

Market Concentration of Seafood and Socio-Pecuniary Status of the Marketers in Lagos and Ondo States, South West, Nigeria

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Abstract

The study was carried out to determine the socio-pecuniary characteristics of seafood marketers and the seafood market concentration in Lagos and Ondo States, Nigeria. A multistage random sampling technique was used to collect data from 180 respondents primarily using structured questionnaire. Data were analysed using descriptive statistics and Concentration Ratio. The results showed that seafood marketers were mainly within the ages of 21 and 40 years (77%), and that most of them were females (54%), married (66%) and literates (49%). The results further showed that most of the seafood marketers had an average family size of five members (56%) with over 10years marketing experience (58%). The seafood market concentration in Lagos State was high compared to that of Ondo State. The market was an oligopoly and the activities of the seafood marketers affected the price and demand for fish in the market.

Keywords:

Seafood, Marketing,
Socio-Pecuniary and
Concentration Ratio

Introduction

Seafood marketing involves different actors mainly the producers, middlemen (wholesalers and retailers) and the final consumers (Kumar *et al.*, 2008). The role(s) played by each actor is vital and it contributes to an effective marketing link which is targeted at the transfer of seafood products from the producers to the final consumers (Nwabunike, 2015). Seafood is one of the most extensively traded commodities in the world (Gephart and Pace, 2015). Generally, seafood is considered one of the most nutritionally balanced foods which is tasty, nutritious and easy to digest. The products are cheaper and provide a good protein substitute for human consumption compared to other animal protein sources such as beef, pork, amongst others (Ayanboye *et al.*, 2015). The seafood industry ranks high among others in its contribution to local and regional economies (Mwirigi and Theuri, 2012).

Marketing serves as a medium for bridging the gap between producers and consumers (Amao *et al.*, 2006). Seafood marketing is considered successful when utility and profit maximization is involved (Agbon *et al.*, 2013). However, the annual demand for seafood in Nigeria far exceeds local production, causing ineffectiveness in national and international trade (Shosanya, 2016). Moreso, due to lack of appropriate fishing measures, poor monitoring and coordination, and necessary awareness, a great proportion of seafood species are threatened and endangered so also, the exploitative tendencies of middlemen from final consumers leading to ineffective marketing (FDF, 2007).

Hence, this study sought to know the socio-pecuniary characteristics and concentration of seafood marketers in the study area (Lagos and Ondo States) in order to ensure a controlled market system.

Materials and Methods

The Study Area

The study was carried out in Lagos and Ondo States. The two states are among the six states in the South West geopolitical zone of Nigeria. Lagos State occupies a land area of 3,577km² and 787 km² is water of which consists of lagoons and creeks (Lagos State Government, 2008). Lagos State lies between latitude 6°27'N and longitude 3°24'E with a population of 9,019,534 (National Population Commission, 2006; Federal Republic of Nigeria, 2007).

Ondo State lies between latitudes 5°45' and 8°15' North and longitude 4°45' and 6° East with a coastline of about 80km which runs in a northwest to southeast direction with a land area of 14,769km² (UNEP, 2007; Department of Research and Statistics, 2010). The State has a population of 3,640,877 (National Population Commission, 2006) and is one of the highest producers of fish in Southwest Nigeria (Mafimisebi and Okunmadewa, 2006).

