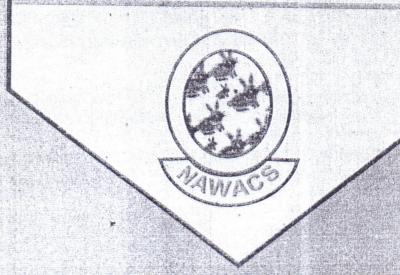
NUMBER 1

# ANNALS OF RESEARCH IN NIGERIA

UNIVERSITY OF AGRICULTURE MAKURDI CHAPTER



The Official Organ of
National Association of Women Academics (NAWACS)
University of Agriculture Makurdi Chapter

# LIST OF EXECUTIVE MEMBERS OF THE NATIONAL ASSOCIATION OF WOMEN ACADEMICS (NAWACS) UNIVERSITY OF AGRICULTURE, MAKURDI CHAPTER

Dr. Elizabeth M. Kembe President Dr. Woruola L. Lawal Vice President

Ado Wombo Secretary General Dr. A. Amali Asst. Secretary General Dr. Phoebe James Treasurer Dr. Bibiana Igbabul PRO Dr. Roseline Obande Welfare Officer Prof. Ngozi Odiaka Director of research Dr. Victoria O. Ayuba Editor-in-chief

Prof. Elizabeth U. Amuta Deputy Editor-in-chief

Dr. Hannah Kaka Special Advisers Grace Akuto

### **Editorial Board Members**

Dr. Victoria O. Ayuba Editor-in-Chief Prof. Elizabeth U. Amuta Deputy Editors-in-Chief

Prof. Regina A.I. Ega

Dr. Sarah B. Adelabu Assistant Editors

Prof. Ebele U. Umeh

Dr. Mike Odey Dr. Juliet Oluwatayo Prof. Ngozi Odiaka Prof. Regina Samba

## Editorial Advisory Board

University of Calabar, Calabar Prof. Eka Braide \*University of Agriculture, Umudike Prof. Ikenna Onyido University of Agriculture, Makurdi Prof. Emmanuel O. Ogunwolu Benue state University, Makurdi Prof. Charity Angya University of Jos, Jos. Prof. Jane Mallum Benue State University, Makurdi

Prof. Donatus Akpa Benue State University, Makurdi Prof. Beatrice Ker University of Agriculture, Makurdi Prof. Stephen Ikurior Ahmadu Bello University, Zaria Prof. T.T. Gefu

University of Uyo, Uyo. Prof. A.O. Ette

University of Agriculture, Makurdi Prof. J.A. Oko Nasarawa State University Keffi Dr. H.J. Kaka

University of Agriculture, Makurdi Prof. Regina A.I. Ega

# TABLE OF CONTENTS

The State of the Party and Party assessment of the Party and State o	J	Analysis of Fish Marketing in Makurdi Local Government Area, Benue State, Nigeria Lawal, W. L., Idega, I. O. and Ogebe, F. O.	]
	2	Assessment of the Institutional Capability of the Second National Fadama Development Project in Nigeria Daudu, S; Kakaan, E. T and Kwaghkper, I. D	1.
	3	Bacteriological Assessment Of Smoked Fish Sold In Makurdi Metropolis Azua, E. T. Ogeh, O. A. And Ebah, E. E.	3
	4	Estimates of Post-Harvest Losses in Inland Fisheries: (A Case Study of Agatu Local Government Area of Benue State Nigeria) Adadu, M.O Ayuba, V.O and Okayi, R.G.	41
	5	Relative Distribution of Cladocera Zooplankton to Heavy Metal Concentrations in River Benue within Makurdi Metropolis-Nigeria. Azua, E.T., Annune, P.A. and Sha'ato, R.	47
in the second	16	The Roles Of Cooperatives in Adding Value to Agricultural Products in Nasarawa State, Nigeria Lawal W. L., Muhammed A. M. and Ani, D. P.	54
	7	The Significance of Malaria Parasites in Public Health (A Case Study of Akwanga Town, Nasarawa State) Azua, E. T., Bala, U. and Ega, R. A. I.	66
	8	The Utilization of Mass Media as Sources of Agricultural Information by Farmers in Benue in Benue State, Nigeria Okwu J.O. and Okwoche V.A	75
	9	Water Quality Parameters as Pollution Indicators of River Benue within Makurdi Metropolis, Nigeria. Azua, E. T., Amuta, E. U. and Annune, P. A.	87
	10	Youths' Attitudes To Rural Development Activities In Ushongo Local Government Area of Benue State. Daudu, S. Okwu, C. E and Afatar, S.	99
	11	Analysis of the Effect of Socioeconomic Characteristics on Farm Income of Fadama ii Farmers In Taraba State, Nigeria. Ogbanje, E.C.; Umeh, J.C.; and Obinne, C.P.O.	112

