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STRUCTURAL CHARACTERISTICS OF *BORASSUS AETHIOPUM* (Mart) NON-TIMBER FOREST PRODUCTS MARKETS IN NORTH-EASTERN NIGERIA



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ABSTRACT

This study analyzed the market structure of three products of *Borassus aethiopum* (a non-timber forest product); mats, hypocotyls and fruits in North-eastern Nigeria to ascertain their distributional efficiency. This was determined using market concentration and experience in trade. Market concentrations were deduced by adopting the Lorenz curves and Gini-coefficient of inequality. Data were generated with semi-structured questionnaires administered on 210 respondents, and market surveys. The result revealed that the mean weekly quantities of sales and purchases were Mats, 30 and 41 units (standard size 2.78m by 0.9m); Hypocotyls, 207Kg and 357.5Kg; and fruits, 162.3Kg and 314.1Kg respectively. The distribution of sales and purchases of mats, hypocotyls and fruits showed a fairly equitable distribution of trade in the hands of buyers and sellers (Gini-coefficients were <0.25). However, there was a relatively higher concentration of trade in the hands of a few buyers of fruits (Gini coefficient of inequality was 0.46). Results from business experience revealed that *Borassus aethiopum* trade has been thriving in North-eastern Nigeria for more than four decades and more people are still coming into the business unimpeded. Based on these features, its trade in Northeastern Nigeria was adjudged oligopolistic. Providing transportation facilities and improving market facilities and providing adequate information dissemination system will make *Borassus aethiopum* marketing more competitive and efficient.

Keywords: Market, Structure, Concentration, *Borassus aethiopum*, Marketing efficiency, Coefficient of inequality.

INTRODUCTION

Borassus aethiopum (Mart) popularly known as African Fan Palm is a typical non-timber forest resource that is widely distributed in North-eastern Nigeria (Popoola and Oluwalana, 2001). The plant is well known for its multifunctional importance in the areas of shelter, food supply and improvement of the economic status (income and employment) of the rural people. The palm is also good for the protection of the environment from degradation and biodiversity depletion. Every part of the palm is important in any of the socio-cultural, economic and, or environmental needs of humankind.

As a multipurpose resource, many

products namely; mats, baskets, hats, hand fans, ropes, trays and plates among others are made from the palm (Tee, 2007). Mats, fruits and hypocotyls from the palm are also important economic commodities in North-eastern Nigeria (Tee and Verinumbe, 2008). According to Tchiegang-megueni *et al* (2001), in Cameroon, the palm is regularly consumed by the rural people as food and also sold to generate income. The trunk of the palm is also widely utilized in Ghana and Mali for construction purposes and the leaves are utilized for roofing (Ayarkwa, 1997; Well *et al*, 1998). In Cambodia, the sweet sap from the inflorescence is a source of yeast and crude

sugar (Morton, 1988; Khieu, 1996). Furthermore, the sweet sap, when fermented forms toddy, a popular beverage, which is also distilled to produce palm wine.

In spite of these numerous benefits of the palm in the rural economies where it is widely distributed, its values at that level are abysmally low (Lintu, 1995; Popoola and Oluwalana, 2001). Economists however believe that one way of adding value to these resources is by identifying their prevalence from the forests, and commercial values; then the forest-based communities and the society at large would be assisted to take maximum (utility) advantage of the resource through improved collection, processing and marketing. According to Lintu (1995), marketing is capable of discovering and spreading the NTFPs from the rural enclaves to the peri-urban and urban settlements and in the process appreciates their values.

Generally, NTFPs marketing in Nigeria takes place at three levels; Concentration, Dispersion and Equalization (Popoola and Oluwalana, 2001). Concentration involves the assemblage of products from various production (collection) centers, like the forest floor, villages and the rural and urban locations. At this phase of concentration, both buyers and sellers respectively obtains and offers the non-timber forest commodities traded at the local production centers. Dispersion involves the distribution of the NTFPs from the different concentration points to various consumers and consumer centers. The last phase, which is Equalization, is the phase at which the NTFPs are standardized and adjusted to suit the demand.

The marketing of NTFPs could therefore be seen as a complex activity of collecting, distributing and processing NTFPs. Thus marketing activities ensures the discovery and distribution of the NTFPs from the rural areas to the townships, and in the process appreciate their values and utility (Lintu, 1995). At every phases of the marketing process, market structure significantly influences its effectiveness. A good market structure ensures that the

marketing process discharges its resource allocation and distributional roles more effectively (Okoh, 1999; Onu, 2000).

Market structure deals with how a market is organized. It defines various types of enterprises making up a marketing system, their behaviour and the relationship between them. It also emphasizes the relationship among various sellers, buyers and between the buyers and sellers. Adegeye and Dittoh (1985) defined market structure as those characteristics of the market that are believed to influence its nature of competition and process of price formation. These characteristics include: Size and number of buyers and sellers ensuring an adequate intensity of price and quality competition; Freedom of entry and exit, and; Adequate size of sellers so as to encourage increased investment.

In addition to the above characteristics, Bain (1972) further identified product differentiation as an important determinant of market competition and thus, its structure. A competitive market structure, according to Goletti and Bidiane (1994), provides situations that are fertile for the exchange process to yield price structures that reflects production and consumption costs respectively.