Maps of the study Area

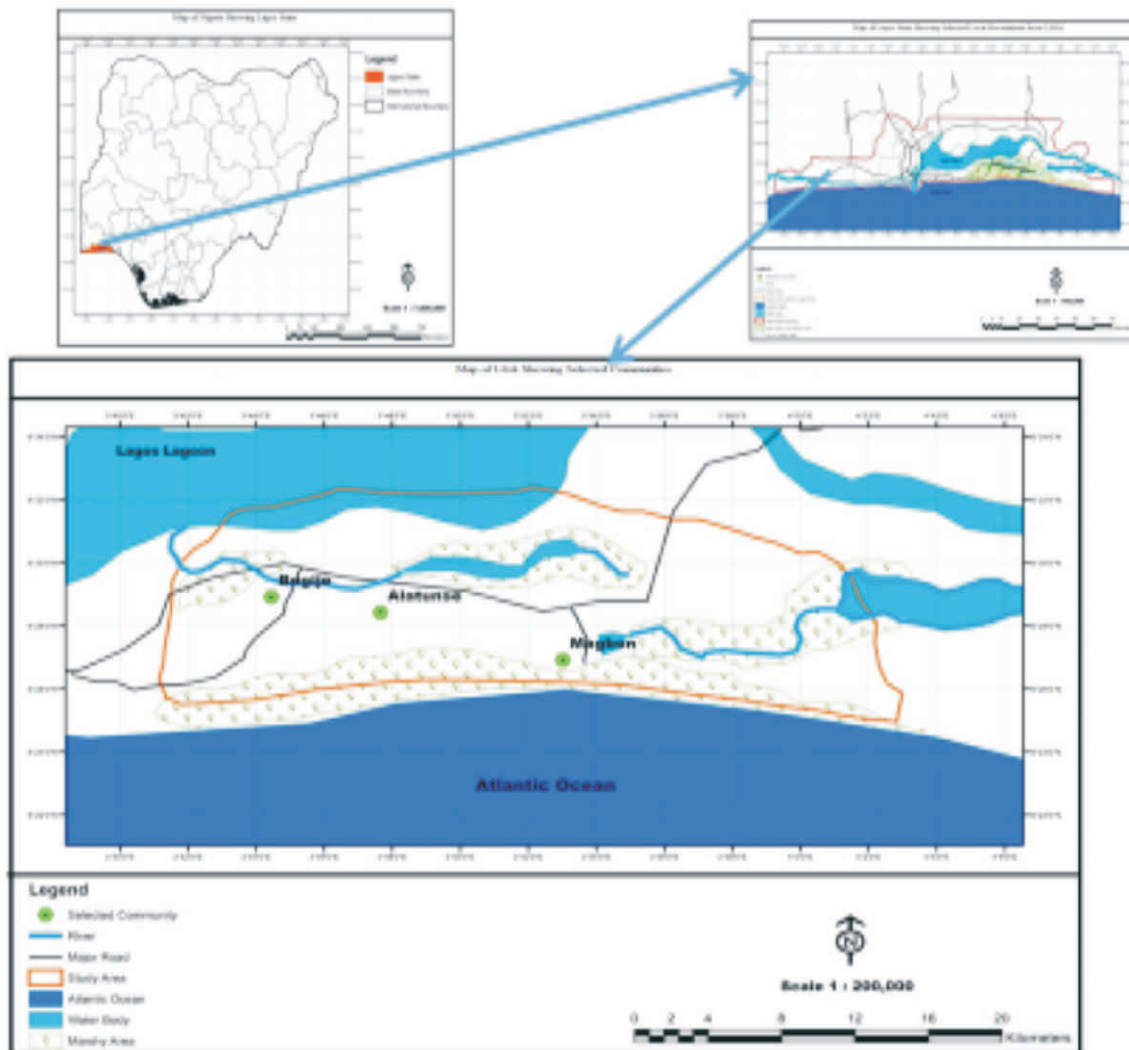


Figure 1: Map of study area showing selected communities in Ibeju-Lekki LGA, Lagos State
Source: Author's creation from computed field survey GPS coordinated, 2018