# ANALYSIS OF FISH MARKETING IN MAKURDI LOCAL GOVERNMENT AREA, BENUE STATE, NIGERIA

Lawal, W. L., IDega, I. O. and Ogebe, F. O.

Department of Agricultural Economics

University of Agriculture Makurdi

wuralawal@yahoo.com

#### **ABSTRACT**

This study was carried out in the two major fish markets in the study area, namely North Bank and Wadata Markets. The main objective of the study was to analyse fish marketing in the study area. Structured questionnaire was used to collect data randomly from 115 fish sellers. Simple descriptive statistics such as frequencies and percentages were used to analyze the collected data.

The study revealed that membership of Fish Trader Association was optional and costs between N200.00 and N500.00 to be registered. Benefits from the Association include financial assistance to the bereaved or celebrating members. Smoked fish which comes mostly from outside the study area (Maiduguri, Taraba and Zamfara) was commonly sold in the study area. Fish was mostly preserved by smoking (74. 78%) and freezing (24.35%). Supply of fish into the markets was mostly through the middlemen (50.45%). Most fish sellers (52.2%) earned between N2,000.00 – N3,000.00 as profit margin weekly.

#### INTRODUCTION

Many researchers have different opinion about marketing. Adekanye (1988) had the view that marketing is really a method of bringing the impersonal forces of demand and supply together irrespective of the location of the market. The view was that marketing functions are the major

specialized activities performed in the marketing system, processing, storage, transportation, standardization, financing, risk bearing and the provision of market information.

According to Olukosi and Isisto (1990), marketing involves all those legal, physical and economic services which are necessary to make products

from the farm available to the creation of form, place, time and possession utilities.

Fish marketing involves all the various activities that direct the flow of fish whether fresh or processed from fish landing sites to the consumers. Fish quality deteriorate very fast due to the high temperature in Africa and must therefore be processed and marketed as soon as possible to maintain good quality to the consumers (Van Berkel et. al 1994). The relevance of marketing is to ensure the flow of goods and services from the producer to the consumer in the form, time and place of need. Buyers are in need of goods and services, while the sellers need to improve their socio-economic status. Aquatic animals and products have to be processed to preserve the product, convert the raw materials to a desirable form, maintain the product quantity, utilize the raw materials fully and ensure consumer safety (Wheaton and Lawson 1995). Marketing provides the avenue to meet these necessities. An efficient marketing sector is an important multiplier of economic development. It does not only link the sellers and buyers but output stimulates consumption. It guides the producers

consumers, thus marketing leads to the towards new production opportunities and encourages innovation and improvement in response to demand and prices (Abbott, 1987).

provides sector fisheries The employment opportunities to many Nigerians in direct fishing, processing and marketing. It also provides research opportunities and manpower training development in fisheries. Nutritionally, fish provides high quality calories, proteins, fats and vitamins. Fish provides the cheapest source of protein in the world (Samson 1997). Fish oil contains unsaturated fatty acids which are low in cholesterol and thus a regular in-take of fish oil, faces no risk of having heart attack which might result from deposition of cholesterol in blood vessels. In recognition of this cardinal importance of fish and allied products in the diet and nutrition of man, the need to develop fisheries, as a food for the provision of adequate fish supply for human consumption was recognized very early in the life of Nigerians as a nation (Adikwu, 2001),

