

**THE ROLE OF WOMEN IN FISH PRODUCTION A CASE STUDY OF
THE SOUTH REGION OF CAMEROON**

BY

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PGD/FH10810189

**BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF
FISHERIES, SCHOOL OF AGRICULTURE AND AGRICULTURAL
TECHNOLOGY, FEDERAL UNIVERSITY OF TECHNOLOGY, YOLA IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF POST GRADUATE I) DIPLOMA (PGD) IN FISHERIES
TECHNOLOGY.**

SEPTEMBER, 2011

CERTIFICATION

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To my beloved son Niceze Marcellus Morfow.

ACKNOWLEDGEMENT

A work of this kind involves the active co-operation of a large number of people in the supply of data and to them I would like to tender my thanks. However, I am particular grateful to the South Regional Delegate of Livestock Fisheries and Animal Industry Dr. Ondua Zang Jean Paul and to all my colleagues and senior staff in the Ministry of Livestock Fisheries and Animal Industries for South Region.

My special thanks goes to my Supervisor Prof. Ben 1-laruna who is equally the Dean of School of Agriculture and Agricultural Technology; without whom the production of this book would not have been possible.

I sincerely acknowledge all the staff of Federal University of Technology, Yola especially in the Department of Fisheries for their contribution in training me. I wish to appreciate the care and concern of Mr. and Mrs. Johnson A. Pastor of Cross Victory Church here in Yola for being my Mentor.

Finally, I acknowledge the love of my family for their support in the completion of this project. Above all, we give glory to God Almighty for giving us the strength to accomplish this task.

ABSTRACT

The demand for fish and fisheries product in the world today is on an alarming increase. Based on its importance in human diet and its supplement in the diet of animals. This study was therefore aimed at finding out the role of women in fish production and the factors militating against women participation in fish fanning. Given that women's level of commitment and interest in any field has always boost the level of production and profitability. A purposive sampling technique was used to collect data from one hundred and two women through structured questionnaires. Descriptive statistics and a participation index were used for data analysis. From the results it has observed that 53% of women were involved in fish processing and marketing of both marine and fresh water fish. 24% of the women

Were into the sales of fresh water fish. Only 13% of them were into fish farming and 10% of the women were into the sales of marine fresh fish. The constraints affecting women in fish production were lack. of capital and preoccupation with

other household chores. The study recommends the provision of training for womn in fish framing, in addition women in the study area should link with micro-finance banks in order to obtain the credits or capital they require.

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CHAPTER ONE

1.1 INTRODUCTION

As demand for fisheries products grows over the next several years, technology will play a crucial role in the ability of supply to keep pace. As a consequent of the heavy exploitation of capture fisheries discussed word wide, increased rates of extraction are undesirable from a global perspective.

Rather, technologies are needed that confer the ability to better manage existing stocks in capture fisheries while minimizing waste and improving the value of product through processing and handling, if may be difficult, however to implement technologies in the capture sector that have a positive impact on the environment without lowering the quantity of landings, at least in the short term.

By contrast, fish farming or aquaculture has the potential to help meet rising demand. Fish farming will require technology that allows for large sustainable increases in production if this is to be the case then women's role cannot be over emphasized without an emphasizes on women's impacts, the potential for aquaculture to significantly boost its long term contribution to world fish supplies will be diminished.

The aim of fish culture principally is to produce quality fish food for human consumption. It is also to enhance culture based fishery by providing enough fingerlings for restocking reservoirs, ponds, lakes and natural open water bodies, in order to prevent the extinction of commercially important species of fish especially when and where there is overexploitation.

Today women play an important role in African economies. One of such area which they excelled is in the fisheries sector. They play a particularly significant role in post catches operations and should be greatly encouraged to invest in fish farming. The south region of Cameroon with headquarter in Ebolowa is located. Some 170Km, south from Yaounde the political capital of the Republic of Cameroon.

The South Region (state) has four divisions (local government) which are the Mvila division with headquarters in Ebolowa, Dja and Lobo for Sangmelima, Ntem Valley for Amban and Ocean division for kribi, The south has a 150km coastline and many major rivers. This has given artisanal fisheries the lead in the socio-economic activities because it provides most of the jobs in. the informal sector beside agriculture.

1.2 Background of the Study

Apart from the south west and Littoral Regions with intense coastline fishing activities, in Cameroon. The South Region also contributes immensely in the GDP in fisheries nation wide with Artisanal fishing leading this sector and providing most of the jobs in the informal sector. The annual National fisheries production is over 180,000 tons more than 2/3 of the production comes from marine and continental fishing, then about 900 tons from aquaculture. The annual National fisheries consumption is estimated at 250,000 tons. The demand being higher than the supply has led to heavy importation of frozen fish and about 100,000 tons is imported yearly to compensate this deficit. (Annual Report 2007 DREPIA South).

