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Socioeconomic Determinants of Farmed Catfish Consumption among Low-Income Households in Omu Community. Odogbolu Local Govt Area, Ijebu Ode. Ogun State

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Abstract

A 76 day interviewer administered questionnaire was conducted to examine the socioeconomic determinant of farmed catfish consumption palter among the low-income households in Omu Community under the Odogbolu LGA of Ogun State. A cross-sectional research design method was employed to a 100 respondents which are 20% of the entire community population, as gathered from the Local Government. The respondents' selection technics was completely randomized with implementation of gender equality of ratio 50:50Males and Females Respondents. Data were collected using carefully structured and close-ended questionnaires administered to a segmented sample of ten individual interviewee over a ten randomly selected locations representing the entire population of the study area. While the data collected were analysed using a simple descriptive statistic, notably the measure of central tendency, particularly percentage distribution and frequency of occurrence. Result showed that the residents had a good taste for fish in meeting their daily dietary protein requirement, particularly frozen fish that was closely followed by farmed catfish species. Their choice for farmed catfish consumption is in freshly cooked state, while the people taste for farmed catfish remained unchanged despite their low purchasing power. And they as well maintained a desire to engage in catfish farming given enabling environment. It was recommended that fish farms be established in the community to tap into the market opportunity, while the government is advice to do more in terms of agricultural development of the rural communities.

Keywords: Consumption Pattern: Farmed Catfish: Low Income Earners: Omu Community: Per Caput Consumption

INTRODUCTION

The welfare of the world poor has always been the major concern of international humanitarian organizations, NGOs and well-meaning global rich individuals. The United Nations World Population Prospects 2024 edition projects the global population to peak within 21st century, likely reaching around 10.3billion in the mid 2080's, up from 8.2billion in 2024 (The United Nations, 2024). Feeding this ever rising world population has been described as a huge task by so many scholars, and concerned Global International Organizations like the Foods and Agriculture Organization of the United Nations,(FAO), Unicef, The World Bank and The World Health Organization.

Food affordability according to the World Health Organization (WHO) is the main index for human survival, while dietary protein requirements in humans' diets forms the basis for a healthy living. Eighty percent of the global population, that is, a staggering 6.4 billion individuals are regarded as poor according to a report from the Foods and Agriculture Organization of the United Nations. While the World Bank Poverty and Inequality Platform (PIP) 2022 release put the global poverty head count ratio at the International Poverty Line to be persons that live on $2.15 per day as at 2022 release. And going by the WHO and FAO, feeding this population of the world poor is a major concern, of individuals who cannot afford good housing, education, better health care, and

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are most vulnerable. Meeting their daily protein dietary requirement for better health is only founded in nothing but in fish as food according to the FAO. Which further states that the fish as food consumption forms the only supply of animal protein for a fifth of mankind. Particularly the world poor who only and grossly depend on buying very cheap fish items, either fresh or frozen. This International Organisation further presses in her State of World Fisheries and Aquaculture, 2024 release that the majority of this category of the world poor population falls within the African – Carribeans – and Pacific (ACP) countries of the world, who are with the potentials for aquaculture development as the emerging leading global contributor to the world fish supplies in recent times, at a skyrocketing 223.2 million tonnes in the year 2022. An average of 4.4% increase since the year 2020 (FAO, 2024).

The global per caput fish as food consumption has risen above 20 kilograms a year, thanks to a massive global Aquaculture inputs (FAO, 2O24). Though poverty is a global phenomenon, and the world poor are all over the continents of the world but here in Africa the story is more pathetic. An average African poor individual cannot afford other dietary protein food items like beef, pork, snail, chicken, milk, eggs and cheese but solely relies on cheap food items towards meeting his daily dietary protein requirement to stay nourished as established by the FAO claims. The World Fish Center 2024 Yearly Bulletin release reported that Nigeria produces about 1.2 million metric tons of farmed catfish annually, arguably the largest within the region, and that about 90% of this production is locally consumed (World Fish Center, 2024). The report further states that despite this outputs, the country has recorded a low 11.3kg annual per caput fish as food consumption that is below the 21kg that is put as global average. And this deviation can only be linked to purchasing power and poor source of income among the country largest poor population. Majority of these people are individuals who live as peasant and small scale farmers or petty traders in villages and rural communities.

