

# WOMEN AND GENDER PARTICIPATION IN THE FISHERIES SECTOR IN LAKE VICTORIA<sup>1</sup>

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## Abstract

The paper starts with an analysis of the gender roles of women in the fisheries sector. These roles are recognized in three stages of production: fishing, processing and marketing. Further, the paper looks at the impacts of gender roles in promoting or hindering the involvement of women in fisheries research, development, and management. Lastly, the paper develops recommendations that will ensure the effective participation of women in the management of Lake Victoria fisheries resources.

## Background Information

Women occupy a central place in the fishing sector. They predominate in Lake Victoria fisheries, representing 70% to 87% of fish-workers involved in this activity especially in the artisanal fish trade (Ogutu 1988, 1992; Sandauno 1999).

The fishery sector around Lake Victoria is characterized by a high participation level of single, divorced and widowed women, and separated mothers (Ogutu 1992; Medard and Wilson 1996; Geheb 1997; Lwenya et al. 2000. Studies show that the levels of married women in Kenya have been recorded as 80% (Lwenya and Abila. 2000) and 69.9% (Geheb 1997). Widowed women have been recorded as 9% (Lwenya et al. 2000) and 11% (Geheb 1997) while single, divorced or women separated from their husbands have been recorded as 9% (Lwenya et al. 2000) and 4% (Geheb 1997). The average number of children per female trader or processor was six.

The participation of women in fish marketing has been spurred by cultural, social, economic, and political factors. Geheb (1997) has argued that although most women do not come from fisher sub-clans, a great proportion had married into such sub-clans. Francis (1995) argues that the migration of men to other parts of the lake and urban centers has left women to take up duties traditionally performed by men. Consequently, they have taken up fish trading and processing as a source of income. Work by Clayton and Savage (1974) claimed that entry into the fish trade was sparked by legal requirements during colonial times due to cash need for taxes, clothing and bride price. Other factors include easy accessibility to fish, easy storage, divisibility, profitability of the enterprise, low initial capital requirements, improved

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<sup>1</sup> In this paper, the word male and female will be used interchangeably with men and women respectively. The earlier version of this paper was presented at the workshop on the role of women in fisheries management, Kisumu-Kenya and by Dr. Stella B Williams at the 6<sup>th</sup> Asian Fisheries Forum, Kaohsiung, Taiwan, 29 November, 2001.

transport costs and the relatively low prices of fish compared to beef (Ogutu 1988; Medard and Wilson 1996; Geheb 1997; Medard 2000a; Lwenya and Abila, 2000). Other factors include family business heritage, (Lwenya and Abila 1999), and a net decline in agricultural production (Francis 1995).

The need for income appears to be the principal driving force for joining the fishery sector (Geheb 1997; Clayton and Savage 1994). This is revealed by the fact that 56% of fish traders interviewed by Geheb (1997) would opt for alternative sources of income if they had the opportunity, especially because of the decline in the performance of the fishery sector. The remaining percentage of respondents (43.5%) said they would not accept alternative employment as they did not believe that any work beyond the lake would pay them as well as fishing. In the study conducted by Socio Economic Data Working Group of Lake Victoria Research Project Phase II SEDAWOG/LVFRP (1999), 40.2% (N=326) of the traders and processors were involved in farming, 50.4% (N=417) had no second activity while the rest were involved in food stall business, handicrafts, and sale of other consumable goods.

In many societies around Lake Victoria, like other parts of Africa, children are the sole responsibility of women, and given the cost of feeding, clothing and sending them to school, the necessity for an income is considerable. Many women's desire for cash stems from these responsibilities, insufficient subsistence sources of income and the women not wanting to bother their husbands for money (Geheb 1997). Climatic changes have also made income from farm yields insufficient to maintain the family throughout the year, hence the need to seek alternative sources of income. When there is no work on the farm, income-generating activities are often sought out by women, especially women who are married into polygamous households or those who have older or migrant husbands. Contrasting results were observed by Lwenya and Abila (2000): 74% of the interviewees in Kenya came from monogamous families while only 25% came from polygamous marriages.

The choice of the fish trade as against other business alternatives has been promoted by several factors. According to a survey carried out by Medard (2001), several reasons for the choice of the fish trade were mentioned by women. Firstly, the fish business, particularly *dagaa*, could be easily stored in their homes; they could break the fish into small quantities and satisfy a majority of the consumers; and it involves less migration as opposed to Nile perch trading. Others stated that the fish trade is a business that has been in their family lineage. Women were introduced to the business by their parents, friends, relatives and their husbands upon marriage. Secondly, fish is the most readily available resource with immediate demand as a commodity for trade in the area. Thirdly, the fish trade requires little capital to start and the profits are immediate. During the dry spell when families have less food (for example vegetables, beans and other food stuffs), women around the lake rely on fish as food by bartering with other commodities, such as firewood, fruits, maize and cassava flour, tomatoes, onions, fresh sweet potatoes and sun dried sweet potatoes. The families live from hand-to-mouth during such times, and the woman is the main person who has to decide on how she is going to feed her family. The lake becomes the place to go.

