Marketing Efficiency of Some Selected Seafood Markets in Lagos State, Nigeria.

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Introduction

- Fish as food makes an important contribution to food security and livelihoods of many individuals around the world.

- In Nigeria like in most coastal developing nations, fish is an important source of food and income to its peoples.

- Fish marketing and distribution is an integral aspect of fish production because it is only when the fish gets to the consumer that production can be complete.

Introduction

- Availability of fish to the consumers at the right time and right place requires an effective marketing system.

- General purpose of marketing efficiency is to provide goods to consumers in the required form at the required time and place with the lowest possible marketing costs consistent with the interests of the producers.

Markets in Nigeria

- In Nigeria markets are held daily, some every other day, others weekly etc. either in rural or urban areas.

- In the markets, every conceivable commodity, both agricultural and industrial is sold.

- Prices are determined by haggling while the sellers are under obligation to sell the to the buyer at the agreed price.

- Major components of fish marketing efficiency are profitability and marketing margins of the various participants (e.g. wholesalers and retailers).

Research Question and objectives

- Are market operations sustainable and profitable?

- Are incomes fairly distributed amongst the seafood sellers/RETALERS?

- Can we understand how market measures promote sustainable consumption and production in line with the goals of SDG 12?

- Objectives:

- evaluate the profitability of selling seafood in the proposed study sites/ determining the gross margin of these markets.

- Examine the cost structure of the fish sellers

- Assess the income equality amongst the sellers

Methodology

Study sites

- The study was carried out in Epe, Makoko and Badagry areas of Lagos State.

- Lagos state –

  - situated in the southwestern geo-political zone of Nigeria

  - shares its boundaries with Ogun State in northern and eastern borders

  - west is the border of Benin Republic.

  - southern border stretches for about180 kilometers (km) along the coast of the Atlantic Ocean.

  - area of 3,577km² landmass of which 786.94 km² (22 %) being the Lagos lagoon
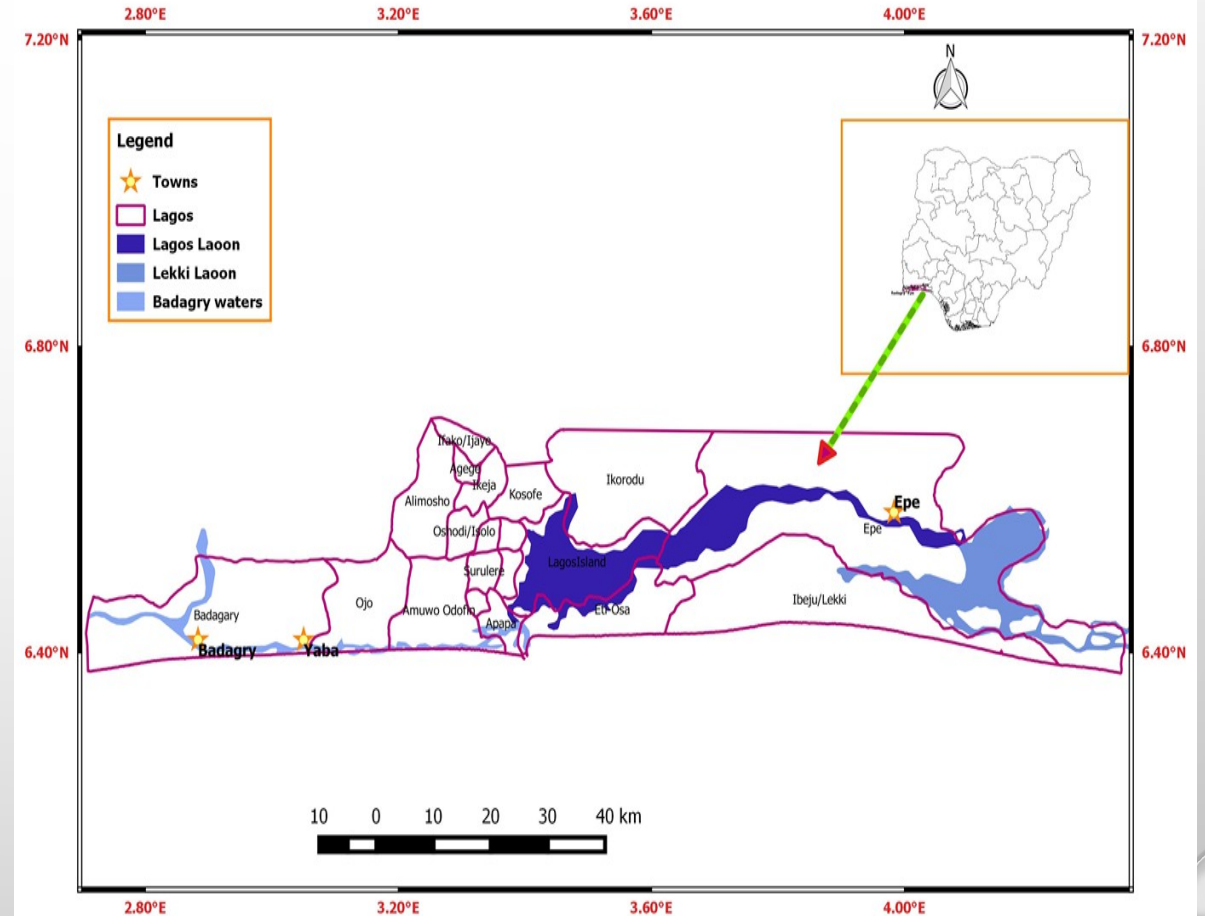
Map of Lagos State showing study sites