The people of Omu under Odogbolu Local Gov Area of Ogun State are a small agrarian rural communities that practices small scale farming particularly cassava cropping. The Community has no employment opportunities for its large youth population except petty trading by Women, and Okada riding by the able young men to make ends meet. Given the recent economic hardships in the country and the community socio – economic status, one becomes concerned about how they are meeting with the required daily nutritional dietary protein to foster healthy living. Solomon. (2010) ascertained that consumer's occupation, income level and purchasing powers do influence their decisions and buying behaviours.

Sabater, et al. (2008) also reported that socio economic variables affect the consumption of fish products by the people in the rural and semi-urban areas of North Zone India. In another similar research, Oyibo, et al. (2020) affirmed that health benefits seconded by income do strongly influenced the fish consumption pattern of University of Kogi State Students. Also reported by Abiodun, et al. (2016) that smoked catfish consumption was high in South East Nigeria as a result of household size and income. While Adeniyi & Omitoyin (2012) also reported that the evaluation of consumer's preferences for fresh and smoked dried fish products can be used to prepare a production plan and distribution network for fish as food across the country. But it is good to re-establish here that products preferences are grossly hinged to so many factors like affordability, method of processing, health benefits, presence of close alternatives, ethnicity, religion backgrounds and peers group pressure. And most importantly, affordability and or income generating power.

MATERIALS AND METHOD

A stratified sampling technique was employed in this research work, in such a way that the identified subgroups in the population are well represented in the same proportion in which they exist in the population. A completely randomized sampling procedure was effected, and for each sample drawn, the same number of sub groups were used to represent a true reflection of the entire population. One hundred Respondents representing 20% of the population, and of equal number of males and females, literates and illiterates, and above 18 years age groups were administered well-structured and standardized close-ended interviewing questionnaires via a direct on-field contacts and in a Cross-Sectional Research Design. Ten locations and or streets were identified within the community as respondents catchment points representing the entire community of about 500 individuals. The Research Design used was Cross-Sectional, with Interviewers Administered Questionnaires as the mode of Research question administration. Mode of sampling was

completely randomized where ten individual Respondents were selected from ten different locations and or streets within the community namely; Ita-Ale, Isale-Oja, Okemeri, Erebe, Oke-Aje, Express, Ishiwo, Celle Bus Stop, Ojudo and Grammar School. Which are the most populous places in the community.

Data Analysis

Collected data were analysed using a simple descriptive statistics, particularly the measure of central tendency, notably percentage distribution and frequency of occurrence for the interpretation of the results and discussion.

RESULTS AND DISCUSSION

Majority of the Respondents are within the age group of 28-37years at 41.7% and are mostly females at 55% as shown on Table 2. Most of the respondents shown on the Table 3 are married at 66.7% with a total of 47.5% for those that with secondary education, while those that stopped at primary education level are 40.8% as indicated on Table 4. Most of the interviewed Respondents as shown on Table 5. engaged in one form of petty trading or the other at 40%, 27.5% for those that are small scale farmers, and 2.5% for those with white colar jobs, mainly primarily and secondary schools Teachers. About 20% are still students in secondary schools as indicated on Table 6.

The people annual earning power is very low, as majority at 60% earns less than #250,000 per annum, only those who are primary and secondary Teachers and on white colar jobs formed the small group percentage of 5% that earn above #500,000 per annum. The results showed that the people flesh type consumption preference is same for both fish and beef at 28.3% each, 14.2% for goat meat, 5.8% for pork and 9.2% for those that do consume chicken gotten from locally raised fowls as shown on Table 7. Frozen fish recorded the highest form of fish sources consumption preference at 43.3% as shown on Table 8, closely followed by farmed catfish at 40%, and 16.7% for captured fish species which the people say they often get from the not too far Oja Ejinrin market Women.