Fish trade among women in Lake Victoria is both specialized and combined with other activities. A majority of the women (57%) earn an income purely on fish trade while 43% combined fish trading and other businesses. These percentages contrast sharply with those of men though the trend is the same: 74% survive purely from fish trade while 24% earn a living through combining fish trading and other businesses (LVFRP/SEDAWOG 1999). The high percentage of women who combine fish trade with other businesses as compared to their male counterparts suggest a gender disparity.

Despite their importance and contribution to the artisanal fish industry, women have received little attention from both the government and non-governmental organizations. The negligence of women in the fish sector is a matter of priority if the fishery sector is to maintain its current level of contribution towards household and national economy.

Women are being marginalized in the fishing industry and their involvement is being limited to small-scale, lower remuneration tasks of processing native species such as *dagaa*, as observed by Leendertse (1990). Sumudra (1995) points out that to ignore the role of women in the fisheries is to discount their

potential to strengthen the sector. The importance and contribution of women in the fishery sector and their dual role in production and reproduction points to the need to identify gender roles in the fishery sector. Gender concerns in the fishery sector can only be identified and addressed by looking at the various gender stereotypes in the sector; and identifying the gender roles in the fishery sector and their impacts in promoting or hindering the involvement of women in fisheries research, development and management. The resulting knowledge would help formulate effective interventions to promote the participation of women in the management of Lake Victoria fisheries resources.

## Gender Stereotypes and Cultural Ties in the Fishery Sector

Gender concerns are deeply rooted in the cultural patterns of people not only in Africa but also other parts of the world. This is revealed in the many gender stereotypes within the fishery sector.

The idea that fishing predominantly involves men going fishing in boats (therefore overlooking a huge range of inshore resource use) is common throughout the world (Lyn 1999). Fishing has further been understood to be predominantly men's work, while women are thought to be only engaged in post-harvest activities such as smoking, drying, and marketing, which earns a narrower profit margin than that earned by the fish catchers (Mbenga 1999). Descriptive nouns such as "Fishermen" although rooted in western culture, is a stereotyping noun that tends to exclude women from the sector. This perception affects the way the fishing industry is supported.

There is therefore a need for a conscious choice of gender sensitive words like "fishworker/fish traders", "fishers" as opposed to the term "fishermen". Such terms if consciously used, would make it clear that although there is a sexual division of labor between men and women in the fisheries, they are all fish workers.

Several cultural forces had been used in the past to keep women away from the fishing trade (Geheb 1997). Such cultural laws as informal regulatory mechanisms in determining the use of the lake were harsh to women. For example, among the Luo community, there is a law prohibiting menstruating women anywhere near the lake as they would contaminate the lake and affect its productivity (LVFRP/SEDAWOG 2000). This cultural law has also been observed in Sukuma, Jita and Kerewe communities. In other instances, the laws were silent about women and the lake, and hence by this silence, excluded women from lake resources.

In some parts of the country where matriarchy is a norm, women inherited the fishing equipment. After marriage, the husband came to live in the woman's home and she had a right to her share of the catch, which she could dispose of, as she wanted. Medard and Wilson (1996) noted how a woman in the Esegere beach Tarime District in Tanzania, complained about the fishing equipment that her brother offered her. The man was using the income from fishing to feed all his other three wives in his homestead or *mji*, in swahili.

Women in some regions of the country have direct access to the fish caught by their husbands, in which case they take the fish to the market and are paid cash.

## Gender Roles in Fishing and Fish Farming

### Fishing Grounds

The nature of fishing areas and their development has played a crucial role in promoting gender disparities. Traditionally, men have fished offshore while women have concentrated on inshore activities through the collecting or gleaning of different species from the reef and other inshore areas (Lyn 1999).

Most development agents encourage the promotion of offshore fishing activities to generate income and to reduce the pressure on inshore water resources. This results in targeting only those involved in this type of fishing - men at the expense of women.

## Routine and Hours of Fishing

The routine of catching fish determines the daily pattern of household activities. Many fishers leave for fishing at night. If their wives work during the day, there is little or no opportunity for family life. Fish is highly perishable. Fisherfolk have few places for storage, and lack the facilities to preserve their products. Unless the fish is sold immediately, they lose the opportunity to get the best prices from the middlemen waiting on the beach. Thus, it is common that women are found selling fish in the community or in the regional markets, immediately after the men have landed.

