



ARTISANAL FISH MARKETING IN AKWA IBOM STATE, NIGERIA: PROBLEMS AND PROSPECTS

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Abstract:

This paper was set out to examine the problems and prospects of artisanal fish marketing in Akwa Ibom State, Nigeria. It was observed that artisanal fish is one of the most important sources of food and income to many people, especially in the riverine areas. Artisanal fisheries is labour-intensive and conducted by artisanal craftsmen whose level of income, mechanical sophistication, quantity of production, fishing range, political influence, market outlets, employment and social mobility and financial power depends on it. Artisanal fish marketing involves all activities undertaken in conveying fish from fishermen to consumers. The paper revealed that artisanal fish marketing in Akwa Ibom State involves a lot of problems which often times hinder the objectives of the fish harvesting and marketing business. The problems include inadequate funds, sea piracy, poor post-harvest fish management, high cost / lack of transportation facilities, lack of market facilities and poor interpersonal relations skills among the fishermen. The study concluded that the problems of artisanal fish marketing if solved can result in the enhancement of level of satisfaction in the harvesting, processing and marketing of artisanal fish to meet the need of the society and provide diversified employment opportunities in fishing communities, villages and settlements. It was therefore suggested among others that, Akwa Ibom State Government in collaboration with Federal Government should provide a well-developed landing and processing sites in all the fishing settlements to ensure hygienic and protected space for processing

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activities as well as proper facilities at processing sites for sanitation and storage. This will help to reduce fish contamination, and prevent microbial attack of harvested fish.

Keywords: fish, artisanal fishery, marketing, distribution channel

1. Introduction

The term fish is a diverse group of animal that lives and breathes in water by means of gill. Fish is one of the most important sources of food and income to many people in developing countries. Ekpo and Essien-Ibok (2013) describe artisanal fisheries as a small scale fisheries whose gear is generally simple and hand-operated (hooks, gillnets, traps and baskets) and its craft is simple and traditional (dug-out wooden canoes, bamboo rafts and small open fibre-glass boats). The geography and biodiversity of Nigeria supports artisanal fishing activities. Nigerian coastal fishery sector is characterized by a rich resource base with a water area of 140,000km² and about 42,000km² continental shelf areas, adjacent to the country's 853km coastline ((Food and Agriculture Organization [FAO], 2007). The huge Niger Delta inland waters associated with River Niger and River Benue, their tributaries and flood plains, natural lakes and wetlands, reservoirs and purpose-built ponds, constitute the total water area in the country. Furthermore, one quarter of Nigerian States is located at the coastal zone, including Akwa Ibom. The other states include Lagos, Ogun, Ondo, Delta, Edo, Bayelsa, Rivers and Cross River state.

Artisanal fish marketing essentially consists of all the activities involved in exchanging and distributing fish from the fishermen to the consumer. Artisanal fish is sold in the local markets in Akwa Ibom State either in fresh or dried form. The fresh fish could be further differentiated into those from: rivers (riverine), reservoirs (Lacustrine), lagoon (estuarine) and the sea (marine), which are often harvested by artisans (fishermen) and trawlers. Artisanal fish products serve as raw materials in feed mills, allied industries/ confectionaries while fish exportation brings foreign exchange earnings. Onuoha and Hassan (2009) have also noted the viability of fishing business to the nation's economy. Maritime trade is a significant contributor to Akwa Ibom State's economic development, especially in the area of fishing business. However, the potential role of artisanal fish marketing in economic development is not without challenges, especially in developing countries like Nigeria, hence the reason to undertake this study to examine the problems and prospect of artisanal fish marketing in Akwa Ibom State.

2. Concept of Artisanal Fisheries

Artisanal fishing (or traditional/subsistence fishing) are various small-scale, low technology, low-capital, fishing practices undertaken by individual fishing households as opposed to commercial companies (*Garcia, 2009*). Many of these households are of coastal or island ethnic groups. Omorinkoba, Ogunfowora, Ago and Mshelia (2011)

define artisanal fisheries as small scale fisheries where the fishers operate in small units. Similarly, Schorr (2005) defines artisanal fisheries as small-scale fisheries for subsistence or local, small markets, generally using traditional fishing techniques and small boats. They occur around the world (particularly in developing nations) and are vital to livelihoods and food security. Artisanal fisheries catches up to 30 million tons of fish for human consumption, and employs over 12 million people annually (Jacquet and Pauly, 2008).

