

Full Length Research Paper

A survey of Fish sold in Liverpool market in Lagos

Adebayor T. Fumilayo

Department of Oceanography and Marine, Obafemi Awolowo University, Ife, Nigeria.

E-mail: tunde_layo@gmail.com

Accepted 12 July, 2014

A survey of the Liverpool Fish Market in Lagos State, Nigeria was carried out to assess the market structure, the socio-economic characteristics of the fish marketers and the nature of fish sold. The Liverpool fish market was headed by a woman, Alhaja Aminat Abdulkalim, the Iyalode of Sanni Market Apapa who co-coordinated the activities in the market. The market was dominated mostly by women and only few men were found in a ratio 1:4 (male: female). Eighty-six percent of the respondents were within 21 – 50 years age bracket which fell within the active age in human beings while only 2% of them were above 60 years. Majority of the marketers (70%) had only primary school education while only 5% had tertiary education. Smoked fish (65%) constituted a majority of the fish marketed while the remaining 35% were fresh and live fish. Liverpool market was identified as an important secondary fish market in Lagos State which played critical role in channeling fishery products to the citizens of Lagos Metropolis. Major problems faced by the marketers were erratic supply of electricity, inadequate cold storage facilities and stalls to display the fish products.

Key words: Fish market structure, fish marketers, socio-economic characteristics, fish sold.

INTRODUCTION

Animal protein sources such as beef, mutton and chicken presently are beyond the reach of an average income earner (Samson, 1997). Hence many people now settle for fish as a cheap source of animal protein. The demand for fish globally and particularly in Nigeria has been on the increase with supply not meeting up with the demand (FAO, 2004). Current projected fish demand is estimated at 2.66 million tonnes based on a population (2006) of 140 million (FDF, 2007). However, data on domestic fish supply in the country showed that average domestic supply of fish was 620,000 tonnes which was augmented by fish importation of about 740,000 tonnes valued at US\$594.4 million hence leaving a deficit of 1.3 million tonnes. Olatunde (1998) reported that fish constitute 40% of protein intake of the average Nigerian and also provides employment opportunities to many rural dwellers in different fields of fisheries activities such as production, processing, preservation and transportation.

Availability of fish to the consumers at the right time and right place requires an effective marketing system. Marketing of fish passes through various market participants and exchange points before they reach the final consumers (Ali et al., 2008). Application of various

pricing criteria on sales of fish and fishery products depends on efficiency with which the marketing system transmits information among the fish mongers or marketers. Bain (1968) defined market structure as characteristics of the organization of a market which seem to influence strategically the nature of competition and pricing behaviour within the market.

The price efficiency approach analyses marketing in its dimensions of space, time and form (Bressler and King, 1970). Essential to the analysis of markets is the identification of market participants, channels and arrangements. Fish marketing does not usually involve the fishermen and consumers only but there are other players in the fish distribution channels especially middlemen (Lawal and Idega, 2004). Consequently prices of fish change as it passes through these middlemen such that by the time it reaches consumers, it becomes expensive. Bryceson et al. (1993) who reported that the middlemen performing the role of marketing are being accused of earning higher profits in the marketing system. As the fishermen approach their landing sites, fish marketers come around to purchase the fish, though the number of intermediaries or middle men may range from one to three



Plate 1. Liverpool fish market.

three. In Gambia, fishermen frequently sell fish to their female relatives and not necessarily their wives who then sell to middlemen or in the towns (Barrett, 1988)

Liverpool fish market is one of the popular fish markets in Lagos State, Nigeria. This study was carried out to investigate the market structure and identify the marketing channels for efficient delivery of good quality fishery products to the consumers.

MATERIALS AND METHODS

Liverpool fish market is located at Apapa, Lagos State and situated under the Tincan-Apapa Wharf fly-over bridge along Apapa-Mile 2 Express Road. The size of the market was about 1509.2 m² in area at the time of the survey. The market was selected because operators at the market included both wholesalers and retailers.

Six visits were made to the market from January to December 2008. During each visit which commenced as early as 6.00 am, the market was surveyed, inspected and fish mongers were interviewed. Facilities at the market, fish species marketed and the market structure/organization were recorded. Structured questionnaires were administered to 50 fish marketers by scientists and then completed by them as most were literates and semi-literates. The market leader was also interviewed. The oral interview focused on problems and challenges faced by fish marketers as well as major challenges of the fish market.

Data collected through these questionnaires included socio-economic variables such as gender, age, educational status, price, cost and problems associated with fish marketing. The data was subjected to inferential and descriptive analysis. Percentages were used to describe the socio-economic variables of the marketers.

RESULTS

Liver pool market was identified as an important secondary fish market in Lagos State which played a very critical role in channeling fishery products to the citizens of Lagos Metropolis. It operated a daily market and opened as early as 6.00 h channeling both processed fish product (smoked) and fresh fish from the neighboring coastal fishing villages. Activities at the fish market are presented in Plates 1- 5.