Active fishing on the lake is predominantly men's work. From a study conducted by Tungaraza (1986), women respondents reported that most women did not join the offshore fishing activity because it required a lot of time, energy, and that it was very risky. In the same survey, women confirmed that there is no taboo, no religious or traditional beliefs that prohibited women from fishing. Where women are involved in fishing, it is usually limited to shallow waters and done by at least four people in one boat. The fish caught by this method include *dagaa* which are usually small and inferior to other big fish and hence fetch very little profits (Tungaraza 1986) Women admitted that fishing paid off if given enough time. They, however, complained of lack of access to appropriate nets for fishing.

Medard (2001) found only three percent (N=200) of women as fishers. They owned boats, nets or both and hired crewmembers. In some instances, women bought fishing gear and hired them out to men for cash or in return for a share of the catch (Medard and Wilson 1996). The main problems in some ventures where the owner of the gears is not accompanying the gear, is theft of gears or cheating in the catch, usually by selling out some of the stock to fishers and fish collectors. For instance, women on Ruhanga beach, Tanzanian waters decided to ground some pressure lamps and nets in fear of theft because the crewmembers cheated them when they visited their camping sites. The gillnets which were valued at Tshs.1,350,000.00 (US\$1,688) were stolen. This setback was very demoralizing.

The active participation of women in fishing in Lake Victoria is limited to hauling of beach seines (Geheb 1997). Women are seen as a source of labor for this exercise and men aspire to marry as many wives as possible in order to secure a reliable labor force (Geheb 1997). The reason given to choosing wives instead of relying on casual labor for this kind of work is they know that the money earned will come back home. It is also observed that their involvement in pulling the beach seine is highly competitive because of industrial fish collectors. This has been observed in Speke Gulf in Tanzania as well as Kiumba and Obenge beach in Kenya. Women also opt to haul beach seines and buy juvenile fish, which are not preferred by the industry. Women are involved in pulling beach seines because owners trust them to reveal the actual amount from fish sales.

## Fish Farming

Despite the efforts of fisheries agencies to promote fish farming in fishing and farming communities, the gender imbalance has been noted. In most cases, men are the owners of the ponds while women and children manage the ponds. For women involved in such activities, group organization has been the strategic option. The organizations include churches, schools, registered and unregistered women's groups, and village government. The following table is an example of fish farming groups in Tanzania:

**Table 1. Involvement in Fish Farming.**

District	Village	Group Name	Men	Women
Tarime	Gwitirio	Umoja	11	0
Bukoba	Kamizilente	Abemunge	15	2
Mwanza rural	Kuzenza-Nyegezi	Kristu Mfalme sisters	0	7

Source: Fisheries Division 2000

A further study is needed to find out who are the actual owners of the fish ponds, how do they manage them, and how is the profit distributed among themselves.

## Gender Roles in Fish Processing and Marketing

At the time of bulk landings, women would salt and/or dry the fish, sometimes even extracting fish oil, and thereby preserving the catch for later use. This helps them gain better earnings and it also makes fish accessible to distant markets in the interiors of the country (Nayak 2000).

Fish processing is usually categorised as full processing or semi-processing. Women are usually involved in semi-processing due to the huge capital investment that is required in full processing. Fish is either sold fresh or in a processed state. Processing is done to preserve and improve the flavour of the fish. Processing involves smoking, sun drying or frying. There is a greater diversity of products in the inland market than on the beach. The reason is fish is highly perishable. Therefore in the inland markets, fish has to be preserved to have a longer shelf life. The long distances to the inland markets from the beach coupled with poor transport infrastructure make it impossible for fish to reach the markets in a fresh state. Processing of certain species is done in the urban-based processing factories.

Preference for fish products influence the form of processing and the gender involved in the processing tasks. For instance, there is a preference for sun-dried *dagaa* to smoked ones among the consumers (Lwenya and Abila 2000). After fishers land the *dagaa*, women wash, sun-dry and later sell them. The process requires patience. Men prefer trading in smoked fish products like Nile perch and tilapia (LVFRP/SEDAWOG 1999), while women prefer sun-dried fish products. Women usually fry the fresh fish that remain after the day's sale.

The difference in ways of processing is partly because of taste and preference among the consumers. It is also partly because of patience demanded in the process, and the labor and capital investments required. For smoked fish products, a good source of fuel, specifically firewood and labor for its transport is required. The capital requirement for purchase of firewood and construction of kilns is high. These factors favor men: men are physically stronger, they have transport (for example, bicycles), and they have access to loan facilities. These could be the reasons women do not deal so much with smoked fish products as men do. Sun-dried fish products often require a lot of patience, involve low capital and require little transportation. These factors tend to favour women more than men.