Therefore public authorities try to promote the fisheries sector by creating specialized management institutions such as the development fund for marine fisheries (CDPM). And the development mission of marine fisheries (MIDEPECM) both depending on the Ministry of Livestock, Fisheries and Animal Industry. (MINEPIA) they are supported by FAQ, Japan and Canada.

In the south about 60% of the economic operators in the fishing sector are women and just few of these women have reach the secondary school. They

play a leading role in the processing and marketing of fishery products as smokers or as fish mongers. Although fish farming is dominated by men, fresh fish marketing however is controlled by native women, together with the processing and the sales of smoked fish. In Kribi, smoke fish per smoker is one million two hundred thousands Francs (1200 000 FCFA) a year. On the other hand, fresh fish trade is more profitable with average annual turnover of four million four hundred and fifty five thousand francs (4,455,000 FCFA) (Trottier B., 1998). In the south fish production is carded out by both men and women. Men and women have three types of relationships; professional, dependence and association.

At the professional level: They are real business relationships. Fishermen (men) are sellers and women are the buyers. They buy fish either for direct marketing or for smoking.

Dependence relations: Are related to the catches since women recognize that without fish catches which is the major activity of men, they could neither sell nor smoke fish.

As for association relationship: They are complementarily or partnership relationships. As women have funded in advance the purchase of the required fishing equipment :or material, they are entitled to part of the

production after the catches. They may at times sponsor the fishing operation and are equally entitled to part of the production. Women respect the division of labour thus established and will not let men interfere in fish smoking and marketing.

1.3 Problem Statement

Owing to the high demand for fish in this area now and in the near future and considering the decline in captured fisheries, the role of women in fish farming was assessed in order to appreciate the level of participation and to know the factors militating against their participation in fish farming and to seek means of addressing the problems thereby correlating and maintaining their job, in a long term sustainable manner.

1.4 Objective of the Study

This study is aimed at:

- 1) Finding out the level of participation of women in fish production in the south region.
- 2) Ascertain the factors that are militating against women's participation in fish farming (Aquaculture).

- 3) Make proposals that can: facilitate the integration of women into fish farming so as to guarantee job security and long term livelihood sustainability

1.5 Justification of the Study

Fish farming is not a “hit and run” business therefore, the participation of women in the running of fish farms will go along way in enhancing the success of the business. Women’s level of commitment and interest can determine the level of production and profitability this can be verified in their role in captured fisheries, fresh fish marketing which is mostly controlled by native women. Among women involved in this sector, many are in direct marketing of fresh fish and also in the processing and the sales of smoked fish in the whole south region. Smoking is the most common processing method still dominated by women.

Fish farming is the only viable means of solving the problem of fish importation and scarcity in the county. It has the potential of providing income in an economical point of view and equally provides good quality animal protein to sustain livelihood especially to the rural populace. Aquaculture haven’t been identified as the fastest food growing industries in the world FAO’s report, women’s massive participation in, this sector can’t

be overemphasized. It is our wish that the ministry of women and social affairs in Cameroon will in the days ahead empower and support a lot of women and their developmental projects in this area.

CHAPTER TWO

2.1 LITERATURE REVIEW

Women in the South Region of Cameroon participate in the selling and transformation of fisheries products mostly whereas in other African countries such as Benin and Togo women dive for oysters in the coastal lagoons and they harvest oysters in saline mangrove swamps in Senegal and the Gambia. In Guinea Bissau, shrimp fisher women make up the largest category of producers in fisheries. (Trottier, 1998). In practically every region in African women catch fin fish with the exceptions of Korhogo region of northern Cote d'ivoire and in an unidentified part of Cameroon, where women do not do any fishing at all. Other places of course exist but they are the exception rather than the rule. In sierra Leone fishing is left to women as it is not worthy of a man's time, In Gabon a significant number of fishing canoes in the estuary of the river Gabon near Libreville are operated by the wives and daughters of the Yoruba owners, The motivation for fishing range just as widely they catch fish for an occasional family meal (Zaire), or •for cash sale (Benin and Senegal); but the most common motivation is to supplement the family's protein intake and then to sell or exchange small surpluses (Trottier, 1998).

2.2 Transitions from Fishing to Farming

Economic development efforts aimed at women have focused on other sectors such as cropping or marketing gardening, as these are more lucrative for women than traditional fishing. Fishing by women has therefore declined into a pastime or has been abandoned altogether. Several environments, such as wet-lands are unexploited and both the land and the time could conceivably be reallocated to fish farming by women (Trottier, 1998).

