

Journal of **Fisheries and Aquatic Science**

ISSN 1816-4927



Journal of Fisheries and Aquatic Science 8 (1): 136-141, 2013 ISSN 1816-4927 / DOI: 10.3923/jfas.2013.136.141 © 2013 Academic Journals Inc.

Socio-economic Status of the Fisher Folk of Yuna Adopted Village in Borgu Local Government Area, Niger State

Y.B. Ahmed

Federal College of Freshwater Fisheries Technology, P.M.B. 1500, New Bussa, Niger State, Nigeria

ABSTRACT

Overcoming poverty in Nigeria is one of the fundamental challenges facing the country today. The study was conducted to assess the socio-economic status of fisher folks in Yuna adopted village, Borgu local government area of Niger state. One hundred respondents (65 male and 35 female) were purposively selected from four registered groups in the village. Frequencies and Percentages were used to arrange, summarize and present the findings of this study. Majority of the male respondents fell within the range of 30-49 years, while female respondents range from 40-49 and 60-69 years. The distribution of respondents based on educational attainment shows that 92.3% male and 100% female had Quranic education. Majority of the respondents (both male and female) lives in mud with thatched roof houses and do not own radio and television. Similarly, the highest proportion of ale respondents generated mostly income of >111,000N and 6,000-10,000N, while female respondents earned between 11,000-30,000N and 6,000-10,000N only. The technologies awareness by respondents include fish farming, V-bottom boat, solar tent dryer and trammel net, only fish farming was adopted by respondents. The major constraints to agricultural production were identified and suggestion was made on how to overcome the constraints.

Key words: Awareness creation, technologies adoption, poverty, fishers

INTRODUCTION

Overcoming poverty in Nigeria is one of the fundamental challenges confronting the Nigerian government. The existence of wide-spread poverty in the country despite the high food production potentials is inconsistent with the principle of sustainable development (ARCN, 2009).

Knowing poverty levels in fishing communities and the means to address it therefore, requires a good understanding of social structures, social relations and essential elements of governance as well as pattern of change with particular reference to entitlement. In terms of employment and income source, Raji and Ovie (2007) estimated that over 10 million Nigerian are engaged in primary and secondary fisheries 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). Inland fisheries have suffered the vagaries of poor policy, poor management, depletion of resources, poor economic and market infrastructure, which constitute a serious impediment to development of the sector making it less productive (Tafida et al., 2009).

A major goal of fisheries extension programme is high level of adoption of disseminated technologies with an expectation of increased levels of production, better income, better standard of living and sustainability of the productive enterprise by fisherfolks (Bolorunduro and Falaye, 2003). Ogunfowora (1997) opined that the effectiveness of agricultural extension is

determined by the rate of adoption of improved technologies and the extent of improvement in the socioeconomic welfare of the adopters. The rate of adoption of a technology is influenced mainly by the perceived attributes of the innovation and socio-economic characteristics of the clienteles (CIMMYT, 1993).

The objective of this study was to assess the baseline socio-economic status of fisherfolks of Yuna adopted village.

MATERIALS AND METHODS

Study area: The study was conducted in Yuna Federal College of Freshwater Fisheries Technology (FCFFT) adopted village of Borgu local government area of Niger state. Yuna village is 6.5 km from the FCFFT, New Bussa and 6 km from New Bussa town.

Yuna village located in Borgu local government areas of Niger state in the southern basin of lake Kainji. Details description of the lake has been described by Ahmed *et al.* (2005).

Data collection: One hundred respondents were purposively selected; purposive selection was employed in the selection of the respondents because not all people in the community were members of association/groups. The list of members was obtained from the college Agricultural Research Outreach Centre Committee, drawn from four farmer groups namely, male, female, youth and mixed. A total of 65 men and 35 women constituted the sample for this project work.

Data analysis: The data obtained in the questionnaires administered was subjected to descriptive statistical analysis in form of frequencies and percentages.

RESULTS AND DISCUSSION

Personal information (Table 1) of fisher folks have key role to play in adoption decision on improved technologies are therefore, important consideration in adoption studies (Bolorunduro et al., 2000). Majority of the male respondents fall within the range of 30-49 years, while female respondents range from 40-49 and 60-69 years of age. Economically active age group of farmers or fisher folks in developing countries has been documented by Vabi and Williams (1991) to be at middle age that is 30-50. Education is a key factor in information dissemination. The distribution of respondents based on educational attainment shows that 92.3% male and 100% female had Quranic education. Although, the proportion of the respondents that may be able to read and write was low, many could read Arabic texts. The possible effects of this is that most fisher folks may not have favorable disposition towards adoption of recommended technologies, since education facilitates learning and acquisition of skills (Bolorunduro and Falaye, 2003; Zaki, 2006). Awareness could determine the level of adoption of technology (Bolorunduro and Falaye, 2003). Therefore, awareness creation is a question of information flow. The information needs of rural stakeholders are both diverse and dynamic fisherfolks generally need adequate information on improved technologies available, if they are to undertake productive initiatives in the most cost effective manner (Bolorunduro et al., 2000).

