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Potential for Women Fish Traders to Upgrade within the Fish Trade Value Chain: Evidence from Kenya

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Fishing is an important economic activity in Kenya which provides employment, income and food to a significant share of Kenyan population particularly the local community around Lake Victoria. Over the last decade the aggregate landings of fish from inland waters have increased tremendously within Lake Victoria contributing about 98% of production from Kenya's inland lakes, and constitute about 93% of all fish landed in 2011. In spite of these enormous contributions, population round the Lake has remained relatively poor in economic terms. Moreover, gender and cultural barriers impede participation by women in some activities within the fish value chain. This paper investigates the location of women fish traders in the fish value chain and the rewards accruing to them. One of the major findings of this paper is that women traders in Lake Victoria are located in the lower nodes of the chain whose returns are low. In addition, women fish traders tend to operate in very micro-scale enterprises. Women fish traders are also challenged by cultural and gender constraints in terms of their potential to upgrade within the value chain. The paper recommends the need for affirmative action to empower women in the fish trade to upgrade. This can be achieved through tailor made training on business practices, assisting them to register as community based organization in order to link them with formal institutions; and finally to assist them acquire modernized technology that can help them grow.

Keywords: Affirmative action, upgrading, women entrepreneurs, women empowerment, value chain

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Introduction

Kenya's fisheries resources are important sources of food, employment, and foreign exchange. Over 90% of the total fish production in Kenya comes from Lake Victoria. Driven by relatively high GDP growth rate in recent years and changing consumer habits, fish has become an increasingly important part of the Kenya's households' diet (USAID, 2008). It is estimated that the fishing industry employs over 50,000 fishermen and women, and another 800,000 persons are engaged in fish processing and trade. In addition, fish exports generated US$ 60 Million in export earning in 2008 (Kenya, 2010).

Lake Victoria is the second largest fresh water body in the world that is endowed with enormous fresh water fishery resource. It has a total surface area of 68,870 km^2 and a total catchments area of 180,950 km^2. This lake water is shared by Kenya, Tanzania and Uganda.[1] As the largest lake in Africa, Lake Victoria is the most single source of fresh water fish on the African continent and it is of great importance to the region's economy and population. Tanzania occupies that largest portion of the lake (51%), followed by Uganda (43%) and Kenya (6%). The Lake contributes immensely to the socio-economic development of the EAC countries.[2] Some of these benefits include:

(1) Supporting a highly productive fishery estimated at 1,000,000 tones annually and valued at US$ 640 million with over US$ 300 million in export.
(2) Providing high protein food, employment, income, and clean water for industrial, agricultural and domestic use.
(3) Contains a high fish species diversity of over 500 endemic fish species of ecological importance; and
(4) Provides an avenue for transport and recreation and hydro-power generation

Fish Production and Trade in Kenya

Freshwater fishery accounts for about 96% of Kenya's total fish production, principally from Lake Victoria. Kenya is endowed with extensive inland waters, covering between 10,500 and 11,500 km2 depending on rainfall, but it is the country's 6% share of Lake Victoria that accounts for almost all (96%) national freshwater fish production. Lake Victoria has a multi-species fishery of tilapiines and haplochromines, cichlids and more than 20 genera of non-cichlid fish, including Mormyrus, catfish, cyprinids and lungfish. Lake Victoria is the third largest freshwater lake in the World, with an area of 68,000km^2. However, the lake is relatively shallow, with a maximum depth of 84m and mean depth of just 40m, which makes it quite susceptible to pollution (USAID, 2008). The area of the lake is divided into the national waters of the bordering countries, with Kenya owning 6%, Uganda 45% and Tanzania 49% of the area. There has been a steady decrease in fish diversity and quantity due to increase in fishing effort as a result of commercialization of fishing in the last two decades.

[1] According to VicRes (2009), the Lake Basin covers part of Kenya (21.5%), Tanzania (44%), and Uganda (15.9%) Rwanda (11.4 %) and Burundi (7.2%).
[2] See for example Kabahenda and Husken (2009) Abila et al (2006) and VicRes (2009) for details.

Lake Victoria accounts for more than 90% of all fish harvested in Kenya with an annual output of approximately 175,000 Metric tones. The fresh water lake fish account for the largest share of the fish harvest. A wide variety of fish species are harvested in Lake Victoria, of which the main ones are (1) Nile Perch, (2) Tilapia, and (3) Omena.