Studies on marketing structure, and particularly the NTFPs, are therefore very important because they can influence production and how resources can be allocated in this sub-sector. It is also an important indicator of the influence of reforms on production and employment in an economy (Onu 2000). Improving the structure of marketing forest products through information from research, such as this, will improve production, outputs, employment potentials and performance of the forestry sub-sector. The relevance of market structure in resource development and utilization has thus prompted this study. The study therefore examined market concentration and trading experience in a typical NTFP *Borassus aethiopicum* (Mart) products trade. It is aimed at providing baseline data for use in developing the utility value of NTFPs using *Borassus aethiopicum* as a yardstick in the sub-region.

MATERIALS AND METHODS

Study areas: This study was carried out in three states (Adamawa, Bauchi, and Yobe), out of the six in Northeastern Nigeria (Figure 1/Table 1). These states were tagged production / consumption areas of *Borassus aethiopum* non-timber forest products. The *Borassus aethiopum* products production/consumption areas were purposively selected because of the extent of availability of the species. From these production/consumption areas, 14 markets (Figure 1); four in Yobe and five each in Adamawa and Bauchi production/ consumption areas respectively were sampled to source data for the study.

Data for the study were generated with the aid of semi-structured questionnaires, market surveys, and interviews with key informants, and personal observations. Data

on weekly quantities of *Borassus aethiopum* products purchased and sold were obtained and the corresponding frequencies of the buyers and sellers of these products recorded. Furthermore, information on marketing activities of traders, the locations of these markets and accessibility to the markets were observed and noted down.

Applying a multistage sampling technique, 210 respondents (traders) were sampled as shown in the Sampling frame (Table 1) and interviewed using the semi-structured questionnaires to generate data. Out of the 210 interviewees, only 207 (comprising 64 buyers and 143 sellers) were used for the analysis and discussion of results. This was due to incomplete information and limited responses to some vital qualitative and quantitative questions.

Table 1: Sampling Layout

Sampled states	Total LGAs in the sampled state	25% of LGAs (Approx. values.)	Respondents in each LGA	Respondents sampled per state
Adamawa	21	5	15	75
Bauchi	20	5	15	75
Yobe	17	4	15	60
Total	58	14	45	210

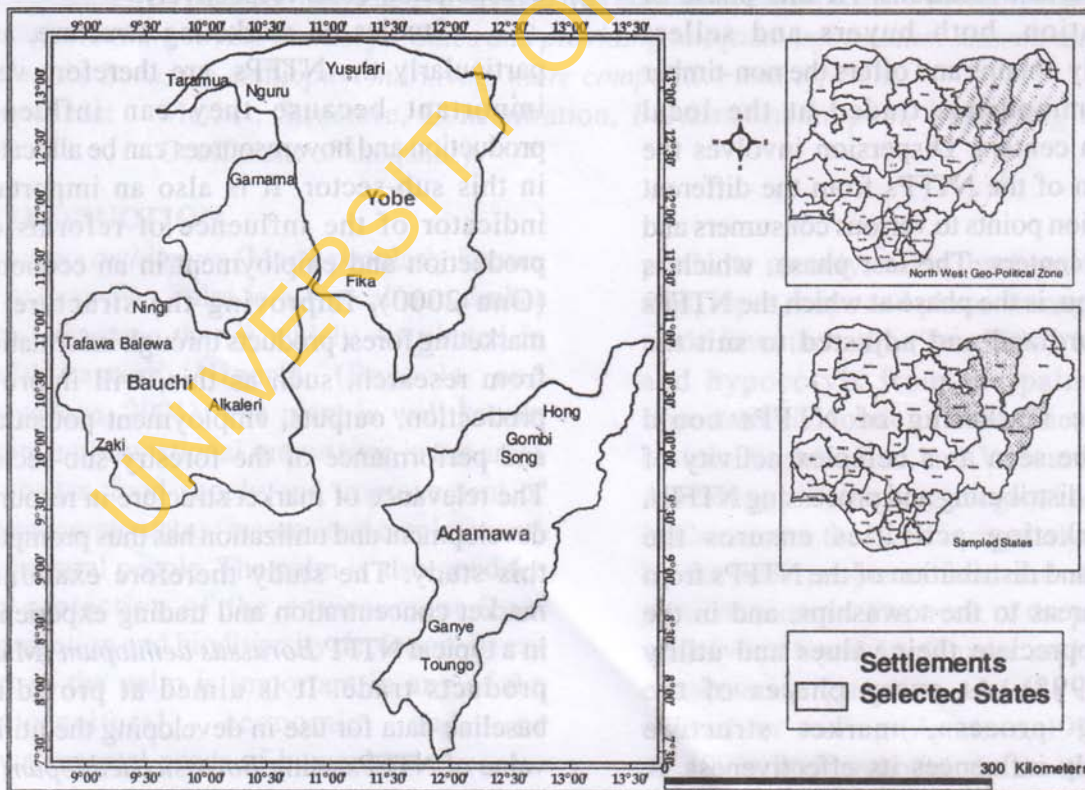


Figure 1: Showing the Study Areas and market locations with coordinates.

Market structure analysis was accomplished using concentration, which was computed based on the quantities of *Borassus aethiopum* products purchased and sold weekly. These were categorized into ranges, and frequencies of respondents (Buyers and Sellers) per range were determined alongside the quantities of trade. The cumulative percentages of frequencies and volumes of trade were then computed. With the cumulative percentage frequency (Y-axis) versus cumulative percentage weekly volume of trade (X-axis) as sets of points, Lorenz curves were produced. The line of equal distribution (LED) or the egalitarian line, which are 45° to the origin were used in measuring the extent of market concentration. The extent to which the Lorenz curve swings away from the egalitarian line gave the coefficient of concentration. This was measured by reaching the curve at a point where it was farthest from the LED. The coefficient of concentration was also calculated using the Gini coefficient.

