

# **Spatial Product Differentiation in Specialized Markets for Agricultural Food Products of Kano Metropolis, Nigeria**

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## **Abstract**

The study examined product differentiation in markets for specialized agricultural food products in Kano Metropolis, Nigeria. Focus Group Discussion was the main instrument that was used to collect the data. The data was qualitatively analyzed through careful collation and arrangement. ARCGIS software was used to map out places of supply of commodities. The products in the markets were differentiated based on variety, periods and places of supply. In Dawanau market, all the products were available throughout the year, but each had periods when supply was high or low. In Yanlemo market, orange, banana, pineapple, water melon, coconut and pawpaw were available throughout the year while mango, *agwalumo*, cashew and *oro* were seasonal. In Yankaba market, all the products were found throughout the year, but there was variation between periods of high and low supply. In all the markets, products were supplied from within Kano State, other states in Nigeria and other countries. Lastly, the study recommended for future research on firm rivalry in terms of location choices and consumer preferences, impact of product differentiation on price and development of transportation infrastructure.

## **Keywords**

Product Differentiation, Specialized Markets, Kano Metropolis, Supply

## **1. Introduction**

Nigeria is known to be the most populous country in West Africa which, in fact, constitutes about half of the region's population. It is expected that it will be among the five most populated countries in the world by 2025 [1]. In particular, the expansion of the urban population has raised the demand for food [2]; [3]). With over 12 million people, Kano State has the highest population in Nigeria out which Kano Metropolis constitutes approximately 3.6 million people or 30% of the state's population, consisting of different ethnic groups, Nigerians and foreigners [1]; [4]. The expansion of the urban population in Kano has necessitated intensification of marketing of agricultural products [5].

In West Africa, trade in agricultural products has been in existence for a long time, particularly between the coastal areas and the inland savanna region based on differences in

production arising from dissimilar ecological conditions. In Nigeria, root and tree crops (yam, processed cassava or *gari*, banana, orange, etc) are moved to markets in the north while grains, vegetables and livestock are taken to southern markets from the north [6]. Kano Metropolis, as the third largest commercial centre in the country, is part and parcel of this regional exchange. In fact, marketing is the second largest economic sector of the Metropolis [1].

In Kano and, indeed, the whole of Africa food marketing systems are shaped by a wide range of highly complex formal and informal institutions. However, little attention has been given to marketing issues for urban and peri-urban producers. "There is a particular need for knowledge about how food marketing systems operate in order to assist and support the growing number of urban and peri-urban food producers and producer-marketers now in existence" [7].

One area that should attract investigation is product differentiation. The degree of product differentiation is

important because it determines whether buyers have specific preferences among the competing products of the various sellers established in an industry [8]. Also, it ensures that the products' value or uniqueness is captured and maintained throughout the supply chain [9]. Indeed, according to [10], product differentiation might perhaps be the most enigmatic of all the factors thought to influence firm conduct.

The aim of this paper is to examine product differentiation in markets for specialized agricultural food products in Kano Metropolis. The achievement of this aim is through the following objectives:

- (i) To identify variety of products in the markets.
- (ii) To establish the periods of supply of the products.
- (iii) To map out and describe the sources of supply of the products.

## 2. Conceptual and Theoretical Background

### 2.1. Concept of Product Differentiation

Product differentiation can be defined in a loose sense as close relation in consumption and/or in production among any set of commodities. It happens in a situation in which related goods are not viewed as easily substitutable by consumers, and in that situation firms do act as localized monopolies. Product differentiation is implicitly aimed at building up switching costs with a view to discouraging consumers from making substitute purchases [10]; [11]. While trying to explain the meaning of the concept, [9] differentiated three types of product differentiation systems:

i) Identify preserved production and marketing: This involves grading system which has premiums that rise as one move from low to high grades. The defining feature of this system is the relationship of premiums to differing grades for private market incentives.

ii) Segregation: The goal of segregation system is to ensure that potentially hazardous crops are prevented from entering supply chains so as not to contaminate products meant for human consumption; so not targeted at capturing premiums.

iii) Traceability: This system allows for retailers and the supply chain to identify the source of contamination so as to develop procedures to remedy the situation. Thus the major target focus of traceability system is to increase food safety.

### 2.2. Spatial and Vertical Product Differentiation

Product differentiation is basically two-fold: There is horizontal (or spatial) differentiation in which people tend to differ according to their rankings of a group of commodities, even if their prices are identical. In markets with spatial differentiation products differ according to variety in flavor, color, fragrance, style, motif or brand identity. Buyers in these markets do not express homogeneous tastes and preferences over a particular group of products, even if all

products have identical prices, and consumers do not view any product as better or worse. The second type is vertical (non-spatial) differentiation in which products differ in quality, which also attracts equal perception by all people so that they tend to buy the one with highest quality even if all products have the same price. Examples are markets for automobiles and medical services [10].