Map of the Study sites
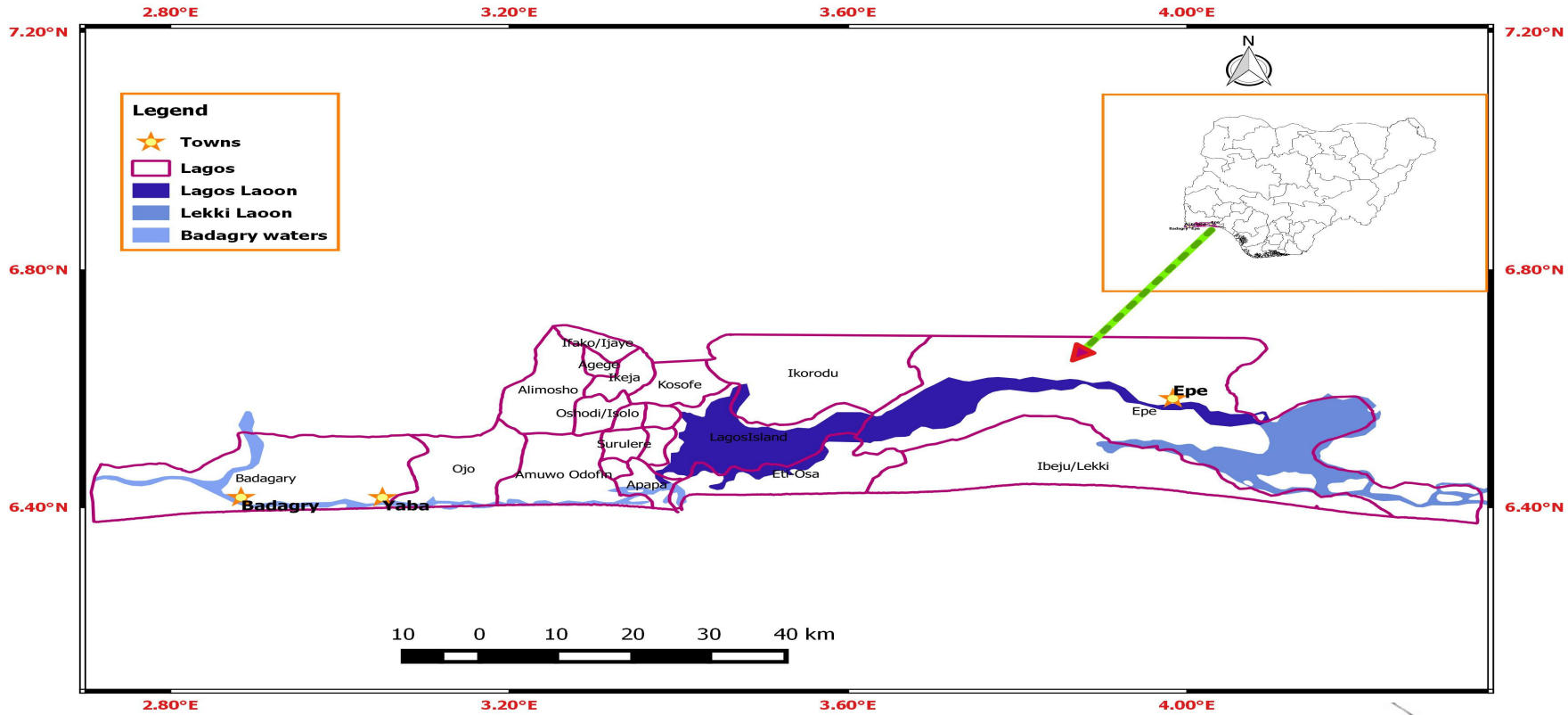
Examples of species of fish/seafood found in the local Nigerian Market