Study Area

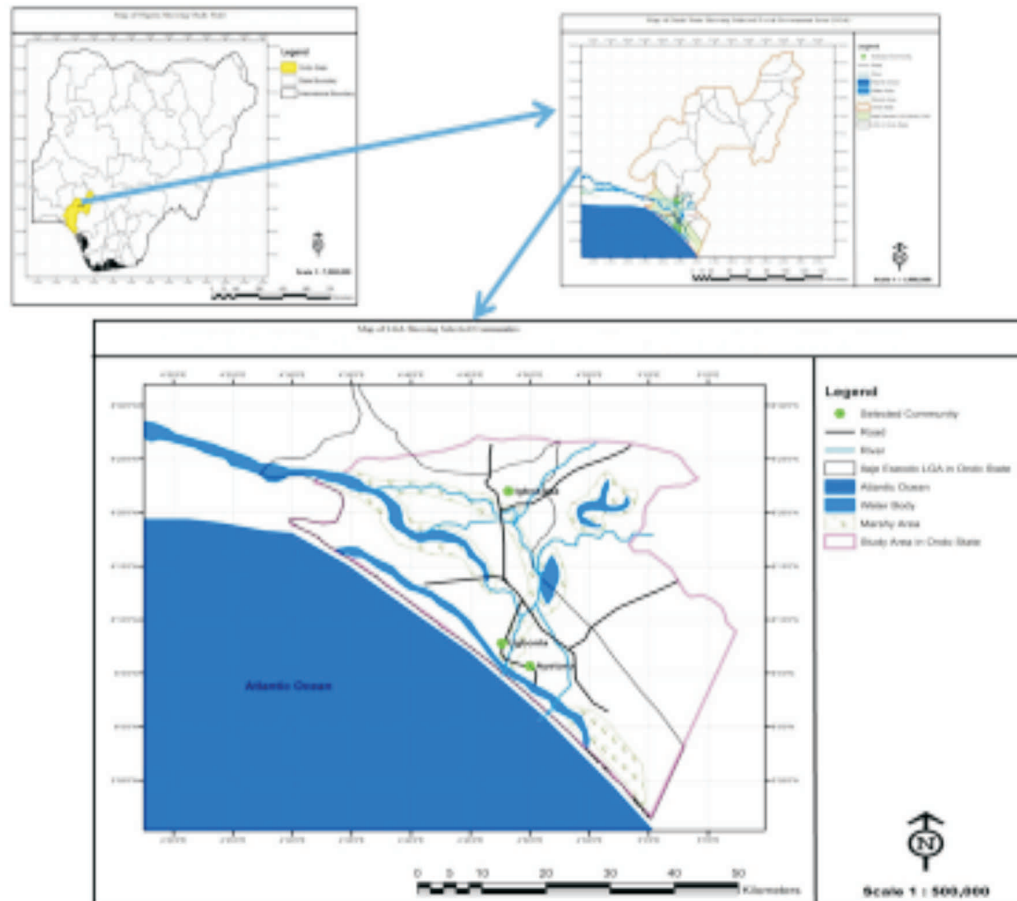


Figure 2: Map to study area showing selected communities in Ilaje LGA, Ondo State
Source: Author's creation from computed field survey GPS coordinates, 2018

Sample Size and Techniques

Data were primarily obtained using structured questionnaire. Multistage sampling technique was employed in the selection of 180 respondents. Purposive sampling technique was used to select two states (Lagos and Ondo) and one local government area (LGA) in each state (Ibeju-Lekki LGA in Lagos State and Ilaje LGA in Ondo State) in South West Nigeria based on their border to the Atlantic Ocean. Descriptive statistics such as frequency distribution, mean, charts and percentages was used to analyse the socio-pecuniary characteristics of seafood marketers and the marketing concentration was determined using:

$$CR_i = \frac{\sum_1^i (S_i)}{\sum_1^n (S_n)}$$

Where:

- CR_i = concentration ratio for first i firms
- S_i = share of the largest i firms in the industry
- S_n = share of the n firms in the industry

- Σ = summation
 i = 1, 2, 3,, n
 n = number of respondents (Caves, 1964; Oparinde and Ojo, 2014)

Results and Discussions

The socio-pecuniary characteristics considered for marketers in the South West region of Nigeria include; age, gender, marital status, family size, educational level and marketing experience. Table 1 shows the age distribution of the respondents in the study area. The result revealed most of the respondents (77%) were between the active and productive age of 21 and 40 years of age. 54% were females while 46% were males (Table 2). 66% of the respondents were married while only 34% of the respondents were single (Table 3). Table 4 shows the family size of the respondents in the study area. Most of the respondents (56%) have a family size of up to five members. The Table also showed that 39% of the respondents had a household size of 6 to 10 members; only 5% of the respondents had a household size of 11-15 members. The average family size was five members. This implied that most of the respondents have a feature of a small family and as such, a few people to cater for and access to family labour for marketing functions. Only 14% of the respondents had no formal education the remaining 86% of the respondents had one form of education or the other, with most of them (49%) having completed secondary education (Figure 3). This indicated that most of the respondents were literate and can easily acquire knowledge to improve their marketing enterprise. Table 5 shows the marketing experience of the respondents in the study area. The Table showed that 42% of the respondents had a marketing experience of up to 10 years. Most of the respondents (54%) had a marketing experience of up to 20 years. The Table also showed that only 3% of the respondents had a marketing experience of up to 30 years; only 1% of the respondents have a marketing experience beyond 30 years. The average marketing experience was 20 years. This implied that most of the respondents were experienced and as such could boost their profits.