Organizational structures of the market

The Liverpool fish market was headed by a woman, Alhaja Aminat Abdulkalim, the Iyalode of Sanni Market Apapa who co-coordinated the activities in the market. She was supported by a man who was responsible for collection of market dues and levies from the marketers. The marketers belonged to the Association of Nigerian Market Women and Men. The market was dominated mostly by women and only few men were found in the ratio of 1:4 (male: female).

Three (3) major categories of fish marketers were identified which included fresh fish sellers, smoked fish sellers and crayfish sellers. Live fish marketers were not very common in this market. Details are presented in Table 1. Both the fresh and processed fish dealers have organized committees with leaders to represent their res-



Plate 2. Fresh fish marketer.



Plate 3. Display of smoked fish.



Plate 4. Fish marketers and buyers.



Plate 5. Display of smoked crayfish.

Table 1. Types of retail fish sellers in Liverpool Fish Market.

Categories	Number of respondents	% of respondents
Live fish seller	2	4
Fresh fish seller	14	28
Smoked fish	18	36
Dry crayfish and shrimps	16	32
Total	50	100

Table 2. Age distribution of fish marketers.

Age group	No of respondents	% of respondents
< 20	1	2
21- 30	18	36
31- 40	15	30
41- 50	10	20
51- 60	5	10
> 60	1	2
Total	50	100

pective interests in the overall market association. There was only one cold room in the market which was operated by only male marketers

Socio-economic characteristics of the fish marketers/fishmongers

Eighty- six percent of the fish sellers were between 21 and 50 years old (Table 2) which coincided with the age for economic activity in humans. Ten percent of the fish marketers were between the ages of 51 and 60 years. Marketers above 60 years accounted for only 2% which was more or less the retiring age of the respondents.

Educational status

Ninety percent of the respondents had acceptable levels of formal education. They can read and write and solve arithmetic problems. Out of these figures 25% had secondary school certificate, 5% had tertiary education, while 60% out of the 70% that had primary school certificate can read and write. Virtually all sections of the population (literate and semi- literate) were engaged in fish marketing.

Fish species marketed

Fish sold in the market were brought in from the surrounding coastal fishing villages namely, Sagbotoju,

Akaraba, Etiagbo, Ajegunle, itwagoh, Olokun, kodomeh, and Ajido. These villages served as the primary markets. The fish marketers sold different types of fish ranging from freshwater to marine species, and fresh to smoked fish. Majority of the marketers (70%) obtained their fish supply from the primary market while the remaining 30% got their supply from the secondary market.

The species marketed included, *Ethmalosa fimbriata* (Bonga fish), *Cynoglossus senegalensis*, (Sole), *Pseudotolithus senegalensis* (Croaker), *Galeoides decadactylus* (Threadfin), *Polydactylus quadrifilis* (West African Threadfin), *Drepane Africana* (African sicklefish), *Elops lacerta*, (Ten ponder), *Chysichthys nigrodigitatus*, (Silver Catfish), *Pomadasys jubelini* (Grunter), *Brachydeuterus auritus* (Big eye grunt), *Vomer sp.* (Moon fish) *Carcharchinus spp* (Shark), *Sphyma sp* (Hammerhead shark), *Liza* and *Mugil* species (Grey mullets), *Tympanotonus / Pachymelania spp* (Periwinkle), *Sphyræna spp* (Barracuda), *Penaeus notialis* (Pink shrimp), *Sepia sp.*(Squid), *Nematopalaemon hastatus* (Crayfish), *Callinectes sp* (Swim crab), *Thunus obesus* (Bigeye tuna), *Ephinephelus sp* (Groupers), *Dasyatis sp* (Sting ray), *Palunurinus sp.* (Spiny lobster), *Pentanemus quinquarius* (Threadfin) and *Lutjanus sp.*(Red snapper).

These species were of various sizes and ages (juveniles, post juvenile, sub-adult and adult). Majority of the fish sold were of sub-adult sizes. Smoked crayfish (*Nematopalaemon hastatus*) was the most abundant species sold. Wholesale marketing of the fresh and frozen specimens were packaged in bags of 20 kg while smoked specimens were packed in baskets or plastic basins. Some of the fish marketers used weighing balance to sell their fish while majority sold in heaps with determined prices. The prices of the different species including fresh and smoked specimens ranged from ₦400 – ₦700 per kilogram (1 US dollar is approximately ₦150).

Social amenities

The market was devoid of many social amenities. They had only one cold room which was handled exclusively by the male fish sellers in the market. No visible tap water or bore hole was located in the area. The only available water used was taken from the Lagoon. The market was dirty without modern sanitary facilities probably because it was situated under a bridge and not properly planned. Most of the fish mongers had deep freezers for fish preservation which made it easier for the women to display their fish on the table without storing in ice. Unsold frozen fish were later returned to the deep freezer.