Another example was reported in Gabon (Vincke and Wijksroin, 1982) who mentioned the existence of a traditional form of fish culture where women caught fingerlings to stock in ponds owned by their husbands. Similar efforts to develop fish farming, like that intensifying the traditional forms of ponding in the fadarnas of Sokoto state in Nigeria (FAQ/UN, 1969) exist in a number of countries. In Liberia, for example, almost all the women of the Gio, Mano and Kpele tribes of Nimba country stock small catfish and turtles in barrage ponds (Trottier, 1998). This is a traditional activity carried out by both men and women and is distinct from formal aquaculture where women work along with men. Many of the women have developed techniques for concentrating and holding fish for subsequent use or when they are larger. For example, many women of the Baisa tribe in Baisa country in Liberia as well as the women of the Gio and Maio tribes.

Of Nimba country, build fences of bushes, reeds or branches to keep fish in a place to grow larger. In Gabon some women in almost every tribe in the regions of France Ville, Ogooue, Ivindo, Nyanga and Moyen Ogooue' make large baskets which they keep in the water to store live fish. Women of the Lrin Lingala and Mbochi tribes in Lacuvette and pooi regions in the Congo build fences, Sinai dams, or dig holes in which to trap fish, and in the Ganibia about half the women of the Yola, Manjanjo and Mandinka tribes build fences and darns but do not wait before bailing out the water. In the Cote d'ivoire almost all the women of the Guerres tribe in the west build fences and darns but wait about seven days before bailing out to collect the fish (Trottier, 1998).

In Zaire many women build small dikes at an angle to river or stream banks and place "medicine" in the tip to attract fish; in Nigeria a few women in Bendel state tribes keep fish in pens and in Senegal women in the Basse Casamance are involved in a traditional form of rice/fish culture. In Guinea Bissau two groups of Papel women near Bissau, about 50 in all, have taken over unused land here they raise fish in the depressions. In Senegal women collect branches covered with small systems and replant them in more convenient locations for future harvesting (Trottier, 1998).

Where women have fish they feed them with kitchen wastes stocking fingerlings from the wild in ponds is less common as a totally spontaneous practice. These practices can conceivably be starting points for the introduction and development of pond culture, and even cage culture as practiced in Gabon Or pen culture in Nigeria and Ghana. As these practices and other related activities are earned out by women the time currently spent might be relocated to fish farming (Trottier, 1998).

2.3 Women in Aquaculture Production

Women who own or operate (manage) fish farms are extremely few in number. Little is known about the level of husbandry practiced by women but it appears that not much is done on ponds which have been obtained through inheritance. These women did not construct the ponds and apparently felt that they only added to their work load. They have not been the targets of training and extension, and do not comprehend the effort and time required to manage them Women, who constructed their own ponds, hiring male labour to build them and sometimes to operate them, are more likely to seek advice. Such women, although still a minority, have recorded some of the highest yields ever obtained in West Africa, and are systematically quoted (FAQ, 1990).

The majority of female fish farmers are wives and mothers, and their primary preoccupations are their families and their crops: These have priority, a fact which can be disconcerting to extension agents(FAQ, 1 990). Extensive fish farming in the rural areas must be viewed within the real constraints of the life of the target populations. Fish can provide vitally needed animal protein but rural women know that the staples of food security are cereals and tubers; anything else can only be a supplement.

2.4 General Labour

The literature on fish farming in Africa rarely makes reference to people, except in terms of labour as an input to be quantified. No subdivision by sex is made (ILO, 1981). The authors evidently consider that it is the practice itself which is important. Surveys of labour input are usually performed by men, and for the most part they will expect aid to be expected to speak with men. Women are seldom seen at pond side meetings and their participation is therefore down played.

The work which women do now is fish farming, a new activity to them. It is a transfer of their labour to cropping (FAQ, 1990). Some tasks, such as land preparation, are usually considered to be too heavy for a woman, and others are accepted to be man's work due to the use of a

specific tool. This pattern is common; women do not dig, excavate, or construct ponds, and women in Zaire do not cut weeds or compost material (FAQ, 1990). In almost every country women help by carrying dirt and/or cooking meals for working parties during construction, and assist or assume total responsibility for almost all other tasks which do not require physical strength. Where ponds are not self draining, women in the family and their friends are called on to help drain and harvest the fish, much as they do when barrage fishing. Wives will also help in disposing of the harvest in the same way that they help in distributing cereals or root crops to family and kin who have helped; and they usually sell the rest. However, fish farm yields from the small ponds rarely produce a surplus exceeding local demand.

2.5 Women Participation in Financial Institutions and Credit Union

Realization of this development potential will not take place, however, without considerable capital investment. Private investment will have to be greatly reinforced by financial investment from the rural banks through the traditional mechanisms of credit and grants.