### 2.3. Theoretical Basis of Spatial Product Differentiation

Spatial product differentiation is deeply rooted in neo-classical location theory particularly starting with Launhardt in 1885. It is based on a spatial distribution of consumers and firms over some abstract product space which representing the range of product variants. As a whole, three main models can be identified. The first which is perhaps more famous representation of spatial differentiation was the Hotelling location model. However, the models of spatial differentiation have failed to reach a consensus regarding minimum or maximum differentiation of firms. In Hotelling model of 1929, firms attempt to lure customers from their competitors and gain the largest market share through minimally differentiating their location in order. The second model was developed by 'Aspremont *et al.* in 1978, in which firms maximally differentiate to reduce price competition [12].

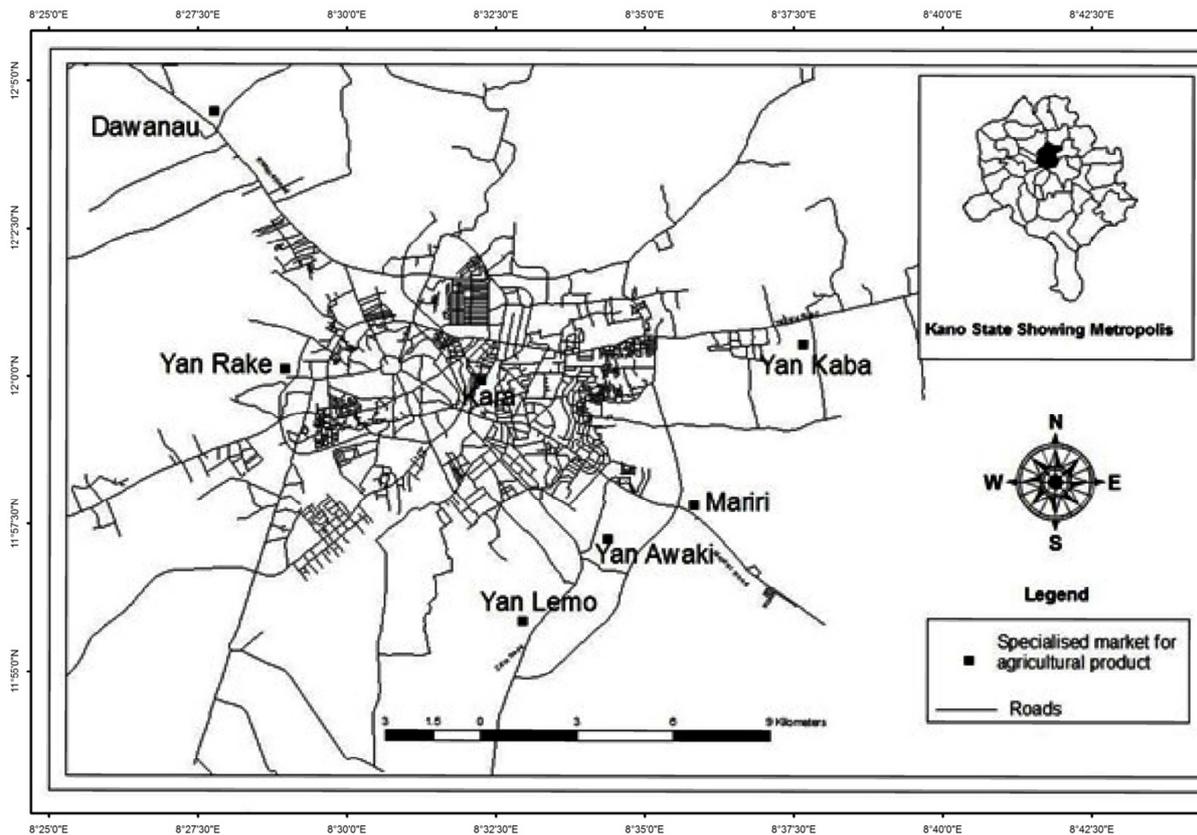
The third type, known as min-max or mixed model, was first developed by Economides in 1989, which successfully incorporated quality variations into the Hotelling model of horizontal differentiation. He introduced two independent versions of the model. One, is a two-stage game with locations chosen in the initial stage and price and quality chosen at the same time in the second. Two, is a three-stage game in which firms choose, in sequential order, locations, quality, then price. In both games, the maxed principle is clear because firms select to maximally vary in locations and minimally vary along quality. In recent times, several models of this multidimensional product differentiation have been explored and developed in which products can be defined by two or more characteristics [10].