Table 1: Age distribution of respondents

Age (Years)	Pooled	
	Frequency	Percentage
= 20	34	18.9
21-30	72	40.0
31-40	66	36.7
41-50	7	3.9
51-60	1	0.6
>60	-	-
Total	180	100

Table 2: Gender distribution of respondents

Pooled		
Gender	Frequency	Percentage
Male	83	46.1
Female	97	53.9
Total	180	100

Table 4: Family size of respondents

Pooled		
Family Size	Frequency	Percentage
1-5	101	56.1
6-10	70	38.9
11-15	9	5.0
>15	-	-
Total	180	100

Table 3: Marital status distribution of respondents

Pooled		
Marital Status	Frequency	Percentage
Married	118	65.6
Single	61	33.9
Divorced	-	-
Widowed	1	0.6
Total	180	100

Table 5: Marketing experience of respondents

Pooled		
Marketing Experience (Years)	Frequency	Percentage
= 10	75	41.7
11-20	97	53.9
21-30	6	3.3
>30	2	1.1
Total	180	100

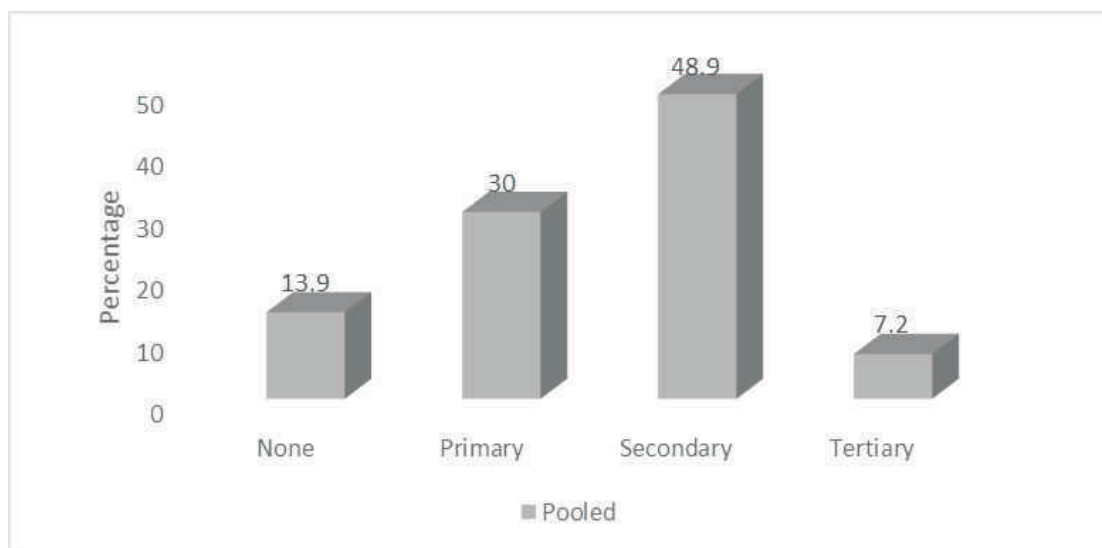


Figure 3: Educational level of respondents

Source: Computed from the field survey data, 2018

Table 6 shows the marketing concentration in Lagos and Ondo States. In Lagos State, the two largest marketers in the seafood marketing business accounted for 38% of the volume of seafood sold. The four largest marketers accounted for 55% of the volume of marketed seafood and the largest eight marketers accounted for 71% of the volume of marketed seafood.

In Ondo State, the two largest marketers in the seafood marketing business accounted for 14% of the volume of seafood sold. The largest four marketers accounted for 24% of the volume of marketed

seafood and the largest eight marketers accounted for 38% of the volume of marketed seafood.

The market concentration in Lagos State can be said to be high compared to that of Ondo State which can be said to be low. The result in Lagos and Ondo states showed the market to be oligopoly which implies that the activities of the marketers affected the price and demand for fish in the market. The largest two marketers in Lagos State were under weak oligopoly while the largest four and eight marketers were under strong oligopoly. The largest two and four marketers were non concentrated while the largest eight marketers were under weak oligopoly in Ondo State.

Table 6: Computation of concentration ratio

Index	Ibeju-Lekki LGA			Ilaje LGA		
	Total Revenue (N)	Total Market Share (N)	Value	Total Revenue (N)	Total Market Share (N)	Value
Concentration Ratio (CR)	626,062.00	CR ₂ =	CR ₂ = 38%	760,250.00	CR ₂ =	CR ₂ = 14%
		240,000.00	CR ₄ = 55%		105,000.00	CR ₄ = 24%
		CR ₄ =	CR ₈ = 71%		CR ₄ =	CR ₈ = 38%
		342,000.00			180,000.00	
		CR ₈ =			CR ₈ =	
		441,600.00			289,000.00	

Note: CR₂, CR₄ and CR₈ = Concentration ratio of the largest two, four and eight marketers respectively

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