

The Abundance and Socio-Economic Characteristics of Kpata Fish Market In Lokoja, Kogi State, Nigeria

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Abstract

This study attempts to analyze the abundance and possible market characteristic of the Kpata fish market (Old Market) in Lokoja. Fishery products caught were mainly to meet domestic demand especially in Lokoja. Age distribution among fish mongers do not differ significantly ($p > 0.05$) as 63.1% of the fish mongers fell within the economic productive age group (18 to 55 years), less than 30% of the respondent were between the ages of 56 to 70 years and only 4.3% of the respondents fell within the step-down age group (71 to 100 years). Distribution of fish species as observed in the market are majorly fresh water species even though there are traces of brackish and marine fish species. Despite the market's long historical background, low level of former education and poor market infrastructures are the major constrains observed in this study.

Key words: - Kpata fish market, Socio-economic characteristics, Northern Nigeria.

1.0 Introduction

The fish production patterns and consumption patterns have changed over the last 30–40 years, with both production and consumption being predominant in developing countries (Delgado et. al., 2003). Fish and all aquatic products are easily digested and though perishable, are easily processed into various forms avoiding wastage. Most importantly, fish constitutes one of the main animal protein sources of the developing world, containing all essential amino acids, thereby providing an affordable nutrient source to most rural and impoverished communities (Sena S. et. al., 1999)

Fish also play an important part in the life and well being of most of the vast populations of Nigerians. Fresh, smoked, dried, roasted or even fried, they are sold in the remote small villages; dehydrated and pounded into fish flour in some areas, they provide an insurance against leaner times. Fish dishes are probably served several times weekly in most homes and there are few Nigerians who do not relish this wholesome food (Reed, W. et.al., 2010)

In Nigeria, fish has a far-reaching implications on food security as fish supplies naturally augment food availability; consumption of fish improves the utilization of food thereby ensuring good nutritional outcomes particularly of the poor and rural populations; and, the vast number of people engaged in the fishing industry earn incomes that improve upon their access to food (Okrah et. al., 2011). The broad objective of this study was to investigate the socio-economic characteristics and abundance of Kpata fish market (Old market) in Lokoja.

2.0 Methodology

Kpata fish market (Old Market) in Lokoja is located at latitude 7° 48'N and longitude 6° 46'E. The city serves as a confluence for the two most prominent rivers in Nigeria; River Niger and River Benue. A pine-hole view of the confluence joining the two rivers can be seen in plate 1.

The ancient city of Lokoja has a long tradition of a very active domestic fishing industry and with the rivers Niger and Benue making a confluence at Lokoja makes the city a natural attraction for some artisanal fish farmers who travel many hundreds of miles during dry seasons from Kano and Sokoto to Lokoja where they fish for a few months until the rain begins.

Besides its importance to fishermen and those who are partly dependent upon fish for food the fishing industry in Lokoja provides gainful employment for many thousands of people who trade in fish or fishing gear as well as transporters and canoe makers.

3.0 Results

Organizational Structure Of Kpata Fish Market

Business in Kpata fish market (Old market) in Lokoja begins as early as 5.30am when fish buyers arrive at the fish landing site to check the day's catch before the arrival of visitors who often come to escalate the prices. The price of fish in the market varies as the supply decides the price levels, subject to the buying power. When there is excess catch of a particular specie and the end markets are glutted with that specie the prices will be cheaper. At the same time when the season is over or the particular specie in short supply, the prices will be at a premium. The catalogue of some fishes caught from Lokoja river and other parts of Northern Nigeria can be seen in table 1.

3.1 Fish Smoking In Kpata Market

Fish smoking in Kpata fish market (Old Market) in Lokoja is traditionally carried out by women along the banks of River Niger. Various traditional methods are employed to preserve and process fish for consumption and storage. These methods includes, frying, drying, smoking, salting etc. However, smoking is the predominant method of fish preservation in Lokoja as over 40% of domestic catches are consumed in smoked form. Edah et. al., 2010 who worked on the Organoleptic Characteristics, Length-weight Relationship and Condition Factor of *Oreochromis niloticus* in Egah River at Idah L.G.A of Kogi State, Nigeria revealed that although, smoking of fish is the predominant method of fish preservation, most of these fishes are not salt-cured before smoking, as such, smoked fishes get spoiled easily.

Pictures of some fishes caught from River Niger, smoked and displayed at Kpata fish market (Old market) can be seen on plate 2 and 3.