The interviewed Respondents revealed that the freshly captured fish species gotten from Ejinrin market Women are not always constant, while farmed catfish though from a sources nearby, that is, Eriwe catfish farming village, Odoyanta and Iwata community catfish farms are quite expensive. So the people go more for different varieties of frozen fish species particularly Kote and Express frozen fishes that are otherwise cheaper than Alaran and Sawa, with a recorded consumption of 4.7% and 19.2% respectively and as shown on Table 11. An average of 600-700gm fresh farmed catfish is been sold at between N1,700 and N2,000 at the Omu market as reported by the interviewed Respondents, while nearly same size of Sawa is gotten for N1,000. Thus, the people preferred the cheaper frozen fish type to fresh farmed catfish.

Majority of the Respondent had indicated that they preferred the farmed catfish at fresh state, as the smoked ones are likewise expensive at both 35.8% and 19.2% respectively as shown on Table 9. Table 10has strongly established the people preference parameter or factors to be majorly price as indicated at 58.3%, and 16.7% for taste, 20% for availability, and 50% for health benefits. Farmed catfish consumption frequency by the community stood at 30% once and daily, 33.3%once and weekly, 31.7% twice weekly, and 5% once in a month as indicated on Table 12. Unitary expenditure on farmed catfish for the people stood at 75% for those that could afford just between N1,000- N3,000 at a goal on purchase, 21.7% for expenditure between N6,000- N10,000, and 3.3% for prices between N11,000- N15,000 and none for the above the asking price of N15,000. Table 14.strongly affirmed that the people are not ready to shifts their taste on farmed catfish at 79.2% recorded for negative responses, and 20.8% for positive responses. Only that they cannot afford much at higher prices, or more kilograms even at affordable prices. Majority as well indicated a strong interest to go into catfish farming, should the opportunity beckons as indicated on Table 15.

Table 1. Age percentage frequency distribution (PFD)

AGE	PFD	(%)
18-27	23.3	23.3
28-37	41.7	41.7
38-47	21.7	21.7
47-57	8.3	8.3
58-67	5.0	5.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 2. Sex percentage frequency distribution (PFD).

SEX	PFD	(%)
MALES	45	45
FEMALES	55	55
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 3. Marital status percentage frequency distribution (PFD).

STATUS	PFD	(%)
MARRIED	66.7	66.7
SINGLE	33.3	33.3
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 4. Educational qualification percentage frequency distribution (PFD).

EDUCATIONAL QUALIFICATION	PFD	(%)
TERTIARY	9.2	9.2
SECONDARY	47.5	47.5
PRIMARY	40.8	40.8
NON	2.5	2.5
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 5. Occupational percentage frequency distribution (PFD).

OCCUPATION	PFD	(%)
FARMING	27.5	27.5
TRADING	40.00	40.00
WHITE COLAR	2.5	2.5
POLITICIAN	2.5	2.5
PROFESSIONAL	7.5	7.5
STUDENT	2.0	20.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 6. Annual earning margin percentage frequency distribution (PFD).

ANNUAL EARNINGS	PFD	(%)
#5,000-#50,000	5.0	5.0
#50,000-#100,000	13.3	13.3
#100,000-250,000	60.0	60.0
#250,000-500,000	16.7	16.7
> #500,000	5.0	5.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 7. Fish consumption comparison to other flesh preference percentage frequency distribution (PFD).

FLESH-TYPE PREFERENCE	PFD	(%)
FISH	28.3	28.3
BEEF	28.3	28.3
GOAT MEAT	14.2	14.2
PORK	5.8	5.8
CHICKEN	9.2	9.2
OTHERS	14.2	14.2
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 8. Sources of fish consumption preference percentage frequency distribution (PFD).

