

A SURVEY OF THE FISHERIES OF RIVER NIGER AT YAURI, KEBBI STATE

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ABSTRACT

A survey of the fisheries of river Niger at Yauri was conducted with the aid of questionnaires administered randomly at four (4) landing sites of Tashan Kasuwa (main market), Gidan-ruwa, Yabon-ruwa and Hutawa. A total of fifty (50) questionnaires were administered in all the villages. From the research work it was found that 76 % of the fishermen operate on full time basis while 24 % operate on part time basis. Out of the 50 fishermen interviewed only 46% were licensed to operate there. The type of fishing gears and equipments used in Yauri are hook and line, cast net, gill net and seine net. About 46 % of the fishermen were found using mesh size less than 2.0 cm. The dominant fish species caught during flood and dry seasons include *Clarias spp.*, *Lates niloticus* respectively. Higher catches are made in the months of March and April. All the fishermen interviewed (100%) do not process their fish but disposed off fresh. Sixty percent of the fishermen belong to different cooperative societies, while 40% do not belong to any cooperative society. The problem associated with fishing operation at Yauri includes that of lack of credit facilities, lack of extension agents, and high cost of fishing items, poor road network and remote location of the fishing village.

Keywords: Fisheries, fishing operations, river Niger, Yauri.

INTRODUCTION

Artisanal fisheries are fish catching operation usually carried out with canoes and simple fishing gears. It is also characterized by intensive labour, low capital investment and low productivity (Dada, 2004). Being low in technology and labour intensive fishery, the gear employed are mainly simple cast nets, hooks, various gillnets, beach seine and traps in the inland waters, exploiting the major rivers, their tributaries, natural lakes and various reservoir. The artisanal fisheries of Kainji Lake play a significant role in augmenting fish protein supply to the human population in Nigeria. Their total catch in 2000 was 13,361 tonnes, representing 6.88% of the total Nigeria inland waters fish production (Abiodun, 2002). The major constraints militating against artisanal fisheries in Kainji Lake and Nigeria in general include inadequate and high cost of fishing inputs as a result of high exchange rate of the local currency and lack of access to credits facilities (Dada, 2004). Many research works have been carried out on the fisheries of Nigeria, in general, and the fisheries of river Niger at Kainji Lake Basin in particular of which Yauri is a part. But there seems to be no attempt to identify the problems facing the fishermen who are collectively and actively engaged in the fisheries of river Niger. This study work aimed to provide information on the areas that need immediate attention for effective fishery development of river Niger. Assess the socio economic background of fishermen. Evaluate the fishing methods and techniques adopted by the fishermen. Find out dominant fish species composition of the catches and Assess fish handling and processing techniques in use around the river.

METHODOLOGY

This survey was conducted at Yauri the Headquarters of Yelwa-Yauri local government area, which is one of the twenty one local government areas of Kebbi State. The relief of the area is dominated by two features, the Kainji Lake (1,250 square kilometers in area) with the tributaries of the river flowing into the river and some chains of low lying hills that run direction (Abdullahi, 1990).

Yauri is located on Latitude 10°51 North and Longitude 4°41 East. Yauri falls in the northern guinea zone with mean annual rainfall of 700-900mm (Akintola, 1986). Mean monthly temperatures do not fall below 25°C with mean monthly maxima of 30°C and minima of 25°C. April and May are the hottest months while December and January are the coldest. Questionnaires and personal observations were the methods used to collect data on the fisheries activities of the fishermen at river Niger in Yauri. A set of fifty questionnaires was designed with the following sections: - Socio economic background of fishermen - Fishing operation, fishing craft/technology, fish species caught. The questionnaires were administered randomly at four landing sites which include Tashan Kasuwa, Gidan ruwa, Yabon-ruwa and Hutawa.

Data collected through the questionnaires administered were scored and the percentages of the parameters were calculated appropriately and presented in frequency tables. Thus, the main statistical tools employed were means and percentages, however, average and descriptions were also employed where necessary.