3.1.1 Socio-Economic Characteristics

From **fig 1**, the age distribution among fish mongers do not differ significantly ($p > 0.05$). 63.1% of the fish mongers fell within the economic productive age group (18 years to 55 years), less than 30% of the respondent were between the ages of 56 years to 70 years and only 4.3% of the respondents fell within the step-down age group (71 years to 100 years), while table 2. shows the categories of fish sellers.

3.1.2 Brackish and Marine Fish Food Traces in Kpata Fish market

Traditionally, the bulk of the food fish supplies is of fresh water origin, and it still is. However, no account of freshwater fishes would seem complete without a mention of some brackish and marine creatures like the; *Potamotrygon garouensis* Giebel, *Palaemon paucidens* Hilgend and the *Atya gabonensis*, which are sometimes captured by fishermen from the Niger River and displayed at the kpata fish market in Lokoja. Historical developments of the fisheries caught indicates the escape of some brackish and marine fisheries origins into the fresh waters of Lokoja.

3.1.3 Fish Food Needs and Aquaculture

Although the production from the capture fisheries in Lokoja has plateaued, the demand for fish has grown over the years resulting from an increased in population, exacerbated by increased consumption among fish lovers, the aquaculture industry in Lokoja is gradually gaining ground as cultured fishes like the *Clarias* and *Heterobranchus* are seen displayed in the market for interested buyers.

4.0 DISCUSSION

Owing to its long historical records as a river port and a confluence city; the Kpata fish market (Old Market) in Lokoja serves as a major fish center for many as fresh fish could be gotten readily at cheaper rate. The categories of fish sellers present on a daily basis are majorly between the ages of 46-55 years followed closely by 56-70 years of ages. The least age group respondents in the market are the too old and too young fish seller (71-100 and 13-17years respectively). The age group of between 18 to 35 years showed a reduced interest in this profession, this could be as a result of their low experience and their social status of been 'spinsters' thus may not be willing to endure the rigorous activities involved in the profession.

The survey also exposed the absence of the male folks in open fish marketing, fish processing and fish smoking. This could be as a result of cultural and native beliefs of the citizenry as they are primarily restricted to the fishing aspect.

The low level of formal education among the respondents contributes to the poor adoption of mother agricultural technologies. This is in line with Dogondaji and Baba (2010) who emphasized that low literacy level could have a negative impact on the adoption of agricultural technologies. Salt curing of processed fish, poor infrastructure and inadequate power supply to kpata fish market are among other points the major limitations observed during this study. This limitations are similar to the results of Ayo-Olalusi et al 2010, who worked on the Liverpool fish market in Lagos State, Nigeria.

4.1 CONCLUSION AND RECOMMENDATION

Kpata fish market (Old Market) in Lokoja has a wealth of a long historical record. With the high rate of development in Lokoja today, the need to provide basic facilities like generators and constant power supply, freezers and cold rooms, market shops at fish landing sites which will serve as both outlet for their fish products and as a ware houses in case of excess supplies becomes very necessary. Despite its primitive beginning Kpata fish market (Old Market) is still regarded as the pier of fresh fish in Lokoja.

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TABLE 1: Catalogue Of Some Fishes Caught and displayed in kpata fish market (Old market) and Other Parts Of Northern Nigeria.

