Literature also asserts that commodities with negative income elasticity are said to be inferior. Those with income elasticity between zero and one are said to be normal and a commodity with income elasticity greater than one is said to be superior. Consumption pattern varies with location and is usually a resultant effect of the socio-economic and cultural factors and the educational level of the consumers, which to a great extent determine the pattern of consumption. To whatever degree these factors affect his choice the dominant determining factors of consumer's choice and preference remain income, price and preference.

## METHODOLOGY

### The study area

Kano state has 44 Local Government Areas and the population is estimated at about 9,383,682 in the 2006 census and over 2,828,861 of the total population reside in the study area (Metropolis) (NPC, 2006). Increase in population is put at 7 percent per annum. (KNSG, 2006). The state lies in the Northern part of Nigeria between latitudes  $11^{\circ} 45' N$  and  $12^{\circ} 05' N$  and longitudes  $8^{\circ} 30' E$  and  $9^{\circ} 05' E$ . The southern part of the state lies in the Northern Guinea Savannah Agro-ecological zone, while the remaining North lies in the Sudan Savannah. The prominent tribes are the Hausa and Fulani, with other ethnic groups like Nupe, Kanuri, Baburawa, Idoma, Igala, Yoruba and Igbo, other nationals from different part of the world like Chinese, Lebanese, Turkish and Nigerian etc are also found in Kano. The major economic activities are commerce, agriculture, industry and education.

Kano metropolis consists of Kano Municipal, Nassarawa, Tarauni, Fagge, Dala and Gwale, Kano State metropolis hosts a greater percentage of the state's industries, government establishments, banks, consulates/embassies, high learning institutions (universities, polytechnics and colleges), multinational organizations (NGOs, Telecommunication companies etc) and a lot of business and business related outfits.

The metropolis is serviced by a lot of service providing places for the populace, like shopping complexes, markets, leisure joints, internet cafes, hotels, parks etc within which citrus products are greatly utilized. In recent times, Kano Metropolis has witnessed a serious deluge of fruit juice stalls on road sides and within quarters, perhaps in response to the high demand of the juices.

### Sampling procedure and sample size

The sampling method was purposive in the choice of the

metropolis as the study area. This is because of the belief that Kano metropolis is a hub of economic activities with a stirring commerce as well as having location advantage as a terminus of trade for most markets within the Northern part of Nigeria and other neighboring Africa nations. The study covered the six Local Government Areas (LGA's) of the metropolis. The six metropolis LGAs were covered. A total of 18 public places were visited and 180 consumers were interviewed. The 18 public places include Learning institutions, shopping Complexes and Public offices. This is because in public places consumers can be met while purchasing or consuming and can be randomly met, identified, picked and or dropped upon confirmation or rejection while purchasing or consuming. There is also the advantage of a fair representation of all economic classes of people in these public places, being a place where everyone goes for one reason or another. Within each place ten consumers each were interviewed using a structured questionnaire. Selection of the respondents was random while identification was based on consumer's confirmation of utilizing citrus fruit juice. The table (4) shows the places selected for the interview.

### Data Collection

The data used in the study were generated from primary and secondary sources. The primary data were obtained through a well-structured questionnaire administered to the consumers by the researcher with the help of well-trained enumerators. Each finding was supported by a key informant from the locations; Salesmen in the sales outlets (shops) within the premises of the identified places were interviewed to identify the most preferred citrus juice being purchased mostly by consumers, in which local was indicated to be preferred. A focus group discussion was held in Singer market because of its position as the main distributing point of most consumable products in the study area. The data gathered include socio-economic characteristics of the consumers, their preference on either local or foreign citrus juice, frequency of consumption within some years and hindrances to the consumption of either of the juices. Out of the 180 questionnaire administered, only 172 were correctly filled and analyzed by the researcher.

### Analytical Techniques

Descriptive statistics was used to achieve the objective of the paper. Simple percentages and frequencies were used to describe the consumer preferences in the study area.

### Descriptive Statistics

These are the scientific methods for summarizing, presenting and analyzing data, as well as drawing valid conclusions and making reasonable decisions on the

Basis of such analysis (Adamu and Tinuke, 1997).