Gini coefficients according to Tee *et al.* (2002) and Abu (2001) are aggregate inequality measure that can vary anywhere from zero (perfect equality) to one (perfect inequality). For some economic variables with relatively equitable distribution, it is of the order 0.20 to 0.35 while for the highly unequally distributed situations; it ranges from 0.5 to 0.70 (Todaro, 1981; Tee *et al.*, 2002). The Gini coefficient of inequality was computed using the following relationship:

$$\text{Gini coefficient} = \frac{(10,000 - \text{Trapezoidal Area})}{(10,000)}$$

Paired sum is the cumulative value of the cumulative percentage volume of products sold or purchased over a specified time.

RESULTS

There is consensus among researchers (Adegeye and Dittoh, 1985; Okoh, 1999; Onu, 2000; Chirwa, 2000), over many years of research, on the relevance of an efficient marketing system in stimulating and producing forestry development and economic growth. Marketing efficiency depends to a large extent on the structure and organization of the market (Okoh, 1999; Onu, 2000). In this

study, the concentration of buyers and sellers in the market and the assessment of trading experience, as a measure of level of entry into and exit from business, were adopted in studying market structure. The results were as follows:

Market Concentration

The result on market survey revealed that the weekly mean volumes of mats bought and sold were 41 and 30 units (standard size 2.78m by 0.9m); Hypocotyls, 357.5Kg and 207Kg; and fruits, 314.1Kg and 162.3Kg respectively. In the marketing chain of *Borassus aethiopum* products from producers and/or middlemen to the final consumers; producers to middlemen and middlemen to consumers, it was discovered that at every level in the marketing chain, there were numerous small-scale participants. However the farm-gate middlemen and wholesaler participants were large enough to wield some influence in the setting of market price and even distribution of the quantities of commodities traded. The distribution of sales and purchases of *Borassus aethiopum* Mats, hypocotyls and fruits are shown in Tables 1 to 6.

The results revealed a fairly equitable distribution of the *Borassus aethiopum* products trade in the hands of buyers and sellers. However, for the buyers of fruits, there was a relatively higher concentration of trade in the hands of a few buyers. This was indicative of a relatively higher Gini coefficient of inequality value of 0.4642. According to Todaro (1981), for economic variables with relatively equitable distribution, the Gini coefficient value lies between 0.20 and 0.35.

Sellers' Concentration

The result in Table 1 revealed that 10.8% of hypocotyls sellers sold 5.0% of the cumulative volume of hypocotyls; 67.5% sold 53.3%; 95.0% sold 88.5% and the remaining 5% sellers, sold 11.5% of the total volume of hypocotyls traded. This is a fairly equitable distribution with a Gini-coefficient value of 0.1365. The distribution of trade shown by the Lorenz curve in Figure 1 does not skew far away from the line of equal distribution

(LED).

Table 2, which shows mat sellers concentration revealed that 67.8% of mat traders sold 43.5%; 94.9% sold 82.1%; 96.6% sold 86.2% and 3.4% sold 13.5% of the cumulative volume of mat traded. The Gini coefficient value of 0.2235 showed an economically equitable distribution. The Lorenz curve in Figure 2 illustrates this. Fruit sellers' concentration as presented in Table 3, and illustrated by the Lorenz curve in Figure 3 revealed an economically equitable distribution of volume of trade among sellers. The curve does not skew too far from the LED.

The Gini coefficient of in-equality is 0.1271. As explained above, 14.6%, 81.8%, 98.2 % and 1.8% of the traders sold 7.9%, 70.7%, 94.8% and 5.2% of the total volume of fruits traded respectively.

Generally, the study of sellers' concentration revealed an economically equitable distribution in the cumulative volume of trade of hypocotyls, mats and fruits among the sellers. However, based on the values of the Gini coefficient of in-equality in each case, trade in fruits was less un-equally distributed among the sellers, followed by hypocotyls and lastly mats. This means that trade in fruits is more competitive.

Table 1: Hypocotyls Sellers Concentration

Range of wkly Vol sold (50kg Jute bags)	Actual Vol sold weekly (50kg Jute bags)	Freq of Sellers	% Freq of sellers	Cum % freq of Sellers	% Vol sold weekly	Cum % Vol	Paired sum	Trapezoidal Area
1-2	25	13	10.8	10.8	5.0	5.0	5.0	54.4749
3-4	240	68	56.7	67.5	48.3	53.3	58.3	3306.6945
5-6	175	33	27.5	95.0	35.2	88.5	146.8	4039.2000
7-8	57	6	5.0	100.0	11.5	100.0	246.8	1234.4000
Total	497	120	100.0	-	100.00	-	507.9	8634.7694

Gini Coefficient of in-equality = 0.1365

NB: 207 Respondents were interviewed but only 120 buyers traded in Hypocotyls.

