

Evaluation of Marketing Margin of Farm-Raised Catfish (*Clarias gariepinus*) Marketing Intermediaries In Ibadan, Oyo State

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Abstract: This study investigates the distribution channels and marketing margin of market intermediaries of farm-raised *Clarias gariepinus* in Ibadan, Oyo State. A well structured questionnaire was used to collect data from 10 fish producers, 20 wholesalers, 50 retailers and 20 fish processors in 5 major fresh fish markets in Ibadan metropolis. The data collected were analyzed using descriptive and inferential statistics. Market margin for the most prominent market channel of distribution were estimated. The marketing margin for wholesalers, retailers and consumer were ₦180, ₦220 and ₦350; while, the net margins were ₦145, ₦202 and ₦288 on 1 kg of fish. The results of the study also revealed that the producer's share in consumer's Naira were 62.5, 57.69 and 46.15% for wholesalers, retailers and processors, respectively. The producers share in consumer's Naira was quiet low among the processors (46.15%) as a result of the added value on the processed fish. The results of the study revealed that the share of the market intermediaries in the consumer's Naira is substantial; however, efforts should be made to increase fish distribution channel to the consumers through the producers, so as to reduce the marketing margin of the intermediaries.

Key words: Market participants, marketing channel, marketing margin, *Clarias gariepinus*, producers

INTRODUCTION

The importance of fish cannot be over emphasized. It is a rich protein source and provides nutritious food. Fishing and fish farming generate income and employment to millions of poor people and trade in fishery products contributes to poverty reduction and national economic growth in many developing nations. Fish is one of the most important sources of animal protein for people in developing countries of West Africa (Teutscher *et al.*, 1990). Marketing has been defined as all processes involved from the production of a commodity until it gets to the final consumer (Crammer *et al.*, 2001). Fish marketing and distribution is an integral aspect of fish production because it is only when the fish gets to the final destination (consumers) that production can be complete. According to Chaston (1983), it is rare in today's society that the location of producers and final consumers permits direct trade between them. Typically, they execute a transaction through one or more intermediaries who may also be referred to as middle men; the number of levels in the distributional chain varies in relation to output and participant location. These processes ascertain that the right product is available at the right place at the right price and at the right time to fully satisfy the consumer (Beierlein and Wooverton, 1991).

Farm-raised catfish farmers are confronting various marketing problems; such as, poor and inadequate road, lack of credit facilities and poor marketing information. These conditions cause wide marketing margins which results in exploitation of farmers. Besides different market intermediaries are involved in the marketing of farm raised *Clarias gariepinus*. Therefore, the specific objectives are to identify the existing marketing intermediaries and marketing channel of farm raised *Clarias gariepinus* in Oyo State; estimate their marketing margin and sort out the producer's share in consumers Naira.

MATERIALS AND METHODS

The study was carried out in Ibadan, Oyo State. A well structured questionnaire was used to collect data from producers, wholesalers, retailers and fish processors. The major fresh fish markets selected in the study were: Aleshinloye, Iwo-Road (Under bridge), Eleiyele, officer's mess and challenge. The 4 groups selected were: 10 fish producers (8 private and 2 government fish farms), 20 wholesalers, 50 retailers and 20 fish processors. Weighted averages were used in the analysis and interpretation of the data. Separate interview schedules were prepared to collect necessary information and data from each of the 4 groups of the respondents. The data were taken by personal interview method. These

schedules were pretested and modified before the actual data collection. Data thus collected were tabulated and statistically analyzed. Owing to certain limitations, the study was confined to only *Clarias gariepinus*.

Marketing margin: Estimates of marketing margins were obtained using the formula given by Kohls and Uhl (1985). According to Kohls and Uhl (1985), marketing margin equals the difference between what the consumer pays and the farm gate price per unit of the food produce. The net margin accruing to the wholesaler or the retailer is the difference between the market margin and the marketing costs. Marketing cost is the sum of transport cost, shop rentage cost, labour cost and other costs. To calculate market margin, the average prices in Naira per kg *Clarias gariepinus* was used as given by the respondents in the various markets. This is to say that the calculation was based on the Naira per kg of fish in the markets.