RESULTS AND DISCUSSION

The age distribution of fishermen interviewed during the survey at Yauri is summarized in Table 1. The result shows that majority of the fishermen fall between the age groups of 21 to 40 (56%), followed by those within the age group of 41 to 60 (28%) and those of 61 to 80 (12%) while the less numerous are those aged between 81 to 100 and those below 21 years of age with a frequency of 4%. This is in accordance with the assertion of Ayanda (1991) stating that the active economic age group in Nigeria is in the range of 25 to 59 years and this constitutes the major labour force in fishing for a long period. The literacy level of fishermen is summarized in Table 2. The result shows that majority of fishermen had Quaranic Education (66%), 12% had western education, 6% had adult education while 16% had no formal education. Implacably, only about 18% of the respondents with western and adult education may be at an advantage to easily perceive the relative advantage of new technologies. As "the level of education is a strong variable that can affect the psychological disposition of fishermen towards limiting their time to adoption" (Bello, 1991). All the fishermen interviewed were married (100%). The family size is thus summarized in Table 3. The result showed that majority of respondents have a family size of about 7 to 10 members, closely followed by those with 3 to 6 members then those with 11 to 14 members and lastly those with 15 to 18 members. The average family size was also calculated to be 10 members per family. This is attributable to the fact that the fishermen of Kainji Lake area of Nigeria are predominantly Hausas (who are Muslims) as reported by Ayanda (1991). Also early marriage is encouraged. The implication of family size of the fishermen is that each adult has to provide for more dependents at the expense of investing in fishery ventures. Because expenditures on health and welfare, housing and education, which are not production directly will tend to receive more attention. This is corroborated by the assertion of Dada (2004) that the earning of the fishermen may be expended on the maintenance of the family in terms of food, clothing and health services among others. The result obtained revealed that all the fishermen (100%) use hook and line. Those using cast net constitute 72%, gill net 40% and seine net 28%. None of the fishermen interviewed used clap net and traps. Majority (80%) of the fishermen use medium sized hooks. Closely following are those using large hooks (70%) and only 16% of the fishermen interviewed use small hooks. The main technology employed by the fishermen interviewed is canoe with paddle (80%) while only 20% use motorized canoe. Although Ayanda and Alamu (1990) maintained that hooks and spears are not suitable for effective catch of fish in large water bodies and their use by fishermen indicates that the fishermen are ignorant of modern fishing technology. Various types of fish species constitute the catch of fishermen; however the major fish species caught are summarized in Table 4. The dominant species include *Bagrus spp*, *Gymnarchus niloticus*, *Heterobranchus*, *Malapterurus sp*, *Hydrcynus sp*, *Lates niloticus*, *Clarias sp* caught by all the fishermen interviewed (100%). Other species include *Distichodus*, *Chitarius*, *Clupisudis*, *Tilapia* and *Alestes* caught by 80% of the fishermen. All the fishermen interviewed do not process their fish. Rather they are disposed off fresh. The reasons for not processing their catch include time consuming, labour intensive, cost of fuel wood. Majority of respondents (72%) do not have access to loan while only 28% have access to such facilities. The reasons for this situation include lack of awareness (16.67%), 44.44% use their savings to conduct their activities, 27.78% do not need the loan while 11.11% applied for the loan but were not granted. This is in accordance with the findings of Ayanda (1991) who reported that the most important source of funds include savings followed by loans from financial institutions and organizations then relatives and contributions as source of capital for acquiring fishing equipment.

CONCLUSION

Socio economic factors, type of fishing equipments used by the fishermen coupled with cost are the principal factors affecting the productivity of the fisheries of the area. Furthermore, Government is not giving the needed attention to the fishery sub-sector. Government should provide effective infrastructures and amenities and encourage extension work so as to enlighten fishermen on the need to adopt new fishing techniques.

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Table1: Age Distribution of Fishermen

AGE GROUP	FREQUENCY	PERCENTAGE (%)
1 – 20	2	4
21 – 40	28	56
41 – 60	14	28
61 – 80	6	12
Total	50	100

Source: Field Survey

Table2: Literacy Level of Fishermen

FORM OF EDUCATION	FREQUENCY	PERCENTAGE (%)
Quranic	33	66
Western	6	12
Adult	3	6
None	8	16
Total	50	100

Source: Field Survey

Table 3: Total Family Size of Fishermen

TOTAL FAMILY SIZE CLASS INTERVAL	FREQUENCY (F)	CLASS MIDDLE POINT (X)	FX
3 – 6	11	4.5	49.5
7 – 10	19	8.5	161.5
11 – 14	12	12.5	150.0
15 – 18	8	16.5	132.0
Total	50		493.0

Source: Field Survey

Table4: Participation in Cooperative Society

STATUS	FREQUENCY	PERCENTAGE (%)
YES	30	60
NO	20	40
TOTAL	50	100

Source: Field Survey

Table 5: Dominant fish Species Caught by Fishermen

FISH SPECIES	FREQUENCY (F)	PERCENTAGE
<i>Bagrus docmac</i>	50	100
<i>B. bayad</i>	50	100
<i>Gymnarchus niloticus</i>	50	100
<i>Heterobranchus sp</i>		
<i>Malapterurus sp</i>	50	100
<i>Distichodus sp</i>	50	100
<i>Hydrocynus sp</i>	40	80
<i>Chitarrinus sp</i>	50	100
<i>Lates niloticus</i>	40	80
<i>Clarias sp</i>	50	100
<i>Chupisudis sp</i>	50	100
<i>Tilapia sp</i>	40	80
<i>Alestes sp</i>	40	80

Source: Field Survey