

THE PROBLEMS OF FRESH FISH MARKETING IN OSHIMILI SOUTH LOCAL GOVERNMENT AREA OF DELTA STATE, NIGERIA

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ABSTRACT

The problems of fresh fish marketing in Oshimili South Local Government Area of Delta State were examined. Primary Data were collected within a 12 months period via interview instruments - questionnaire and observations. 144 copies of questionnaire were randomly distributed to 2 wholesalers and 10 retailers from 3 identified markets with evidence of fish marketing activities in the four major towns in the study area. Reports from 126 respondents who returned their questionnaire show that cultured fish ponds are the most regular and reliable source of fresh fish in the area, though rivers/stream provided more fishes but supply was irregular and not reliable. Fresh fish was observed to be significantly more abundant in the dry season than in the rainy season. Results also show that seasonality, scarcity, means of preservation, poor means of transportation and the use of badly-shaped containers are the main problems of fresh fish marketing in the Local Government Area. The paper recommends the creation of enabling environment to encourage more people to go into aquaculture in order to beat the problem of seasonality in fish supply. Also, fish smokers should use cheaper alternative fuel for smoking unsold fish.

Keywords: *Fresh Fish, Marketing, Oshimili South, Delta State.*

INTRODUCTION

Fish marketing and distribution is an integral aspect of fish production because it is only when the fish gets to the final consumers that production can be completed. Marketing has been defined as all processes involved from the production of a commodity until it gets to the final consumer (Crammer, Jensen and Southgate (Jr), 2001). These processes ascertain that the right product is available at the right place, at the right price and at the right time to fully satisfy the consumer (Beierlein and Woolverton, 1991; Okoh, Ugwumba and Elue, 2008). Fish is one of the most important sources of animal protein for people in developing countries of West Africa (Teutscher, Sack and Onedrsogo, 1990).

Fish supply has been one of the problems militating against adequate fish consumption hence reduced intake of animal protein. Fish being highly perishable after harvest requires proper preservation and storage to increase the shelf life (Clucas and Ward, 1996). Major methods of fish preservation and processing have been

identified as freezing, wood smoking and drying. In most markets in Oshimili South Local Government Area and in Nigeria, fish is sold to consumers as frozen or ice fish, cured (smoked) fish sundried fish and as fresh fish either from a cultured pond or from the wild. The buying and selling of fish products in their various forms as fresh or preserved fish have been affected by the various factors. Pollnac (1985) observed that urbanization and growth of urban population which has led to changes in the pattern of demand for fish products and the development of informal markets are responsible for an increase in consumer demand for higher quality fish products. Other socio-economic problems such as transportation and distance from the point of sale to the final consumers have affected the quality and cost of fish products (Gittenger, 1984). The problems of demand and supply of fish in riverine and non-riverine communities may be affected by abundance and unavailability of fish products.

Oshimili South L.G.A. is bounded on the East by River Niger and has a few streams discharging into the river. Fish though available in various forms in the markets, has been observed to be highly expensive. Fresh fish happens to be a delicacy amongst the people of the area. This study therefore seeks to examine:

- a The availability of fresh fish in Oshimili South Local government Area and if availability depended on source of fish.
- b The accessibility of fresh fish sellers to fish preservation/storage facilities and other constraints to fresh fish marketing in Oshimili South L.G.A.

MATERIALS AND METHODS

The study was carried out in Oshimili South L.G. A. which lies on latitude $6^{\circ}34' - 6^{\circ}45'E$ and longitude $5^{\circ}59' - 6^{\circ}18'N$ (Ministry of Lands, Survey and Urban Development, 2003). The area is made up of four major towns namely: Asaba, Ibusa, Okwe and Oko. Data were collected within a period of three months between February and April, 2009. Primary data collected were through personal interview, questionnaire and observations. Three locations were identified as markets in each of the towns purposely sampled for the study due to evidence of fish marketing activities. Two wholesalers and 10 retailers were selected by simple random sampling technique from each of the three markets in the four towns giving a total of 144 respondents for the study, out of which 126 returned their questionnaires. Also, collected were information on the socio-economic parameters of the respondents such as gender, age, level of education, years of experience, access to credit, input and output (income), profit margin as well as problems encountered during fresh fish marketing were identified. Data collected were analysed using descriptive statistics - means, percentages and non-parametric statistics - chi-square test at 95% confidence level.