Price spread and farmer's share in consumer price: The price spread refers to the difference between the price paid by the consumer and price received by the producer for an equivalent quantity of farm products (Goswami, 1991). The farmer's share in consumer price according to Goswami (1991) is given by the formula:

$$\text{Farmer's share in consumer price} = \frac{\text{Price received by the farmer, i.e., farmer's gross price}}{\text{Total price paid by the consumer}} \times 100$$

RESULTS AND DISCUSSION

Market participants: Four types of market participants were identified. They are the producers, wholesalers, retailers and fish processors. The wholesaler represents a vital link between the producers and the retailers. None of the wholesalers engaged in any other types of occupation, they depend entirely on this activities for their livelihood. As revealed by 17 (85%) of them wholesaling required total involvement and is time consuming because of the location of some fish farms. It also required proper monitoring, experience and managerial skill due to the nature of the product.

Fish retailing, on the other hand, are the greatest proportion of the middlemen. Their main activities are selling to the ultimate consumers. The retailers have small operating capital and operate at small scale level. The study revealed that 46 (92%) of the retailers derived their total income from fish retailing, while 4 (8%) derived additional income from other sources of activities; such as, marketing of livestock products, snail, petty trading and selling smoked fish.

Apart from selling farm raised catfish, some of the retailers sold captured fish; such as, *Tilapia* sp.,

Heterobranchius sp., *Chrosichthys nigrodigitatus*, Snakehead (*Parachanna obscura*) and *Heterotis niloticus*. The reasons for engaging in other types of occupation include the current economic depression which has made fish marketing an expensive venture, to have something at hand during the time of fish scarcity and to expand their sources of income. However, a greater percentage of the retailers maintained that it is not easy to combine farm raised catfish retailing with any other business. They also revealed that they received >75% of the total income from the sale of farm raised catfish. Fish processors on the other hand include those that processed fish into pepper soup, frying and smoking. They add value to the fish and sell their processed fish in hotel, beer parlour and restaurants.

Sources of fish supply: The primary sources of fish supply according to the fish traders were from private and government fish farms. However, 70% of fish were got from the private fish farms while only 30% were from government fish farms. They revealed that although, fish from government farms were a bit cheaper but the supply is not regular.

Marketing channels: The sequence of stages involved in transferring produce from the farm to the consumer is generally referred to as marketing channel (Shepherd, 1996). The fish supplied by the producers passed through certain channels before it reached the ultimate consumers. Direct marketing as practiced by the fish farmers was made possible as revealed in Fig. 1; however, the producer sold 90% of their catch through intermediaries, particularly when the consumer markets were distant from the production areas.

Figure 1 also revealed that the producers can also sell directly to the retailers or the consumers but it is not a

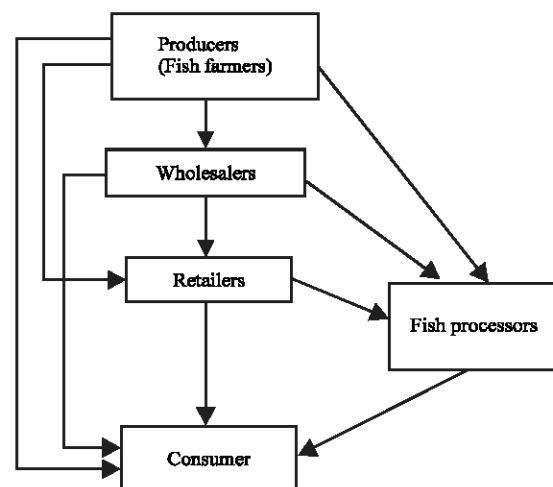


Fig. 1: Marketing chain and distribution channel for farm raised *Clarias gariepinus* in Oyo State

common occurrence as the wholesalers make it almost impossible for the other marketers to buy directly from the producers because of their control of the market. The following channels were revealed from the study:

- Channel 1 : Producer-Consumer
- Channel 2 : Producer-Wholesaler-Consumer
- Channel 3 : Producer-Retailer-Consumer
- Channel 4 : Producer-Processor-Consumer
- Channel 5 : Producer-Wholesaler-Retailer-Consumer
- Channel 6 : Producer-Wholesaler-Processor-Consumer
- Channel 7 : Producer-Retailer-Processor-Consumer
- Channel 8 : Producer-Wholesalers-Retailer-Processor-Consumer

Here, 8 market channels were observed in the flow of *Clarias gariepinus* fish in Oyo State. Selection of a suitable marketing channel depended upon the volume and quality of fish catch and the requirements of the consumers. Channel 3, 5 and 6 were the most prominent for the sale of fish in the urban markets.