Table 2 shows the distribution of respondents according to ownership of house, type of house, means of transportation, ownership of radio and television and farm assets. Majority of the respondents (73.8%) male and 65.7% female lives in mud with that ched roof and do not also have radio, television and VCD player. Araoye (2002) was of the opinion that the fisherfolks constitute

J. Fish. Aquat. Sci., 8 (1): 136-141, 2013

 ${\bf Table\ 1:\ Personal\ information\ of\ respondents}$

| Parameters | Male (n = 65) | | Female $(n = 35)$ | |
|--------------------|---------------|------------|-------------------|------------|
| | No. | Percentage | No. | Percentage |
| Age group (years) | | | | |
| 20-29 | 7 | 10.8 | 2 | 5.7 |
| 30-39 | 26 | 40.0 | 5 | 14.3 |
| 40-49 | 21 | 32.3 | 12 | 34.3 |
| 50-59 | 10 | 15.4 | 4 | 11.4 |
| 60-69 | 1 | 1.5 | 11 | 31.4 |
| 70 and above | - | - | 1 | 2.9 |
| Marital status | | | | |
| Married | 65 | 100.0 | 33 | 94.3 |
| Widow | - | - | 2 | 5.7 |
| Family size | | | | |
| 1-9 | 40 | 61.5 | | |
| 10-19 | 18 | 27.1 | | |
| 20-29 | 5 | 7.7 | | |
| 30-39 | 2 | 2.7 | | |
| Level of education | | | | |
| Quranic | 60 | 92.3 | 35 | 100 |
| Primary | 3 | 4.6 | - | - |
| Secondary | 2 | 3.1 | - | - |

Table 2: Living conditions of the respondents in Yuna adopted village $\,$

| | Male (n = 65) | | Female $(n = 35)$ | | |
|---------------------------|---------------|--------------------|-------------------|------------|--|
| Parameters | No. | No. Percentage No. | | Percentage | |
| Ownership of house | | | | | |
| Self ownership | 22 | 33.8 | | | |
| Inherited | 40 | 61.5 | | | |
| Rented | 3 | 4.6 | | | |
| Type of house | | | | | |
| Mud with thatched roof | 48 | 73.8 | 12 | 34.3 | |
| Mud with zinc roof | 17 | 26.2 | 23 | 65.7 | |
| Transportation | | | | | |
| Workbull animals | 10 | 15.4 | - | - | |
| Bicycle | 9 | 13.8 | - | - | |
| Motorcycle | 39 | 47.7 | 12 | 34.3 | |
| Canoe | 15 | 23.1 | 4 | 11.4 | |
| None | - | - | 19 | 54.3 | |
| Ownership of radio and te | levision* | | | | |
| Radio only | 29 | 43.3 | 4 | 11.1 | |
| VCD player | 4 | 3.0 | 1 | 2.8 | |
| Both radio and TV | 4 | 3.0 | 1 | 2.8 | |
| Do not own any | 34 | 50.7 | 34 | 83.3 | |
| Farm assets | | | | | |
| Animal traction | 30 | 41.1 | 14 | 40.0 | |
| Tractor | 1 | 1.7 | - | - | |
| Sprayer | 11 | 15.1 | - | - | |
| Outboard engine | 4 | 5.5 | - | - | |
| None | 27 | 36.9 | 21 | 60.0 | |

^{*}Number not equal to 65 or 35 because of multiple responses

Table 3: Main occupation and income generated by respondents in Yuna adopted village

| | Male (n = 65) | | Female (n = 35) | |
|----------------------------------|---------------|------------|-----------------|------------|
| Parameters | No. | Percentage | No. | Percentage |
| Occupation | | | | |
| Fish processing/marketing | - | - | 31 | 88.6 |
| Fishing | 64 | 98.5 | - | - |
| Petty trading | 1 | 1.5 | 4 | 11.4 |
| Income | | | | |
| < N 5,000 | 1 | 1.5 | 1 | 2.9 |
| № 6,000- №10,000 | 16 | 24.6 | 8 | 22.8 |
| № 11,000- № 30,000 | 5 | 7.7 | 12 | 34.3 |
| N 31,000- N 50,000 | 6 | 9.2 | 2 | 5.7 |
| N 51,000- N 70,000 | 3 | 4.6 | 1 | 2.9 |
| ₩71,000- ₩90,000 | 3 | 4.6 | - | - |
| N 91,000- N 10,000 | 6 | 9.2 | 6 | 17.1 |
| > N 111,000 | 25 | 38.5 | 3 | 14.3 |