Aquaculture development has potential to advance the role of women in rural communities. The role which women play in fisheries is less

reported at the National level than their role in agriculture, in spite of abundant studies available. This is true in Ghana and the Philippines, for example where there are as many women as men involved in the fishing industry (Librero, 1996)

In india, in the State of Tamil Nadu, Fish drying and curing and fish marketing are the two main activities in which women are involved in both marine and inland fisheries. In brackish water aquaculture women are engaged in prawn seed collection from estuaries and back waters. To a lesser extent women are involved in shrimp processing.

In a few places along the coast of the State of Andhra Pradesh, women are seasonally engaged in collecting mollusks and shells. A number of cooperatives have been established to organize women for hand braiding of fishing nets, supply of twine, etc. These groups are given financial support by the Cooperative Central Bank. Commercial banks also provide loans to women who are engaged in fish marketing. Repayment of such loans has been exceptionally good. In rural coastal areas there is much scope for further development of women in such fields as brackish water and fresh water aquaculture (Librero, 1996).

Current activities in Andhra Pradesh vary from fish curing, seed collection for aquaculture, organized fish transportation, and institutional credit to increase women's working capital for fish marketing. Few banks have experimented on small-scale loans to fisherwomen to increase fish marketing or establish petty shops. Initiated in 1976, the Grameen Bank project has aimed at extending banking facilities to poor men and women. A proposal for pilot fisherwomen extension activities in Andhra Pradesh has been prepared whereby the Department of Fisheries assigns two extension officers to implement the proposed activities, and banks institute new loan procedures to increase repayment rates and to enlarge women's economic base for income-earning activities.

In Malaysia women are involved only in shore-based small-scale fishery activities, the most important of which is the processing of fishery products. Few programmes or organizations in the country deal specifically with improving the role of women in fishing communities. There are several extension programmes which include training courses in improved fish processing and freshwater fish culture directed at women. The Rural Community Development Authority conducts courses in home economics for rural areas which also reach women in fishing communities. The number of women officers in the fisheries administration of Malaysia is very limited.

There are only four women officers concerned with research extension (Librero, 1996).

While women may not be the entrepreneurs in fishpond businesses managed by their husbands, they hold the purse and are instrumental in planning and budgeting. Certainly women participate in decision-making, not only in the house but also in the aquaculture business.

In the Philippines the rural banks, the Development Bank of the Philippines, the Philippine National Bank, commercial and other banks, all provide credit for aquaculture regardless of sex of the borrower provided that the borrowers fulfill the requirements of the banks and provide collateral. Special credit programmes have been implemented for fisheries, for example, the Biyayang Dagat programme, but no special projects have yet been designed to encourage when to borrow for aquaculture purposes.

The centre of integrated rural development for Asia and the Pacific (CIRDAP) convinced that women groups in fishing communities did not receive adequate attention launched its first action programme for women in fishing communities in Indonesia, the Philippines, Sri Lanka, and Vietnam in 1984, with financial and technical assistance from the Government of Japan and FAO. The objectives of the programme are to improve the living

and working conditions of rural women and their families in fishing communities and to provide necessary inputs and services to help meet their basic needs. One of the immediate tasks is to assist rural women in establishing their own economically viable income generating activities (Librero, 1996).

Women from fishing communities in Sri Lanka are improving their living conditions by engaging in economic activities such as coir making, garment manufacture, and handicrafts (Drewes, 1985). Incomes earned through these activities, although lower than those of their husbands, are high enough for the women to start participating in financial decision-making in the family. Only 8% of the women interviewed engaged in fisheries activities such as fish trade, fish handling and processing, net mending and repairing, or backwater fishing. The extent of women's participation in these activities varied according to the economic development of the region, level of technology applied, existing infrastructure, and cultural/religious backgrounds, as well as topographical conditions. In some northwestern coastal villages women engage in fish handling, processing and marketing. In the southwestern villages, however, with their well-developed infrastructure (roads, harbor, ice plants, larger motorized craft) most women, barring a few who are the sole earners in the

family, rarely engage in any fishery-related activities. Changes in fisheries technology, such as net-making machines, imported machine-made nets, modern forms of fish handling and marketing, mechanized and motorized transport, have apparently induced withdrawal of women from fishery related activities.