S/N	SCIENTIFIC NAME	COMMON NAME	LOCAL NAME
1.	*Alestes baremoze*	Cloffa, Silversides	Paraffin
2.	*Chromidotilapia guntheri*	Mouthbrooder	Itoin / Kwana
3.	*Ethmalosa fimbriata*	Bonga fish	Bonga
4.	*Bathygobius soporator*	Frillfin goby	
5.	*Cynoglossus senegalensis*	Tongue sole	Abo
6.	*Gymnarchus niloticus*	Trunkfish	Eja osan / Aba
7.	*Lisa falcipinnis*	Mullet	Atoko
8.	*Mormyrus rume*	Elephant catfish	Lele / Dolphin
9.	*Polypterus senegalus*	Gray bichir / Dragon fish	Adagba
10.	*Schilbe mystus*	Butterfish	Dibawe
11.	*Chrysichthys walker*	Gunther	
12.	*Chrysichthys nigrodigitatus*	Silver catfish	Obokun
13.	*Elops lacerta*	Ten Ponder	
14.	*Galeoides decadactyles*	ShinyNose / Threadfin	Ofon
15.	*Polydactylus quadrifilis*	West African Threadfin	
16.	*Drepane Africana*	African sicklefish	
17.	*Tilapia guineensis*	Guinean Tilapia	Epia
18.	*Heterotis niloticus*	Bony tongue	Aika / Slapwater
19.	*Malapterurus electricus*	Electric catfish	Mijiriya / Electric fish

