



Baseline Survey of the Socio-Economics of Fishers in Communities around Gurara Reservoir, Kaduna State, Nigeria

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ABSTRACT

This study examines the socioeconomic status of the fishers around the Gurara reservoir in Kaduna State. A total of 100 respondents were sampled through the use of structured questionnaires, informant interviews, observations and Focus Group Discussions. A greater number (95%) of fishers were in the age bracket of 10 – 45 years, 24% of them had no formal school education. Only 2% had attempted senior secondary school. The fishery of Gurara reservoir is highly characterized by men catching the fish while the women were rather involved more in post-harvest activities such as handling the catch by gutting larger fish species and washing them (74%) for onward processing and trading. There is a need for the supply of amenities such as electricity and potable water to the communities around the area which can easily be derived from the reservoir.

Key words: Gurara reservoir, socio-economic status, fishers, fish mongers, social amenities

INTRODUCTION

Throughout the centuries, fish has been an important component of the populations' diet in many parts of the world. Fish catches increased rapidly over the past hundred years due to improved technology, which provided more powerful engines and sonar equipment. Nigeria is blessed with a rich fish diversity potential numbering over 120 species in the inland waters, rivers, lakes, reservoirs and inshore waters and also characterized by heterogeneity of fish species (Tobor, 1990). This natural resource provides employment, food, livelihood and trade for both local and national economies.

The Artisanal sector (both coastal and inland) supplies the high volume of fish with an average of 356.2mt yearly (CBN, 2000). There are about 264,601 people, on the average, that are fully employed in the Artisanal fishery (FDF, 1996). Reservoir fisheries play a vital role in the provision of fish protein and employment to the people of Nigeria (Ita 1993). It is expected that the construction of Gurara dam and the creation of its adjoining reservoir must have improved the socioeconomic state and development among the residents and other nearby communities. This is so because activities such as irrigation farming and fishing, especially are presumed to be kick-started. Hence, the creation of the reservoir in 2008 continued to attract fishers from different parts of the country to the area. It is against this backdrop that this study attempted to examine the socioeconomic status of the fishers around the reservoir as a way of initiating baseline data of the fishers' socioeconomic status.

METHODOLOGY

Gurara reservoir is a fairly new man-made reservoir derived from damming the upper reaches of Gurara River and other seasonal streams in Kachia/Kagarko Local Government Areas of Kaduna State. The reservoir which lies between latitudes 9° 38' and 9° 46'N and longitudes 7° 42' and 7°48'E has a maximum water surface area of 6,367.7 ha. and a maximum storage capacity of 880 million cubic meters. The reservoir is surrounded by fishing and non-fishing communities. For this study, the sample was taken from Tunga Malam, Anturu/Igoh and Atara. The selection of these communities was based on accessibility, level of fisheries activities and traditional institutions. A total of 100 questionnaires

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were administered, also observations, Focus Group Discussion and interview guides were used to obtain some information. The data collected were subjected to descriptive statistical analysis. This survey was carried out within seven days in the month of January 2016.

RESULTS AND DISCUSSION

Table 1 shows Age distribution of fishers and fish monger in Communities around Gurara Reservoir, Kaduna State, Nigeria. The results indicated that 95% of both fishermen and fish mongers fell within the age brackets of 10 – 45 years. Thus, they are young people who are vital to the agricultural development of the rural communities where poverty is dominant and should be encouraged.

Table 1: Age distribution of fishers and fish mongers

Age (Years)	No. of fishermen	No. of fishmongers
10 – 25	34(34%)	1(1%)
26 – 35	23(23%)	13(13%)
36 – 45	21(21%)	3(3%)
46 – 55	3(3%)	0
above 55	2(2%)	0

■ Non-Formal Educ. ■ Primary Sch. ■ Junior Sec. Sch. ■ Senior Sec. Sch.

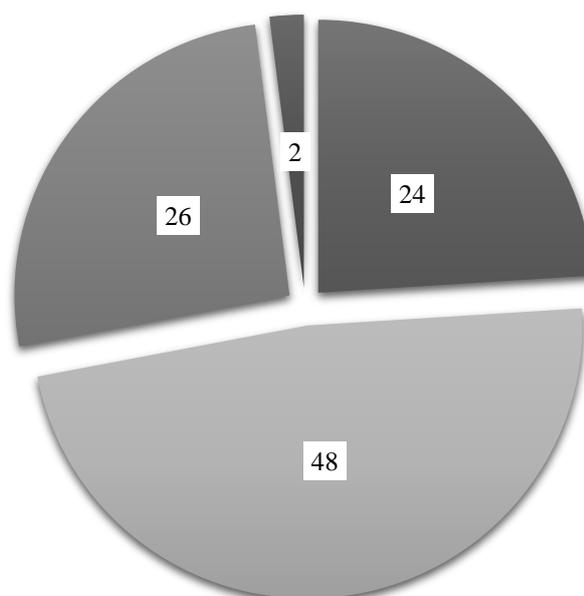


Figure 1 shows educational background of the respondents.

