



## Impact of cooperative society on fish farming in Anambra state, Nigeria

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### Abstract

The study evaluated the impact of cooperative society on fish farming in Anambra State, Nigeria. Data were collected using structured questionnaires distributed to 147 fish farmers randomly selected from the three selected senatorial zones of the state. The results shows that majority of the respondents (59.18%) were within the economically active age group (31 – 40 years), males (66.67%), married (72.79%) with household size of 1-3 persons (46.26%) and 56.46% acquired tertiary education. Most of the respondents (63.27%) obtain loan from cooperative society and 50.34% obtained information. The results showed that fisheries cooperatives provide incentives such as loans, and organized training for fish farmers in the three zones. It is recommended that government should established fisheries cooperatives to help fish farmers.

### INTRODUCTION

A cooperative society is an organization of people of common economic interest whose aim is to cater for the general well-being of its member (Abdullahi *et al.*, 2014). Cooperatives brings about community development and empower small scale fish farmers. One of the measures that have been adopted in order to solve agricultural problems in Nigeria and to increase productivity is the marketing establishment of cooperative societies such as agricultural cooperatives, multipurpose cooperatives and many others (Osuntogun and Adeyemo, 1981; Abdullahi *et al.*, 2014). A cooperative society is a useful tool to ameliorate the effect of poverty on the developing nation as Nigeria.

Fish farming is the rearing of fish under controlled or semi-controlled conditions for economic and social benefits (Achilike and Matanmi, 2014). Fish farming in Nigeria has embraced the cooperative society model for

achieving economic growth, exchange of ideas, financial security, improved standards of living, as well as employment generation and social security (Abdullahi *et al.*, 2014).

Fish is very important in the diet of many Nigerians, high in nutritional value with complete array of amino acids, vitamins and minerals (Akinrotimi *et al.*, 2006). In addition, fish products are relatively cheaper compare to beef, pork and other animals' protein sources in the country (Amao *et al.*, 2006). Fish contribute more than 60% of the world supply of protein, especially in the developing countries (FAO, 2007). However, due to increase in human population and decrease in fish supply from ocean fisheries caused by over fishing, habitat destruction, water pollution and obnoxious fishing methods, fish demand in Nigeria particularly in Anambra State is high. As a result Nigeria imports over 900,000 metric tonnes of fish annually (Ozigbo *et al.*, 2013).

Cooperative society has great impact of ensuring increase in fish production. Hence this study was designed to determine the impact of cooperative society on fish farming in Anambra State.

## MATERIALS AND METHODS

### Description of the study area

The study was conducted in Anambra State, Nigeria from May to August 2019. The state which occupies an area of about 4,844 km<sup>2</sup> is located at Latitude 6° 20' N and Longitude 7° 00' E. Anambra State is bounded in the West by Delta State and in the South by Imo State and Rivers State, and in the North by Kogi State.

Anambra State is located within the evergreen rainforest zone. Two distinct climatic seasons namely rainy season (April to September) and dry season (October to March) operate in the area. About 4,177,828 people inhabit the area, the Igbos being the predominant ethnic group. The major occupations of the inhabitants are Fishing, Agriculture and Trading.

### Data collection and sample size

Respondents were selected using random sampling technique. The study area was made up of 21 Local Government Areas which comprise three senatorial districts namely:

- a) Anambra North, comprising Awka North and south, Njikoka, Dunkofia, Anaocha and Idemili North and South Local Government Areas;
- b) Anambra Central, which comprises of Onitsha North and South, Ogbaru, Oyi, Ayamelum, and Anambra East and West Local Government Areas;
- c) Anambra South consisting of Orumba North and South, Aguata, Ekwusigo, Ihiala and Nnewi North and South Local Government Areas. Three (3)

Local Government Areas were randomly selected and forty-nine (49) respondents were selected in each local government area. A total of one hundred and forty-seven (147) questionnaires were distributed to 147 respondents at the rate of 49 respondents in each zone.