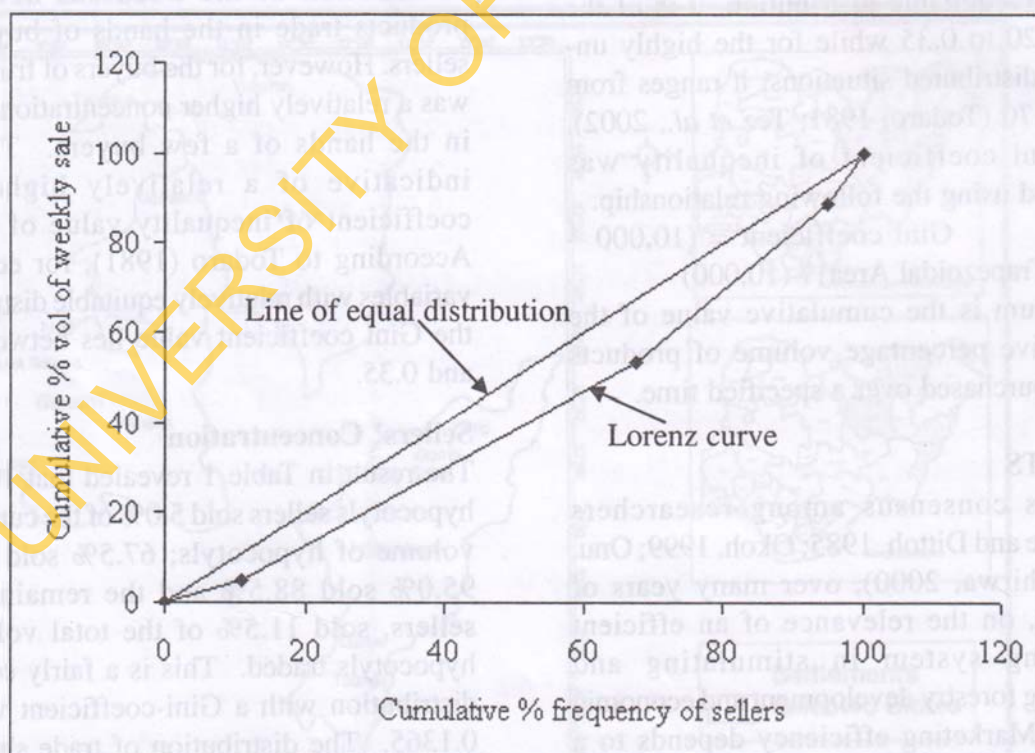


Figure 1: Lorenz Curve for Hypocotyls Sellers

Table 2: Mats Sellers Concentration

Range of wkly Vol sold (50kg Jute bags)	Actual Vol sold weekly (50kg Jute bags)	Freq of Sellers	% Freq of sellers	Cum % freq of Sellers	% Vol sold weekly	Cum % Vol	Paired sum	Trapezoidal Area
1-2	63	40	67.8	67.8	43.5	43.5	43.5	2945.9100
3-4	56	16	27.1	94.9	38.6	82.1	125.5	3402.8472
5-6	6	1	1.7	96.6	4.1	86.2	211.7	359.9410
7-8	-	-	-	-	-	-	-	-
9-10	20	2	3.4	100.0	13.8	100.0	311.7	1056.7047
Total	191	59	100.0	-	100.0	-	692.4	7765.4629

Gini Coefficient of in-equality = 0.2235

NB: 207 respondents were interviewed but only 59 sellers traded in mats.