## 3. Materials & Method

### 3.1. The Study Area

Kano metropolis is located between longitudes 8° 25'E to 8° 40'E and latitudes 11° 54'N to 12° 06'N (Figure 1). It is the second largest industrial and commercial centre in Nigeria experiencing a rapid growth rate [3]. There have been two levels in commercial hierarchy of the metropolis. At the apex, there are three commercial units: the Kurmi, the Sabon Gari market and Central Business District (CBD). At the lower level are four all-purpose markets (Wambai, Rimi, Tarauni and Gama) and sixteen specialized markets (Kwari, Kofar Ruwa, Yan Kaba, Kwanar Singa, Dawana, Yan Lemo, Kara of Abattoir, Farm Centre, Akija, Yan Goro of Mariri, WAPA, Yan Katako, Yan Kekuna, Yan Taya, Yan Itace and Yan Rake). The specialized markets for agricultural food

products came into being in the post-colonial time. Before, they were part of all-purpose markets [13]; [14]; [15].



Source: Kano State Ministry of Land and Physical Planning (2008)

**Figure 1.** Specialized Agricultural Food-Products Markets in Kano Metropolis.

This study centers on specialized agricultural food products markets in the metropolis with particular attention to Dawanau, Yan Lemo and Yan Kaba markets. Dawanau Grains and Tubers Market is located along Katsina road some 20km outside Kano and falls in Dawakin Tofa local government area. Its relative location and functions in the urban Kano justify its consideration and inclusion in this research. Yan Lemo Fruits Market is located at Maikalwa in Kumbotso local government area, along Zaria road, about 11 km from the ancient city of Kano. Yan Kaba Vegetable Market is located at Yankaba along Hadejia road, in Nassarawa local government area. The main reason that influenced their choice each of the markets specializes in the marketing of a large scale of products especially important in the diet: tubers and grains, vegetables and fruits.

### 3.2. The Study Methods

This research employed qualitative methods in the collection and analysis of data. To collect the data, two instruments were used. One, Focus Group Discussion was used in which ten traders of Dawanau, Yanlemo and Yankaba markets were involved, comprising of suppliers, wholesalers and retailers. The discussion centered on products variety, periods and places of suppliers, and grading and packaging of products. The data collected was subjected to qualitative

analysis through careful collation and arrangement, and the results tabulated. ARCGIS software was used to map out the spatially separated places of supply.

## 4. Results & Discussion

### 4.1. Introduction

In this study products are only differentiated according to their variety, and periods and places of supply. The nature of differentiation of products in the three markets is described in what follows:

### 4.2. Dawanau Market

In this market, products are available throughout the year (Table 1). The products include beans, millet, sorghum, maize, rice, ground nut, wheat, cassava and its products (*rogo*), benni seed, red sorrel (*soborodo*) and yam. All these products are available throughout the year but each has a period when supply is high. Figure 2 illustrates sources of supply of these products.

*Beans:* Two varieties of beans could be found any time, but each is predominant in a particular period. The early variety, which matures in less than two months and is smaller in size, is supplied in the wet season, around August to

September, from Kano and Katsina States. The late variety is supplied in the dry season from Gombe, Niger and Katsina States, Niger Republic, Chad and Cameroon.

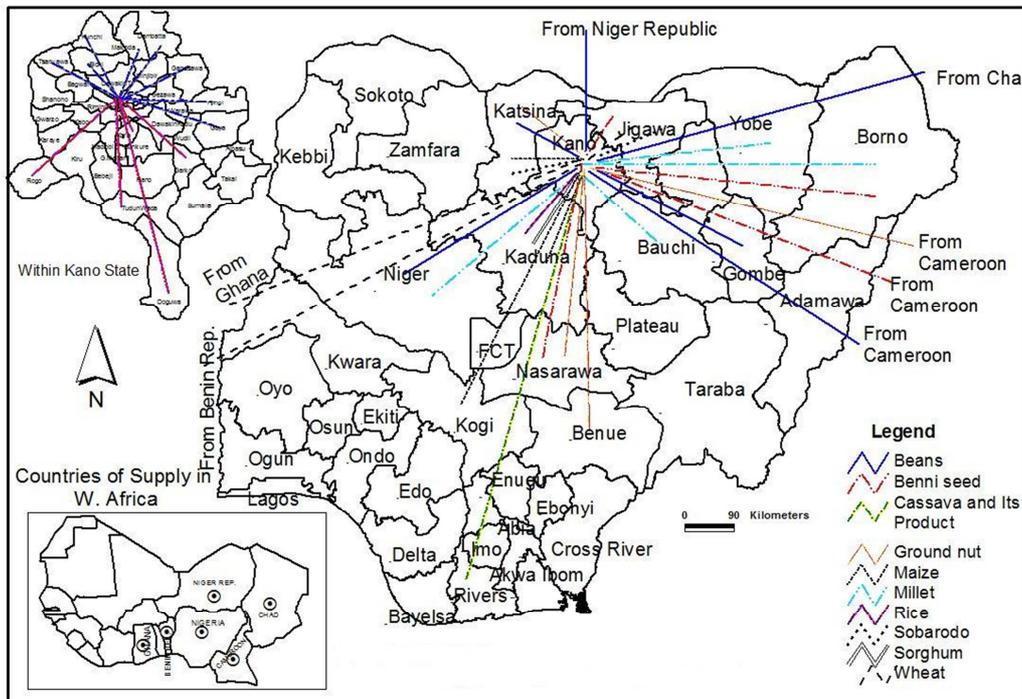
*Millet*: There are two varieties of millet: *gero* and *maiwa*. *Gero* is darker in colour and is planted, matures and harvested relatively earlier than *maiwa*. Thus, it is supplied in