According to Abbott and Markhan (1992) the various crops, livestock, fisheries and poultry products have their different problems. The

marketing and distribution of fish in Benue State is not a simple direct commodity flow involving only the fishermen and the consumers since there are various channels through which fresh fish must pass before the consumers. getting to implication, fish do not get to the consumers on time in the desired state of freshness. The price of fish is inflated as it passes through the marketing channels. The storage facilities in the State are poor. The consumers buy the fish in spoilt form and at a high prices. The fish marketing in is carried out on smallscale basis and most of the fish sellers are poor.

d

k

of

in

ce

et

to

he

OF

The study therefore examined the marketing performance of fish in Makurdi Local Government, Benue State. The specific objectives of the study are to:

- (i) examine some socio economic features of the fish marketers in the state,
- (ii) investigate the organization of fish sellers in association and the impact of the organization on the marketing performance.
- (iii) Identify the various credit sources available to the fish

sellers in association and the impact of the organization on the marketing performance.

- (iv) Identify the various credit sources available to the fish sellers and examine the extent of the accessibility to the credit sources.
- (v) Examine the various fishpreservation technologiespracticed by the fish sellers.
- (vi) Identify the storage facilities and
- (vii) Make policy recommendations based on the research findings.

The need for improving the level of efficiency of fish marketing and distribution in Nigeria fisheries sector necessitates this study. This will enable the producers and the marketers to derive benefits from the enterprise and also to improve the consumers' level of satisfaction.

## MATERIALS AND METHODS

The study was carried out in Makurdi Local Government Area of Benue State of Nigeria. The respondents were selected randomly using the list of association of fish sellers in the study area. Structured questionnaire was used to collect data randomly from 115 fish sellers. Fifty fish sellers were

selected from the North Bank market, Makurdi while sixty five were from the Wadata market, Makurdi. The rainfall in the area lasts from mid March to November with an annual mean of 1350mm. Farming is the predominant socio-economic activity of the people of the study area. Hunting, fishing and other tapping wine palm However, these occupations. usually seasonal and are practiced along with farming. Aspects covered include questionnaire the demographic data on the respondents, sources of fish, source of credit, membership in Association, constraints to fish marketing. The numerical aspects of the information gathered were analyzed using simple descriptive statistics such as frequency distribution and percentages.

### RESULTS AND DISCUSSION

Socio-economic features of the respondents

The results showed that majority of the fish sellers (89.56%) were females (Table 1). Most respondents (54.79%) were between 21- 40 year old. Few youths below 20 years old and old women who were above 50 years were engaged in fish marketing. This shows that adoption of technology in preservation and marketing can easily be achieved especially if such technology leads to increased income.

The result also showed that most fish sellers (44.30%) were Jukun from Taraba State, the neighboring States, who traditionally engaged in fishing activities. Majority of the respondent (49.60%) were also illiterate who did not attend any formal education. the implication of this is that the rate of in of innovation adoption marketing was very slow. Majority were married (56.50%) having large household size more than six. This implies that the use of family labour is marketing. fish abundant in

Table 1: Socio-economic Characteristics of the Respondents

Feature	Frequency	Percentage
Sex	***	*
Male	12	10.44
Female	103	89.56
Age (years)		9
<20	17	14.78
21-30	34	29.57
31-40	29	25.22
41-50	18	15.65
>50	17	14.78
Ethnic Groups		
Etilo	6 . :	5.20
	2'	1.70
Igala	18	15.70
Idoma	70	-
Yoruba	12	10.40
Tiv	2	1.70
Hausa	51	44.30
Jukun	21	18.30
Ibo	3	2.60
Others	3	2.00
Educational Status	57	49.60
No schooling at all	27	23.50
Started primary school and	21	23.30
stopped	17	14.80
Completed primary school	17	7.80
OND/NCE	5	4.30
HND/University	, 5	: 4.30
Marital Status	2.1	27.00
Single	31	56.50
Married	65	13.0
Widowed	15	
Divorced	4	3.50
Family Size		7.80
$\leq 3$	9	7.80
4 – 6	45	39.10
7 - 10	36	31.40
>10	25	21.70

Source: Field survey, 2008

# Occupational Distribution and Sources of fish supply

The result (Table 2) also revealed that most fish sellers (81.70%) were engaged in the fish marketing on full time basis and had above two years of

experience. The supply of smoked fish is more available (50.40%) in the market. Fresh fish, smoked frozen fish and fresh frozen fish accounted for 24.30%, 14.00% and 11.30%, respectively. Most respondents

(94.80%) indicated that fish was regularly supplied into the market. The dried fish were mostly obtained from Maiduguri, Taraba and Zamfara States.

