Statistics of Kainji Lake, Nigeria. Nov. 1994 – Dec. 1998. KLFPP Tech. Report Series No. 13.

du Feu, T.A. and Kasali (1996). Fishing Gear Survey, National Institute for Freshwater Fisheries Research Annual Report 1995, pp 170 – 172.

Ferrer, E. and C. Nozara (1997). Community-based coastal resource management in the Philippines: Key concepts, methods and lessons learned. A presented at the International Development Research Centre Planning Workshop on Community-based Natural Resource Management, 12 – 16 May, Hue, Vietnam.

It, E.O. (1982). Biological indices of overfishing in Kainji Lake and the management proposal. KLRI Tech. Rep. Ser. No.6.

Okomoda, J.K. (1998). Outcome of the beach seiners and non-beach seiners meeting. A report prepared for the Nigerian – German Kainji Lake Fisheries Promotion Project, New Bussa, Niger State.

Okomoda, J.K. (2001). Report of training workshops on community mobilization techniques for local mobilisers

and field extension workers. 16th February to 3rd March, 2001. A report prepared for the Nigerian – German Kainji Lake Fisheries Promotion Project, New Bussa, Niger State.

Okomoda, J.K. and S.O. Alamu, (1997). Report of mobilication workshops held with District heads and Sarkin ruwas on strategies for implementing the fisheries edicts. A report prepared for the Nigerian – German Kainji Lake Fisheries Promotion Project, New Bussa, Niger State.

Okomoda and Asuwaju, (1997). Report of mobilization workshops held with extension agents on holding effective village meetings. A report prepared for the Nigerian – German Kainji Lake Fisheries Promotion Project, New Bussa, Niger State.

Sajise, P. (1995). Community-based resource management in the Philippines: perspectives and experiences. A paper presented at the Fisheries Comanagement Workshop at the North sea center, 29 – 31 May, Hirtshals, Denmark.

A STUDY OF THE PARTICIPATING WOMEN IN LAKE ALAU'S FISHERY

BY

A.M. SULE *, A. RAJI** AND M. OLABANJI***

NATIONAL INSTITUTE FOR FRESHWATER FISHERIES RESEARCH ZONAL OFFICE MAIDUGURI BORNO STATE.

** FEDERAL COLLEGE OF FRESHWATER FISHERIES TECHNOLOGY P. M. B. 1269, BADA BORNO STATE.

ABSTRACT

The article discusses the increasing participation of Women in Artisanal fishery. The concept of involvement of women in poverty alleviation, food security and social development activities should be given high priority by putting them on the research agenda as one of the means of bridging the gap in knowledge regarding their status and contribution in rural development in Nigeria.

1.0 INTRODUCTION

One of the greatest problems afflicting contemporary Nigeria is food. The issue of self-sufficiency in food seems to have eluded solution inspite of the government's effort. It stands to reason that the problem will continue to defy all solution as long as our agricultural and rural development policies and strategies are conceived and executed in such a way that they marginalize peasant women who constitute a bulk of the agro-rural population. While the peasant women toil hard in food production, processing and marketing, they are at once the most neglected, most exploited and most under-rewarded stratum of humanity. Due to divergent cultures, while some peasant women are over worked some are underworked in their contributions to the socio-economic

development. To drive home the point, (Ahooja-Patel, 1982) said, "most of the unemployed are women. The majority of the nourished are also women. The majority of women are not represented in important assemblies where decisions on development are taken. The majority of women are not benefiting from the cumulative technical and scientific knowledge of mankind".

From the late 1970, it became obvious that it is necessary to improve the status of the rural women because of their contribution to the rural economy as part of the solution to the socio-economic problems of the country. Factors responsible for the increased awareness as shown by (Famoriyo, 1985), the direct connection between the food crises and marginalisation of women producers, rural-urban migration, limited access of women to out put increasing technology and the Lagos Plan of Action for Africa (1980) which emphasized the action of government in encouraging rural women to increase food production, reduce food importation and reduce rural migration (FAO, 1984). Despite the above statements, it does not seem that the realization of the Lagos Plan of Action has been captured in Nigeria. According to the (FAO, 1984) since then (1980) the Governments of Tanxania (1981), Ethiopia (1982), Somalia (1982) and Lesothro (1982) have reviewed women's role in agricultural production and its implications for national food, agricultural and rural development strategies. It is clear that the need to improve rural women's status in Nigeria is at best, still considered if at all, as a social welfare function.

There has been no significant change in the material and social conditions of Nigerian rural women. In the wards of (Raza and Famoriya 1980) given the global focus, i.e. the absolute number of rural women in the developing societies, their poverty, their contribution to national economies and their role-set in the socio-cultural life of the societies and their deprivations should make them a primary target for integrated rural development.... Any societal transformation in most parts of Africa cannot be achieved without women paying a full role...