Examples of species of fish/seafood found in the local Nigerian Market

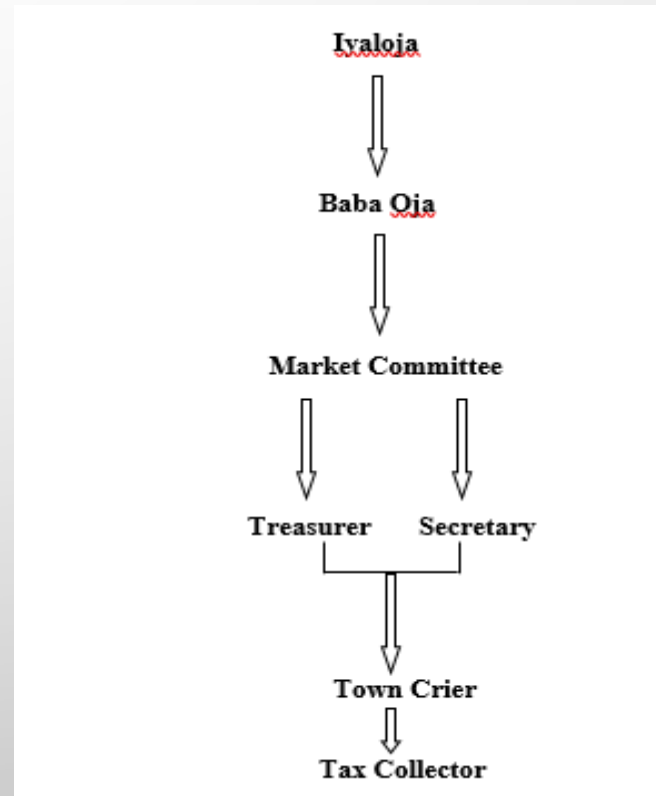Fish produced by Coastal states in Nigeria
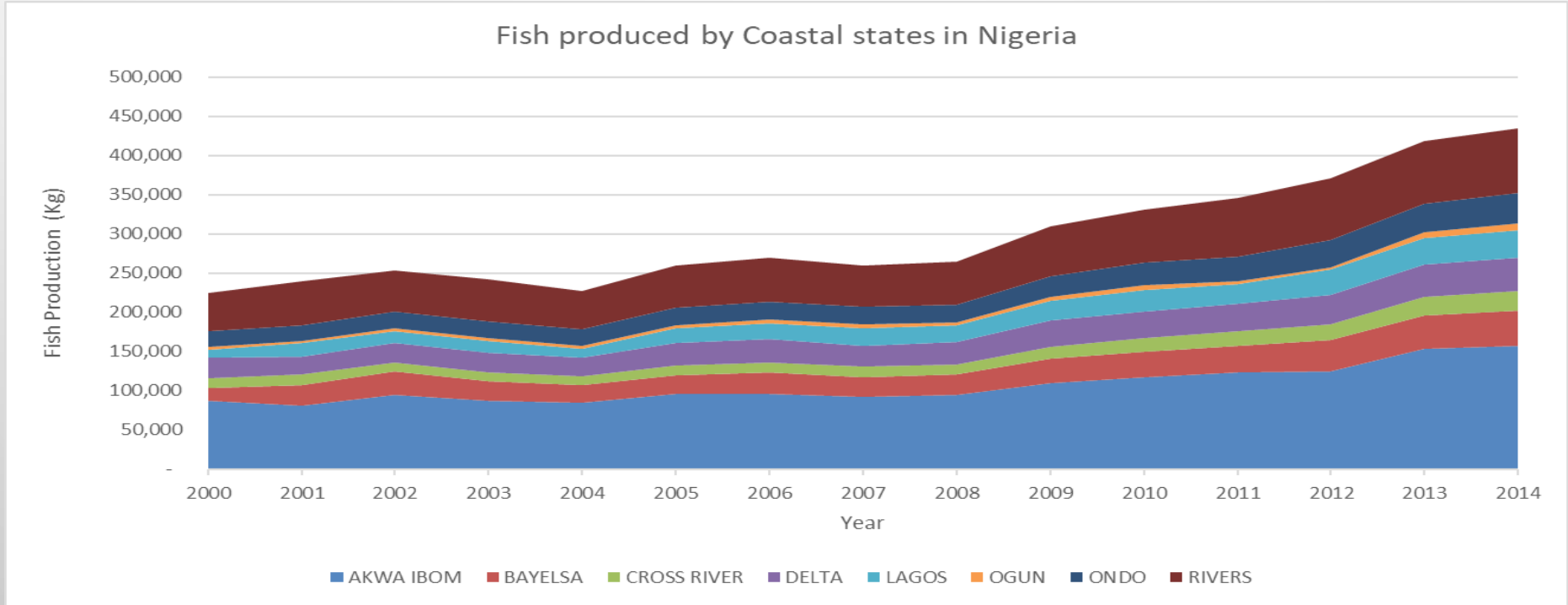
Data collection

- Primary Data obtained with the use of questionnaire

- Respondents were selected randomly in the markets

- Total of 150 respondents: EPE – 50

- Makoko- 60

- Badagry - 40

- Organogram of the market association

Analytical procedure

- Budgetary Analysis

- Descriptive statistics

- Lorenz curve and Gini coefficient

Determination of Gross margin

- Π = TR-TC;

- GM= TR- gp /tr

- Where: Π= profit

- Tr= total revenue

- Tc= total cost

- Gp = gross profit

Gini Coefficient

- The Gini coefficient is defined as a ratio of the areas on the Lorenz curve diagram.