## RESULT AND DISCUSSION

### Socio-economic Characteristics of the respondents

Socio-economic Variables are important human attributes that enhance the efficiency of farmers, consumers and marketers of agricultural produce in their business (Shu'aib, 2009; Adayigbafua, 2010).

**Age:** the socio-economic characteristics of the respondents are presented on table 2. The result revealed that the group that has the highest patronage of citrus Juice was between the ages of 16-55, representing 61% of the total population, and corroborating the finding of the focus group discussion with the wholesalers in Singer market in Fagge Local Government. The Minimum age of the respondents was 16 and Maximum was found to be 63 years. A mean age of 33 years was determined. This indicates that most of consumers were within their youthful ages. Only 2% fall in the old age of 56-65. Age is a period of human life, measured by years from birth, usually marked by a certain stage or degree of mental or physical development and involving legal responsibility and capacity. The age structure of a population affects a nation's key socio-economic issues and can also be used to help predict potential political issues. Age and dynamism considerably contribute to many of the qualities associated with young people such as their active involvement in community development, higher social propensity, faster reaction time, and proneness to innovation (Adesope, 2007). Young people are found to be patronizing most of the citrus juice more, findings from the key informants who are the salesmen revealed that the young people mostly of 18-35 like to consume juices as their meal together with some snacks and that they relish the juices in their leisure times during picnics and on dates with their girlfriends and spouses.

**Gender;** table 1 indicated that Male respondents were mainly the purchasers of the citrus Juice (65.1%). This may not be un-connected to the seclusion culture of the study area, thereby restricting the movement of women. This result indicates that even though the women (34.9%) were involved in the purchase of consumables, the greater purchase is done by male in the area. Hence purchasing in the study area is a male dominated activity. This corroborates the finding of Adamu, (2010) which states that socio-cultural features of the study area restrict women from outdoor activities. Also the key informant said emphatically that most of the purchases are made by male friends, boyfriends and husbands unless if there is none. Gender represents the sex of the respondents, whether a respondent is male or female. The area by nature of the culture and religious restriction

found the purchase to be gender biased as it is mostly done by the Male; however consumption is across gender with no clear margin identified.

**Marital Status;** The result indicates that 61.6% of the respondents were married, 31.4% were single which are mostly young and schooling, 2.3% were divorced and 4.1% and 0.6% were widows and widowers respectively. UN (1973) found that, different ethno-religious groups continue to attach prestige to marriage as an indicator of social responsibility, trust and achievement. This is typical of a northern community set up within which people marry early and this act shows responsibility and respect for the religion. Marriage makes an individual more responsible and takes relatively technical decisions more accurately (Mustapha, 2010). The study area reveres the institution of marriage so much that the married people are viewed as more responsible and more gentlemanly.

**Level of Education;** the analysis of level of education in table 1 below indicates that more than half of the respondents (69.8%) were literate at tertiary level. This is because the research focused more on learned environments e.g schools, offices within which most people, if not all, were educated at one level or another. This shows that, the awareness they have on the benefits of fruits and juices have influenced them positively. This is the indicator of the ability of the individual to read or write both in a formal and the informal way. An individual's level of education should usually enhance his social and economic decisions favorably, as he has the capacity to judge and make decision objectively.

**Occupation;** The study shows on areas that civil servants and white collar job employees were the highest group that purchased Citrus Juices (45.3%), and followed by business people (23.8%). This is because majority within the groups are literate and employed in the civil service and businesses. Therefore they are aware of the benefits of fruits juices and have the wherewithal to purchase citrus juice.

**Household size;** Household size refers to the members of a family living together and feeding from one pot, here the members may not necessarily be blood relatives. Table 1 indicates that majority of the respondents (60.5%) had household size of 1-5 members, while 27.9% had a size of 6-10 members, 5.8% a household size of 11-15 members, 2.3% had 16-20 members and 0.6% have household size of 21-25%. A total of 2.9% of the respondents did not indicate their household size. The minimum household size was found to be one meaning the respondent either a bachelor or widowed and having no dependents in his household.