Marketing margin of the intermediaries

Marketing cost: Marketing cost represented the cost of performing various marketing function need to transfer a commodity from the place of production to the ultimate consumer. Marketing cost incurred by the wholesalers, retailers and fish processors is shown in Table 1. From the Table 1, transportation cost is the highest for both wholesalers and retailers (57.14 and 10.00%), respectively.

Share in consumer's Naira: Marketing margins and net profit of different intermediaries in different channels are given in Table 2. In channel 2 and 3 the producers got the

Table1: Marketing cost incurred of *Clarias gariepinus* by different intermediaries (₦ kg⁻¹)

Cost items	Wholesalers	Retailers	Processors
Stall rent	5.00 (14.29)	3.50 (19.44)	15.00 (24.19)
Transportation cost	20.00 (57.14)	10.00 (55.56)	10.00 (16.13)
Labour cost	5.00 (14.29)	2.00 (11.11)	12.00 (19.35)
Miscellaneous	5.00 (14.29)	2.50 (13.89)	25.00 (40.32)
Total cost	35.00	18.00	62.00

Figures in parentheses indicate percentages of total marketing cost (Field survey, 2012)

Table 2: Marketing margins and net profit for various marketing intermediaries (₦ kg⁻¹)

Particulars	Wholesalers (Channel 2)	Retailers (Channel 3)	Processors (Channel 4)
Producers price (Farm gate price)	300.0	300.0	300.0
Marketing cost	35.00	18.00	62.00
Consumer purchased price	480.0	520.0	650.0
(A) Marketing margin	180.0	220.0	350.0
(B) Net profit (MM-Cost)	145.0	202.0	288.0
Share of producer in consumer's Naira (%)	62.50	57.69	46.15

Field survey, 2012

highest share in consumer's Naira, 62.5 and 57.69%, respectively as explained in Table 2. The producers share in consumer's Naira was quiet low in channel 4 (46.15%) as a result of the added value on the processed fish and due to marketing cost.

CONCLUSION

Channel 4 was seen from this study has having the highest marketing margin of ₦288; while, channel 2 has the lowest marketing channel of ₦180 on 1 kg of fish bought for ₦300. It was also discovered that the share of producer in consumer's Naira was the lowest in channel 4 (46.15%). Farm-raised *Clarias gariepinus* is an important food in the diet of the people in Oyo State, there is therefore, need to improve on its marketing in order to make it reach the consumer at an affordable price.

RECOMMENDATIONS

To enhance the prospect of food security in Nigeria, the following recommendations are suggested: Channel 4 should be discouraged by the fish farmers; while, channel 2 only should be encouraged. Fish farmers should be encouraged by providing market or avenue through which they can sell fish on their own. This will reduce the profit margin of the intermediaries and the consumers will buy fish at affordable price.

REFERENCES

- Beierlein, J.G. and M.W. Wooverton, 1991. Agribusiness Marketing: The Management Perspective. Prentice Hall, New Jersey, USA.
- Chaston, I., 1983. Marketing in Fisheries and Aquaculture. Fishing News Books Ltd., Survey England, Pages: 143.
- Crammer, G.L., C.W. Jensen and D.D. Southgate Jr., 2001. Agricultural Economics and Agribusiness. 8th Edn., John Wiley and Sons, New York, USA., ISBN-13: 978-0-471-38847-0, Pages: 544.
- Goswami, S.N., 1991. Price spread of tomato in a village market Kamnep District, Assam. J. Agric. Mark., 34: 11-14.
- Kohls, R.L. and J.N. Uhl, 1985. Marketing of Agricultural Products. Macmillan Publishers, New York, ISBN-13: 9780029463505, Pages: 624.
- Shepherd, W.A., 1996. A guide to marketing costs and how to calculatethem. Marketing and Rural Finance Service, Agricultural Services Division. FAO. Rome.
- Teutscher, F.B., Sack and A. Onedsogo, 1990. Measures for improving the utilization and marketing of fish in Eastern and Southern Africa. Joint Commission for Africa and Food and Agricultural Organization Technical Publication. JEFAD/AMS/88/53, pp: 37.