- If the area between the line of perfect equality and Lorenz curve is A, and

- the area under the Lorenz curve is B, then the Gini coefficient is A/(A+B).

- Since A+B = 0.5, the Gini coefficient,

- G = 2A = 1-2B.

$$G = 1 - 2 \int_0^1 L(X)dX$$

- If the Lorenz curve is represented by the function X = L(X), the value of B can be found

Gini coefficient = A / (A+B)
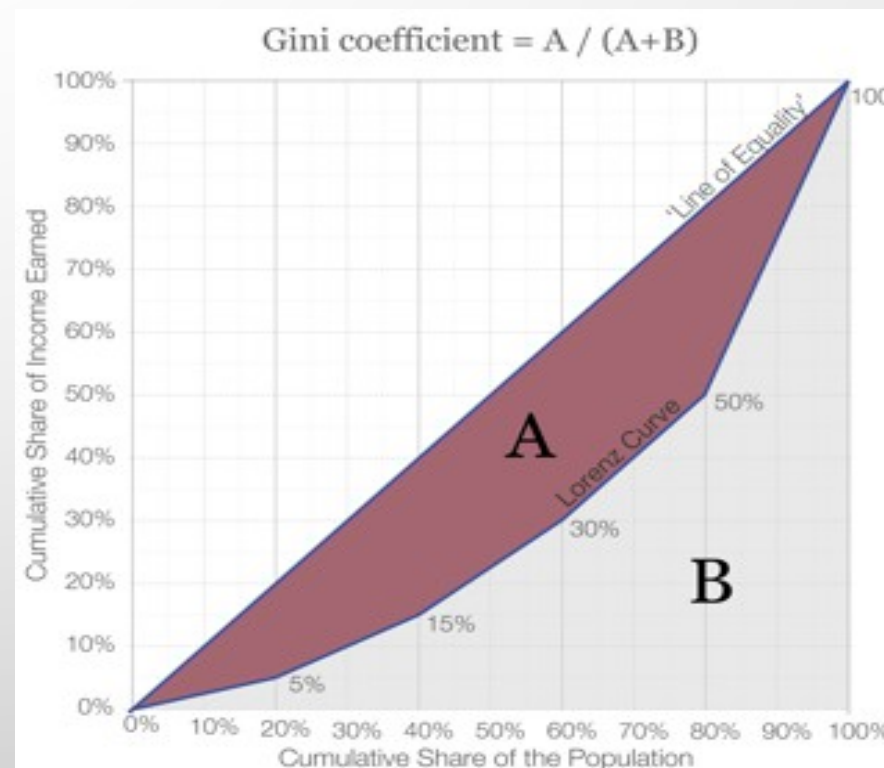
Results and Discussion

Demographics of respondents

VARIABLES	EPE		MAKOKO		BADAGRY	
	Frequency	%	Frequency	%	Frequency	%
LEVEL OF EDUCATION						
No formal	24	40	46	92	29	72.5
Primary	20	33.3	4	8	7	17.5
Secondary	16	26.7	0	0	2	5
Tertiary	0	0	0	0	2	5
YEARS OF EDUCATION						
No Education	24	40	46	92	29	72.5
01-<07 years	20	33.3	4	8	7	17.5
>07-17years	16	26.7	0	0	4	10
AGE						
21-30years	0	0	4	8	1	2.5
31-40years	23	38.3	6	12	17	42.5
above 40years	37	61.7	40	80	22	55
HOUSEHOLD HEAD						
Yes	14	23.3	4	8	4	10
No	46	76.7	46	92	36	90
HOUSEHOLD SIZE						
<5	36	60	8	16	18	45
>6 - 10	24	40	42	84	22	55
MARKET EXPERIENCE						
6-10years	0	0	0	0	2	5
11-15years	11	18.3	6	12	3	7.5
more than 15years	49	81.7	44	88	35	87.5
TRIBE						
Yoruba	60	100	8	16	8	20
Egun	0	0	42	84	32	80
SEAFOOD ASSOCIATION MEMBER						
Yes	44	73.3	30	60	18	45
No	16	26.7	20	40	22	55