The local supply from River Benue is seasonal depending on the water level.

Table 2: Occupational Distribution and Sources of fish supply

Performance	Frequency	y	Percentage	-
Fish selling as the major occupation				
Yes	. 94	7.	81.70	
No	21		18.30	
Years of Experience				
< 1	3		2.60	
3-6	38.		31.30	
7 - 10	25		21.70	
10 years and above	43		37.40	
Type of Fish Sold	·	*		
Fresh fish only	28		24.30	
Smoked fish	58		50.40	
Smoked frozen fish	16	9 <sub>20</sub>	14.00	
Fresh frozen fish	13 "		11.30	
Regularity of Fish Supply				
Very regular	109		94.8	
Not regular	6		5.20	
Seasonal	-		-	
Source of Fish Supply				
Direct from fishermen	. 28		24.35	
(artisan sources				
From cold rooms store	28		24.35	
(improved fish)			ar.	
From other states	. 59		51.30	

Furthermore the results revealed that the most commonly fish preservation method practiced in the study area was by smoking (74.78%). Unsold fresh fish at the close of market and spoiling ones were smoked immediately (71.30%) or kept in the fridge/freezer and later sold at a lower price (Table 3).

The result also showed that most fish sellers (78.26%) consumed fish products in their homes daily and this formed part of the business profit. It was also discovered that family labour (children, relatives and spouses) was mostly used in fish marketing (99.14%). This indicated that labour cost was free in fish marketing.

Table 3: Fish preservation, consumption pattern and sources of labour/marketing performance

	y .	
Performance	Frequency	Percentage
Method of Fish Preservation		
Smoking	86	74.78
Salting	, <del>-</del>	·
Salting/Drying	. 1	0.87
Sun drying —	-	·
Freezing	28	24.35
Fish Consumption pattern	*	
of family members		
They don't eat fish daily	1% 1	0.86
They eat fish daily	-	
Twice in a week	90	78.26
Thrice in a week	4	3.47
Once in a week	18 .	15.65
Unsold fish at the close of		
market		71.2
Smoke them immediately	82	71.3
Keep in fridge/freeze	31	26.9
Throw them away	<u>-</u> ,	-
Consume them	1	0.86
I don't have left-overs	1	0.86
Labour use in Selling Fish		*
Family labour	114	99.14
Hired labour	1	0.86

Source: Field survey, 2008.

# Membership in Fish Trade Association

Table 4 shows the nature of trade association in the study area. Most respondents (71.30%) belonged to Fish Traders Association which was believed to have legitimate rights to restrict sales of fish by unregistered members. However, membership in the association is optional. The registration fee was between N2000.00 - N500.00 in addition to provision of refreshments which included two crates of minerals and

colanuts. The Association meets fortnightly, during this time the official registration of members takes place.

Benefits derived from membership in the Trade Association were classified into social and economic benefits. Socially, the Association supports members with cash and visits when bereaved or given birth to children Economically, (53.04%). Association defends the members' government local with interest (20.86%) or protects members from charges. and excessive taxes .

ets

cial

in in

fied

fits.

orts

pen

Iren

the

ers'

ient

of

However, the association gave little or no assistance in loans or capital

acquisition.

