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ASSESSMENT OF FISHERIES EXTENSION SERVICES NEEDED BY THE FISHER FOLKS IN DONGA LOCAL GOVERNMENT AREA, TARABA STATE, NIGERIA

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ABSTRACT
The study assessed fisheries extension services needed by the fisher forks in Donga Local Government Area of Taraba State. Purposive sampling method was used to select three fishing communities that have large number of fisher folks, fifty percent respondents were randomly selected from each of the fishing communities respectively which made up the total sample size of 115 respondents. Data were collected through structured questionnaire and scheduled interview while descriptive statistics such as frequency and percentage were used for the analysis. The results revealed that 71.3% of the fisher folks were male, age of 26-30 years were 37.4%, 44.3% were married, 55.7% were illiterates, family size of 1- 5 were 36.9% and 39.1% had fishing experience of 1-5 years. About 55% fisher folks preferred fishing in the morning, 40% during the dry season, and 45.2% purchased their fishing gear, cast net 32.2% and dugout canoe with paddle 43.5% were mostly used for fishing. Training on use of modern smoking kiln 95.7%, training on use of any fishing gear 93.0% and information on the purchase of fishing input 93.0% were major extension services needed by the respondents. Constraints indentified among the fisher folks include high cost of fishing input 98.3%, seasonality of water volume 98.3%, 98.3% and inadequate processing facilities 98.3%. It was recommended that Government should provide funds in form of loan at a reduced interest rate to the fisher folks and more extension agents should be employed, mobilized and organize timely training for the fisher folks.
Key words: Assessment, constraints, extension, fisher folks, fishing

INTRODUCTION
The poverty-stricken population in the world are rural dwellers who largely hinge their livelihood on agriculture or related activities for a living. To boost agricultural production, therefore, is seen as one of the most powerful tools against poverty (Sahu & Das, 2015). Several studies clearly indicated that the agriculture sector is a key driver in poverty mitigation and the eventual attainment of economic development of many countries. It is estimated that 50–80% of the staple foods eaten in third world countries are produced by peasants, fisher folks, and livestock keepers, many of which are inadequately served by research, extension, and advisory services (Pye-Smith *et al.*, 2012). Agriculturalists and other players in rural development need better access to technical information, knowledge, and advice, and must link with other actors in agri-food markets and value chains to improve their livelihoods (Christoplos *et al.*, 2012; Sikhweni & Hassan, 2013). Extension programs in agriculture, fisheries, and aquaculture are seen as a link between farmers, fisher folks, and other actors in rural development programs. Extension service goes beyond technology transfer to general community development through human and social capital development, improving skills and knowledge for production and processing, facilitating access to markets and trade, organizing farmers and producer groups, and working with farmers towards sustainable natural resource management. Where market failures such as limited access to credit and non-competitive market structures that provide a disincentive to farmers to pro-duce exist, extension services tend to provide solutions.
Despite the existence of the extension agents in the study area, fish catches are still low or dwindling. It is on this back drop that the study investigated the assessment of fisheries extension services needed by the fisher folks in Donga Local Government Area, Taraba State, Nigeria. The specific objectives of the study were to (i)

identify socio-economic characteristic of the fisher folks (ii) examine fishing practices of the respondents (iii) investigate fisheries extension services needed by the respondents (iv) identify constraints facing fisher folks

MATERIALS AND METHODS

Study Area

Donga is a Local Government Area (L.G.A) in Taraba State, Nigeria. The head quarter is in Donga town very close to the River Donga. It is located between Latitude 7.33^0 N 10.17^0 E and Longitude 17.55^0N 10.283^0 E. It has Area of 3,121Km^2 and the population of 134,111 according to 2006 National Population Census and has 10 Wards. The Local Government shares boundaries with Bali, Kurmi, Takum, Wukari and Ukum L.G.A in Benue State. The major ethnics groups in the Local Government Area are: Ekpan (Jukun), Ichen, Chamba. Majority of the people are arable farmers while those in the River rime areas are involved in artisanal fishing. The prominent rivers in the area are River Donga and River Suntai.

SAMPLING PROCEDURE AND SAMPLE SIZE

Purposive sampling method was used to select three fishing communities that have large number of artisanal fisher folks namely Donga, Akate and Nasarawa Kabawa. Fifty percent of the fisher folks were randomly selected from each of the fishing communities respectively which made up the total sample size of 115 respondents.

DATA COLLECTION AND METHOD OF ANALYSIS

Questionnaire were used for data collection and supplemented with scheduled interview where respondents do not have formal education. Data collected were analyzed using descriptive statistics (frequency and percentages).

RESULTS AND DISCUSSION

Table 4.1 showed that majority of the respondents were males (73.3%) while 28.7% were female, Mohammad *et al* (2018) reported that fishing activities are mostly dominated by male. The age group of 26 – 30 years was the highest (37.4%) among the respondents; this is an advantage since fishing activities require young and energetic youths, 43.3 % of the respondents were married while 33.0% were single. Ekong, (2013) pointed out that marriage in any society is highly cherished. This implied that marriage confers some level of responsibility and commitment of an individual. Educational background of the respondents indicated that 57.7% of them were illiterates, 26.1% had First Leaving School Certificate. The family size of 1-14 was highest (36.5%) while 16-20 was 10.5% among the respondents. This is an indication of low level of education and village or rural-based life. The higher the family-size that individual will keep the less the education (Tambi and Ewane 2019).