The result indicates that the highest (60.5%) purchasers of citrus juice fell between the household that had 1-5 members, and followed by 6-10 members (27.9%). This might be related to affordability due to little financial burden as compared to those with large household size.

**Table 1:** List of countries producing citrus in the world

<b>Fruit Type</b>	<b>Producing Country</b>
<b>Oranges</b>	Brazil, United States, Mexico, India, Spain, China, Iran, Italy, Egypt, Indonesia.
<b>Small citrus</b>	Nigeria, China, Syria, Guinea, Japan, Saudi Arabia, India, Sierra Leone, Angola, Tunisia.
<b>Lemons and limes</b>	Mexico, India, Iran, Spain, Argentina, Brazil, United States, China, Italy, Turkey
<b>Grapefruit</b>	United States, China, South Africa, Mexico, Israel, Cuba, Argentina, India, Turkey, Tunisia.

**Source:** UNCTAD, 2005

**Table 2:** Socio-economic Characteristics of the consumers of citrus fruit juice in Kano metropolis (n=172)

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Age (years)</b>		
16-35	104	61
36-55	64	37
56-65	4	2
Mean Age= 33years		
Minimum=16years		
Maximum=63years		
<b>Gender</b>		
Male	112	65.1
Female	60	34.9
<b>Marital status</b>		
Single	54	31.4
Married	106	61.6
Divorced	4	2.3
Widow	7	4.1
Widower	1	0.6
<b>Level of Education</b>		
Quran	4	20.9
Primary	5	23.8
Secondary	43	25.0
Tertiary	120	69.8
<b>Occupation</b>		
Student	36	20.9
Business	41	23.8
Civil Servant	78	45.3
Housewives	17	9.9
<b>Household size</b>		
1-10	152	88.4
11-20	14	8.1
21-30	1	0.6
Minimum=1		
Maximum=22		
Mean=5.50		
<b>Income (N)</b>		
1-100,000	139	80.9
101,000-200, 000	21	12.2
201,000-300, 000	11	2.9
Mean income=N61, 166.00		
Minimum= N5, 000.00		
Maximum= N300000.00		

**Source:** Field Survey

**Table 3:** Percentage distribution of consumers based on preference and regular consumption of local and imported citrus juice in Kano metropolis

Count	Local %	Imported%
Regular consumption	60.5	39.5
Preference	69.2	30.8

Source: Field Survey

**Table 4:** List of places selected for the consumer interview

S/N	L.G.A	Shopping Complex	Institutions	Offices
1	Dala	Nasidi Supermarket Gwammaja	Government Girls Secondary School Dala Aminu Kano way	Dala orthopedic hospital Aminu Kano Way
2	Fagge	Kano City Shopping Centre Fagge, IBB Way	College of Science, arts and remedial studies. Airport Road, Kano.	Fagge local government secretariat
3	Gwale	Shopwell on Gwarzo Road	Federal College of Education, Kano.	Starcomms (Gadon Kaya branch)
4	Kano Municipal	Zango Stores Kafar Mata	School of hygiene Kano BUK Road, Kano	Primary school management board
5	Nassarawa	Well care Murtala Mohammed way	School of Heath Technology, club road.	Kano state pilgrims board Bompai Road
6	Tarauni	Country Mall Abdullahi Guda way farm Centre Kano	HIIT Computers Zaria Road, Kano	Immigration Services, Passport office. Dahiru Mustapha Road, Farm Centre

Source : Author

**Income Level:** The result showed that the group that had the highest purchase earned between 1,000-100,000.00 Naira (80.9%). This corroborates the finding of the occupation of the respondents as it showed that the civil servant earn an average of 50,000.00 Naira and were the major group that patronized citrus juice in the study area.