Onuoha (2009) lists the characteristics of artisanal fisheries' to include the following: It is labour intensive with very low capital investment, infrastructure facilities such as cold storage and processing plants are very poorly developed for the sector, the fishing units are numerous and generally highly scattered in remote hardly accessible settlements which makes evacuation, distribution and marketing of the products rather difficult and the fishermen lacked access to credit from commercial banks and other financial houses. The foregoing implies that Artisanal fisheries is labour-intensive and is undertaken by fishermen whose level of income, quantity of production, fishing range, political influence, market outlets, employment and social mobility and financial power depends on it. Hence, artisanal fish is the fish caught (harvested) by fishermen. However, the concern of this paper is the marketing aspect of artisanal fish business.

3. Concept of Artisanal Fish Marketing

Marketing is generally considered as the process by which companies create value for customers and build strong customer relations in order to capture value from customers in return (Kotler and Armstrong, 2007). Olaoye (2016) postulates that traditionally artisanal fish marketing and distribution systems involve the collection, processing and transportation of fish from fisher folk at remote landing areas to major consuming centers. Artisanal fresh fish is sold at landing site to middlemen processor who smokes the fish (sometimes smoking is done by the family processors) and sell to distant wholesaler or middlemen transporter, this fish then pass through some intermediaries before getting to the final consumers. The main functions of marketing as highlighted by Olaoye (2016) are the physical, facilitating and exchange functions. Physical function is series of activities that involves transportation, storage, handling and processing. Facilitating function includes all non-physical activities that are involved in the smooth running of the fish market such as; standardization, financing, market intelligence and risk bearing. While, exchange function is the judgment of value usually expressed as 'Price'. It involves negotiating for the title of the fish in a favourable term of exchange.

Cheke (2014) postulates that in Nigeria, artisanal fish marketing commences from the harvesting stage to the value chain, where it then gets to the final consumer. Both men and women play key roles in the processing and marketing of artisanal fish in Akwa Ibom State. In Aqua culture production, both men and women are involved in fish farming whilst the women dominate at the retailing level of the farmed fish products. But in the capture fisheries sector (i.e. Trawling and Artisanal fisheries) the

men dominate at the production stage whilst the women are the key processors and sellers of the products. Umoinyang (2014) opines that the marketing of fish has steadily changed due to urbanization. Before urbanization, artisanal fish were locally and domestically produced and consumed with little or no leftover for sales. With increasing urbanization and development, which has further increased the distance between fishermen and consumers, artisanal fish marketing has become very important type of business. Artisanal fish marketing involves all activities undertaken in conveying fish from fishermen to consumers. The conveyance is only possible through the use of marketing or distribution channels as discussed below.

4. Artisanal Fish Distribution Channel

After harvesting, fish products need to reach the processors and final consumers while they are still in good conditions. At times, the fish products go beyond the fishing communities to cities within and outside Akwa Ibom State. For instance, vehicles are often seen with loads of sticks of fish and bags of crayfish from Ibaka, Oron beach, Ikot Abasi, Ibeno, and other fishing settlements to places like Abia, Abuja, Imo and Rivers States (Ekpo and Essien-Ibok, 2013). In artisanal fish marketing, fish passes to the final consumers through the network of various fish distributors that constitute distribution or marketing channel. Distribution (marketing) channel according to Ali, Rahman, Hossain, Rahman, Hossen, Naser, Islam, Subba, Masood, and Hoque (2014) is a chain of various systems involved in marketing from production sector to final consumers with intra and inter linkages. Madugu and Edward (2011) describe distribution channel as the participants and the route through which processed fish were transferred from producers to consumers. A typical artisanal fish distribution channel in Akwa Ibom State is illustrated in the figure below.