CHAPTER THREE

MATERIALS AND METHODS

3.1 The Study Area

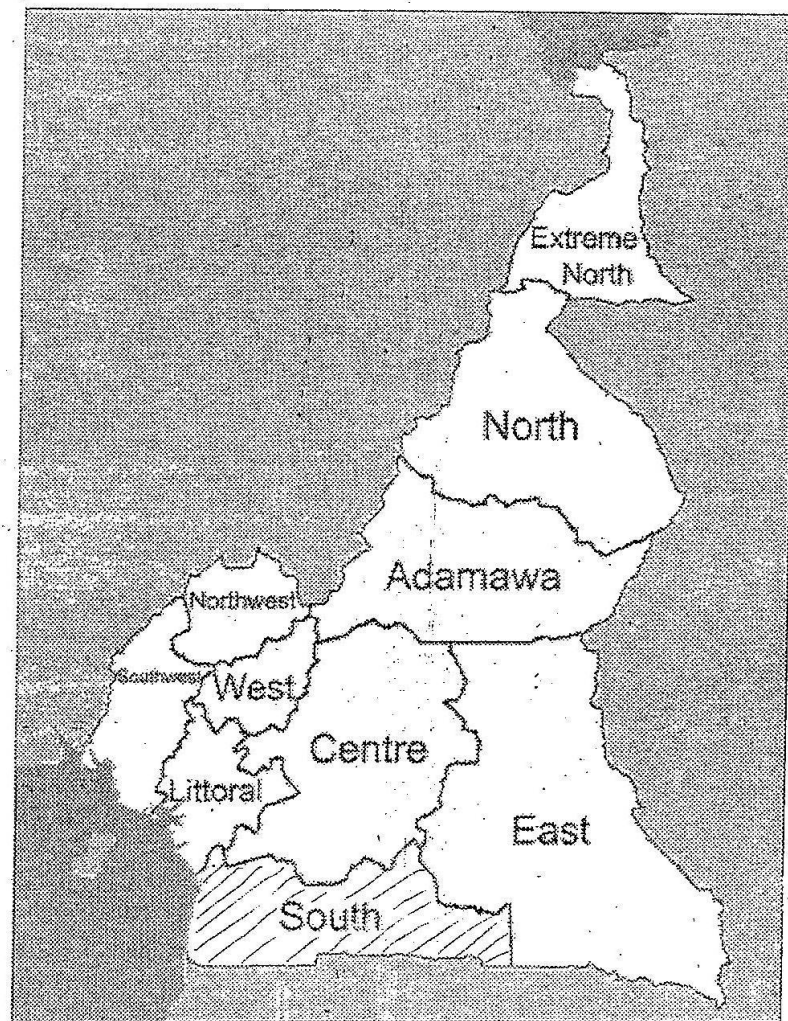


Figure 3.1 Map of Cameroon showing Study Area (shaded) South Region.

3.1.1 Physical Features

The south region of Cameroon constitutes one of the ten regions that form the Republic of Cameroon with its headquarters in Ebolowa. This region is situated between latitude 3°30' north and longitude 130 00' east having a surface area of about 47 190km² which is 10.07% of the total national surface area.

The South Region is limited in the north by the Centre Region with headquarters in Yaounde, in the North West by the Littoral Region with headquarters in Douala in the south by Republic of Congo (Brazza Ville), Gabon and Equatorial Guinea, in the east by the East Region with headquarter in Bertua and finally in the west by the Atlantic ocean.

3.1.2 Relief

The South Region is semi mountainous having a chain of hills and mountains with altitudes varying between 650 to 900 meters. This chain is disrupted at the Ntem division which has the highest altitude of 1 043 meters high above sea level.

Also a vast continuation of low land with heavy deposit of sand at the kribi beach with altitude varying between 0 to 300m in the ocean division.

31.3 Climatic, hydrology and Vegetation

The South Region presents a sub equatorial climate type characterized by four seasons. Two dry and two wet seasons with long and short durations.

The annual precipitation ranges between 1200mm to. 2000mm and an average temperature of about 25°C. The vegetation here is principally dense equatorial forest with lot of mangrove zones. The hydrographical features are rich and abound here with major rivers such as river Ntem, river Dja and Lobo and the Kienke river which flows across the forest to the ocean.

3.1.4 Population

According to the sensors of 1987 the south region was estimated at 520 000 habitants making a population density of 11 habitants per km² which at the time was equally distributed within the four major divisions. Today one can deduce that this population must have quadrille to over 2000 000 people because of the heavy population densities seen in the four major towns in this region.

3.1.5 Socio Economies Aspect

The south region of Cameroon with its 150km sea shore on the Atlantic Ocean is the only Region of Cameroon which shares it's borders

with three countries which are Gabon, Equatorial Guinea and Congo Brazzaville.

On the religious aspect, Christianity is the principal religion in the whole South Region having more protestant faithful followed by the Presbyterians, Catholics and lastly the Pentecostal dominations, who are still few. Islamism is not left out, this is mostly practiced by visiting Muslims who came and settled in this Region.

3.2 Method of Data Collection

A participatory research approach was employed with the use of primary and secondary data. The primary data came from the South Regional Delegation of Livestock Fisheries and Animal Industry (Annual Report, 2007 DREPIA). This was supplemented with published sources from (FAQ, 1990 and ILO, 1981). The secondary data was compiled from participatory group discussions and, questionnaires (Appendix I) distributed to selected women of the four divisions which are the Ntem valley, the Mvila, Dja and Lobo and 'finally the Ocean division.

