

AFM -05

Fishing Inputs Supply and Their Benefits to Fishers in Taraba State, Nigeria

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Abstract

This study was on fishing inputs supply and benefits to fishers in Taraba State, Nigeria. A multi-stage stratified design was used for selecting respondents for the study. Among the fishers, 70% of the population sizes of 264 among Tella and Mutum Biyu communities were sampled at random to obtain 179 respondents. Data were collected through structured questionnaire and scheduled interview administered to the fishers were analyzed using Statistical Package for Social Scientist (SPSS). The results showed that Marine ropes of 6mm were benefited by 16.76% fishers, floats 16.20% and 4mm marine rope 15.08%. Majority (87.71%) of the fishers indicated that their catches increased and 87.71% fishers had increased income as a result of the fishing inputs which they benefited from the government through the extension agents. There was a significant relationship between the fishing inputs benefited by the fishers, increase catches and increase in income. Fishers benefited from different types of fishing inputs. The study recommends that more fishing inputs should be supplied by the government on a regular basis to fishers for effectiveness in fish production.

Keywords: Benefit, catches, fishers, fishing inputs, income

Introduction

Fish offers up to 180 calories per capita per day, but reaches such levels only in a few countries where there is a lack of alternative locally produced protein or where a preference for fish has been developed and maintained (FAO 2005). While producing food, employment, livelihood and wealth, fisheries can also generate a significant level of environmental impact on target and non-target resources as well as on sensitive habitats (Lokkeborg 2005 and FAO 2008). In terms of employment and income source, Raji and Ovie (2007) estimated that over 10 million Nigerians are engaged in primary and secondary fishery activities mainly as fishers, fish processors, fish farmers, marketers and other ancillary activities. However, the fishers themselves are said to constitute the very low income group and yet face the poorest living conditions (Araoye, 2002). Fisheries play very important roles for food security livelihoods and income generation in Nigeria. The demand for fish in Nigeria has been on the increase due to increasing human population, the health benefits attributable to consumption of fish amongst others. Apart from being an income earner to many Nigerians especially people in coastal, water ways and lake areas of the country, it has a value chain in areas such as fish processing, marketing, recreation, tourism, sport, medicine, fisheries research (Adeokun *et al*, 2006).

Food sufficiency through transformed agricultural programmes as advocated by the government can only be achieved when the producers in various segments of agriculture receive the right information at the right time on input supply, modern production methods, storage and marketing (Ogunremi *et al*, 2017).

Ogunremi (2016) opined that, the artisanal fisheries account for over 80 percent of the total fish production in Nigeria. This developmental awareness made the government of Nigeria to mandate each state through Agricultural Development Project (ADP) to serve as a link between the research institutes and the artisanal fisheries and as well intervenes through procurement and distribution of subsidized inputs to the fishing communities. There are efforts made by governments in different States of Nigeria to distribute fishing inputs to fishers to assist them in their profession with the ultimate aim of increasing the quantity of protein supply and intake by the populace. Adequate data are lacking on the benefits and inputs distributed by the government through the extension agent.

The study therefore aimed at investigating the fishing inputs supplied and benefits to fishers in Taraba State of Nigeria.

Materials and Methods

Study area

Taraba State is located northeast of Nigeria and has a total land area of 54,428 km² extending between latitudes 6°25'N and 9°30'N and longitudes 9°30'E and 11°45'E. It is bounded in the north by Gombe State, in the west by Bauchi and Benue states, in the east by Adamawa State, and on the south by Cameroon (Oruonye and Bashir 2011). It is a multiethnic state inhabited by a number of ethnic groups: Tiv, Kuteb, Chamba, Jukun,

Hausa, and Fulani, who are predominantly farmers and engaged in different types of activities such as fishing, hunting, local craft, and tailoring (Fregene, 2015).