Profitability estimates and Gross Margin- EPE

Average Profit Statement for seafood sellers in Oluwo Seafood Market Epe N= 60	Smoked ₦	Fresh ₦	Combined average $
Revenue	38500.00	80616.67	119116.67
Cost of goods sold	13500.00	23913.40	37413.40
Gross profit	25000.00	56703.26	81703.26
Expenses			
Security and market levy	1200.00	1200.00	1200.00
Firewood/charcoal	1200.00	0.00	1200.00
Salt/spices	3000.00	0.00	3000.00
Ice	150.00	303.00	453.00
Transportation	1500.00	1500.00	3000.00
Depreciation	1255.56	210.79	1466.35
Miscellaneous	500.00	500.00	500.00
Total expenses	8805.56	3713.79	10819.35
Earnings before tax	16194.44	52989.47	70883.92
TAX	416.00	416.00	416.00
Net earnings	15778.44	52573.47	70467.92

Profitability estimates and Gross Margin- Makoko

Average Profit statement for seafood sellers in Asejere Seafood Market Makoko, Yaba. N=50				
	Smoked ₦	Fresh ₦	Combined average ₦	Value in $
Revenue	33000.00	146199.00	179199.00	490.96
Cost of goods sold	11300.00	18944.96	30244.96	82.86
Gross profit	21700.00	127254.04	148954.04	408.09
Expenses				
Rent	5000.00	5000.00	5000.00	13.70
Security and market levy	3600.00	3600.00	3600.00	9.86
Ice	0.00	1548.00	1548.00	4.24
Transportation	1500.00	2000.00	3500.00	9.59
Depreciation	341.86	1937.18	2279.04	6.24
Miscellaneous	1200.00	2500.00	3800.00	10.41
Total expenses	11641.86	16585.18	19727.04	54.05
Earnings before tax	10058.14	110668.86	129227.00	354.05
TAX	416.00	416.00	416.00	1.14
Net earnings	9642.14	110252.86	128811.00	352.91
Gross Margin	65.76	87.04	83.12	

Profitability estimates and Gross Margin- Badagry

Average Profit Statement for Agbalata seafood market Badagry				
	Smoked ₦	Fresh ₦	Combined average ₦	Value in $
Revenue	31300.00	118135.00	149435.00	409.41
Cost of goods sold	10710.90	24992.10	35703.00	97.82
Gross profit	20589.10	93142.90	113732.00	311.59
Expenses				
Security and market levy	1500.00	1500.00	1500.00	4.11
Ice	313.50	1254.00	1567.50	4.29
Transportation	351.69	475.81	827.50	2.27
Depreciation	2495.50	1355.50	3851.00	10.55
Miscellaneous	500.00	500.00	500.00	1.37
Salt and spices	482.61		482.61	1.32
Total expenses	5643.30	5085.31	8728.61	23.91
Earnings before tax	14945.80	88057.59	105003.00	287.68
TAX	416.00	416.00	416.00	1.14
Net earnings	14529.80	87641.59	104587.39	286.54
Gross Margin	65.78	78.84	76.11	