Processing as a means of prolonging the shelf life of fish products is usually complicated by the additional cost it requires. There is therefore a need to improve the processing technologies and to make them affordable, so as to allow equal opportunities for both men and women.

## Proportion of Women in the Fish Marketing Sector

Women dominate the fish marketing system of Lake Victoria while men dominate its production (Ikiara 1999). Women are found wholesaling and retailing fish. As wholesalers, they purchase fish in bulk from fishers or from co-operative societies and sell it to retailers. As retailers, women purchase their fish from wholesalers and transport it to their selling points. But the trend is quite different for Tanzania. Generally, the trend for women's involvement is already decreasing compared to the early 1980s.

**Table 2. Respondents' (Fish Traders and Processors) Sex by Country.**

Gender	Kenya	Tanzania	Uganda	Total
Men	50(15.7%)	155(78%)	155(52%)	360(44.1%)
Women	269(84.3%)	43(22%)	145(48%)	457(55.9%)
<b>Total</b>	<b>319(100%)</b>	<b>198(100%)</b>	<b>300(100%)</b>	<b>817(100%)</b>

Source: SEDAWOG/LVFRP 1999 (Note: The sample varied because of survey personnel problems).

Table 2 indicates that men have more advantages compared to women. This is due to their being able to directly access the catch in terms of capital, transportation and time.

## Transport of Fish to the Market

Fishing gears, transportation, and credit facilities are among the major factors that disadvantage women in the market, rendering them incapable of competing with their male counterparts in the marketing of fish products. Men own boats, which enable them to sell fresh Nile perch directly to the factory agent who offer better prices. Studies by SEDAWOG (1999) indicate that most women deal with fresh fish, as they do not own bicycles, which could ease the transport of dried fish to inland markets. The majority of women deal with fresh fish but in small quantities near the beach communities, as they have no quick transport means. In most cases, they have to walk long distances to the market place or to a point where they have access to public transport.

Fresh fish traded at the beach is less damaged and requires less cost, time, and labor as there is no processing involved. It requires good business arrangements with the fishers. It also requires a good capital base to withstand the stiff competition by the financially empowered factory agents. These are challenges for women. Fresh fish such as tilapias and other indigenous species are sold at a lower price than processed fish.

**Table 3. Regional Proportion of Male and Females Trading in Fresh, Smoked and Sun-dried Fish Products.**

Gender	Sun-dried	Smoked	Fresh
Male	169(70.7%)	139(52.3%)	86(30.4%)
Female	70(29.3%)	127(47.7%)	197(69.6%)
<b>Total</b>	<b>239(100%)</b>	<b>266(100%)</b>	<b>283(100%)</b>

Source: LVFRP 1999.

Sun-drying is easier and cheaper as it does not require firewood or frying oil. Sun-dried *dagaa* is cheaper than the fresh and is therefore preferred by inland market customers who do not get fresh fish easily. The role of women is evidently crucial in fish marketing. In some instances they are the sole distributors of fish, which means the fisher is dependent on the woman in converting the fish into money to buy other food.

## Fisheries Management and Development: Involvement of Women

The active participation of women in the fishery sector in Lake Victoria is quite evident especially in the post harvest activity. Their presence in the organizational base needs to be enhanced and recognized. In some parts of Lake Victoria, women have been the sole distributors of fish, which means the fishers are dependent on the women for the distribution process.

Training for men and women in fisheries related matters also varies considerably. For instance, for the past five years, the Nyegezi Fresh Water Fisheries Institute enrolled more men than women in their long-term self sponsored courses.

**Table 4. Training Status of the Nyegezi Freshwater Fisheries Training Institute (NFFTI).**

Year	1995	1996	1997	1998	1999	2000
Men	15	7	11	13	14	11
Women	4	1	7	3	6	14
<b>Total</b>	<b>19</b>	<b>8</b>	<b>18</b>	<b>16</b>	<b>20</b>	<b>25</b>

Source: Nyegezi Fresh water Fisheries Training Institute (NFFTI) 2000.