2. FISHERY SUB-SECTOR IN NIGERIAN ECONOMY

The contribution of this sub-sector to Nigeria's socioeconomic development is minimal when compared to the overall contribution from agriculture, chiefly, contributions of protein supplies from fish in Nigerian food diet is high for the fact that fish is rich in protein and protein is an important requirement for a balanced diet. Williams (1985) indicated that fish consumption per individual per year was estimated as 10.5 kilogram in 1970 whilst computed estimate indicate that contribution to available protein supplies from fish and livestock in the Nigerian diet is equivalent to 15.5 percent. The outcry is the low annual production indicating that fish demand cannot be met from local supply. While production is in thousand metric tones, consumption is in million metric tones.

Women play a very crucial role in the fish industry especially the Artisanal in the areas of fish processing, preservation and marketing. Some authors content that the low capital requirement of Artisanal fishery is a major explanation of women's greater involvement in it compared with industrial and fish farming. Oshuntogun and Ladipo (1985) observed that all the fish sellers from the village level to the city merchants were all women in Epe. Moreso, most of the women were found to be full-time fish traders.

3. THE STUDY AREA AND METHODOLOGY

The study was conducted in the four fish landing sites of Lake Alau in the months of July and August 2001. The landing sites are: Dan site, Abari, Alau Ngaufate and Dabam Yarbirgi. The population of fish mammies or women entrepreneurs-that is women who either own canoes and/gill-nets or both that fishermen use to fish are as follows:-

Landing Sites	No. of Women Entrepreneurs
Dan site	4
Abari	10
Alau Ngaufate	6
Daban Yarbirgi	<u>3</u>
	<u>23</u>

The twenty-three women entrepreneurs were interviewed concerning their personal data or socio-economic characteristics, occupational details, relationship with fishermen and fish traders, attitude towards fishery and benefits of their involvement.

4. RESULT AND DISCUSSION

In terms of age characteristic, this study shows that abut 96% of the fish mammies are below the ages of 45 years. In fish processing and marketing, they can be regarded as agile. The complete absence of teenagers might not be unconnected with marital rules and/or the start up capital. Whatever it is, the young are more enlightened, more educated and progressive in outlook with most favourable attitudes toward change. With the age composition of the fish mammies, change in terms of adopting better management practices in fish capturing and handling will be very difficult.

All the respondents were at one time or the other married. About 65% of the respondents are still married, 22% divorced and 13% widowed. Closely connected with the marital status, is the number of children born by the respondents. The study shows that about 61% of the

fish mammies have between 6 and 10 children, 26% hard between 1 and 5 children while 4% hard between 11 – 15 children with 9% being barren. This relatively large number of children is a good or pull factor making the women to look out for avenues of where to eke out a living in the fish industry to enable them cope with the predicaments of the socio-economic upheavals of contemporary Nigeria. Many of the children of the respondents are in various colleges with many learning handworks such as tailoring, mechanics, hair dressing, driving, carpentry with financial support from the fish mammies.

About 78% of the fish mammies have not gone through formal education. Only 13% and 9% had primary and secondary education. This low literacy rate is a characteristic which these fish mammies share with the rest of the peasant population in Nigeria. Obviously, this is a major constraint to the management of the Artisanal fishery considering that much of the written communication in extension and other rural development programmes presupposes a certain minimum level literacy among the target population/groups.

Asking about the length of time the fish mammies have engaged themselves in the fish industry, the responses were categorized thus: 61% had been engaged between 6 and 10 years, 26% between 1 and 5 years and 13% between 11 – 15 years. The respondents have quite a good wealth of experience in fish handling and marketing. All fish mammies relate to two set of customers, these are the fishermen who fish with their canoes and gillnets at agreed prices and the regular retail fish traders who are men and women.

Ownership of fishing materials is important to the development of small scale fishery. The lack of fishing materials by many fishermen in the study area made them to enter production relations with the fish mammies that own them. It was discovered that 48% of the respondents possessed a canoe each, 26% owned two canoes each, 22% had two each and 4% had four each with 35% not owning.

The income of every fishmamy was taken on the day of her interview as no records of such transactions are kept. The revelation on their incomes were as follows: 22% made N50 – N100/day, 43% made N101 – N150/day and 8% earned N151 – N200/day. The daily incomes are gotten from their sources: a N20 charge/canoe/day, a N30 commission on a basin full of fish, a profit of N50 on each transaction of fish to the retailers and sharing into two equal halves of fish caught between the owner of a gill-net and the fisherman. Many of the fish mammies depend mainly on the fish industry for their incomes. Capital availability for investment is still a problem. Prices

of the fresh fish varies depending on the species, sizes and condition of the fish. A basin of small-size tilapia is sold for N300 to the fishmamy while in turn she sells same to a retail customer at N35. For schilbe, it is N350 to the fishmany and N400 to the retailer. Big sizes of all species are sold in singles fish to the fishmamies and then to the retailing customers.

Fresh first are hardly smoked in the study area. The spoilt ones are unhygienially spread on the bare ground for sun drying. The good ones are taken to Maiduguri town in places like Mary Village, Gwange, Custom, Goni Kachllari, Farm Centre, Galadima by the retailers for both home consumption and frying for sales.