large quantities immediately after the wet season, towards the end of the year. It is supplied more from states located in the northeastern part of the country. *Maiwa* is harvested later and, therefore, it is supplied more at the beginning of the year, from Bauchi State.

Table 1. Product Differentiation (Dawanau).

Product	Variety	Period of High Supply	Places of Supply
Beans	Dan Wuri (Early Variety)	August – September	Kano, Katsina
	Dan Kaka (Late Variety)	January – July & October – December	Niger Republic, Chad, Cameroon, Gombe, Niger, Katsina
Millet	Gero	October – November	Borno, Yobe, Niger, Bauchi
	Maiwa	January – February	Bauchi
Sorghum	Kaura (Red)	January – February	Kaduna
	Fara (White)		
Maize	Fara (White)	January and December	Katsina, Kaduna
	Ja (Red)		
Rice	Wita (Kano state variety)	September – November	Katsina, Kogi, Doguwa, T/Wada, Kura, Garko L.G.A.s, Zaria, Rogo L.G.A.
	C P (Short) (Kano variety)		
	Yar Das or zaria (Short and early variety)		
	Yar Thailand (Upland and early variety)		
Ground Nut	Bahaushiya (Home variety)	Jan. – July & Oct. – Dec.	Kano, Katsina
	Yar Dakala (An early variety)	August – September	Benue, Nassarawa
	Mai Bargo (Mostly for oil)	Jan. – July & Oct. – Dec.	Cameroon
Wheat	Indegenious (Dry season)	April – May	Kura (Kano), Jigawa
	Foreign	Jan. – March & June – Dec	Benin Rep., Ghana
Cassava and its products (Rogo)	Kura Kura (Solid, ungrinded)	March – June	Southern Nigeria
	Alebo (grinded)		
	Kwaki (Gari)		
	Dan Cameroun (Whiter)		
Benni seed	Dan Jigawa	January – July & October – December	Maiduguri, Cameroon, Jigawa State
	Dan Lafia		Nassarawa State
Red Sorrel ( <i>Rumex acetosella</i> )	Dark Red	February – April	Jigawa, Katsina
	Light red		States

Source: Fieldwork (2012)



Source: Fieldwork (2012)

Figure 2. Supply Sources of Products to Dawanau Market.

Sorghum: This has red (*Kaura*) and white (*fara*) varieties, all supplied more at the beginning of the year, particularly from Bauchi State.

Maize: This also has white (*fara*) and red (*ja*) varieties. All the varieties are supplied at the beginning and end of the year. The white maize is supplied from Katsina and Jigawa States while the red one is brought from Katsina and Kogi States.

Rice: Rice has four main varieties, all supplied at the end of the year. *Wita* (a long variety) is made available mainly from Kura, Tudun Wada and Doguwa Local Government Areas of Kano State. *C.P.* is short and supplied from Bagwai Local Government Area. Das or Zaria variety (*Yar Das* or *Zaria*) (shorter) and *Yar Thailand* (upland rice) from Rogo Local Government Area of the state are early varieties which are supplied relatively earlier than *wita* and *C.P.*

Ground nut: There were three varieties of ground nut in the market. First, there is the home variety (*bahaushiya*), which has two main periods of supply. One is at the end of the year, supplied from within Kano State, especially from Madobi Local Government Area. The other one is in the first half of the year from Katsina State. Second, there is an early variety, *Yar Dakala* which is supplied from the middle belt of Nigeria, before the end of the wet season. The third variety, called *Mai bargo*, is bigger in size and used for the production of oil. It is supplied in the first half of the year and around October to December from Cameroon.

Wheat: Wheat is of two types. There is indigenous (dry season) variety, supplied from Kura in Kano State and Jigawa State. The second variety is foreign, wet season type, supplied at the end of the wet season from Ghana and Benin Republic.