### Consumer's preference to local and imported citrus juice

Table 3 shows the consumer preference for imported and local citrus juice. It showed that 60.5% of the respondents consumed local citrus juice regularly, while 39.5% consumed imported citrus juice on regular basis. However, about three quarter of the respondents (69.2%) preferred consuming local citrus juice. This is due to preference in factors like taste, aroma and even fear for some imported citrus juice, as some of the respondents expressed that some harmful and toxic substances might be present in the juices, especially those labeled with "for export only". This result is contrary to the findings of Okechukwu *et al*, (1999) that consumers in the third world countries. Nigeria inclusive, give more importance to country of origin (imported from

America, Europe and Asia) than price and other products attribute.

The consumers exhibited a strong affinity to the locally produced citrus juice in the study area. More than half of the respondents (69.2%) preferred the local citrus juice. This may be due to affordability and accessibility of the local juice. This is indicated by the frequency with which they consumed the local citrus juice (60.5%). The imported citrus juice was more preferred by 30.8% of the respondents with a consumption frequency of 39.5%. This means having the affordability and availability of the product 30.8% would prefer the imported and 39.5% would consume it regularly, and that majority of the respondents (69.2%) would choose locally produced citrus juice. This corroborates the focus group discussion (FGD) held with the wholesalers and key informants. One wholesaler had the opinion that even though the local citrus juiced are tasty when compared to the imported, they still remain inferior in quality and richness of the juice. He opined that once a consumer has the affordability he would rather prefer the imported ones, pointing out that the preference is mainly due to affordability of the local citrus juice.

## CONCLUSION

The study analyzed consumer's preference between local and imported Citrus fruit juice in Kano metropolis of Kano state, Nigeria. It described the socio-economic characteristics of the consumers, consumer preference between the two type of citrus juice (local and imported). In Conclusion based on the findings of this research it was found out that the socio-economic factors that influence consumption are age, occupation and marital status. This is due to the fact that some age group (young people) prefers juice over another group (old people). The age groups found to have the highest patronage level were between the ages of 26-35, at parties, picnics and even at lunch and meal times. Locally produced citrus juice was found to be people's favorite in terms of preference and in consumption. The local juice is affordable, available and gives utility to consumers at convenience.

It is therefore evident as showed by the result of this work that the consumers contrary to popular opinion prefer the locally produced citrus juice.

## RECOMMENDATIONS

Based on the findings of the study, the following suggestions were made:

Even though people prefer locally produced ones, the preference is mostly due to affordability, as they are cheaper. There should be a campaign to enlighten people on the relevance of consuming locally produced juices on economic development of the Nation. The quality of the citrus juice should be further improved to favor their competition with the imported ones. Also the regulatory bodies like NAFDAC and SON should pay more attention and certify to consumers the safety of both local and imported juices.

### Suggestion for further study

There should be a value chain study on citrus to study and identify the problems of citrus production and marketing in Nigeria so as to help the sector.