These questionnaire was distributed strictly to women involved in fish farming, fish processing, fresh water fish marketing and marine water fresh fish marketing. A total of one hundred and twenty questionnaires were

administered and eighteen were death. Making one hundred and two questionnaires received from the 'four divisions, with at least 25 from each division with the exception of the ocean division with 27 responded.

3.3 Method of Data Analysis

Special efforts was made to include all information on fish farming, fish processing, fresh water fish marketing and marine water fresh fish marketing. Attention was given to fish farming, the scale of operation and method of operation. For the analysis, simple counts tables of frequency were used, and pie chart were equally used to illustrate the results.

CHAPTER FOUR

RESULTS

4.1 Demographic Characteristics of the Respondent

4.1.1 Age of the Respondents

The age range of the respondent was 15 to 70 years from the 102 women who submitted their questionnaire. From the table below it was observed that 80% of them fall within the active age of 20 to 60 years.

Table 4.1: Age group of respondent

| Age group | Frequency | Percentage |
|-----------|-----------|------------|
| 10-19 | 6 | 6 |
| 20-29 | 23 | 23 |
| 30-39 | 28 | 27 |
| 40-49 | 30 | 29 |
| 50- 59 | 10 | 10 |
| 60 | 5 | 5 |
| Total | 102 | 100% |

4.1.2 Marital Status

Majority of the respondents about 89% had children with only 49% married. 28% were abandoned by their husband and 6% were duly divorced. 5% were widowed and 12% were single

| Marital status | Frequency | Percentage |
|----------------|-----------|------------|
| Single | 12 | 12 |
| Married | 50 | 49 |
| Abandoned | 29 | 28 |
| Divorce | 6 | 6 |
| Widowed | 5 | 5 |
| Total | 102 | 100% |

4.1.3 Social Status of the Women

The social status of the women are enhanced by observing the traditional expectation of bearing as many children as possible, thus ensuring the provision of an adequate labour force for the family chores. Also the children are expected to take care of their parents in old age. Thus about 51% of the respondent had between 5 and 9 children followed by 38% that had between 1 and 4 children while 11 % had no child.

4.1.4 Educational Level

59% of the respondent had completed primary school education only, while 20% had vocational training after primary school. 15% had University Education in various field while 6% had professional training in fisheries and aquaculture. it was observed that the lack of standard education is common among women fisher folks.

Table 4.3 Educational Level

| Marital Status | Frequency | Percentage |
|-----------------------|-----------|------------|
| Primary | 60 | 59 |
| Vocational Training | 20 | 20 |
| Professional Training | 16 | 15 |
| University Education | 6 | 6 |
| Total | 102 | 100% |

4.2 Level participation in fish production

The level of participation in fish production was revealed in the individual division under the following aspects. From the questionnaires total women involved in;

- 1) Fish farming and sales of farmed fish
- 2) Fresh water fish marketing
- 3) Marine fresh fish marketing
- 4) Processed fish marketing from both marine and fresh water which includes:

- ❖ Smoked fish
- ❖ Sundry fish
- ❖ Roosted fish

Table 4.4 shows the level of participation of women in fish production

| Employment aspect | Level of participation and % in | | | | | | | |
|---|---------------------------------|------|-----------------------|------|----------------|------|----------------------|------|
| | Ocean division | | Dja and Lobo division | | Mvila division | | Ntem valley division | |
| Fish farming and sale of farmed fish | 0 | 0% | 5 | 20% | 6 | 24% | 2 | 8% |
| Fresh water fish marketing | 4 | 15% | 8 | 32% | 7 | 28% | 5 | 20% |
| Marine fresh fish marketing | 10 | 37% | 0 | 0% | 0 | 0% | 0 | 0% |
| Processed fish, marketing both marine and fresh water <ul style="list-style-type: none"> ❖ Smoked fish ❖ Dry fish ❖ Roasted fish | 13 | 48% | 12 | 48% | 12 | 48% | 18 | 72% |
| Total | 27 | 100% | 25 | 100% | 25 | 100% | 25 | 100% |

From table 4.4 above, the highest level of participation of women in fish production is seen in fish processing and marketing of both marine and fresh water fish in all the four division of the Region. This is followed by those involved in the sales of fresh water fish and then fish farming. The last level of participation is seen in those involved in the sales of marine fresh fish only.

Table 4.5

| Aspect | Level of participation in | | | | Total |
|------------------|---------------------------|-----------------------|-----------------|---------------------|------------|
| | Ocean division | Dja and Lolo division | Mvilla division | Ntem valle division | Percentage |
| Fish farming | 0 | 5 | 6 | 2 | 13 |
| Fresh water fish | 4 | 8 | 7 | 5 | 24 |
| Marine fish | 10 | 0 | 0 | 0 | 10 |
| Processed fish | 13 | 12 | 12 | 18 | 53 |

seen in those involves in the sales of marine fresh fish only.