DISCUSSION

The Liverpool fish market is a popular market in Lagos Metropolis and highly patronized by the inhabitants

because the fish and fishery products were cheaper than the other markets in the State. The market operated daily although on a small scale on Sundays. Both fresh and smoked fish were sold in the market but overall, the market was known for the sale of smoked crayfish which is used as a condiment in preparation of many Nigerian dishes. All the fish marketed were caught from Nigerian coastal waters. Both wholesales and retail fish marketing were carried out. Fish sold were mostly from the capture fisheries. Aquaculture raised fish were not observed during the period of this study.

From our survey, it was observed that a marketer could make a profit ranging from ₦1000 – ₦3000 per day. The total number of marketers was about six hundred and hence the average profit of that market was about one million two hundred thousand naira (₦1,200,000) per day. This was however dependent on the catch and the season. More sales were made from the months of May to December.

The fish market like most food markets in Lagos was headed by a woman leader who oversees to the smooth operations of the market. Majority of the fish marketers were women (80%). Women have been found to be actively involved in fish marketing in Nigeria more than men. A similar study conducted in Benue State by Lawal and Idega (2004) reported 90% women participation in fish marketing. The age of majority of the fish sellers ranged from 21 to 50 years indicating they were within the active work-life of humans and can withstand rigors associated with the trade. Youths below 20 years were not involved in the actual fish marketing except as errand boys and girls. This may be attributed to the rigors of the trade or their inability to access credit for fish purchases which was found to be expensive.

Fish marketing chains have been found to be influenced by a number of factors which includes economic, cultural and geographical settings. The value chain usually commences from the fishing villages where the fishes are harvested and terminates in the fish markets. Each stage of the chain involves different organization and relationships consisting of various age groups, sexes and ethnic groups. Majority of the marketers had acceptable levels of formal education and these actually make communication easy in the market as majorities of fish marketers communicated in English. As majority of the fish marketers were women, there is need to strengthen and empower them for efficient delivery of fish and fishery products to consumers (Chilivumbo and Kanyangwa, 1984).

Major constraints

Some major problems encountered by the marketers were irregular supply of electricity, lack of credit facilities, inadequate cold storage rooms and ice holding facilities. There were very few stalls in the market and most of the

fish were displayed on the ground and hence not hygienic. There was no modern landing jetty at the market.

Conclusion

Liverpool fish market played an important role in marketing and distribution of fish and fishery products in the State. The market was situated under a fly-over bridge and lacked basic infrastructure as applicable in most markets in Lagos State. There is limitation of space for expansion and this may have been responsible for the lack of social amenities in the market. However the close proximity to the coastal fishing villages makes it a gateway for the delivery, marketing and distribution of fish and fishery products. There is urgent need for infra-structural development of the market or a re-location to another site for the establishment of a standard fish market.

REFERENCES

- Ali EA, Gaya HIM, Jampada TN (2008). Economic analysis of fresh fish marketing in Maiduguri Gaboru market and Kachallari Alau dam landing site of Northeastern, Nigeria. *J. Agric. Soc. Sci.*, 4: 23-6.
- Bain JS (1968). *Industrial Organization*. 2nd Edition. John Wiley and Sons, New York.
- Barrett HR (1988). *The Marketing of Foodstuffs in the Gambia, 1400-1980. A Geographical Analysis*. Aldershot: Avebury.
- Bressler RG, King RA (1970). *Market prices and interregional trade*. John Wiley and Sons, New York
- Bryceson DF (1993). *Liberalizing Tangamia food trade; Public and private faces of urban marketing policy 1939 – 1988* UNRISD James Carry, London.
- Chilivumbo A, Kanyangwa J (1984). *Strengthening Women's Participation in Food and Agricultural Marketing; Proceedings of the Seminar held at Cooperative College, Lusaka, Zambia, 16-19 April*. Development Studies Bureau, Occasional Paper 21.
- FAO (2004) *Future prospects for fish and fishery products: Medium-term projection to the year 2010 and 2015*. FAO Fisheries Circular. FIDI/972-1. Rome.
- FDF (Federal Department of Fisheries) (2007). *Fishery Statistics of Nigeria*. 4th Edition. 1995-2007. p. 49.
- Lawal WL, Idega EO (2004). *Analysis of fish marketing in Benue state*. A paper presented at 2001 Annual Conference of Association of Agricultural Economists (NAAE) Held at A.B.U Zaria, November, 3-5.
- Olatunde AA (1998). *Approach to the study of Fisheries Biology in Nigeria inland waters*. Proceedings of International Conference of two decades of research In Lake Kainji. pp. 338- 541.
- Samson YA (1997). *Introduction to Agriculture and Fisheries management in Nigeria*. Goal Educational Publishing, Abeokuta, Nigeria. pp. 10-24.