Cassava and its products: First, there is the solid, ungrinded type, called *Kura-Kura*. The second is the grinded cassava, known as *Alebo*. Third, there is *Gari*, i.e. *Kwaki*. All these varieties are supplied from the southern part of the country all the year round, but higher around the first half of the year.

Benni seed: It is of three types: The Cameroon variety (*Dan Kamaru*), which is whiter and supplied from Maiduguri and Cameroon; the Jigawa State variety (*Dan Jigawa*), which is also white, while the *Dan Lafia* is from Nassarawa State. All these types are supplied in January to July and the quarter of the year.

Red Sorrel (*Rumex acetosella*): This is locally called *Soborodo*, and has the dark red and light red types, all supplied in February to April from Jigawa and Katsina States.

### 4.3. Yanlemo Market

The products that are traded in this market are orange, banana, pine apple, water melon, coco nut, paw paw, mango,

agwalumo (*spondias mombin*), cashew and oro (Table 2). While orange, banana, pine apple, water melon, coco nut and paw paw are available throughout the year, mango, agwalumo, cashew and oro are seasonal. Figure 3 illustrates sources of supply of these products.

Orange: This is of two types in the market. First, there is Tiv variety (called *dan Tiv*). Supplied from the middle belt, especially Benue state, it is available throughout the year, but more at the end of year into the starting of the new year. The second variety is known as *Dan Kwalla* and supplied from western Nigeria mainly towards the end of the year. The method of packaging for both varieties is sacks – light sack for *dan Tiv* and dark sack for *dan kwalla*. This method is based on product perishability. *Dan Kwalla* is soft and, therefore, more susceptible to damage by heat. This requires a packaging method with more air spaces. That is why it is packaged in dark sack, which is more porous. *Dan Tiv* is relatively harder. Thus, it is packaged in the light sack which is less porous but more durable.

Banana: Four main types are supplied. There is Ogoja or Bendel variety (*Yar Ogoja* or *Yar Bendel*). It is big in size, supplied from Edo and Delta States at the beginning of the year. The second one is *Yar Ikom*, also called tourist. It is supplied at the middle of the year from Cross River State. Thirdly, there is *Yar Ikare* and *Yar Isen* from Oyo and Ogun States respectively. It is short but thick and supplied at the beginning and end of the year. Lastly, there is *Sankola* (soft and bigger), from Plateau State and available every month. All the varieties are supplied in bunches.

Pine Apple: The Bendel variety (*Yar Bendel*) supplied from Edo and Delta States is available every month but dominant in May to November. It is bigger and more juicy. The other type of pine apple is *Yar Ghana* and *Yar Cotonu* from Ghana and Benin Republic, which is available in the market only around August and September.

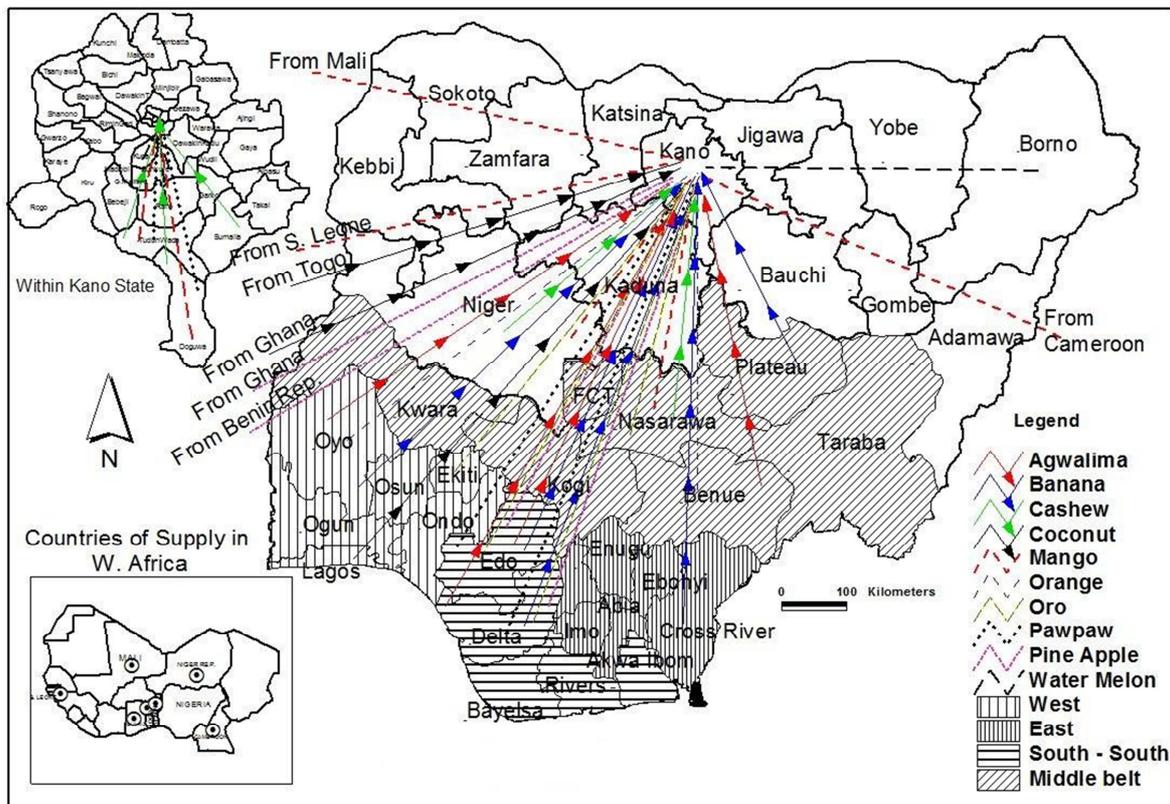
Coconut: All varieties of coconut are found throughout the year. The Ghana variety (*Yar Ghana*) is dominant in the first half of the year, it is big and the sweetest. Togo variety (*Yar Togo*) has the same supply period with *Yar Ghana* but is bigger in size. The third type is home variety (*Yar Gida*), supplied from Lagos and mostly available around the middle of the year. It is the biggest but less sweet.