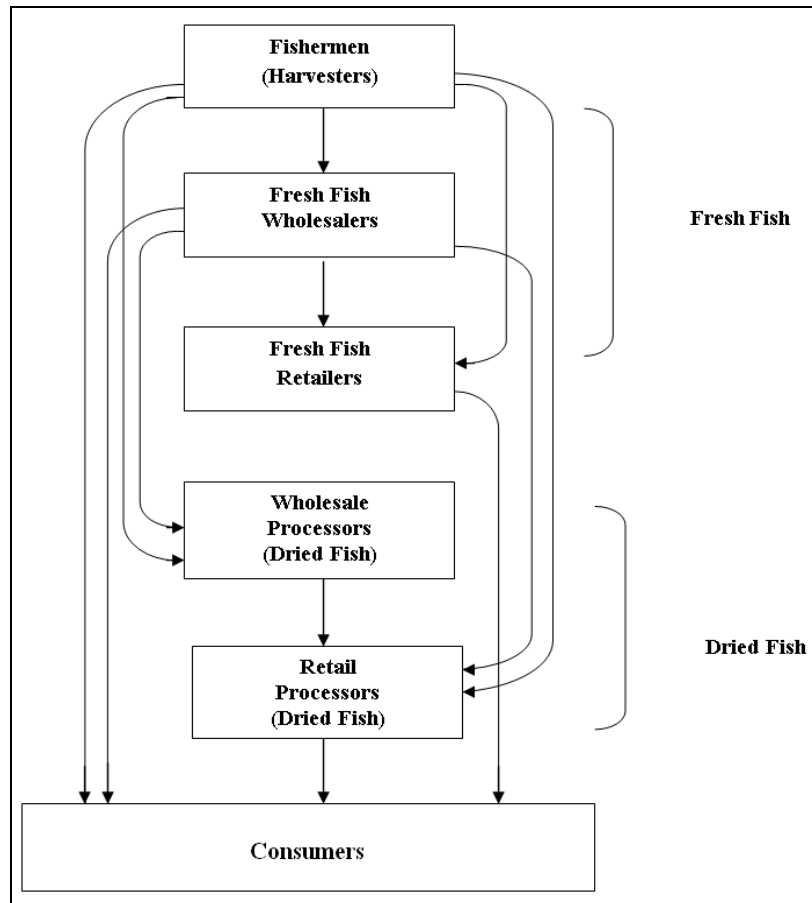


Figure 1: Schematic Diagram on Fish Marketing Channel from Fishermen to Consumers
 (Source: Adapted from (Eminue, 2018))

Artisanal fish distribution starts from the fishermen and ends with the final consumers. Fish by our local distributors are marketed either fresh or dried. The fishermen are sole producers of artisanal fresh fish. The fresh fish are sold to wholesalers, retailers or directly to final consumers. The wholesalers purchase in bulk from the fishermen for the purpose of breaking the bulk to retailers or the final consumers. Hence, the wholesalers are seen as bulk breakers in the distribution chain. Some of the wholesalers distribute artisanal fish in fresh form only, while some are processors who purchase artisanal fresh fish from fishermen and then process the fish into dried form. Likewise, the retailers purchase artisanal fish either from fishermen or wholesalers in small quantity and resale to the final consumers in smaller quantity. However, some retailers deals with fresh fish, while some are sellers of dried fish either purchased from wholesales processors or the ones processed individually (Eminue, 2018). Summarily, fish distribution in this study has the following channels:

1. Fishermen → Wholesalers (fresh fish and processors) → Retailers (fresh and dried fish and processors) → Consumers.
2. Fishermen → Wholesalers (fresh fish and processors) → Consumers.
3. Fishermen → Retailers → (fresh and dried fish and processors) → Consumers.
4. Fishermen → Consumers (fresh fish only) (Eminue, 2018).

Awoyinka (2009) opines that marketing of food (including artisanal fish) in Nigeria is characterized by multitudes of deficiencies and problems. Hence, the paper is undertaken to discuss the problems and prospects of artisanal fishing marketing in Akwa Ibom State, considering the remote nature of many fishing settlements where the business is operated.