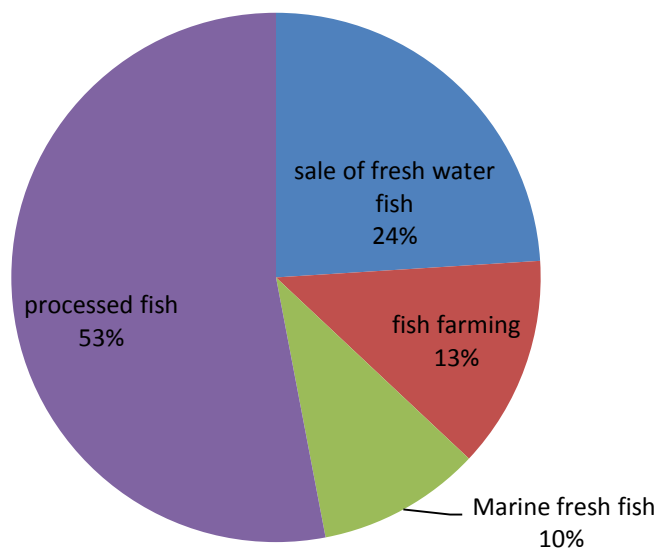


Figure 4.1, Pie chart showing women role in fish production in the south region of Cameroon.

From the result in figure 4.1 above, it is observed that 53% women were involved in fish processing and marketing of both marine and fish water fish. 24% of the women were into the sales of fresh water fish. Only 13% of them were farming and 10% of the women into the sales of marine fresh fish.

CHAPTER FIVE

5.1 DISCUSSION

5.1.1 The General Response on the Level of Participation of Women in Fish Production of the South Region of Cameroun

The results clearly shows that only 13% of the entire women folk are into fish production specifically fish farming, whereas 53% of the women are involved in marine and fresh water fish processing and marketing that is, smoked fish, dry fish and roasted fish. This is where a lot of them gain their employment and earn a living. Meanwhile the remaining 24% and 10% of the respondent are involved in the sales of fresh water and marine fish respectively.

5.1.2 The Factors Militating against Women's Participation in Fish Production were seen as follows:

- i. The main constraint is tie to allocate to a new activity, especially one which requires substantial commitment such as fish farming. This is reinforced by women themselves, particularly those who are not familiar with fish farming. However, for the most part, only large fish farms provide full-time employment; typical extensive rural ponds in the South Region which may be only a few area in size require little time to maintain

in addition to the production of compost. The time for pond construction, which may require some 20-30 days of effort for a 100m pond, is less the constraint than the hiring of labour and obtaining credit. Other tasks of maintenance can be integrated with other periods in the cropping cycle. As many women are not fully aware of the real demands of fish farming on their time their reluctance to take on another task reinforces a bias in development towards men. The time constraint is often advanced to rationalize the absence of women as producers, but it is not necessarily justified.

- ii. The constraint of land ownership is common to both men and women, but it is especially difficult for women to resolve. Land tenure in Africa is traditionally communal, and land for cultivation is an inalienable right of every adult but allocated through the village elders who are all male. In some communities, women do not have direct access to the elders but must approach a father, husband or brother for some of the land allocated to the family. In some cases women are barred from obtaining title to land as an occupant or owner, or may not be able to buy or rent land. Even women with inherited land may only have the right to entrust unto male children who are of age. Both men and women often encounter resistance if they want land for permanent construction, which is required for tree crops,

irrigation development, and fishponds, etc. lack of long term tenure is often cited for disinterest in productive investments on the land, and a handicap for credit programmer. Several governments dealing with land reforms have responded with regulations for occupancy or privatization, but these are generally reserved for men. Women who require land to establish a fish farm usually approach the village elders directly, or their husbands. Women may rent, inherit or buy land iii Cameroon.

- iii. Although land is a principal requirement for aquaculture, credit and the labour to develop it are important constraints for both men and women. Again, women are more affected than men. Credit is often a continual need for seasonal inputs, such as fingerlings and other supplies; but the constraint of labour is removed almost completely once the pond is constructed.. Excavation and construction of ponds are activities considered too heavy for women. They must therefore hire male laborers, and this requires capital. Women have less access than men to formal sources of credit, such as banks or credit unions. They rarely have the collateral required, usually land title. Therefore women rely mostly on family, their savings, or money lenders. Some woman, such as successful traders, do not need credit or can obtain loans on good terms. This is not the case of rural woman, however, particularly the female head of rural

household, who is particularly needful and vulnerable must join the popular saving system (tontines) and become a member of G 1 C (common initiative group) for easy access to loan.