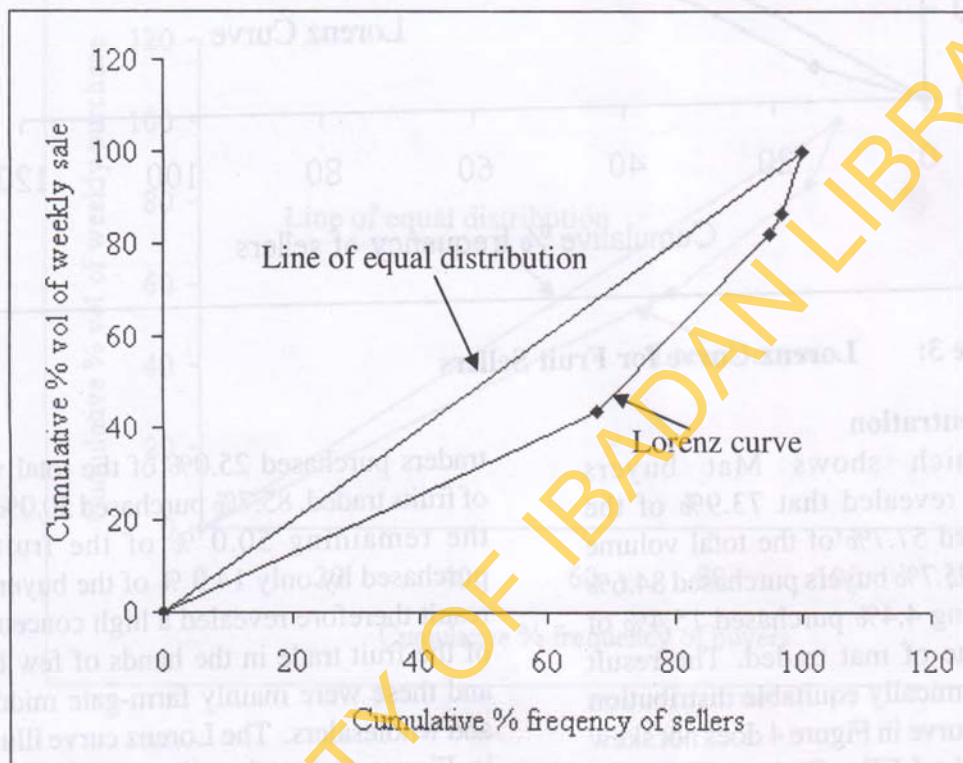


Figure 2: Lorenz Curve for Mat Sellers

Table 3: Fruits Sellers Concentration

Range of wkly Vol sold (50kg Jute bags)	Actual Vol sold weekly (50kg Jute bags)	Freq of Sellers	% Freq of sellers	Cum % freq of Sellers	% Vol sold weekly	Cum % Vol	Paired sum	Trapezoidal Area
1-2	15	8	14.5	14.5	7.9	7.9	7.9	114.2175
3-4	120	37	67.3	81.8	62.8	70.7	78.5	5282.7131
5-6	46	9	16.4	98.2	24.1	94.8	173.3	2835.0224
7-8	-	-	-	-	-	-	-	-
9-10	10	1	1.8	100.0	5.2	100.0	273.3	497.3878
Total	91	65	100.0	-	100.0	-	533.0	8727.3428

Gini Coefficient of in-equality = 0.1271

NB: 207 Respondents were interviewed but only 65 sellers traded in fruits.

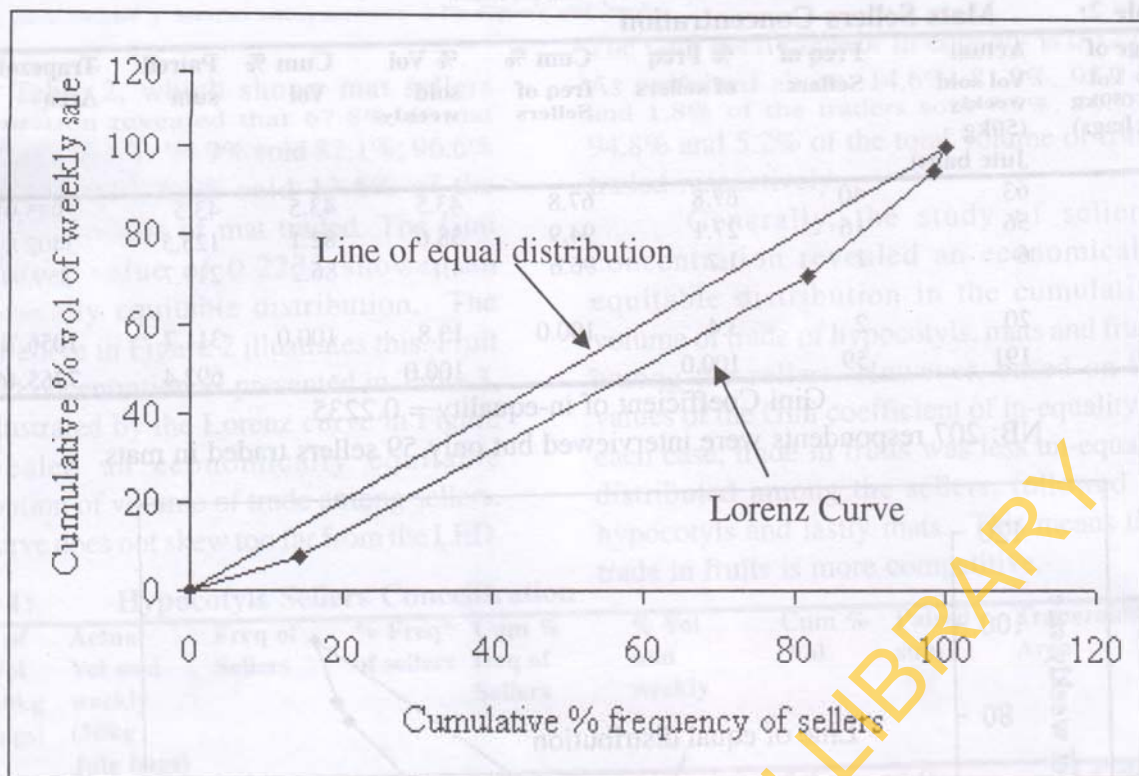


Figure 3: Lorenz Curve for Fruit Sellers

Buyers' Concentration

Table 4, which shows Mat buyers concentration, revealed that 73.9% of the buyers purchased 57.7% of the total volume of mats traded; 95.7% buyers purchased 84.6% and the remaining 4.4% purchased 15.4% of the total volume of mat traded. The result shows an economically equitable distribution and the Lorenz curve in Figure 4 does not skew far away from the LED. Gini coefficient of inequality is 0.1589.

The result on Hypocotyls buyers concentration presented in Table 5 showed that 7.7%, 50.0%, 65.4%, 96.2% and 3.8% of the buyers purchased 3.0%, 33.3%, 46.7%, 92.5% and 7.5% of the total volume of hypocotyls exchanged respectively. The Gini-coefficient of in-equality of 0.069 indicates a highly economically equitable distribution of volume of trade among buyers. The Lorenz Curve illustrated in the Figure 5 also proves this.

Table 6, which shows fruit buyers' concentration, revealed that 71.4 % of the

traders purchased 25.0% of the total volume of fruits traded, 85.7% purchased 50.0%, while the remaining 50.0 % of the fruits was purchased by only 14.3 % of the buyers. This result therefore revealed a high concentration of the fruit trade in the hands of few buyers, and these were mainly farm-gate middlemen and wholesalers. The Lorenz curve illustrated in Figure 6 therefore skewed further away from the LED and the Gini coefficient of inequality was also very high (0.4642) out of the economically equitable range of 0.2 to 0.35 (Todaro, 1981). Buyers' concentration showed economically equitable trade distribution in Mats and hypocotyls. Fruit trade was unequally distributed. Based on the Gini coefficient of in-equality in distribution.