Table 4: Percentage distribution of respondents by awareness and adoption levels of technologies in the study area

| Technologies | AWL (%) | ADL (%) | ADD (years) |
|------------------|---------|---------|-------------|
| Fish farming | 42.6 | 33.3 | 13 |
| V-bottom boat | 8.5 | - | 6 |
| Solar tent dryer | 24.7 | - | 2 |
| Trammel net | 9.4 | - | 4 |

AWL: Awareness level, ADL: Adoption level, ADD: Adoption duration

the very low income and yet face the poorest living conditions. The incidence of poverty is also reported to be higher among large house hold and those with lower levels of education (Raji, 2008).

The result from Table 3 shows that majority of the male respondents (98.5%) had fishing as main occupation while the main occupation of most of the females was fish processing (88.6%) and Petty trading (14.4%). The male respondents earned more income than the female respondents. Majority of the male respondents (38.5 and 24.6%) generated monthly income of <N 111,000 and N111,000-N 30,000, while female respondents (34.3 and 22.8%) between N 11,000-N 30,000 and N 6,000.00-N10,000.00 only.

Table 4 present the distribution of respondents by awareness and adoption levels of technologies in the study area. Of all the technologies aware by the respondents only fish farming was adopted by 33.3% of the respondents. Awareness creation often the first step in disseminating a technology-package and to a large extent, the level of awareness could determine the level of adoption of technology (Bolorunduro and Falaye, 2003).

The findings of the study from Table 5 revealed that most of the respondents male (35.0%) in Yuna community faced constraints of lack of fishing/farm and female (41.5%) processing inputs to enhance their productivity and well being, lack of capital to purchase inputs, lack of knitting and sewing machines, high cost of fishing and farm inputs and lack of roads and electricity. Roads for instance play a significant role in collection and distribution of goods and services; it allows access to markets and health centers/hospital and permits easy delivery of fishing and farming inputs (Tafida et al., 2009). Similarly, electricity presents a great impediment to engagement into other livelihood activities like services e.g., barbing, operation of cottage industry, freezing of fish, grinding processing.

J. Fish. Aquat. Sci., 8 (1): 136-141, 2013

Table 5: Distribution of respondents based on major constraints to agricultural (fisheries) production in Yuna adopted village

| | Male (n = 65) |) | Female (n = 3 | 5) |
|--|---------------|------------|---------------|------------|
| | | | | |
| Parameters | No. | Percentage | No. | Percentage |
| Lack of capital to purchase inputs | 25 | 31.3 | 10 | 18.9 |
| Lack of fishing and farm inputs | 28 | 35.0 | - | - |
| Lack of knitting and sewing machines | - | - | 12 | 22.6 |
| Lack of road and electricity | 5 | 6.3 | 4 | 2.5 |
| Lack of awareness on improved technology | 4 | 5.0 | 5 | 9.4 |
| High cost of fishing and farm inputs | 8 | 10.0 | - | - |
| Lack of fish processing materials | 10 | 12.5 | 22 | 41.5 |

Number not equal to 65 or 35 because of multiple responses

Table 6: Distribution of respondents based on suggestion made on how to overcome the constraints in Yuna adopted village

| | Male (n = 65) | | Female (n = 35) | |
|--|---------------|------------|--------------------|------------|
| Parameters | No. | Percentage | No. | Percentage |
| rarameters | NO. | rercentage | NO. | rercentage |
| Provision of available fishing and farm input at subsidized rate | 40 | 43.0 | - | - |
| Provision of available processing materials at subsidized rate | - | - | 26 | 44.1 |
| Loans should be made available at low interest rate | 20 | 21.5 | 14 | 23.7 |
| Provision of infrastructural facilities such as road and electricity | 15 | 16.1 | 9 | 15.7 |
| Awareness creation on recent innovation of improved technologies | 18 | 19.4 | 10 | 16.9 |

Number not equal to 65 or 35 because of multiple responses

Suggestion made by the respondents (Table 6) includes provision of available fishing/farm/processing inputs at subsidized rate (male 43.0% and female 44.1%), loans should be made at low interest rate (male 21.5% and female 23.7%), awareness creation in recent innovation of improved technologies and provision of infrastructural facilities such as roads and electricity. Tafida et al. (2009) observed that deficiency in basic infrastructure such as roads, market, water and electricity often lead to translate into poor marketing, low information and poor ability to diversify into multiple livelihood portfolio, hence reduction in income and well being.