S/N	NAME OF FISH	FAMILY	GENUS
1	<i>Chrysichthys auratus longifilis</i>	Bagridae	<i>Chrysichthys</i>
2	<i>Chrysichthys nigrodigitatus</i>	Bagridae	<i>Chrysichthys</i>
3	<i>Chrysichthys furtus</i>	Bagridae	<i>Chrysichthys</i>
4	<i>Clarotes laticeps</i>	Bagridae	<i>Clarotes</i>
5	<i>Clarotes macrocephalus (after Blache)</i>	Bagridae	<i>Clarotes</i>
6	<i>Auchenoglanis biscutatus</i>	Bagridae	<i>Auchenoglanis</i>
7	<i>Clarias lazera</i>	Claridae	<i>Clarias</i>
8	<i>Clarias anguillaris</i>	Claridae	<i>Clarias</i>
9	<i>Clarias submarginatus (after Daget)</i>	Claridae	<i>Clarias</i>
10	<i>Heterobranchus longifilis (after Boulenger)</i>	Claridae	<i>Heterobranchus</i>
11	<i>Heterobranchus bidorsalis</i>	Claridae	<i>Heterobranchus</i>
12	<i>Heterobranchus isopterus Bleeker</i>	Claridae	<i>Heterobranchus</i>
13	<i>Hydrocynus brevis</i>	Characidae	<i>Hydrocynus</i>
14	<i>Hydrocynus somonorum</i>	Characidae	<i>Hydrocynus</i>
15	<i>Hydrocynus lineatus</i>	Characidae	<i>Hydrocynus</i>
16	<i>Hydrocynus forskali</i>	Characidae	<i>Hydrocynus</i>
17	<i>Micralestes actuidens</i>	Characidae	<i>Micralestes</i>
18	<i>Alestes dentex sethente</i>	Characidae	<i>Alestes</i>
19	<i>Alestes baremose</i>	Characidae	<i>Alestes</i>
20	<i>Alestes chaperi (after Boulenger)</i>	Characidae	<i>Alestes</i>
21	<i>Alestes longipinnis</i>	Characidae	<i>Alestes</i>
22	<i>Alestes nurse</i>	Characidae	<i>Alestes</i>
23	<i>Alestes Leucisus</i>	Characidae	<i>Alestes</i>
24	<i>Alestes imberi (after Boulenger)</i>	Characidae	<i>Alestes</i>
24	<i>Alestes macrolepidotus</i>	Characidae	<i>Alestes</i>
26	<i>Alestes brevis</i>	Characidae	<i>Alestes</i>

27	<i>Hepsetus odoe</i>	Characidae	<i>Hepsetus</i>
28	<i>Nannaethiops unitaeniatus (after Daget)</i>	Citharinidae	<i>Nannaethiops</i>
29	<i>Paradistichodus dimidiatus</i>	Citharinidae	<i>Paradistichodus</i>
30	<i>Distichodus brevipinnis</i>	Citharinidae	<i>Distichodus</i>
31	<i>Protopterus annectens</i>	Lepidosirenidae	<i>Protopterus</i>
32	<i>Heterotis niloticus</i>	Osteoglossidae	<i>Heterotis</i>
33	<i>Papyrocranus afer</i>	Notopteridae	<i>Papyrocranus</i>
34	<i>Xenomystus nigri</i>	Notopteridae	<i>Xenomystus</i>
35	<i>Hyperopisus bebe occidentalis</i>	Mormyridae	<i>Hyperopisus</i>
36	<i>Mormyrus rume</i>	Mormyridae	<i>Mormyrus</i>
37	<i>Mormyrus hasselquisti</i>	Mormyridae	<i>Mormyrus</i>
38	<i>Mormyrus macrophthalmus</i>	Mormyridae	<i>Mormyrus</i>
39	<i>Petrocephalus bane ansorgei</i>	Mormyridae	<i>Petrocephalus</i>
40	<i>Petrocephalus bovei</i>	Mormyridae	<i>Petrocephalus</i>
41	<i>Petrocephalus simus</i>	Mormyridae	<i>Petrocephalus</i>
42	<i>Mormyrops deliciosus</i>	Mormyridae	<i>Mormyrops</i>
43	<i>Mormyrops oudoti (after Daget)</i>	Mormyridae	<i>Mormyrops</i>
44	<i>Mormyrops engystoma (after Boulenger)</i>	Mormyridae	<i>Mormyrops</i>
45	<i>Marcusenius psittacus</i>	Mormyridae	<i>Marcusenius</i>
46	<i>Marcusenius harringtoni (after Daget)</i>	Mormyridae	<i>Marcusenius</i>
47	<i>Mrcusenius isidori</i>	Mormyridae	<i>Marcusenius</i>
48	<i>Marcusenius ihuysi</i>	Mormyridae	<i>Marcusenius</i>
49	<i>Marcusenius petricolus (after Daget)</i>	Mormyridae	<i>Marcusenius</i>
50	<i>Marcusenius brachistius</i>	Mormyridae	<i>Marcusenius</i>
51	<i>Gnathonemus tamandua</i>	Mormyridae	<i>Gnathonemus</i>
52	<i>Gnathonemus abadii</i>	Mormyridae	<i>Gnathonemus</i>
53	<i>Gnathonemus pictus</i>	Mormyridae	<i>Gnathonemus</i>
54	<i>Gnathonemus petersii</i>	Mormyridae	<i>Gnathonemus</i>
55	<i>Gnathonemus deboensis</i>	Mormyridae	<i>Gnathonemus</i>
56	<i>Gnathonemus niger</i>	Mormyridae	<i>Gnathonemus</i>
57	<i>Gnathonemus senegalensis</i>	Mormyridae	<i>Gnathonemus</i>
58	<i>Gnathonemus cyprinoides</i>	Mormyridae	<i>Gnathonemus</i>
59	<i>Gymnarchus niloticus</i>	Gymnarchidae	<i>Gymnarchus</i>
60	<i>Cromeria niloticus occidentalis (after Daget)</i>	Kneriidae	<i>Cromeria</i>
61	<i>Mugil cephalus</i>	Mugilidae	<i>Mugil</i>
62	<i>Hemichromis bimaculatus</i>	Cichlidae	<i>Hemichromis</i>