Hypocotyls market was less unequally distributed, followed by Mats trade. Trade in fruits was actually un-equally distributed. This means trade in hypocotyls was more effective, indicating a near perfect and efficient marketing system.

Table 4: Mat Buyers Concentration

Range of Wkly Vol Purchased (50kg Jute bags)	Actual Volume Purchased weekly (50kg Jute bags)	Buyers freq	% Buyers freq	Cum % Buyers Freq.	% Volume Purchased Weekly	Cum % Vol	Paired Sum	Trapezoidal Area
1-3	45	17	73.9	73.9	57.7	57.7	57.7	4263.87
4-6	21	5	21.7	95.6	26.9	84.6	142.3	3093.60
7-9	-	-	-	-	-	-	-	-
10-12	12	1	4.4	100.0	15.4	100.0	242.3	1054.01
Total	78	23	100.0	-	100.0	-	442.3	8411.48

Gini Coefficient of in-equality = 0.1589

NB: 207 Respondents were interviewed but only 23 buyers traded in mats.

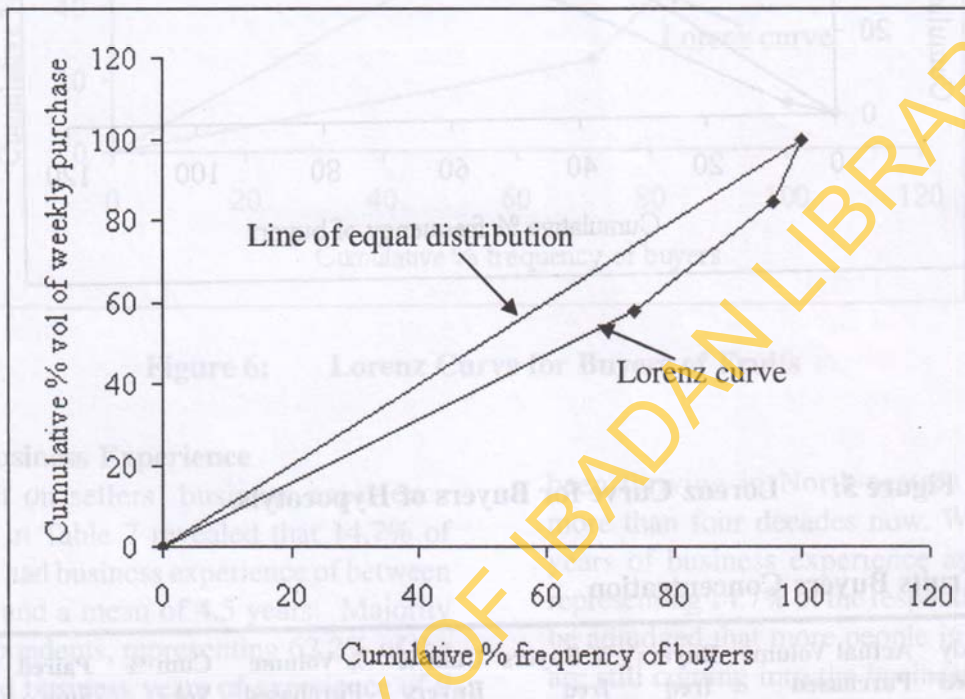


Figure 4: Lorenz curve for Buyers of Mat

Table 5: Hypocotyls Buyers Concentration

Range of Wkly Vol Purchased (50kg Jute bags)	Actual Volume Purchased weekly (50kg Jute bags)	Buyers freq	% Buyers freq	Cum % Buyers Freq.	% Volume Purchased Weekly	Cum % Vol	Paired Sum	Trapezoidal Area
1-3	11	4	7.7	7.7	3.0	3.0	3.0	22.7624
4-6	113	22	42.3	50.0	30.4	33.4	36.4	1535.8530
7-9	57	8	15.4	65.4	15.3	48.7	85.1	1306.6848
10-12	163	16	30.8	96.2	43.8	92.5	177.6	5459.8288
13-15	28	2	3.8	100.0	7.5	100.0	277.6	1068.144
Total	372	52	100.0	-	100.0	-	579.7	9393.273

Gini Coefficient of in-equality = 0.0607

NB: 207 Respondents were interviewed but only 52 buyers traded in Hypocotyls.