SOURCES	PFD	(%)
FROZEN	43.3	43.3
FARMED	40.0	40.0
CAPTURED	16.7	16.7
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 9. Form of processing preference for fish consumption percentage frequency distribution (PFD).

FORM OF PROCESSING	PFD	(%)
FRESH	35.8	35.8
SMOKED	19.2	19.2
FRIED	24.2	24.2
DRIED	20.8	20.8
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 10. Reason for fish consumption preference percentage frequency distribution (PFD).

REASON FOR PREFERENCE	PFD	(%)
PRICE	58.3	58.3
TASTE	16.7	16.7
AVAILABILITY	20.0	20.0
HEALTH BENEFITS	5.0	5.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 11. Types of frozen fish preference for consumption percentage frequency distribution (PFD).

TYPES	PFD	(%)
SAWA	19.2	19.2
KOTE	12.5	12.5
MACKEREL	26.7	26.7
ALARAN	4.7	4.7
PANLA	31.7	31.7
OTHERS	5.8	5.8
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 12. Farmed catfish consumption percentage frequency distribution (PFD).

CONSUMPTION FREQUENCY	PFD	(%)
ONCE DAILY	30.0	30.0
ONCE DAILY	33.3	33.3
TWICE WEEKLY	31.7	31.7
ONCE A MONTH	5.0	5.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 13. Unitary expenditure on farmed catfish consumption purchase percentage frequency distribution (PFD).

UNITARY EXPENDITURE	PFD	(%)
#1,OO0-#5,000	75.0	75.0
#6,000-#1,000	21.7	21.7
1,000-#15,000	3.3	3.3
> #15,000	NIL	NIL
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 14. Change of taste possibility on farmed catfish consumption percentage frequency distribution (PFD).

CHANGING TASTE	PFD	(%)
YES	20.8	20.8
NO	79.2	79.2
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023.

Table 15. Catfish Interest farming percentage frequency distribution (PFD).

FARMING INTEREST	PFD	(%)
YES	65.0	65.0
NO	35.0	35.0
TOTAL	**100**	**100**

SOURCE: Field Survey, Dec.2023

The results follows Solomon, M. (2010) that income level is one of the drivers which influence consumers' decisions and buying behaviour. As also proven by Oyibo, et.al. (2020) that income strongly influenced fish consumption pattern of University of Kogi State Students in a similar research conducted. The research finding also supported Abiodun et.al. (2016) that household size and income highly influenced the consumption pattern of smoked catfish by the people in South Eastern part of Nigeria. The finding is a strong pointer to the people low income level as it affects their fish as food consumption pattern.

CONCLUSION AND RECOMMENDATIONS

It is concluded from the outcome of the field survey that the resident of Omu community under Odogbolu LGA Ogun State demonstrated a fair consumption preference for fish in meeting their daily nutritional dietary protein requirements, majority of which come from cheap frozen fish species which is Panla. As an alternative to farmed catfish, due to their very low sources of income. Their consumption preference for farmed catfish closely matched with the records gotten for frozen, which they as well preferred being eaten in a freshly cooked state, other than value added smoked catfish. Their average taste for farmed catfish remains unchanged, despite their low purchasing power as a results of low income. They as well maintained a strong desire to go into catfish farming under an enabling environment. And it was hence recommended that investors should tap into the market potentials of a possible rising demands on farmed catfish in the location, while the government is as well advised to give more supports to Agro businesses, and particularly cassava farming in large scales within the area, in order to improve the people's earning power and raise their purchasing powers for food commodities. Community heads and other Stakeholders are advised to establish a communal catfish farming business ventures as a replica of the nearby Eriwe Catfish farming Village, so that the community residents may have access to jobs to better their livelihoods. It is as well recommended that people should be enlightened on the health benefits of catfish consumption other than raising their income alone as a factor that drives their consumption preference towards fish as flesh type.

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