

## Stakeholders' Perception of Extension Needs of Fish Marketers in Akwa Ibom, Nigeria

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**Abstract:** The study attempted to ascertain the perceptions of stakeholders (fish marketers, fisheries extension agents and cell-level extension agents) on extension needs of fish marketers in Akwa-Ibom State of Nigeria. A hypothesis was also tested to determine the existence or otherwise of significant differences in the perceptions of stakeholders on extension needs of fish marketers. A multi stage sampling technique was utilised respondents for the study. Primary data was collected and analysed with the aid of descriptive and inferential statistics. The result revealed a generally high level need index among fish marketers and all the stakeholders perceived that a gap in knowledge exists in fish marketing though the level (degree) of perception of the fishery extension officers differ from others. Since there is a wide acceptance by all the stakeholders that there are gaps in knowledge, extension personnel should focus on giving relevant and timely information to enhance fish marketing potential in Akwa Ibom State.

**Key words:** Needs of fish, perceptions of stakeholders, fish marketers, fisheries extension, Nigeria

### INTRODUCTION

The fishery sector makes a vital contribution to the food and nutritional security of 200 million Africans and provides income for 10 million engaged in fish production, processing and trade (NEPAD, 2005). Despite the subsistence nature of our capture fishery in Nigeria, as much as 50% post-harvest losses are recorded, the result being economic losses to farmers, fish processors and marketers (Bolorunduro, 1996). Ita (1993) observed that there is inadequate dissemination of information on fisheries activities and resource potentials as well as processing, marketing and resource management. Farnington *et al.* (2002) also observed that farmers' need extension education on a diverse range of rural development options including information on markets, rural industry and other income opportunities.

Considering these therefore, the views of relevant stakeholders in fish marketing sector must be taken into consideration. Of utmost importance are the views of the fish marketers who are the major stakeholders and ultimate recipients of introduced innovations, for according to Probst and Hagmann (2003), local people's perspectives need to be at the centre of research efforts for

development. The views of fishery extension officers and extension agents become important since they are directly involved in information dissemination in agriculture. Van den Ben *et al.* (1996) defined extension as involving the conscious use of communication to help people form sound opinions and make good decisions. Therefore, information is a crucial variable in technology transfer in agriculture. The major task of agricultural development effort is information transfer to improve agriculture, of which fishery is a part. This therefore, rests on the shoulders of the extension agents and fishery extension officers in the Ministry of Agriculture. In the context of this research work, extension need is a gap in knowledge/skills required to bring about a desired change or improvement in fish marketing activity. In that wise, Laogun, defines a need as the difference between what exists and what is desired.

Against this background, this study was conceived to ascertain stakeholders' perceptions on extension needs of fish marketers in Akwa Ibom State. Specifically, the study attempted to identify extension needs of fish marketers and ascertain perceptions of stakeholders on extension needs of fish marketers in the study area. A hypothesis was also tested to determine the existence or

otherwise of a significant difference in the perceptions of the relevant stakeholders on extension needs of fish marketers.

## MATERIALS AND METHODS

The study was conducted in the riverine areas of Akwa Ibom State with the population comprising both dried and fresh fish marketers, extension agents working in the agricultural cells in which the ports are situated and all the fishery extension officers in the State Ministry of Agriculture.

Multistage sampling technique was used in selecting 6 ports whereby 20 marketers (10 fresh and 10 dried) were randomly selected from each of the ports. Six extension agents (1 per port) were randomly selected while the 7 fishery extension officers in the state were utilized. Altogether, 133 stakeholders were surveyed on their perceptions on extension needs of fish marketers in Akwa Ibom State.

Both primary and secondary data sources were utilized in the study. Primary data were obtained through well-structured and validated sets of questionnaire and In-Depth-Interview (IDI) sessions. Both the descriptive (mean, percentages and ranks) and inferential (ANOVA) statistics were used to analyze collated data.

To ascertain fish marketer's extension needs, respondents were requested to respond to their perceptions of 12 identified major extension need items. This was done with the aid of a 3-point Likert scale of

Disagree, Undecided and Agree. Total and mean perception scores were computed, after which a cut-off mean score of 2.5 was used to differentiate between an Extension Need (EN) ( $\bar{x} \geq 2.5$ ) and a Non-Extension Need (NEN) ( $\bar{x} < 2.5$ ). ANOVA statistical tool was used to ascertain whether or not there was any significant difference in perceptions of stakeholders with regard to the ascertained extension needs of fish marketers.