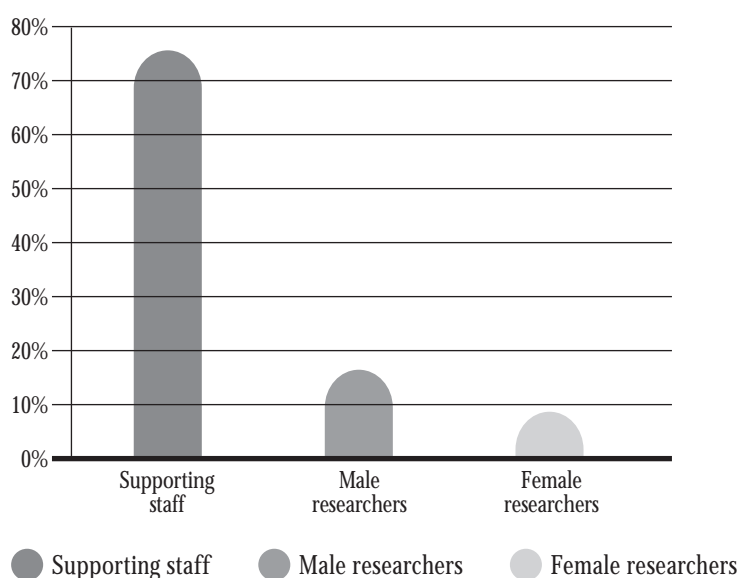
Financial constraint is one of the factors for unequal representation. Besides that, parents believe that men qualify better than women. However, efforts have been put in place to involve more women in short courses sponsored by donor agencies. For instance, in the year 2000, out of 49 students sponsored by Plan International, 23 were women. The management is also trying to find other donors, such as the

Vocational and Educational Training Authority (VETA), to enable more women to participate in various courses such as fish quality control, processing and hygienic handling, gear technology, entrepreneurial studies and cooperative and leadership studies.

## Involvement of Women in Fisheries Research by year 2000

There are more men than women in the Fisheries Division in Tanzania (Fig. 1). However, of the women who are employed, only 2.1% women have held senior managerial posts (Fig. 2). The trend is also the same in fisheries research. Out of 147 research staff, there are 17% (25) men researchers and only 7.4% (11) women researchers (Fig.1).

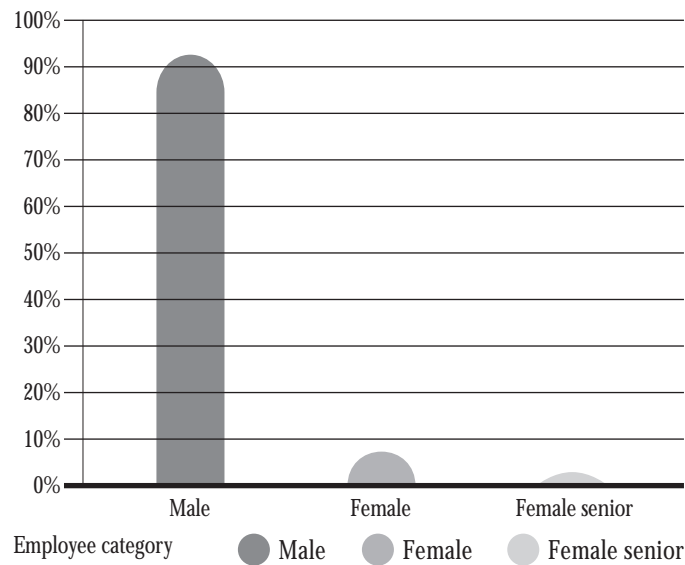
Fig. 1. Employment status in TAFIRI by year 2000.



Source: Tanzania Fisheries Research Institute (TAFIRI), Dar Es Salaam 2000.

In an attempt to address women and gender concerns in the fisheries sector, a community-based research system is desirable. This form of research requires the involvement of the community in all stages of the research. The approach is process-oriented and therefore needs time and intensive monitoring. However, the approach yields useful insights and, has an awareness-building and mobilizing effect on the community (Quist 1999). In collecting solid baseline data for gender research, surveys should be encouraged as they can give a wide range of data on many issues. The formulation of the questionnaires should include women so that they can make the questionnaires gender-sensitive. This means that the concerns of women as resource users would be addressed. The fisheries resources should not only be valued commercially in the community. Their non-cash value, such as food for the family, and their being used as an exchange product, should be taken into consideration. Research volunteers should be trained from the community, as they understand the social structure more than outsiders do. There is also a great possibility of the research volunteers becoming activists in advocating the concerns of women.

Fig. 2. Fisheries Division employment status by year 2000.



Source: Fisheries Division 2000.

## Fisheries Management

Women are the main resource managers. They are the main agents in trading and processing fish. Women are concerned with the day-to-day management of the home and therefore some of the critical changes brought about through poor fisheries management affect them more than they affect men. For instance, women from Kibuyi beach in Tanzania complained about persistent use of illegal gear as a result of irresponsible beach leaders (Medard 2001). In Ihale beach, women spoke vehemently on the lack of public toilets around the beach, which could serve various stakeholders particularly traders and fishers from outside the area (Medard et al. 2000). In Uganda, the *Gabunga* (the beach leader) has always been men. In Tanzania, Beach Management Units (BMU) comprises more men than women. In 20 beaches selected randomly, 85.5% (217) were men and 14.5% (46) women (Nanai 2000) (Fig. 3).