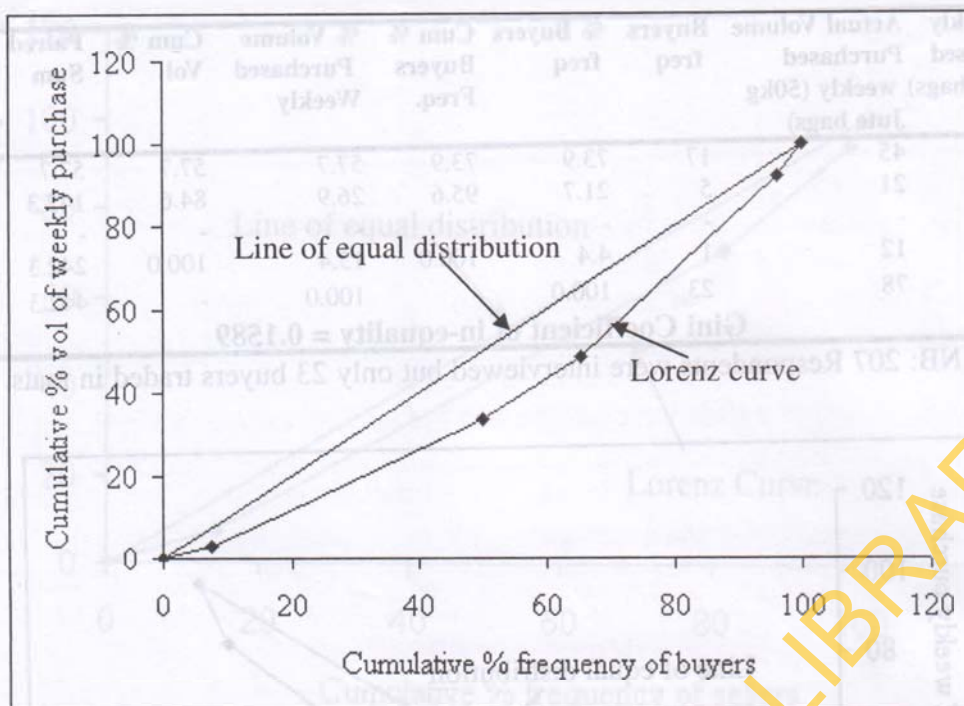


Figure 5: Lorenz Curve for Buyers of Hypocotyls.

Table 6: Fruits Buyers Concentration

Range of Wkly Vol Purchased (50kg Jute bags)	Actual Volume Purchased weekly (50kg Jute bags)	Buyers freq	% Buyers freq	Cum % Buyers Freq.	% Volume Purchased Weekly	Cum % Vol	Paired Sum	Trapezoidal Area
1-4	10	5	71.4	71.4	25.0	25.0	25.0	1785.5
5-8	-	-	-	-	-	-	-	-
9-12	10	1	14.3	85.7	25.0	50.0	75.0	1071.75
13-16	-	-	-	-	-	-	-	-
17-20	20	1	14.3	100.0	50.0	100.0	175.0	2500.75
Total	40	7	100.0	-	100.0	-	275.0	5358.00

Gini Coefficient of in-equality = 0.4642

NB: 207 Respondents were interviewed but only 7 buyers traded in fruits.

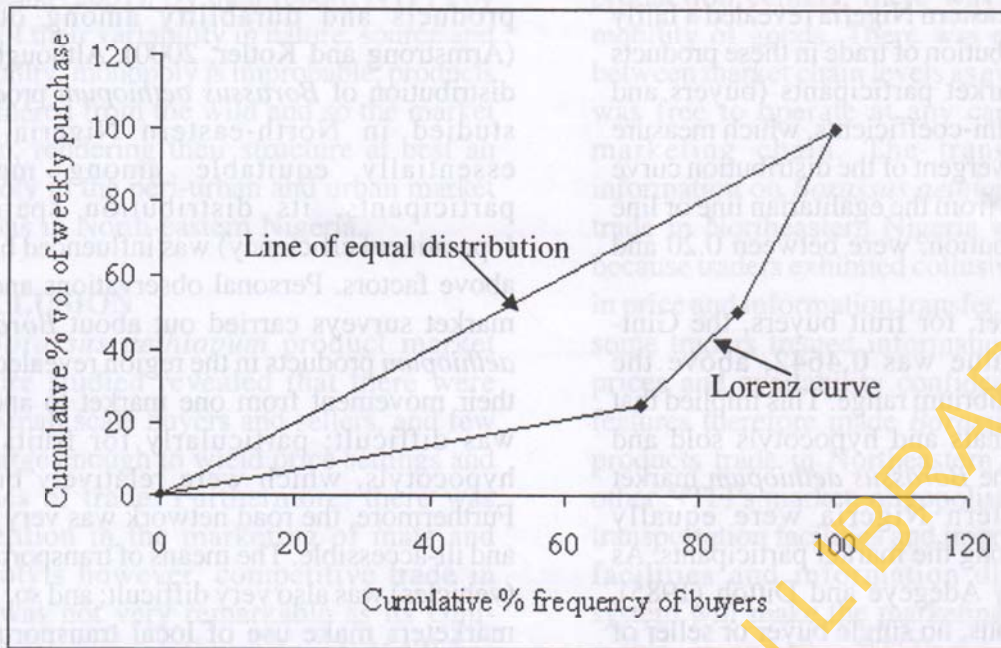


Figure 6: Lorenz Curve for Buyers of Fruits

Sellers Business Experience

The result on sellers' business experience presented in Table 7 revealed that 14.7% of the sellers had business experience of between 1-8 years and a mean of 4.5 years. Majority of the respondents, representing 62.2% of the traders had business years of experience of 9 - 16 years. The mean years of business experience at this range was 11.9 years. Only one person each had business years of experience from 33 - 40 years and 41 - 48 years respectively. From this result, it could be deduced that *Borassus aethiopum* trade has

been thriving in North-eastern Nigeria for more than four decades now. With the least years of business experience as 1 -8 years, representing 14.7% of the respondents, it could be adjudged that more people in recent years are still coming into the business. Interviews and discussions with market participants on conditions of entry into *Borassus aethiopum* products trade points to the fact that there are no laid down conditions and no restrictions exist.