CONCLUSION

The fisherfolks of Yuna community Borgu local government area of Niger state are faced by constraint on lack of fishing, farm and processing inputs, lack of capital to purchase input, lack of knitting and sewing machines, lack of awareness on improved technology, high cost of fishing and farm input and lack of road and electricity. Based on the above, the following recommendations were made in order to improve the living and income standard of the fisherfolk in Yuna Fishing Community.

- Government and other financial lending institutions should provide loans to artisanal fishers at low interest rate on single digit
- Adequate supply of well subsidized farm, processing and fishing inputs with recommended mesh sizes should be paramount
- Government and donor agencies should direct their policies toward provision of rural infrastructure such as road and electricity
- ARCN and FCFFT should make concrete arrangement to improve the logistics for their staff so
 as to motivate them to discharge their duties more efficiently

J. Fish. Aquat. Sci., 8 (1): 136-141, 2013

- Thee is the need to intensify more efforts in empowering fisherfolk educationally and economically
- There is the need for improvement in the mode of capture, landing, processing, preservation and transportation of fish in inland waters
- There is also the need for efficient awareness creation on improved technologies developed by NIFFR and FCFFT

REFERENCES

- ARCN, 2009. Implementation of the adopted villages. Agricultural Research Outreach Centres (AROCs), National Agricultural Research Institutes (NARIs) and Federal Colleges of Agriculture (FCAs).
- Ahmed, Y.B., A.A. Eyo and A. Usman, 2005. Impact of Nigerian Agricultural Cooperative and Rural Development Bank loan on artisanal fisheries in Lake Kainji. Proceedings of the 19th Annual National Conference of the Fisheries Society of Nigeria, November 29-December 3, 2004, Ilorin, Nigeria.
- Araoye, P.A., 2002. Man-made Lakes, ecological studies and conservation needs in Nigeria. Rev. Biol. Trop., 50: 857-864.
- Bolorunduro, P.I. and A.E. Falaye, 2003. Socio-economics characteristics as predictors of adoption fish smoking kilns by fish processors in North-West Nigeria. Nig. J. Fish., 1: 70-84.
- Bolorunduro, P.I., O.A. Owolabi, O.C. Jegede and F.O. Olowomiyan, 2000. Factors influencing the adoption of fish processing and preservation technologies in North-Western Nigeria. A Research report submitted to NARP, FMARD, Abuja.
- CIMMYT, 1993. The Adoption of agricultural technology: A Guide for Survey Design. CIMMYT, Mexico, ISBN-13: 9789686127775, Pages: 88.
- Ogunfowora, O., 1997. Input supply and its impact on agricultural extension. Proceedings of the Workshop on the National Agricultural Research Strategy Plan and Extension Services Input Delivery, November 25-29, 1996, NARP., Abuja, pp: 421-435.
- Raji, A. and S.I. Ovie, 2007. Biodiversity conservation and sustainable livelihoods: The case of the Nigerian Inland water fisheries. Proceedings of the National Stockholders Workshop on Inland Capture Fisheries Development in Nigeria, (ICFDN'07), Kaduna, Nigeria.
- Raji, A., 2008. The Nigerian fisheries and the attainment of the millennium development goals. Proceedings of the Opening ceremony of the 22nd Annual Conference of the Fisheries Society of Nigeria, November 12-16, 2007, Birnin Kebbi, Kaduna.
- Tafida, A.A., A.A. Adebayo, J.O. Ayanda, A. Wara and R.B. Adedeji, 2009. Rural infrastructure and poverty alleviation in fishing communities around Kainji Lake Basin, Nigeria. Nig. J. Fisheries Sci. Technol., 1: 135-142.
- Vabi, M.B. and C.E. Williams, 1991. Factors determining technology adoption behaviour of ruminant livestock farmers in Kwara State of Nigeria. J. Rural Dev. Nig., 4: 8-15.
- Zaki, B.A., 2006. An Assessment of Performance of Sokoto Agricultural and Community Development. Ph.D. Thesis, Department of Agricultural Economics and Extension, Usmanu Danfodiyo University, Sokoto.