Mango: Three main types are supplied to the market. First, there is home variety (*Dan Gida*), which is smaller in size. It is supplied around middle of the year, from within Kano State especially Tudun Wada and Doguwa Local government Areas. Second, there is the Cameroon variety (*Dan Kamaru*), which is rounded in shape, available only within July and August, and supplied from Cameroon, Mali and Sierra Leone. Lastly, there is *Dan Lafiya*, supplied from Nassarawa and Niger States. It is bigger and sweeter.

Table 2. Product Differentiation (Yanlemo).

Product	Variety	Period of Supply	Places of Supply
Orange	Dan Tiv (in light sacks)	Dominant in January-March, December	Middle belt
Banana	Dan Kwalla (in dark sacks)	September-November	Western Nigeria
	Yar Ogoja (Bendel) (Big)	February-May	Edo, Delta
	Yar Ikom (Tourist) (Thin)	June-September	Cross River
	Yar Ikare (Oyo) & Isen (Ogun) (Short but thick)	January, October-December	Western Nigeria
Pine Apple	Sankola (Soft and bigger)	Available every month	Plateau
	Yar Bendel (Bigger and more watery)	Dominant in May-November	Edo, Delta
Water Melon	Yar Ghana (Yar Cotonon) (Thin)	August-September	Ghana, Benin Republic
	Yar Rani (Small and medium sizes)	January-June, November-December	Kano
Coco Nut	Yar Damina (Baga) (Bigger and sweeter)	July-October	Borno
	Yar Ghana (Big and sweetest)	Dominant in January-August	Ghana
	Yar Gida (Biggest but less sweet)	Dominant in July-Aug.	Lagos
Mango	Yar Togo (Bigger than Yar Ghana)	Dominant in January-August	Togo
	Dan Gida (Smaller)	April-June	Kano
	Dan Cameroun (Rounded)	July-August	Cameroun, Mali, Sierra Leone
Paw Paw	Dan Lafia (Nassarawa state) (Bigger and sweeter)	March-May	Nassarawa, Niger
	Yar Bendel (Bigger and sweeter)	August-November	Delta, Edo
Agwalumo	Yar Gida (Smaller)	August – September	Kano
	Yar Uromi (Big and white)	January – May & November – Decem.	Edo, Delta
	Yar Akure (Big and red)		Western Nigeria
	Yar Gara (Ankwa) (Big and red)		Middle belt
	Yar Awaina (Big and small, but more shinning)		Middle belt
Cashew	Yar Akele (Small)		Western Nigeria
	Dan Lafiya (Bigger and sweeter)	January – June	Nassarawa, Niger
Oro ( <i>Irvingiagarbonensis</i> )	Dan Gida (Small and medium sizes)		Kano
	Dan Gara (Bigger and sweeter)	July – September	Middle belt
	Dan Yarabawa (Yoruba Land) (Big and sweet)		Western Nigeria
	Dan Bendel (Smaller)		Edo, Delta

Source: Fieldwork (2012)



Source: Fieldwork (2012)

Figure 3. Supply Sources of Products to Yanlemo Market.

Paw Paw: Consists of two varieties, all supplied at the same time, towards the end of the year. Bendel type (*Yar Bendel*), from Edo and Delta States, is bigger and sweeter. The home variety (*Yar Gida*) is supplied from within Kano State, and it is smaller in size.