- iv. iv. A significant constraint which operates against women becoming fish farmers is the lack of access to extension and training. Women are rarely included in extension meetings, often because they are planned with reference to the schedule of the men. Unless special provisions are made by extension agents to include women in the meetings, women will not fully understand fish farming and ponds left in their care will be left unattended. More particularly, greater benefits can be gained by having more women extension agents. This would help to overcome and eliminate some of the social barriers inhibiting many women from taking up fish farming.
- v. The major external factor to the participation of women in aquaculture is the failure to make explicit provisions for them in the target group. As experiences in agriculture have demonstrated, benefits for the heads of households do not necessarily accrue to the family. Furthermore, provisions for participation are often poorly understood by the women themselves, or are unacceptable for social or cultural reasons. There remains a propensity to overlook women in aquaculture production, even

though women are recognized to be the main food crop producers in Cameroon. The need is to involve more women in the development process, not only in planning and administration but particularly in extension where direct communication is necessary.

5.1.3 Proposals that can facilitate the Integration of Women into Fish Farming are as follows:

- i. Their children and their crops: Women are less likely than men to be away from home for long periods; therefore they can give continual attention to pond husbandry if the ponds are close;
- ii. Daily routine: Women are more likely to provide the constant attention required for good husbandry, and know and can use a variety of by-products (such as kitchen wastes, weeds and crop residues) for composting;
- iii. A typical rural fish pond does not provide full employment:
Women can accommodate fish farming tasks to other duties, Tasks which require greater labour inputs can be scheduled appropriately around others as the fish are not at risk if harvesting is delayed;
- iv. Their responsibility towards the family: Women give priority to family needs. Benefits aimed specifically at the head of the household

do not necessarily accrue to the household, and often there has been a resulting negative economic and nutritional impact on the position of the wife and family.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

There is a definite need for explicit recognition of women's contribution to the development of aquaculture in Cameroon. This requires better documentation of evidence of their participation and particular attention to involving and evaluating their activities in further development.

The source of material for this work therefore comes from the Regional Delegation for Livestock, Fishery and Animal Industries for the South Region and includes many personal communications and personal experiences. Also, the answers to the questionnaire survey (Annex 1), from where a total of 102 selected women from 4 divisions in the South Region sent back their questionnaires. The results are patchy and have no statistical value, but they serve as a useful starting point to describe the current status of women in fish production in the South Region of Cameroon.

6.2 Recommendations

There are few women in the study area that are involved in fish farming due to inadequate capital, pre-occupation with household chores and dominance by their spouses. The following recommendations are hereby suggested in order to enhance the participation of women in homestead fish farming:

- The women should be encouraged to participate in cooperative societies.
- There is need to organized training on fish feed formulation, raising of fingerlings and disease control for women involved in homestead fish production.
- Women in the study area should be linked with micro-finance banks in order to have access to credit which can be used to increase their level of participation in fish production.
- The men in the study area should be sensitized on the need to free up women's time to enable them have more time for other non-household economic activities.

6.3 Suggestions for further research

- The rate of fish distribution, commercialization and consumption in the South Region

- Gender participation in aquaculture and fish farming in the South Region
- Economic contribution of women in fish production in the South Region

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APENDIX 1
SAMPLING QUESTION

SECTION A

- 1) Name
- 2) Age:.....
- 3) Occupation.....
- 4) Level of education.....
- 5) Level of education
- 6) Social status (no of children).....
- 7) Place of resident.....
- 8) Address.....

Section B

EXPIRIENCE IN FISHREIS

- 9) Are You A Certifiled Fish Farmer ? Yes() No ()
- 10) Are You A Train Fish farmer? Yes [] No []
- 11) If yes what professional level -----
- 12) When did you start this fish business -----
- 13) Are you involved in:
 - i. The sales of fresh fish from marine water? Yes [] No []

- ii. The sales of fresh fish from fresh water? Yes [] No []
- iii. The sales of process dry or smoked fish or roasted fish?
Yes [] No []
- iv. The production of fish from ponds? Yes [] No []

SECTION C

LEVEL OF PRODUCTION

- 14) What quantity of fish do you sell per day?-----
- 15) What quantity of fish do you produce per day? -----
- 16) Is your business profitable? -----
- 17) How many of you are involved in the business -----
- 18) What are the main problem you face? -----
- 19) Are there other alternative to your business?-----
- 20) What is the level of association with others? -----

SECTION D

LEVEL OF PARTICIPATION IN FISH FARMING

- 21) Are you aware of fish farming?-----
 - i. If yes do you own fish pond? Yes [] No []

- ii.** What are the problems you face in fish farming? -----
 - iii.** How many of you are involve in your fish farming? -----
 - iv.** What are your suggestion to ameliorate your production?-----
 - v.** What are your suggestion to ameliorate your production? -----
 - vi.** How many women in your area you known are into fish farming?-----
- 22)** If you are not into fish farming would you like to start? yes [] No []