Factors that determine fish price

Lorenz curve of the Fish markets
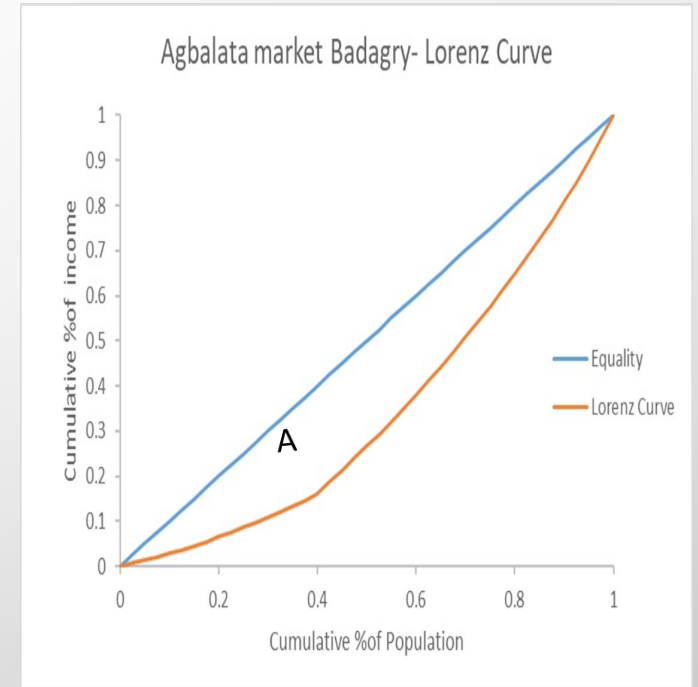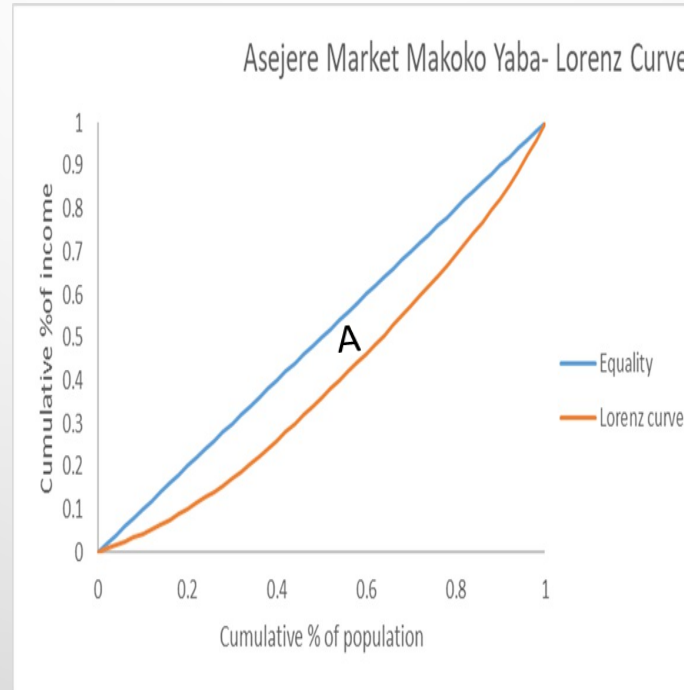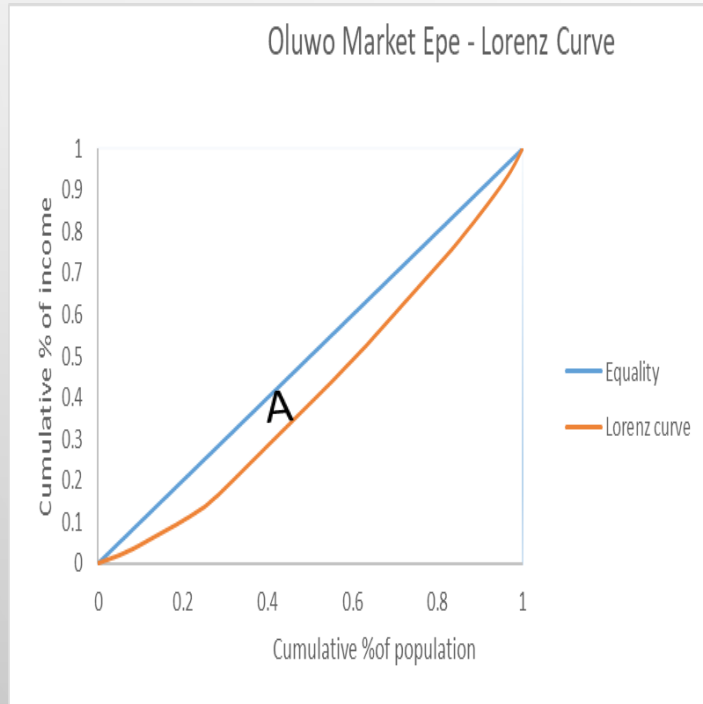
Gini Coefficient

Conclusion

- The business is profitable

- Income is evenly distributed among the sellers (retailers)

- Sustainable?

recommendation

- Data collection mechanism- Community- based

- Safety regulations