Agwalumo (*Spondias mombin*): There are five types of these fruits traded in the market, available at the beginning and towards the end of the year. First, there is Uromi variety (*Yar Uromi*), big and white, and supplied from Edo and Delta States. Second, there is *Yar Akure*, from Ondo State, which is big and red. Third, *Yar Gara* (Igala) or *Yar Ankwa* from middle belt of Nigeria, is big and red. Fourth, *Yar Awena*, from Ondo State, is of different sizes (big and small) but more shinny. Last, there is *Yar Akele*, from Oyo State, which is small in size.

Cashew: The two types of cashew supplied to the market are available only in the first half of the year. Lafiya variety (*Dan Lafiya*), brought from Nassarawa and Niger States, is bigger and sweeter. The home variety (*Dan Gida*) is supplied from within Kano State.

Oro (*Irvingia garbonensis*): Three varieties are made 120 available in the market, all supplied from the mid-year to towards the end of the year. Igala type (*Dan Gara*), from middle belt of the country, is big and sweeter. The Yorubaland type (*Dan Yarabawa*), from Western Nigeria, is medium size and sweet. The third type is *Dan Bendel*, which is small in size and brought from Edo and Delta States.

#### 4.4. Yankaba Market

Table 3 shows products that are traded in Yan Kaba market. All the varieties are available throughout the year, but there is variation between periods of high and low supply. The

products include tomato, red pepper, hot pepper, onion, okra, pumpkin, and what is popularly called white man's products (cabbage, carrots, green beans and peas, cucumber, garlic, arish potato, etc.). Figure 4 illustrates sources of supply of these products.

Tomato: The tomato varieties are UTC, *Dandino*, *Dan Eka* and *Rikuta*. The four varieties are supplied mostly in January to April from Kano and Jigawa States and in August to December from Gombe and Kaduna States.

Red Pepper: The three varieties are *Shambo* from Zaria in Kaduna State, *Dan damaso* from Borno State and *Dan Kudu*, supplied from Tudun Wada and Kiru (Kwanar Dangora) Local Government Areas of Kano State. *Shambo* is the longest of the varieties.

Hot Pepper: There are five varieties in the market. They are *Dan Guru* (from Borno State), *Dan Sakkwato* (from Sokoto, Zamfara and Kebbi States), *Dan Birnin Gwari* (Kaduna State), *Dan Kazaure* and *Dan Desina* (Bauchi State). The last two are available during the period of low supply.

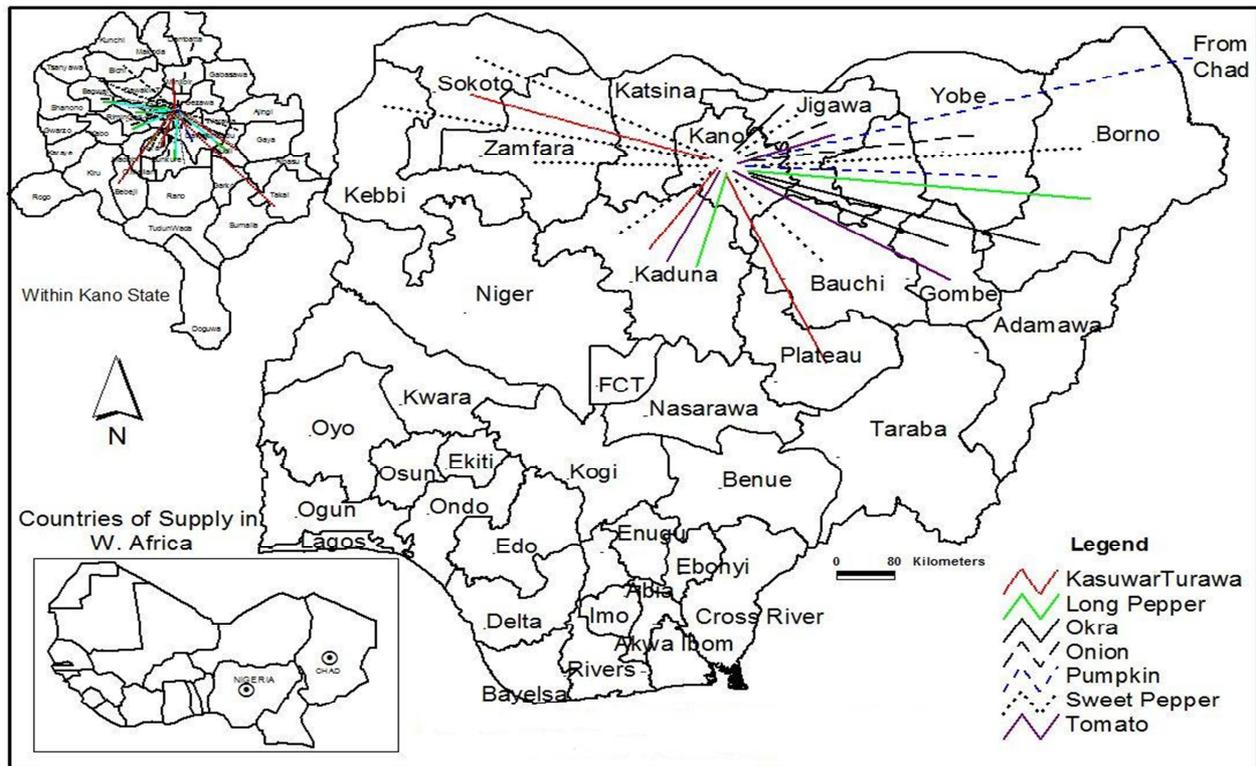
Onion: Two varieties are sold in the market. *Yar Gabas* (from Hadejia in Jigawa and Gaidan in Yobe States) is light in colour, and supplied more around the middle of the year. The home variety (*Yar Gida*) is red, which is supplied from within Kano State, in the first half of the year.