RESULTS AND DISCUSSION

Analysis of data collected as on table 1 shows that the most regular source of fresh fish in Oshimili South Local Government Area are rivers and lakes. Although reliability on this source is fairly low. Other sources of fresh fish were wild ponds and

cultured ponds with culture ponds being the most reliable. Fresh fish was observed to be significantly more abundant in the dry season than in the rainy season in the study area (figure 1). Responses show a dearth of preservation/storage facilities even as there is dire need for such facilities. The major means of preservation is smoking (table 2). The fuel for smoking is firewood, which is relatively scarce making the cost of smoking high. Table 3 shows that transportation is the major constraint in fresh fish marketing in the area. Most fresh fish sellers in the study area travel long distances by road. Some of the roads are bush tracks while others are tarred roads. Most parts of the tarred roads were in poor conditions. Cost of transportation is high. Also, most of the fresh fish are transported in large, wide and round containers.

The socio-economic characteristics considered (table 4) showed that females were more of retailers than wholesalers while males were more of wholesalers. Active fresh fish marketing was observed to be highest in age group 41 - 60 followed by age group 21 - 40. Most of the fresh fish marketers had formal education up to the primary school level. 41.3% of the respondents had 6 - 10 years of experience on the job of fresh fish marketing. Few of the respondents had access to loans as 65.1% were self sponsored. Income/profit margin per month was observed to be low. More of the respondents had income/profit of between 0 - 5,000 naira (Table 4).

The most regular sources of fresh fish in the study area are rivers/streams and lakes, since the area has a network of small streams which empty into the larger River Niger and is dotted by lakes such as Lake Onah. According to Akegbejo-Samson (1997), major sources of fresh fish are rivers and lakes. These are regular sources that are not reliable due to seasonality and the fact that fishermen cannot rightly predict their catch. The more reliable sources are cultured ponds and wild ponds which are few in the study area. These factors contribute to scarcity and high cost of fish. Also, there is considerable need to preserve unsold fish. Clucas and Ward (1996) reported that different methods of preservation of fish bring about differences in shelf life of fish. In Oshimili South L.G.A. unsold fish is preserved mainly by wood-smoking. But wood is also scarce and expensive. This is an additional cost which translates to higher prices of fish. Transportation was observed to be a major problem in fish marketing and distribution in the study area. Most fresh fish sellers travelled by road and some of the roads are bush tracks while others are tarred but in a state of disrepair. This reduces the volume of traffic on the roads and raises the cost of transporting fish. Furthermore, the fish are transported in large, wide and round containers, which make it difficult for the containers to be loaded into vehicles used. Only special vehicles can conveniently accommodate these containers because of their unique shapes and sizes. This adds to the inconvenience of transporting the fish.

Majority of the fish marketers were females. This shows that females dominated the fresh fish marketing and distribution in the study area. Aihonsu, Oreagba Idowu and Shitty (2008) reported similar result of more female involvement in fishery activities. Active participation in fresh fish marketing and distribution was found to be higher in age group 41 - 60 with a mean of 42 years. This goes to show that fresh

fish marketers are able-bodied and prepared to undergo the stress associated with the marketing and distribution of fresh fish. Few of the respondent, 1.6% had no formal education while most had primary education, more of the retailer-respondents had between 0.5 and 6 - 10 years of experience on the job, whereas the wholesalers had higher years of experience of between 6 - 10 years and 11 - 20 years on the job. Education and years of experience had been found to have positive influence on choice and management of business (Ebe, 2007).

Most of the respondents were self sponsored as many of them complained of not having any form of assistance and did not know how to go about obtaining loans from credit facilities. Income margin per month was observed to be low. This low income could be attributed to the many constraints especially transportation of fresh fish to sale outlets. Other constraints were inability to access loans, and the presence of middlemen in the distribution of fresh fish which have resulted in the unstable price and high cost of fish in the study area.

Table 1: Regularity and Reliability of sources of fish supply

| Sources | Fish Supply (%) | Regularity (%) | Reliability (%) |
|----------------|-----------------|----------------|-----------------|
| Rivers/Streams | 61 (48.4) | 13 (10.3) | 26 (20.6) |
| Lakes | 24 (19.1) | 11 (8.7) | 9 (7.1) |
| Wild ponds | 20 (15.9) | 38 (30.2) | 40 (31.8) |
| Cultured ponds | 21 (16.7) | 64 (50.8) | 51 (40.5) |

Source: Survey, 2010

Table 2: Methods of fresh fish preservation used by respondents

| Methods | Number of Respondents | (%) |
|--------------------|-----------------------|------|
| Sun drying | 2 | 1.6 |
| Salting | 0 | 0 |
| Freezing | 35 | 27.8 |
| Smoking (firewood) | 89 | 70.6 |

Source: Survey, 2010

Table 3: Problems of fresh fish marketing by respondents

| Problems | Number of Respondents | (%) |
|------------------------|-----------------------|------|
| Sources of fish supply | 32 | 25.4 |
| Availability of fish | 28 | 22.2 |
| Cost of fish | 51 | 40.5 |
| Preservation | 36 | 28.6 |
| Transportation | 83 | 65.9 |
| Credit/loans | 60 | 47.6 |
| Input | 45 | 35.7 |
| Middle men | 59 | 46.8 |
| Level of education | 25 | 19.8 |
| Years of experience | 54 | 42.9 |
| Gender | 33 | 26.2 |