On the sources of their start up capital, 43% of them had theirs from their personal savings, 35% had theirs as collections from contributions while 22% got theirs as loans from relations.

None of the respondents had ever benefited from institutional loan. Extension agents had no contact with the fish mammies. Interestingly, none of the respondents joined the fish industry as a heritage.

Furthermore, about 52% of the fishmammies have the zeal and determination to remain in the fish industry inspite of all odds. Equally, about 48% of them indicated their willingness to leave the business if they can find other alternative income yielding ventures.

Generally, the observed low values or scores of socioeconomic characteristics of the fishmammies (see appendix) are obviously constraints to the development of small scale fishery. The low literacy among farmers for example, inhibits effective written communication between extension agents and the fishmammies particularly with regard to fishery management measures.

Development institutions are often found to be in effective in the services of the poor, the illiterate and powerless who are usually the declared target group. This happen because, in practice, the institutions more often than not turn their attention, willingly or unwillingly, to the service of the wealthy, powerful and influential people in urban as well as in the rural communities. This phenomenon was epitomized in the days of the Better Life for Rural Women that become Better Life for Rulers' Women and same was it for the Family Support Programme. Those served usually include retired and serving civil servants, military offices, businessman and women and traditional rulers to the exclusion of the peasantry.

Being not on sinecures, the women forsook their inured positions to eke a living in the fish industry. With their involvement in the fish industry, the women declared that

their social status increased within their families and community. They felt their dignity and respect in society are higher than before their involvement in the trade. On the economic fronts they are able to improve their accommodation, purchase clothes for themselves and their children and able to pay school fees as well as charges for their children apprentices. So far, none of them started saving money for investment in other businesses.

5. CONCLUSION AND RECOMMENDATIONS

Agricultural production, processing and marketing usually either exclude or merged women and men inspite of their enormous contributions. A case in point is the decade by decade publication of the Federal Department of Fisheries which usually does not single out women from production, processing, preservation and marketing. Lack or paucity of proper documentation of the role in Nigerian peasant women is indeed no solution.

Our recommendations for the recognition and appreciation of the rural women are as follows:-

There is need for research documentation in the area of rural women's contributions to the nations socio-economic development.

Peasant women should be made to benefit from rural development policies in areas such as: inputs, access to credit, provision of appropriate technology, price incentives and extension services.

Improvement of the status of rural women have take into consideration the form of rural organization conducive to such an improvement. Women should be organized first for credit assistance, then into their own co-operatives where they will be enlightened on self-help, self-determination and self-administration to make an on-slaught on mass poverty and destitution.

Finally, peasant women should be trained not only to perceive the situation they are in, but also to understand how to escape from the ocean of poverty and to improve their own statuses so that they can function effectively in promoting rural development in Nigeria.

TABLE 1:

Socio-economic variables of the Respondents

Socio-economic variables	No of respondents	Percentage
Age: 30-34 35-39 40-44 45-49	5 9 8 1 23	22 39 35 4 100
Marital Status	15	65
Married	5	22
Divorced	3	13
Widowed	23	100
No of Children	2	9
0	6	26
1-5	14	61
6-10	1	4
11-15	23	100
Formal Education No formal education Primary education Secondary education	18 3 2 23	78 13 9 100
Experience	6	26
1-5	14	61
6-10	3	13
11-15	23	100

No of Canoes owned 1 2 3 4	11 6 5 1 23	48 26 22 4 100
No of Gill nets owned 0 1 2 3	8 9 5 1 23	35 39 22 4 100
Income Per Day N50-N100 N101-N150 N151-N200	5 10 8 23	22 43 35 100
Source of Capital Personal Saving Contribution Loan from Relation	N0 10 8 5 23	% 43 35 22 100
Attitude Towards Fishery Will remain inspire of all odds Change if economic cor improves.	12 11	52 48

REFERENCES

- 1. Ahoja Patel, K. (1982). "Another Development with Women" in Development Dialogue.
- 2. **Famoriyo, S. (1985).** "The significance of Women in Nigerian Agriculture Conference on Leadership and national Development held by NISER. Ibadan April 8th 12th.
- 3. F.A.O (1984). Development Strategies for the Rural Poor. FAO Economic and Social Development Paper 55 edited by M. Riad EL Ghonemy, ROME.
- 4. Oshuntogun, C.A. and Ladipo, O.O. (1975). A structural Analysis of the Epe Fish Market in O.B.O. Anthonio and S.A. Agbola (Editors) studies in the development of the Nigerian Food Economy. Ibadan University Press.
- 5. Raza, M.R. and Famoriyo, S. (1980). Integrated Rural Development as a Framework for Women's Participation in Development Conference on Integrated Rural Development and Women in Development, $22^{nd} 26^{th}$ September 1980, Benin City.
- 6. Williams, S.B. (1985). Women's Participation in the Fish Industry in Nigeria. A review.