5. Problems of Artisanal Fish Marketing in Akwa Ibom State

Artisanal fish marketing in Akwa Ibom State involves a lot of problems which often times hinder the objectives of the fish distributors, which is to satisfy consumer wants and to ensure the profitability of the firm. The following are some of the problems of artisanal fish marketing in Akwa Ibom State:

5.1 Inadequate availability of Funds

Artisanal fish marketing is constrained by lack of access to capital to procure marketing facilities related to fish business. The requirement of sanitation and hygiene involved in fish handling are complex and costly, demanding huge access to finance. Bank loans are rarely accessible in rural areas, and moreover, cumbersome bank formalities and the need for collateral deter the traders from approaching these institutions.

5.2 Sea Piracy

Ukoima (2016) describes sea piracy as the criminal act of hijacking boats, marine engines and other fishing gears as well as seizing fish that are bought from trawlers for resale or cash that was meant for purchase of fish. Essien and Adongoi (2015) opine that these incidences occur on daily basis, leading to either loss of life or maiming of persons and hijacking of fishing boats.

5.3 Poor Post-harvest Fish Management

Poor fish handling, processing, storage and preservation increase the rate of spoilage, wastage and fish deterioration, thereby reducing the volume of fish available for sales. While managing the products, fish processors depend on traditional processing methods such as mud-type, drum-type, pit oven and sun light to reduce post harvest losses. These traditional methods of fish processing, however, do not effectively prevent microbial spoilage of harvested fishes (Tabor, 2000).

5.4 High Cost / Lack of Transportation Facilities

High cost of transportation is one of the constraints facing artisanal fish distributors in the marketing of fish. The unavailability of adequate transportation facilities such as roads, vehicles, rails, etc also hinders effective distribution of fish from one point to another. There are no access roads in places like Uti, Uko-ofuho, Mbe Nodoro, Ibout Utan, Asiak Obufa, Ine Odiong, Ine Ekpo, Utan Iyata, Ute Effiong and Atabong, among others. Therefore, transportation of fish from these areas has always been a problem sometimes leading to fish deterioration.

5.5 Lack of Markets Facilities

Facilities in most of the markets of Akwa Ibom State are inadequate. Even though traders (retailers and wholesalers) are required to pay market taxes, market conditions are usually poor throughout the State. Storage facilities are lacking, water supply and sanitation facilities are inadequate, hygiene is poor, stalls are often not available or are too expensive requiring women to sit out in the open, and security, especially at nights, is inadequate.

5.6 Poor Interpersonal Relations Skill

Lack of interpersonal relations skills had further complicated the situation of artisanal fish marketing in Akwa Ibom State, leaving many fish distributors struggling to have a niche in the market share. Lovett and Jones (2014) assert that in today's global and competitive business environment, business organizations are striving to stand out from their competitors in an attempt to garner an additional segment of clientele. One's ability to interact with others may be a big differentiation in how successful one becomes in personal or business life.

6. Prospect of Artisanal Fish Marketing in Akwa Ibom State

Making conditions favourable for artisanal fish marketing could lead to significant benefits. At the same time, artisanal fish are well suited to the local needs, tastes and cultures. Artisanal fish marketing provides diversified employment opportunities in fishing communities, villages and settlement, hence supporting artisanal fish marketing could provide economic and social support to fishermen, processors, distributors and the society in important ways. Fishing is easily accessible compared to any other business one may wish to undertake in the riverine settlements. Proceeds from fish sales are used to purchase household needs, assets, built houses, acquire new fishing equipment, pay for children's school fees and health care. Some fishermen have developed other fishing skills such as net mending, fish processing and boat making. It is imperative that Akwa Ibom State governments recognizes the economic, social and cultural importance of small-scale and artisanal fish marketing not as peripheral activities but as important in their own right.