Source: Survey, 2010

Table 4: Distribution of Respondents according to socio-economic characteristics

| Variable | Wholesalers | Retailers | Total | Percentage |
|---------------------------------|-------------|-----------|-------|------------|
| Gender: | | | | |
| Male | 15 | 20 | 35 | 27.8 |
| Female | 9 | 82 | 91 | 72.2 |
| Age-group: | | | | |
| 1 - 20 | 1 | - | 6 | 4.7 |
| 21 - 40 | 7 | 42 | 49 | 38.9 |
| 41 - 60 | 15 | 54 | 69 | 54.8 |
| Above 60 | 2 | - | 2 | 1.6 |
| Level of Education: | | | | |
| Non formal | 2 | - | 2 | 1.6 |
| Primary | 11 | 65 | 76 | 60.3 |
| Post primary | 4 | 21 | 25 | 19.8 |
| Vocational | 7 | 16 | 23 | 18.3 |
| Others | - | - | - | - |
| Years of Experience: | | | | |
| 0 - 5 | 1 | 36 | 37 | 29.4 |
| 6 - 10 | 11 | 41 | 52 | 41.3 |
| 11 - 20 | 10 | 22 | 32 | 25.4 |
| 21 - 30 | 2 | 3 | 5 | 4.0 |
| Above 30 | - | - | - | - |
| Source of input: | | | | |
| Self | 7 | 75 | 82 | 65.1 |
| Family | 12 | 18 | 30 | 23.8 |
| Loans | 5 | 9 | 14 | 11.1 |
| Income/profit per month: | | | | |
| 0 - 5,000 | 17 | 31 | 48 | 38.1 |
| 5,001 - 10,000 | 11 | 21 | 32 | 25.4 |
| 10,001 - 20,000 | 7 | 18 | 25 | 19.8 |
| 20,001 - 30,000 | 8 | 9 | 17 | 13.5 |
| 30,001 - 40,000 | 3 | 1 | 4 | 3.2 |
| Above 40,000 | - | - | - | - |

Source: Survey, 2010

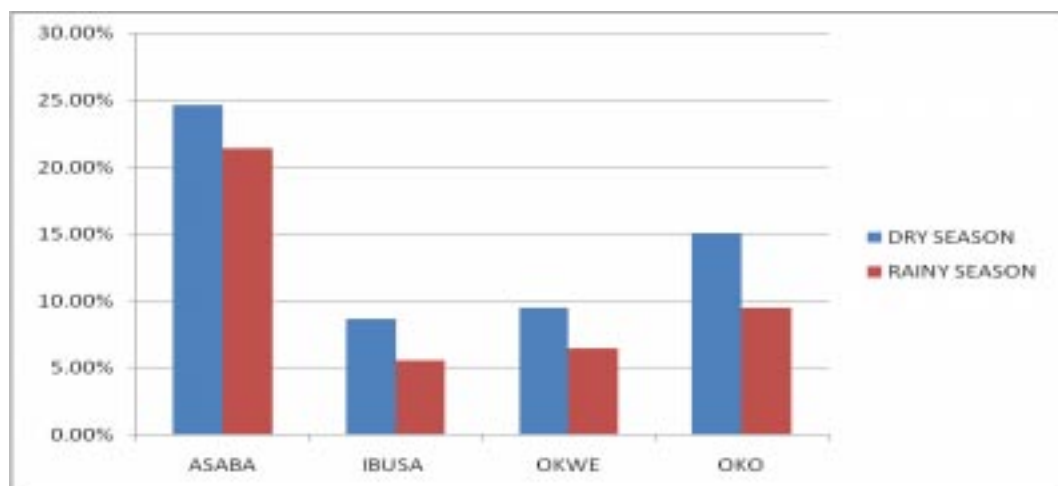


Figure 1: Seasonality of fresh fish availability in the study area according to respondents

CONCLUSION AND RECOMMENDATIONS

This study has shown that cultured fish ponds are the most regular and reliable source of fresh fish in the area. Though fresh fish supply from rivers and lake are more, supply are not regular and reliable. Government should therefore create a more enabling environment for more people to go into aquaculture so as to beat the seasonality of fresh fish supply. Due to inadequate and high cost of fish preservation/storage in the area. Fish smoking can be achieved by using cheaper alternatives of fuel such as rice husks, wood wastes and maize cobs as substitutes for wood. The government should open up more roads and intensify efforts on the maintenance of existing roads. Research efforts should be directed more toward producing better-shaped containers that will ease the transportation of fish.

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