## RESULTS AND DISCUSSION

Results on Table 1 revealed that all identified items were perceived as extension needs, the least important of which were microbial reduction activities ( $x = 2.5$ ) and prevention of insect/rodent attack ( $x = 2.5$ ). On a disaggregated basis, the fish marketers perceived improved fish sorting techniques ( $x = 2.8$ ) as their least important need. The fish extensionists perceived fish procurement strategies ( $x = 1.7$ ) and microbial reduction activities ( $x = 1.7$ ) as least important needs, while the extension agents perceived prevention of insect/rodent attack ( $x = 2.5$ ) as the least important need of fish marketers. It was also revealed that fish extension officers recorded generally lower perception scores than the other stakeholders. This is confirmed by the results of the Analysis of Variance (ANOVA) on Table 2 which shows that there is a variation in the mean index of extension needs perception. Fisheries extension officers have a mean perception of 85.32% while those for fish marketers and extension agents are 97.89 and 98.15%, respectively.

Table 1: Stakeholders responses on extension needs of fish marketers

Item	Extension needs	Mean fish marketers	Scores/ Ranks fish extensionists	Extension agents	Grand mean	Remarks
1.	Improved fish					
	Sorting techniques	2.8(9)	1.9(10)	3.0 (1)	2.7(10)	EN
2.	Fish hygiene techniques	2.9(8)	2.7(7)	3.0 (1)	2.9(8)	EN
3.	Fish procurement strategies	3.0(1)	1.7(11)	3.0 (1)	2.6(7)	EN
4.	Environmental hygiene techniques	3.0(1)	3.0(1)	3.0(1)	3.0(1)	EN
5.	Use of innovative					
	Smoking devices	2.9(8)	2.7(7)	3.0(1)	2.9(8)	EN
6.	Microbial reduction activities	2.9(8)	1.7(11)	2.8(11)	2.5(12)	EN
7.	Prevention of Insects/rodents attack	2.9(8)	2.1(9)	2.5(12)	2.5(11)	EN
8.	Storage techniques	3.0 (1)	3.0(1)	3.0 (1)	3.0(1)	EN
9.	Packaging techniques	3.0 (1)	3.0(1)	3.0 (1)	3.0(1)	EN
10.	Marketing techniques	3.0 (1)	3.0(1)	3.0(1)	3.0(1)	EN
11.	Sources of credit	3.0 (1)	3.0(1)	3.0(1)	3.0(1)	EN
12.	Record keeping techniques	3.0 (1)	3.0(1)	3.0(1)	3.0(1)	EN

Note: EN = Extension Need

Table 2: ANOVA result of stakeholders' perceptions on extension needs

Variable stakeholders	Mean perception of extension needs	F-value	Sig. level	Alpha level	Remark
Fisheries extensionists	0.8532 <sup>a</sup>	14.517	0.000	0.05	Sign
Extension agents	0.9815 <sup>b</sup>				
Fish marketers	0.9789 <sup>b</sup>				

This implies that, fisheries extension officers do not agree with all the identified items as extension needs of fish marketers. Though they agreed to a greater percentage of the needs, they still felt that no improved knowledge is needed to handle some of the identified needs. In other words fish extensionists believe that there is no improved knowledge beyond what is locally available.

This finding confirms the assertion of Tall (2004) to the effect that there is a low dissemination of appropriate fisheries related technologies in Nigeria, resulting to insufficient knowledge of fish handling, preservation, processing and distribution methods. Implications are that success in the fish marketing industry will continue to be elusive until the main actors agree on the problems affecting success in the industry. In essence, success in the fish marketing industry is dependent on the utilisation of a participatory approach to problems solution. This is because according to Sseguya and Abel (2003) the people are highly knowledgeable about what can be done about problems affecting their livelihood.

## CONCLUSION AND RECOMMENDATIONS

The study has revealed that there is a very high extension needs index in fish marketing in Akwa Ibom State. All the classes of stakeholders interviewed perceived the existence of this gap in the knowledge of fish marketers though in varying degrees, which led to differences in the perceptions of the stakeholders. Based on this, there is a need to provide relevant and timely information on identified areas to enhance fish marketing potentials in Akwa Ibom State for increased and sustained availability of fish protein. The following recommendations seem pertinent;

- The fishery extension personnel should liaise with the Research Institutes on ways of tackling the identified needs in fishing sub-sector.
- The Unified Agricultural Extension Service (UAES) should incorporate fishery sub sector education and training into their scheme of work to make sure the extension agents are better trained to educate marketers.

- All the stakeholders should organize a forum whereby this issue will be discussed and consensus decisions adopted to concretize the fish marketing sector in Akwa Ibom State.

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