### Data Analysis

Data Analysis obtained from the respondents were subjected to percentage description tools. Analysis was done using statistical package for social science (SPSS) software, application version 16.0. The results were summarized in table forms.

## RESULTS AND DISCUSSION

### Socio-economic characteristics of fish farmers

The social-economic characteristics of the respondents in the study area are shown in Table 1. Majority of the respondents (59.18%) were within the economically active age group of 31 – 40 years. This was followed by 25.17% of the respondents which were within the age group of 41 – 50 years. None of the respondents was above 60 years. This is in agreement with the report of (Ogunlade, 2007; Okwu *et al.*, 2011; Achilike and Matanmi, 2014) that most of the fish farmers are in their economic active years. Male fish farmers dominated in the three zones forming 66.67% of the respondents while females constitute only 33.33% of the respondents. The study revealed that majority of the fish farmers were married (72.79%). Only 19.04% and 8.16% were respectively single and widowed while none was divorced. Marriage confer some level of responsibility and commitment on individuals who are married (Oladaja *et al.*, 2008; Olaoye *et al.*, 2014). All the fish farmers were educated. Most of the respondents (56.46%) had tertiary education. This finding is in consonance with the observation of Olaoye *et al.*, (2014). The level of education attained enable fish farmers to function effectively (Ikpi *et al.*, 2013). Education induces economic motivation and widen farmer's social and economic horizon and predispose them to great receptivity of new innovation (Adoption of innovation) (Olapade, 2012).

### Source of Finance

Majority of the respondents (63.27%) obtained loan from cooperative society (Table 2). This agrees with Akerele *et al.*, (2019) whose study revealed that majority of fish farmers sourced fund through cooperatives.

### Training and Information

This study showed that cooperative society help fish farmers to acquire training and information (Table 3). Majority (50.34%) of the fish farmers acquired training through demonstration.

### Conclusion and Recommendations

The study showed that cooperative society improves fish farmers, increased fish production and fishing communities socio-economically. Government should established fishers cooperatives to assist fish farmers financially. Also fish farmers should be encouraged to establish fisheries cooperatives. Awareness on fisheries cooperatives in the senatorial zones should be intensified and non-members should be encouraged to join in order to benefit from the available incentives.

**Table 1: Socio-economic characteristics of the respondents in the study area**

Variables	Anambra North	Anambra Central	Anambra South	Total	Percentage
<b>Age/years</b>					
20 – 30	2	5	1	8	5.44
31 – 40	25	31	31	87	59.18
41 – 50	14	13	14	37	25.17
51 – 60	9	3	3	15	10.20
> 60	0	0	0	0	0
Total	49	49	49	49	100
<b>Gender</b>					
Male	37	32	29	98	66.67
Female	12	17	20	49	33.33
Total	49	49	49	49	100
<b>Marital Status</b>					
Single	10	5	13	28	19.04
Married	39	37	31	107	72.79
Widowed	0	7	5	12	8.16
Divorced	0	0	0	0	0
Total	49	49	49	49	100
<b>Household size</b>					
1 – 3	18	29	21	68	46.26
4 – 6	12	7	12	31	21.09
> 7	19	13	19	48	32.63
Total	49	49	49	49	100
<b>Level of Education</b>					
Non-formal	0	0	0	0	0
Primary	9	8	6	23	15.65
Secondary	18	12	11	41	27.89
Tertiary	22	29	32	83	56.46
Total	49	49	49	49	100

**Table 2: Distribution according to source of finance**

Variables	Anambra North	Anambra Central	Anambra South	Total	Percentage
Personal Saving	10	15	18	43	29.25
Bank Loan	3	2	3	8	5.44
Cooperative Society	35	30	28	93	63.27
Government Support	1	2	0	3	2.04
Total	49	49	49	49	100

**Table 3: Distribution according to training and information offered by cooperative society**

Method of training on fish farming	Anambra North	Anambra Central	Anambra South	Total	Percentage
Seminar	27	25	21	73	49.66
Demonstration	22	24	28	74	50.34
Total	49	49	49	147	100

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