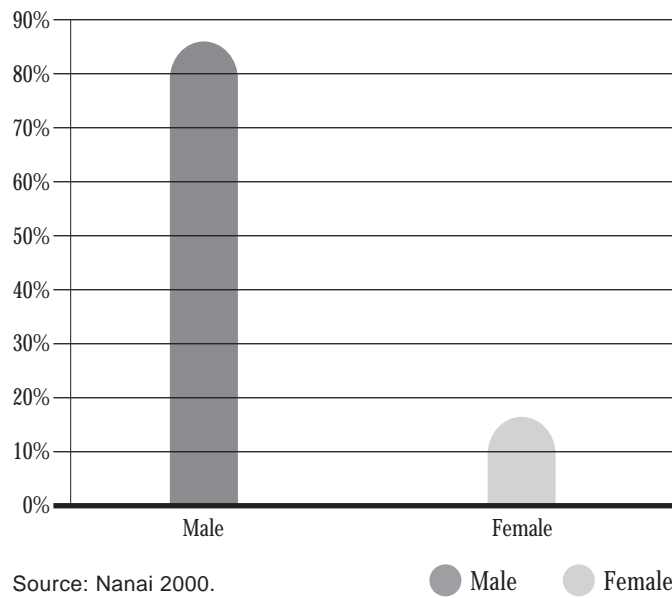
There is a need to empower women in all disciplines. Women are good mobilizers and advisers in communities. Imparting such talents into fisheries is essential.

The employment and credit arrangement between men and women in processing factories also vary considerably. The following figures 4 and 5 indicate various differences six operational Nile perch factories in Tanzania.

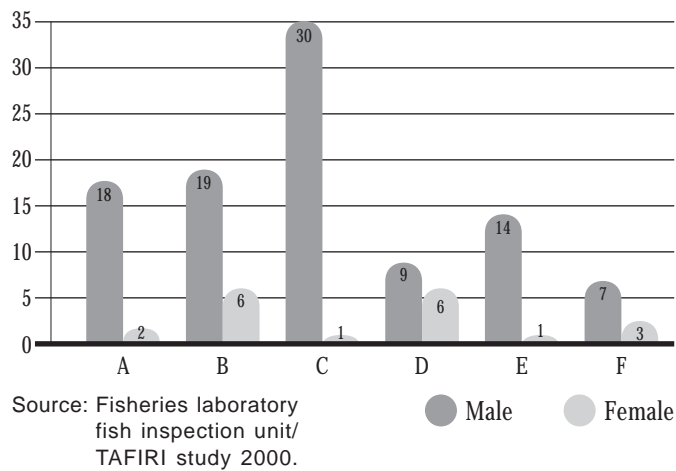
From the study, it was found that 83.6% (97) of fish suppliers were men while 16.4% (19) were women (Fig. 4). A disproportionate gender pattern is also evident in the provision of credit given by owners of factories to facilitate production. Of those people who were credited by fish factories, 79.1% (53) were men and 20.9% (14) were women (Fig. 5).



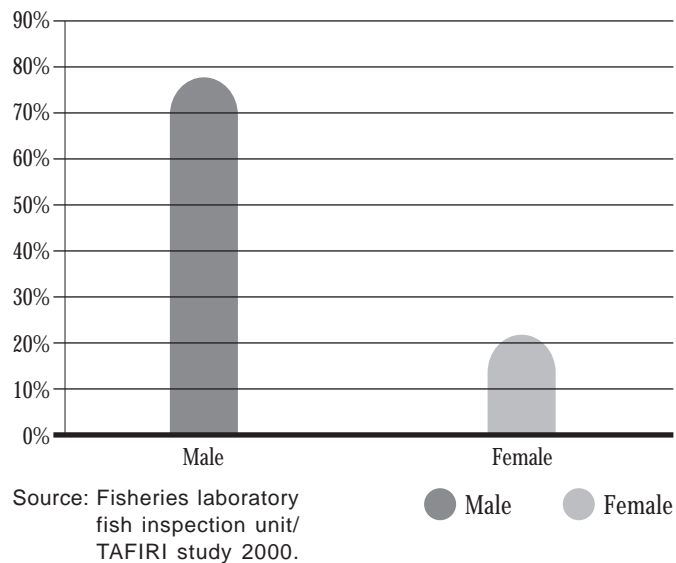
**Fig. 3. Beach management composition in 20 selected beaches in L. Victoria Tanzania.**