Forty-eight (48%) of the fishers had primary education, while 26% of respondents attended Junior Secondary and 2% had a Senior Secondary education. One may conclude that these persons are involved in fisheries activities to support their education. 24% of the fishers had no formal school education and these are mostly the elderly. Through the key informant and focus group discussion it was discovered that the majority of the fishermen and fishmongers were non-natives of the area (Hausa from Sokoto, Kebbi States and Agatu from Benue). A greater number of these fishermen and fishmongers are part-

time fishers. Forty-six (46%) of them were resident at Anturu/Igoh, 28 (28%) at Atara and 26 (26%) at Tunga Mallam. The fishers are still the locals and one may infer the construction of this dam has created livelihood opportunities to the people of the surrounding communities.

Income realized from agricultural activities

About 70% of the fishers have more than one source of income. The main activities they are involved in to supplement their income are farming of both cash and food crops, livestock keeping (cows, sheep, goats), petty businesses such as provision kiosks, making of local brews, and selling agricultural produce. The fisher income is mostly spent on various activities, but, a large proportion uses their income on the basic needs such as; food, clothing, shelter, medical services and education. Interestingly the assistants mostly spend much of their money on entertainments such as alcoholism, attending video shows etc.

Fisher's activities according to gender

Table 2 shows fisher's activities according to gender. All those catching fish on the reservoir are males. No single female was seen paddling a canoe or fishing on the reservoir. This indicates that the fishery of Gurara reservoir is highly characterized by men catching the fish while the women were rather involved more in post-harvest activities such as handling (74%) the catch by gutting larger fish species and washing them for onward processing and trade. The findings revealed that the women are partly involved in the growing fishery of Gurara reservoir.

Table 2: Fisher's Activities according to Gender in Communities around Gurara Reservoir, Kaduna State, Nigeria

Activity	Male	Female
	% Frequency	% Frequency
Fishing	100	0
Handling (gutting and washing)	26	74
Trading (Fresh)	53	47
Processing (frying, smoking, sun-drying and salting)	83	17
Trading (processed)	96	4

Basic amenities around Gurara reservoir

Housing characteristics

The housing structures constructed within the fishing communities fall into three categories, permanent, semi-permanent and non-permanent (Onyango *et al.*, 2006). Permanent houses are built on privately owned pieces of land usually obtained by inheritance, and are made of either burnt bricks or cemented blocks with the roof made of zinc sheets. These houses are owned and occupied by some few indigenous persons, rich fishers and those employed in the formal sector but residing within the reservoir basin.

The semi-permanent and non-permanent houses are mostly owned and occupied by the small and medium scale fishers and to some extent assistants. These houses are usually small and made from mud (unburnt brick walls), with the roof made of either grass or zinc sheets. The houses are crowded and separated by narrow streets of between one to two meters wide. Despite not having better houses, over 70% of the fishers reported sleep on beds with mattresses, with only few (18%) sleeping on papyrus mats and mattresses alone and this is mostly the assistants moving between landing sites. The others uses mats placed on a racked aquatic plant's beds. Interestingly, over 50% of the fishers indicated to have more than one house.

Access to water and sanitation

About 65% use reservoir water as a source of drinking water, 30% and 5% get their water from shallow well and springs respectively. Other sources include rain water. The water from these sources is taken raw without treatment. There was no pipe borne water in the three fishing communities. On sanitation,

about 31% of fishers have household latrine. Those without latrines go to the bush (47%) neighbouring toilets (20%) and the reservoir (2%) while others go to other places. One can infer that availability of water in the area has not guaranteed good drinkable water for the residents. Again, there is tendency of poor hygiene considering the percentage of houses without a latrine thereby exposing the people to the outbreak of diseases in the area.

Availability and accessibility to other social/health services

Social services such as health facilities, schools, and toilet services were available and accessible to a significant number of fishers. In the three communities assessed, there was a dispensary, a primary school each at Anturu/Igoh and Atara with trained personnel. There was also Junior and Senior Secondary School in Ontario owned by the Kaduna State Government. These were easily accessible to the majority of the fishers. There was, however, none of these services at Tunga Mallam. Table 3 indicates the distribution of these social services in the three communities. Other services such as mobile phone network are only confined to Tunga Mallam because of its proximity to the dam site camp. Electricity is also not yet established.

Table 3: Social amenity at landing site in Communities around Gurara Reservoir, Kaduna State, Nigeria

Landing Site Facility	Anturu/Igoh	Atara	Tunga Mallam
Landing sites with mobile phone network	NA	NA	A
Portable Water	NA	NA	NA
Landing site with			
(i) Primary School	A	A	NA
(ii) Secondary School	A	NA	NA
Landing site with health clinic	A	A	NA
Landing site with electricity	NA	NA	NA

Key: NA = Not Available, A= Available

Access to banks and savings scheme in the fishers' community was still very insignificant. Some fishers have formed some form of informal saving schemes that are locally managed. These schemes are mostly dominated by female fish handlers and processors; this could be due to the fact that women are better savers than the men as observed by Luomba *et al.* (2013).

Conclusion

It is known a fact that fisheries activities are emerging around Gurara reservoir. This is calling for attention of the Fisheries Departments in both State and Federal levels. The study discovered that there are young, agile and productive men and women that will be useful in agricultural development in Kaduna State. It is pertinent that the fisheries department or the organization responsible for fisheries development in the State should begin to put in place measures that will support responsible fisheries and good management practices which will eventually lead to economic growth and alleviate poverty among the people and also be able to exploit other benefits accruable from Gurara reservoir.

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