Table 4: Membership of Trade association in fish marketing

Response	Frequency	Percentage
Membership of trade association		
Yes	82	71.3
No	33	28.7
Time taken to be registered		
Within a week .	87 :	75.6
Within a month	2	1.7
I don't know	26	22.6
More than a month	-	-
Registration fee (N)		
Between 50 - 100	13	11.3
Between 100 – 200	3	2.6
Between 200 - 500	75	65.2
I cant say	24	20.9
Is it compulsory to join?		
Compulsory	38	33.0
Option	70	60.9
Compulsory but refused to join	3	2.6
No association exists	4	3.5
Benefits derived from membership	Fe.	
Assist with loan or capital	2	1.70
Defend member's interest with Local.	24 :	20.86
Government		
Protect members from excessive tax/charges	3	2.60
Support members with cash when bereaved	61	53.04
/celebrate		
No benefits	25	21.74

Source: Field survey 2008.

### Source of Credit

Table 5 presents the source of credit/capital in fish marketing in the study area. The results indicated that the source of credit/capital in fish marking was mostly from non institutional source, especially through personal savings (63.0%). Other sources included donations from spouse or relatives (17.0%) and money lenders (10%). Esusu (9.0%).

(Table 5). The institutional credit sources from the Nigerian Agricultural Credit and Rural Development Banks, Commercial Banks and Micro Finance Banks had offered no assistance in fish marketing in the study area as none of the respondents obtained loans from these sources. There was a higher preference for the non-institution credit sources because bank loans

were assumed to be too bureaucratic.

to process.

Table 5: Source of Capital

Response	Frequency		
Source of fund for the Business Personal savings Donations from spouse/relatives Esusu/Ajo contribution Trade Association Money Leaders Commercial Banks	73 20 10 1	63 17 9 1 10	

Source: Field Survey, 2008.

# Profit Margin in Fish Marketing

The results indicated that most fish sellers (37.40%) earned a profit N2,000,00 margin between. N3,000.00 weekly (Table 6). The size of the profit margin depends greatly processing and handling techniques, perishability, seasonal and institutional factors such as market performance.

Table 6: Weekly Profit from Fish Marketing

111111111111111111111111111111111111111		Frequency	Percentage
Response		8	7.0
I don't know		9	2.6
No profit		9 .	7.8
< N2,000.00		43	37.4
N2,000.00 - N3,000.00		. 17.	14.8
N4,000.00 - N5,000.00	4	37	27.8
N5,000.00 and above		3 JZ	

Source: Field Survey, 2008.

#### Fish Encountered Problems Marketing

The major problem associated with fish marketing were of those spoilage of fish (42.0%), lack of storage and preservation facilities (39.0%) and too much revenue charged by the Local Government (8.0%) (Table 7). Other problems included inadequate funds for the business, lack of market facilities and inconsistent electric power supply. Despite all these problems, most respondents, (88.0%) still preferred to continue in the fish business.

Table 7: Problems of fish marketing in Makurdi Local Government Area

Response	* 4	Frequency	Percentage
No problems	v	4	3
No ready market for the product		; -	, -
The ease of spoilage of fish commodity		49	42
Problem of storage/preservation		45	39
Problem of too much revenue/charge by LGA	A	9	8
Fish sellers association give us problem		. 5	4
Others		- 3	3
Do you want to continue			
Yes		101	88
No		6	. 5
Indecision		8	7

Source: Field Survey, 2008.

# CONCLUSION AND RECOMMENDATIONS

### Conclusion

Despite all the problems encountered in fish marketing in the study area, the supply of fish into the market is regular. Little or no hired labour cost was incurred and the business was viable. The fish marketing was carried out mostly by women who were energetic to conduct the business. However, they were educationally backward.

### **Policy Recommendations**

In order to promote the performance in fish marketing in the study area, the following recommendations are made:

(i) Women education should be improved to facilitate faster adoption of new technologies in fish marketing. (ii) The government should also improve the conditions of the market facilities by providing hygienic store and cold rooms to reduced fish post harvest/spoilage losses.

#### REFERENCES

Abbort, J.C. (1987) Agricultural
Marketing Enterprises for the
Developing World Cambridge
University Press London, Pp.
21-30.

Abort, J.C. and J.P. Makeham (1990)

Agricultural Economics and
Marketing, in the Tropics.

Longman Publishers Ltd. Burnt
Mill, England, p. 2.

Adekanye, T. O. (1985). Readings in Agricultural Marketing

Longman Publishers, Nigeria, Pp. 11-12.