Taraba State is drained by four major rivers, Benue, Donga, Taraba, and Ibi, and their tributaries. They arise from the Cameroon Mountains, draining almost the entire length of the state in a north and south direction to link up with the Niger River (Oruonye and Bashir, 2011). The state has about 500,000 ha of water bodies and 142 natural ponds (Oruonye, 2014). These rivers and ponds in Taraba State are major sources of livelihood for the fishers and their households.

Sampling procedure

A multi-stage design was used for selecting respondents for the study (Villareal et al., 2004). In the first stage Bali zone was randomly selected out of the three stratified Agriculture Development Zones in Taraba State. In the second stage Gassol Local Government was selected from Bali zone because the zone has the highest number of fishers. Third stage involves random selection of 70% of the fishers from a population size of 264 among Tella and Mutum Biyu communities to obtain a sample size of 179 respondents.

Data collection and method of analysis

Data were collected through structured questionnaire and scheduled interview administered to the fishers. The data collected were entered into the computer software and analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequency distribution and percentages were used to describe the data. ANOVA was used to determine the relationships between the inputs benefited, increase in catches and increase in household income of fishers at 0.05 significant level.

Results and Discussion

Fishing inputs benefited by the fishers

The fishing inputs benefited by the fishers were indicated in Table 1. Marine ropes of 6mm were benefited by 16.76% fishers, floats 16.20% and 4mm marine rope 15.08%. It implies that fishers actually benefited from fishing inputs distributed by the government but in smaller quantity. Ibrahim *et al.* (2016) reported a similar study that government through the extension agents in Baga Basin distributed hook and line, traps and various nets to fishers. 'Sustaining livelihoods' of the poor in fishing-dependent communities by enabling or enhancing their access to fishing opportunities is prominent in contemporary fisheries development thinking (Swan and Gréboval, 2005). If loan is made available to artisans it can be used to purchase inputs and solve the problem of unavailability and other corrupt practices that are associated with subsidized inputs that do not get to end users and inputs sold in government shops as reported by Ogunremi (2016).

Table 1: Fishing inputs benefited by the fishers

Variable	Frequency	Percentage
6mm marine rope	30	16.76
4mm marine rope	27	15.08
Fishing net	20	11.7
Floats	29	16.20
Sinkers	31	17.3
Smoking klin	20	11.7
Non benefited	22	12.29
Total	179	100

Source: Field survey 2017

Contributions of fishing inputs supply to fishers' house hold.

Table 2 showed that majority (87.71%) of the fishers indicated that their catches and income were increased as a result of the fishing inputs which they benefited from the government through the extension agents who did the distribution. This is consistent with the earlier study by Bolong *et al.* (2012) that agricultural extension activities definite goal and objectives are increased levels of income, productivity fishermen were observed to be interested in new and improved fishing inputs such as canoes, buoys, floats, nets, hook and line, with the use of an outboard engine (Watson *et al.*, 2006). The use of poor quality fishing materials limits the catch levels of the Fisher folks (Tietze *et al.*, 2005).

Table 2: Contributions of fishing input supplied to the Fisher folks

Contributions	Yes	Percentage	No	Percentage
1.increase in catches	157	87.71	22	12.29
2.Household income	157	87.71	22	12.29

Source; field survey 2017

Test of relationship between inputs benefited, increase catches and increase in income

Table 3 showed relationship between groups and within groups ($p=0.05 > \chi^2=.000$), there was appositve correlation between the fishing inputs benefited by the fishers, increase catches and increase in income. It implies that, the higher the quantity of fishing inputs benefited the more catches and household income increase of the fishers.

Table 3: ANOVA showing relationships between and within variables

	Sum of squares	df	Mean square	F	Sig.
Between groups	224.982	1	224.982	31.700	.000
Within groups	1256.214	177	7.097		
Total	1481.196	178			

Source; field survey 2017

Conclusion and Recommendation

Fishers benefited from different types of fishing inputs supplied by the government through the extension agents which resulted to the increase in their catches and income.

The study recommends that more fishing inputs should be supplied by the government on a regular basis to fishers for effectiveness in their profession. Also, proper monitoring of the distribution of inputs should be put in place to ensure that the inputs do not get into wrong hands.

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