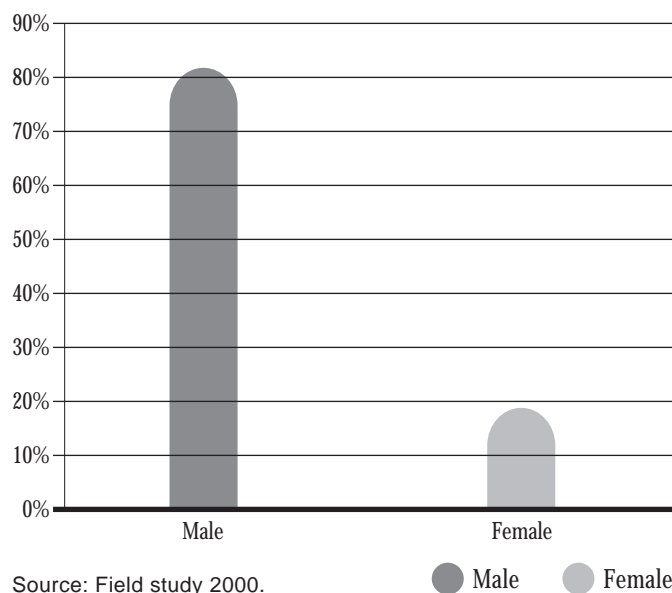
**Fig. 4. Fish supplier (agents) in six selected factories.**



**Fig. 5. Fish suppliers credited by fish processing factories.**



**Fig. 6. Women's involvement in swim bladder processing.**



Women's participation in the swim bladder trade, one of the by-products of Nile perch processed fish, was also low compared to men (Fig. 6 and Table 5). The reason for this was the high costs involved. Swim bladders are very expensive. One kilogram may cost between Tshs. 4,000.00 (US\$ 5) and 10,000.00 (US\$ 12.5) depending on the quality. The figure in table 5 was very low (6) for swim bladders because the study relied on the respondent's (factory owners) compliance and some factories sold the by-product themselves in local and foreign markets. The employment opportunities in fish processing factories also varied. Lower paid jobs such as casual laborers, laundry workers, fish maws cleaners and operators were more directed to women than men (Table 6). Generally, the division of labor between the sexes depends on various factors. These include educational attainments, which women were more disadvantaged; lobbying tactics and more energetic jobs were for men (Table 6).

**Table 5. By-product main buyers.**

Product	Main buyers from the fish factories												Total	
	Men						Women						Male	Female
Factory	A	B	C	D	E	F	A	B	C	D	E	F		
Chips	*	2	3	*-	3		*	2	7	0	7		8(33%)	16(67%)
Carcass/punk	*	2	2	10	3	10	*	5	8	6	6	10	27(42%)	35(56%)
Offals			2						8				2(20%)	8(80%)
Oil products	*	1	1	*-	1	0	*	6	9		8	12	3(8%)	35(92%)
Skin	*	*	*	*	*	*	*	*	*	*	*	*		
Swim bladders			3		3				0	0	0		6(100%)	0(0%)
<b>Total</b>	*	5	11	10	10	10	*	13	32	6	21	22	46(33%)	94(67%)

\* = The respondent did not fill the exact number

\*- = The respondent indicated only one sex to participate in that activity

Source: Fisheries laboratory fish inspection unit/TAFIRI study 2000.

**Table 6. Employment opportunities in fish processing.**

Job description	Number of people involved												Total	
	Men						Women						M	F
	A	B	C	D	E	F	A	B	C	D	E	F		
Fish factory														
Fish Filleters	54	40	12	70	12	40			-				217(100%)	0(0%)
Administrator(s)	15	2	2	2	2	8	10	4	2	5	3		31(56%)	24(44%)
Sweeper/cleaners	20	20	5	5	4	13	40	5	4	5	4		67(54%)	58(46%)
Packers	18	40	0	23	0	6		20	20	35	20	12	87(45%)	107(55%)
Ice machines operators	30	12	4	4	4	0			-			2	50(96%)	2(4%)
Drivers	1	35	10	5	10	10			-				71(100%)	0(0%)
Quality controller	1	10	4	1	4	2		2	2				22(85%)	4(15%)
Environmental engineer	0	20		1		-							21(100%)	0(0%)
Boat crews	15	20	30	15		12							65(100%)	0(0%)
Production supervisors	1	2	8		6	3		6					20(77%)	6(23%)
Factory directors		1	3	1	1	2		2	1				8(72%)	3(28%)
Accountant (s)			3	1	2	2			-	1			8(89%)	1(11%)
Porters/makuli	10	20	-		-	15			-				45(100%)	0(0%)
Security guards	2		6	5	8	5		5		1			26(81%)	6(19%)
Secretaries		50	-		-	1		2	2	2	3		51(85%)	9(15%)
Laborers				-	-			20		-			0(0%)	20(100%)
Trimmers			-	-	4	-			12	36	10	20	4(5%)	82(95%)
Fish maws operators			-	-					10				0(0%)	10(100%)
Laundry			-	-		3			4	10	4	10	3(10%)	28(90%)
<b>Total</b>	<b>167</b>	<b>282</b>	<b>64</b>	<b>133</b>	<b>57</b>	<b>122</b>	<b>50</b>	<b>66</b>	<b>57</b>	<b>95</b>	<b>44</b>	<b>106</b>	<b>787(75%)</b>	<b>260(25%)</b>

Source: Fisheries national laboratory: fish inspection unit/TAFIRI study 2000.