Ukoima (2016) posits that *"fish (especially artisanal) is not just predominantly serving as a commodity for business in Akwa Ibom State, but as a catalyst product to ancillary industries such as sales of locally made boats, marine engines, nylon (fishing nets) and net mending among others. Hence, fish business could be seen as a business of businesses"*. The foregoing implies that, venturing into fish marketing business holistically holds promising potentials to investors in Akwa Ibom State. Given critical concerns about food security and employment creation in Akwa Ibom State, encouraging artisanal fish marketing could play an extremely vital role, making available fish in remote regions at affordable prices. Prospect of fish marketing could therefore be summarized as follows:

1. Advancement in marketing will lead to development of other industries producing accessories for packaging rather than relying on used materials. This will subsequently lead to increase in employment and economic development.
2. It will implore research into more techniques of fish preservation and preparation of various fish product so as to meet the different tastes of the consumers and subsequently lead to advancement and general development of the sector.
3. Any expansion in the volume of trade occasioned by improved marketing will create for the government further incentives to provide additional infrastructure like road, storage facilities and warehouse etc. which will link up the villages to urban centers and improve the living standard of the participants which will subsequently enhance their performance.
4. With good and efficient marketing set-up, fish supply can be guaranteed throughout the year with little variation in prices. This will favour the fishermen, consumer and even policy makers for appropriate economic planning in Akwa Ibom State.
5. Good fish marketing will ensure production of the right product at the right time and at the right place and form and in effect will ensure judicious use of resources to the best advantage of the fisher folk.

6.1 Educational Implication

The paper suggests that problems and prospects of artisanal fish marketing should be taught as part of business and entrepreneurial education courses to the students so that the evolving graduates from business education and other related discipline will be equipped with requisite skills and competences that will enable them undertake artisanal fish marketing business. In this way, those that will invest in artisanal fish distributive trade will be vested with knowledge and skills required in risk and post-harvest fish management.

The paper also emphasize that educational system, especially vocational education should implore research into more techniques of preservation and preparation of artisanal fish product so as to meet the different tastes of the consumers and subsequently lead to advancement and general development of the sector. The students should be taught the best way of fish preservation and storage to prevent insect infestation, which expose the business to risk.

7. Conclusion

Artisanal fish marketing and consumption seems to be increasing all over the world. Fish and fish products are becoming popular among every class of the society. Due to high cost of other animal protein sources and the medicinal features of fish products, many people prefer to go for fish as alternative source of animal protein. Artisanal fish marketing in Akwa Ibom State involves a lot of problems, such as lack of funds and access to fish and poor handling, storage, transportation and marketing facilities, which

often times hinder the objectives of the fish distributors, which is to satisfy consumer wants and to ensure the profitability of the firm. The problems of artisanal fish marketing if solved can result in the enhancement of level of satisfaction of fishermen, processors and traders towards meeting the need of the society and providing diversified employment opportunities in fishing communities, villages and settlements. Therefore supporting artisanal fish marketing could provide economic and social support to fishermen, processors, distributors and the society in important ways.

7.1 Suggestions

The following steps to support an expansion of artisanal fish marketing activities in Akwa Ibom State are suggested:

1. Akwa Ibom State Government in collaboration with Federal Government should provide a well-developed landing and processing sites in all the fishing settlements to ensure hygienic and protected space for processing activities as well as proper facilities at processing sites for sanitation and storage. This will help to reduce fish contamination, and prevent microbial attack of harvested fish.
2. Local Government Authorities should reinvest the money from market taxes to improve market facilities and conditions, especially to provide for adequate and secure storage space, sanitation and covered vending space for fish distributors. This will make fish marketing business attractive and also reduced carriage and fish deterioration.
3. Riverine local government authorities should provide sophisticated cold rooms for fish harvesters and processors to have easy storage of unsold and unprocessed fresh fish till the following day. This in addition to reducing fish deterioration and post-harvest loss, will also boost internally generated revenue (IGR) of the government.
4. Federal and state governments should establish coast guards who should work in synergy with naval officers to boost the numerical strength of coastal security officers. This will guarantee wide security coverage to reduce sea piracy and protect lives and property in the sea area. Also, fishermen and artisanal fish marketers should be provided with accident benefit schemes and insurance facility to ensure continuity of business in case of any eventuality.
5. Akwa Ibom State government should build road infrastructure that will support the use of fast and cost effective means to transport fish from fishing settlement to other villages and markets. This will ensure fish easily gets to the consumers in the desired form of freshness to attract good price and enhanced profit.
6. Akwa Ibom State Government and commercial banks should provide fish distributors with interest free loan and low interest rate credit facilities to expand the trading capital. Credit schemes should adapt to the needs of fishermen and traders.

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