63	<i>Hemichromis fasciatus</i>	Cichlidae	<i>Hemichromis</i>
64	<i>Pelmatochromis guentheri</i>	Cichlidae	<i>Pelmatochromis</i>
65	<i>Pelmatochromis pulcher (after Boulenger)</i>	Cichlidae	<i>Pelmatochromis</i>
66	<i>Tilapia zillii</i>	Cichlidae	<i>Tilapia</i>
67	<i>Tilapia monodi (after Blache)</i>	Cichlidae	<i>Tilapia</i>
68	<i>Tilapia melanopleura</i>	Cichlidae	<i>Tilapia</i>
69	<i>Tilapia mariae</i>	Cichlidae	<i>Tilapia</i>
70	<i>Tilapia macrocephala</i>	Cichlidae	<i>Tilapia</i>
71	<i>Tilapia nilotica</i>	Cichlidae	<i>Tilapia</i>
72	<i>Tilapia galilaea</i>	Cichlidae	<i>Tilapia</i>

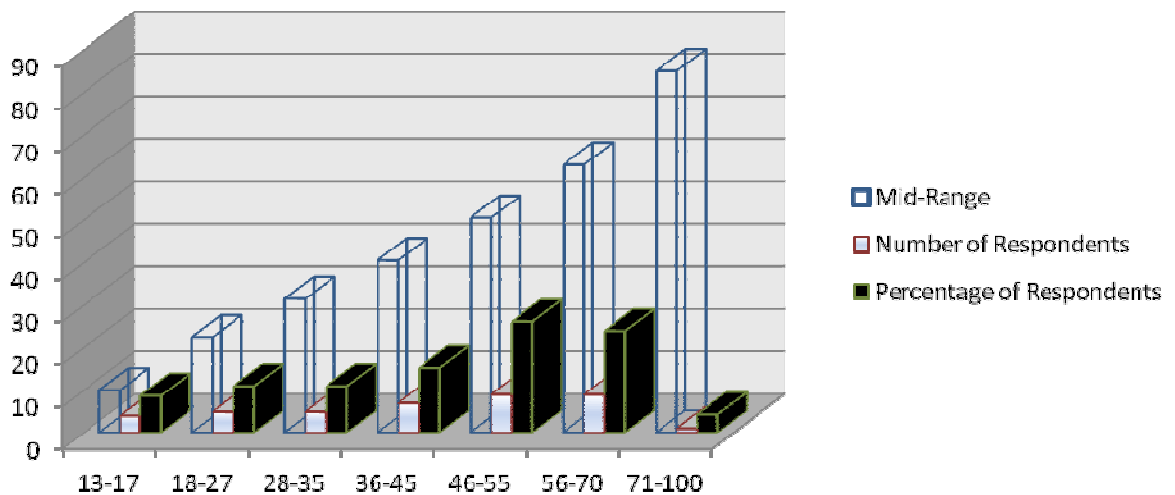


Fig 1: Age Distribution And Socio-Economic Characteristics of Kpata fish Marketers in Lokoja

Table 2: CATEGORIES OF FISH SELLERS

Categories	Number of Respondents	Percentage of Respondents
Live Fish Sellers	9	16.07
Fresh Fish Sellers	19	33.93
Smoked Fish Sellers	16	28.57
Penaeid shrimp sellers	12	21.43
Total	56	100

**PLATE 1: A pin-hole view of the River Niger and Benue confluence from Lokoja's 'table-tops'
(naijatreks.com/2011)**



PLATE 2: Display of Smoked Fish at Kpata Fish Market



PLATE 3: Display of Fresh Fish at Kpata Fish Market



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