## Gender Concerns-Economic, Physical, Emotional and Psychological Stress

The outdoor fishing jobs oblige women to leave their children alone, or put their eldest daughters, often still girls, in charge of the household. The consequences are not only economic and physical, but also emotional and psychological (Sumudra 1995).

With environmental problems such as water pollution from the sewage and lack of health services, and atmospheric pollution, the situation gets more complicated for women. In such areas with environmental problems, poverty-related diseases like stomach and respiratory infections, cholera, and malnutrition are quite common. Medard (2000b) also reported AIDS victims, unskilled and semi-skilled casual laborers, landless and female households to be among the poorest class. The growing health problems affect women's participation in the fishing sectors, as they are the ones traditionally responsible for the sick.

## Cheating of the Catch and Data

Though Ikiara (1999) does not specify the gender of the culprits, absentee vessel owners face a high risk of being cheated with respect to catch realisation. Given that most women hire out their fishing gears as they do not usually take part in the offshore fishing activities (Medard 2000a), they are the ones mostly struck by the problem of gear theft. This limits the number of units each investor is willing to operate and, perhaps, explains why the data about fishing boats does not provide a clear picture of the structure of the industry (Wilson and Medard 1999). Some data and information from the fish industrial processors are questionable.

## Education

As pointed out by Ikiara (1999), most fishers are generally poorly educated: 8% of fishers have no education at all, 65% have not gone beyond primary education. The issue mostly affects women who, in a study conducted by Medard (2001) in Tanzania, concluded that education was a key-influencing factor determining their roles in the society. Most women are aware of their disadvantaged situation in terms of education, and assert that it has affected the direction of their lives and limits their opportunities (Mutoro 1997). Where fisher groups exist, lack of education has been cited as a source of stagnation in the groups' business endeavors, limiting their communication to the outside world (Medard 2000a).

LVFRP/SEDAWOG (1999) found that training among fish traders and processors is low. For instance, out of 198 fish traders and processors interviewed in Tanzania, only 6% had knowledge of book-keeping and 2% on fish processing.

Specialized training on fish group management and leadership roles, accountancy management procedures and gender awareness is limited to only group officials. Hence, there is a tendency to overburden some of the group members, which affects the performance of the marketing and processing fish groups (Medard 2000a).

## Competition among Traders

The rising need for cash income has caused a great number of traders to join the fishery sector. Due to stiff competition, women have developed coping strategies. Some may invest in their own boats and gears, while others may have special arrangements with the fishers in order to secure sufficient supplies. The arrangement could be gifts of food and loans of money. Competition can be so stiff that female traders may prostitute themselves to fishers in order to obtain favours, low prices, and guaranteed supplies.

## Conclusions and Recommendations

Apart from the in-depth analysis of the situation of women in fishing communities, it is important to promote women as social actors with the potential to improve their family situation, communities, fishery and their country. This paper dispels the notion that women are only minimally involved in the fishing industry. Their involvement needs recognition and women need to be taken seriously in the planning process. The fact, however, is that the involvement of women has not only made the survival of the fishing communities possible but has also helped preserve the way of life of artisanal fishing communities. The numerous outlets for employment in the artisanal sector should be noted and creatively integrated into the economy.

Unfortunately, neither is there any real appreciation of the numerous tasks that women are involved in nor value attached to these tasks. Consequently, minimal efforts have been made by the authorities to help women sustain these roles. There is ample scope and reason to sustain and even subsidize women in fishing communities so that they continue to exist along with the development of the fishing industry.

It is also recommended that, improvement of Knowledge, Information services and Management (KIM) in the fishing industry for small-scale fishers (both men and women) is important for the present and future sustainability. It is crucial that this should be complemented with efforts in raising public awareness on the importance of fishing communities to the overall health and well-being of the country.

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Besides always being astonished at the way poor women carry their burdens as home makers and fish dealers, we acknowledge the inner strength these women have, to transcend the harshness of daily existence and to affirm life. We have been inspired by them and desire to be in solidarity with them.

The workshop also exposed us to the ecologically diverse and rich East African environment. The ongoing destruction of this sensitive area around the lake environs is visible everywhere. Wisdom and courage will be required to alter this course for sustainable fisheries management. We firmly believe that this will be possible if and when those who nurture life are included in the decision making process of riparian countries.

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