## REFERENCE

- Adaighofua AA. (2010) Econometric Analysis of Banana and Sweet Orange Fruits Characteristics Affecting Consumer Preference in Kano Metropolis, unpublished M.sc thesis of Department of Agricultural Economics and Extension, Bayero University, Kano Nigeria Pp 6
- Adamu SO and Tinuke LJ (1997) *Statistics for Beginners* SAAL Ibadan, Nigeria Pp15.
- Adamu N (2010) *Marketing of Fresh and Dried tomato in Kano Metropolis*, Unpublished M.sc thesis of Department of Agricultural Economics and Extension, Bayero University, Kano Nigeria Pp 28
- Adesope OM (2007). Agricultural youth organizations: introductory concepts. Second edition, *University of Port Harcourt Press*, Port Harcourt, Nigeria, pp.1-3
- Ahungwa GT, Haruna U, Muktar BG (2014) Food security challenges in Nigeria: a paradox of rising domestic food production and food import International Letters of Natural Sciences 13(1) (2014) 38-46 ISSN 2300-9675 Available online at [www.ilns.pl](http://www.ilns.pl)
- Akinsuyi Y (2012) Nigeria Spends over 24.5 tr on Food Importation Annually . Thisday Newspaper online accessed at <http://www.thisdaylive.com/articles/nigeria-spends-over-n24-5tr-on-food-importation-annually/115011/18><sup>th</sup> November, 2014
- Arens WF (1996) Contemporary Advertising USA Times Mirror Higher Education Group Inc. Company
- Bureau of African affairs (2009); Bureau of public affairs; electronic information & publication office of the undersecretary for public & publication @ [www.state.gov/p/af](http://www.state.gov/p/af)
- Food and Agriculture Organization. (2002). Production Yearbook. FAO,
- Food and Agricultural Organization (2004). Food loss prevention in perishable crops. Corporate Document Repository p220-231.
- FAO (2005): Food and Agriculture Organization of the United Nations FAOSTAT Database 2005 [www.fao.org](http://www.fao.org)
- Fegusson CE and Gould JP (1975); *Micro Economic Theory* Edition Richard D.Irwin,Inc.,Georgetown Ontario,PP29-43
- Islam N, Khan PR and Rehaman KU (2009); Consumer preference for imported products over domestically produced. Available @ <http://www.scribd.com/doc>
- Kano State Government KNSG (2006) National Population Commission Census Report 2006 Pp 30-35
- Kinsey JD (2001) "The New Food Economy: Consumers, Farms, Pharms, and Science," *American Journal of Agricultural Economics*, Vol. 83, (5) pp. 1113-1130
- Mustapha AL (2010) *Economic Analysis of Groundnut Oil extraction Among Women in Kano state*, Unpublished M.sc thesis of Department of Agricultural Economics and Extension, Bayero University, Kano Nigeria Pp 21
- Miner JR and Kahane R(2008) Horticulture for health: the knowledge management platforms.. The global horticulture initiative, Arusha Tanzania
- Natamayer R, Durvasula S and Linchtenstein D (1991) A cross assessment of the reliability and validity of the CETSCALE Journal of marketing Research vol 28 pp 320-327
- Osagie C (2013) The Struggle to Stem Indiscriminate Food Importation, Thisday Newspaper, 31 Dec. 2013. [www.thisdaylive.com/news](http://www.thisdaylive.com/news) accessed, 6/3/2014.
- Olife IC, Ibeagha OA and Onwualu AP (2015) Citrus Fruits Value Chain Development in Nigeria Journal of

- Agriculture, biology and health Vol.5, No.4, 2015  
[www.iiste.org](http://www.iiste.org)
- Oluwalana IB (2006): Fruit Cultivation and Processing Improvement In Nigeria. *Journal of Agriculture* 1 (4): 307  
[www.journalofnaturalproducts.com/Volume4/5\\_Res\\_aper-4.pdf](http://www.journalofnaturalproducts.com/Volume4/5_Res_aper-4.pdf)
- Okechukwu RC and Onyemah V (1999); Nigerian consumer attitudes toward foreign and domestic products *Journal of international Business Studies*, 30, 611-622
- Ruel M (2004) Patterns and determinants of fruit and vegetable demand in developing countries: a multi-country comparison International Food Policy Research Institute, Washington DC, United States of America in a Report of a Joint FAO/WHO Workshop, 1-3 September 2004, Kobe, Japan@  
[www.who.int/dietphysicalactivity/fruit/en](http://www.who.int/dietphysicalactivity/fruit/en)
- Shu'aib AU (2009) *Economic Analysis of Bee Keeping in Selected Local Government Areas of Kano State Nigeria*. An unpublished M.sc Dissertation Department of Agricultural Economics and Extension, Usman Danfodio University, Sokoto Pp57
- Sanago D (2007). Africa's Food Status: Implications and Challenges in a Changing World. pp. 31 – 39. In: Facing up t to food crisis in sub-Saharan Africa: Challenges, gaps and role of agriculture policies, Proceedings of the 12th Annual Symposium of the International association of Research Scholars and Fellows. International Institute of Tropical Agriculture, Ibadan, Nigeria. Pp 91.
- UNCTAD (2005): Commercial Market information in the commodity area
- Udin N, Parvin S, Rehman LM (2008) regular basis Development of a regression model. *International Journal of business management vol. 3 No*
- United Nations (1973) Revisions Global Estimates and Projections of Population by Age and Sex