Table 1: Demographic characteristics of the respondents

Demographic characteristics	Value labels	Frequency	Percentage
Sex	Male	82	71.3
	Female	33	28.7
Age (years)	15-20 years	17	14.8
	21-25 years	26	22.6
	26-30 years	43	37.4
	31-40 years	13	11.3
	Above 41 years	16	13.9
Marital status	Married	51	44.3
	Single	38	33.0
	Widowed	10	8.7
	Divorced	15	13.0
	Separated	1	0.9
Educational background	Illiterate	64	55.7
	First leaving certificate	30	26.1
	SSCE	16	13.9
	OND/NCE	5	4.3
Family size	1-5	42	36.5
	6-10	34	29.6

	11-15	27	23.5
	16-20	12	10.4

Source: Field survey, 2021

Table 2 indicated that 54.8% of the respondents preferred fishing in the morning; only 45.2% acquired fishing gear through purchase while 31.2% rented. Major fishing gears used by the respondents are cast net 32.2% and gill net 31.3%. Dugout canoe and paddle 43.5%, planked canoe with outboard engines 31.3% and fiber canoe with outboard engine 9.6% was the least used by the respondents for fishing activity. The use of primitive fishing input has its limitation in terms of catches apart from time consuming. Fish spoilage can also be attributed to this because after covering long distance on water for fishing through manual paddle before getting to landing sites rigor mortis would have set in.

Table 2 Fishing practices of the respondents

Fishing practices of	the respondents	Frequency	Percentage
Preferred fishing period	Morning	63	54.8
	Afternoon	28	24.3
	Evening	24	20.9
How do you acquire your fishing gear	Purchase	52	45.2
	Rent	36	31.3
	Gift	14	12.2
	Lease	13	11.3
Types of gear used	Gill net	36	31.3
	Trap	17	14.8
	Hook and line	25	21.7
	Cast net	37	32.2
Types of craft/Boat used	Dugout canoe and paddled	50	43.5
	Planked canoe and outboard engine	36	31.3
	Fiber canoe with outboard engine	11	9.6
	Fiber canoe and paddled	18	15.7

Field survey, 2021

Extension services needed by fisher folks are shown in Table 3. Training on use of modern smoking kiln (95.7%), training on use of any fishing gear (93.0%), information on the purchase of fishing input (93.0%), information through workshop/seminar (92.2%), training on fishing gear storage (91.3%), while information on procurement of loan (68.7%) was the least. The implication of the high level of the respondents response on extension services needed could be attributed to poor extension fishers' ration in the study area. The highest need on use of modern smoking kiln is an indication of the respondents desire to minimize or totally eradicate post harvest fish spoilage which accounted for high income loss among the artisanal fishers. Information on procurement of loan which was the lowest could be as a result of association membership through which some could easily obtain loan or level of exposure on various avenues through which money could be sourced for establishing or expanding on the business.

Table 3 Extension services needed by the respondents

Extension service needed	No	Yes
Do you need training on use of any fishing gear	8(7.0%)	107(93.0%)
Do you need training on use of modern smoking kiln	5(4.3%)	110(95.7%)
Do you need any training on repair of outboard engine	17(14.8%)	98(85.2%)
Do you need information on the purchase of fishing input	8(7.0%)	107(93.0%)
Do you need information on better marketing of fish	15(13.0%)	100(87.0%)
Do you need training on fishing gear storage	10(8.7%)	105(91.3%)
Do you need information on appropriate mesh size	13(11.3%)	102(88.7%)
Do you need information on workshop/seminar	9(7.8%)	106(92.2%)
Do you need information on procurement of loan	36(31.3%)	79(68.7%)

Field survey, 2021Figures in parenthesis are in percentages

Table 4 showed the constraints faced by the fisher folks in the studied area. High cost of input 98.3%, poor weather condition 98.3%, seasonality of water volume 98.3%, inadequate marketing facilities 98.3%, inadequate processing facilities 98.3%, insufficient funds 98.3%, inadequate storage facilities 97.4%, and poor catches 95.7% respectively. To solve some of the constraints the fisher folks should be given wider knowledge on fishing and handling of fishing crafts and gears through training at intervals to encourage new entrants (Van Beek 2017).

Table 4 Constraints of respondent to fishing

Constraints of respondent to fishing	No	Yes
Theft	7(6.1%)	108(93.9%)
Insufficient funds	2(1.7%)	113(98.3%)
Poor catches	5(4.3%)	110(95.7%)
Inadequate processing facilities	2(1.7%)	113(98.3%)
Inadequate marketing facilities	2(1.7%)	113(98.3%)
Inadequate storage facilities	3(2.6%)	112(97.4%)
Seasonality of water volume	2(1.7%)	113(98.3%)
High cost of input	2(1.7%)	113(98.3%)

Field survey, 2021 Figures in parenthesis are in percentages

CONCLUSION AND RECOMMENDATION

Fisher folks were mostly male, married have low level of formal education; and used dugout canoe with paddle. Extension services needed were quite enormous which is indication of low contacts with the Officers were saddled with the responsibility of information dissemination to fisher folks. It was recommended that Government should provide funds in form of loan at a reduced interest rate to the fisher folks; while extension agents should be mobilized to organize routine trainings to enable fishers adopt innovations that improve fish production and their welfare.

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