Table 7: Sellers' Business Experience

Range of Business Experience (years)	Frequency	Percentage	Mean experience (yrs) per range
1 - 8	21	14.7	4.5
9 -16	89	62.2	11.9
17 - 24	26	18.2	20.0
25 - 32	5	3.5	27.5
33 - 40	1	0.7	35.0
41 - 48	1	0.7	40.0
Total	143	100.0	-

DISCUSSION

The size distribution of sales and purchases of *Borassus aethiopicum* mats, hypocotyls and fruits in Northeastern Nigeria revealed a fairly equitable distribution of trade in these products among the market participants (buyers and sellers). The Gini-coefficients, which measure the extent of divergent of the distribution curve (Lorenz curve) from the egalitarian line or line of equal distribution, were between 0.20 and 0.35.

However, for fruit buyers, the Gini-coefficient value was 0.4642, above the economic equilibrium range. This implied that quantities of mats and hypocotyls sold and purchased in the *Borassus aethiopicum* market in North-eastern Nigeria were equally distributed among the market participants. As propounded by Adegeye and Dittoh (1985), in such situations, no single buyer or seller of these products could significantly influence the demand and supply of these commodities and their respective prices in the market. This finding corroborates earlier finding by Onu (2000) in the case of cotton marketing in Northeastern Nigeria where quantities of cotton seeds marketed were equally distributed among the market participants. Consequently, this creates a competitive situation in the market for it to perform her ascription roles of efficient resource allocation, information flow, resource utilization and price determination among others; which are required for effective economic development (Okoh, 1999; Chirwa, 2000).

In the case of fruits the distribution was un-equal, and its demand was from few market participants; the farm-gate middlemen and the wholesalers who were also large enough to wield prices of the commodity in the market. The bulkiness of *Borassus aethiopicum* fruit could probably be the reason for this kind of distribution. From the unfolding situations, *Borassus aethiopicum* mats and hypocotyls have potentials for welfare and economic development in North-eastern Nigeria; however there is need for regulatory intervention in the case of fruits for a more balanced *Borassus aethiopicum* economy in the region.

Distribution of resources is influenced by many factors; transportation network, storage and processing facilities, bulkiness of products and durability among others (Armstrong and Kotler, 2000). Although the distribution of *Borassus aethiopicum* products studied in North-eastern Nigeria was essentially equitable among market participants, its distribution spatially (operational efficiency) was influenced by the above factors. Personal observations and the market surveys carried out about *Borassus aethiopicum* products in the region revealed that their movement from one market to another was difficult; particularly for fruits and hypocotyls, which were relatively bulky. Furthermore, the road network was very poor and ill-accessible. The means of transportation (vehicles) was also very difficult; and so, most marketers make use of local transportation facilities like bicycles, head-loaders, porters, wheel-barrows and motorcycles. These made transportation of these commodities within the local markets difficult and expensive and thus indirectly affects the efficiency in marketing these products.

The assessment of marketers' experience in *Borassus aethiopicum* products trade as a measure of entry into and exit from business revealed that majority (62.2%) of the traders belonged to the class with business experience of 9-16 years and only one person belong to the highest class of experience of 40-48 years. Similarly, 14.7% of the traders had business experience of 1-8 years. The foregoing result thus reveals that trade in *Borassus aethiopicum* products has lasted for more than four decades in North-eastern Nigeria and more people are still coming into the business. This assertion is supported and justifiable by the two extremities of experience boundaries of 1-8 years and 40-48 years for the lower and highest extremes respectively. None of the new entrants complained of any restrain against their entry into and exit from the *Borassus aethiopicum* product trade or business by the older market participants or traders.

Based on the theoretical models of market structure propounded by Bain (1972), and Adegeye and Dittoh (1985) the

mentioned features indicated that the market structure studied was oligopolistic. This finding corroborates that of Popoola and Oluwalana (2001). By their report; NTFPs by virtue of their variability in nature, source and availability; monopoly is improbable, products are gathered from the wild and so the market is open, rendering their structure at best an oligopoly in the peri-urban and urban market locations in North-eastern Nigeria.

CONCLUSION

The *Borassus aethiopicum* product market structure studied revealed that there were many small scale buyers and sellers, and few were large enough to wield price settings and volumes of trade. Furthermore, there was competition in the marketing of mats and hypocotyls however, competitive trade in fruits was not very remarkable as its Gini-coefficient of in-equality value (0.4642) has indicated. Trade in fruits therefore tends towards monopoly. The qualities of Hypocotyls and fruits among traders in the markets were homogeneous, and so, could not be differentiated among these traders. Therefore, they were not perfectly substitutable in the market. However, Mats varied in designs and could be perfectly substituted along the lines of differences in designs. There were no structures on ground

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to limit entry into or exit from the market. Every marketer had freedom of entry and exit; however, because of the remoteness of the production centers, there was difficulty in mobility of goods. There was easy mobility between market chain levels as every marketer was free to operate at any capacity in the marketing chain. The transmission of information on *Borassus aethiopicum* products trade in Northeastern Nigeria was defective because traders exhibited collusive behaviours in price and information transfer. For instance, some traders treated information on product prices and availability confidentially. These features therefore made *Borassus aethiopicum* products trade in Northeastern Nigeria, like other NTFPs market, oligopolistic. Providing transportation facilities and improving market facilities and information dissemination system will make the marketing of *Borassus aethiopicum* and other NTFPs more competitive and efficient.

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