Okra: There is the irrigated (*Yar Rani*) type, which is supplied in the dry periods from Wudil, Bagwai, Kura and Bichi Local Government Areas (Kano State). There is also the rain-fed type, which is supplied in the wet season from Gombe and Jigawa States, and Bichi Local Government Area of Kano State.

Table 3. Product Differentiation (Yankaba).

Product	Variety	Period of High Supply	Places of Supply
Tomato	UTC	January – April	Kano & Jigawa
	Dandino		
	Dan Eka Rukuta	August – December	Gombe & Kaduna
Red Pepper	Shambo	January – April &	Zaria (Kaduna)
	Dan Damaso	August – December	Borno
Hot Pepper	Dan Kudu		Kano
	Dan Guru	January – June & Dec.	Borno
	Dan Sakkwato		Sokoto, Zamfara, Kebbi
	Dan Kazaure	January – April & Dec.	Kazaure (Jigawa)
	Dan Desina	January – sFebruary & Aug.- December	Bauchi
Onion	Dan Birnin Gwari	July – November	Kaduna
	Yar Gabas (Hadejia & Yobe) (Light in colour)	April – July	Jigawa, Yobe
	Yar Gida (Red in colour)	February – July	Kano
Okra	Yar Rani (Irrigated)	January- April September – Dec.	Kano
	Yar Damina (Rainfed)	May – August	Gombe, Jigawa, Yobe Maiduguri, Chad
Pumpkin	Irrigated	June – August	
	Rainfed	January- May & Sept – December	Kano
Kasuwar Turawa	White Man's Products	August – December	Kano, Kaduna, Sokoto, Plateau (Jos)

Source: Fieldwork (2008)



Source: Fieldwork (2012)

Figure 4. Supply Sources of Products to Yankaba Market.

Pumpkin: This also has irrigated and rain-fed varieties. The irrigated pumpkin is supplied from Yobe State and the Republic of Chad after dry season. The rain-fed type, from Dawakin Kudu in Kano State, is supplied after the wet season, toward and to beginning of the year.

Products of “Kasuwar Turawa”: The extreme part of Yan Kaba market is a section (known as *Kasuwar Turawa*) for the sale of products mostly patronized by Indians, Pakistanis, Lebanese, Europeans, Arabs, etc. These products which include cabbage, carrots, green beans and peas, cucumber, garlic, etc are always in the market, especially towards the end of the year. Produced by irrigation in Kano State, the areas of supply are Wudil, Takai, Minjibir, Kura and Bebeji (Kofa) Local Government Areas. The rain-fed type came from Kaduna (Zaria and Kachiya), Sokoto and Plateau States.

## 5. Conclusion and Recommendations

### 5.1. Conclusion

The conclusions to be derived from the study include: One, the study was limited in scope as it incorporated only products variety, and spatial and seasonal variation in supply. It did not go into location and price competition within the markets. Two, the variety of the products, the diversity of sources of supply and seasonal fluctuation in supply are indicative of low concentration, competitiveness and of course efficiency of the markets. Three, in line with ‘New Trade Theory’, the differentiated nature of the products shows that the markets would attract high retail and

wholesale purchases from within the state, country and even outside.

### 5.2. Recommendations

Based on the conclusions, the following recommendations are offered:

- (i) There is the need for future research on firm rivalry in terms of location choices and consumer preferences of the products within the markets.
- (ii) Another area that needs to be researched is impact of product differentiation on price. That is, to study price competition as indicative of spatial locations within the markets.
- (iii) Development of transportation and communication infrastructure, nationally and locally, will facilitate availability of more variety of products from more diverse places.

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