The Nile Perch is mainly for the export market of industrialized countries such as European countries where consumers perceive fish as a healthier product relative to alternative meats. The demand is relatively high for fish fillets (Schuurhuizen, et al. 2006; USAID 2008). Fresh Tilapia is the preferred species for the domestic market in Kenya. The other important fish species is Rastrinobola argentea (Omena). Its production has been on the rise in recent past and has surpassed the dominant Nile perch. Most of Omena in Kenya is marketed through the animal feed industry channel (70%) and only 30% is available for human consumption resulting in serious competition for the commodity between direct human food and raw material for animal feed.

Research problem

The Lake Victoria Basin region is characterized by high poverty amongst its people even though there are natural fish resources. These issues serve as an indication that there are some constraints that deter entrepreneurship amongst women in the fish trade.

Although women participate in the fish production and trade activities, their involvement has been limited to particular nodes of the chain due to cultural, gender and social factors that somehow inhibit their moving up and down the value chain (Ngigi, 2008). The fish trade in particular, is characterised by high participation of women in the fish trade as opposed to actual fishing. There are some instrumental factors that influence women location and participation in fishing sector in Lake Victoria. These include socio-cultural (factors imposed on women by the society), psychological (factors imposed internally by women concerns and aspirations) and economic aspects governing the trade (Madanda, 2003).

In spite of these enormous contributions, population round the Lake has remained relatively poor in economic terms. Moreover, gender and cultural barriers impede participation by all people in different activities within the fish value chains. Most disadvantaged are women whose presence in the fish trade activities has remained generally low owing to the socio-cultural constraints. This study was designed to investigate how gender and cultural issues affect women's participation in the fish trade value chain.

Gender inequalities are often critical to understanding and addressing the weak links within the fish value chains as well as the most critical areas for upgrading within the value chain and poverty reduction. Gender analysis is however one of the weakest point in most value chain analysis, and largely ignored in most value chain manuals. Gender differences and inequalities affect the ways in which value chains operate at every level. Many of the tricky and complex issues highlighted by gender analysis are often not confined to gender itself, but reflections of other inherent shortcomings in the types of economic analysis which commonly dominate value chain analyses and

development. Gender analysis provides a starting point for more accurate poverty analysis and integration of key dimensions of extra-market factors, power relations and motivations into the currently incomplete understanding of economic growth.

Understanding and incorporating these dimensions are essential not only for gender but to designing effective sustainable pro-poor growth strategies. Although women are engaged in fish trade value chain activities, their contribution is more often than not undercounted. Similarly their returns within the value chain are lower than those of men (Schuurhuizen, et al., 2006; Spencer et al. 2000). Through value chain analysis, one is able to determine value chain nodes where women are located, constraints they face and possible intervention to improve their welfare in the chain.

Objectives

The value chain analysis was undertaken in order to understand the location and factors that determine women participation in fish trade value chains. Value chain analysis enables one to discuss potential and bottlenecks with regard to upgrading within the value chain. Finally, issues of governance in the value chain are discussed with a view to highlighting possible policy and regulatory interventions necessary for promoting women participation in high earning value chain nodes.

Methodology

This paper is drawn from a research project entitled *"Gender, Women and Culture in the Lake Victoria Fish Trade: A Value Chain Analysis"* which is a three years project funded by the VicRes during the 2007/2008 round. The study employed both qualitative and quantitative methodologies. A cross sectional study design was used since it was a multi-site and country study.

Survey respondent selection followed both a purposive and random sampling techniques to arrive at 100 respondents based on the research proposal. The research teams in Kenya held discussions with Ministry of Fisheries officials based in Kisumu where study sites were identified. In consultation with the respective Beach Management Units (BMUs), comprehensive lists of potential respondents were compiled and then random sampling was used for the survey to ensure that each of the female subjects had equal chances of being included in the study. In obtaining a sample size, researchers listed all women traders into a sampling frame where each trader was assigned a number and thereafter the desired sample size was selected randomly by random numbers (http://www.random.org/sequences/).
Where the randomly selected respondent was not available the next available trader was selected. Due to the cultural issues, some women who were randomly selected opted for their spouses to be interviewed instead of them. This is how male respondents ended up in the sample. At the end of the exercise, a sample of 100 respondents which included 91 female and 9 male fish traders was interviewed using structured questionnaires.[1]
In addition, four (4) case studies and two (2) focus group discussion were conducted

[1] The questionnaire and interview guide used in data collection are attached in the Appendix 2.

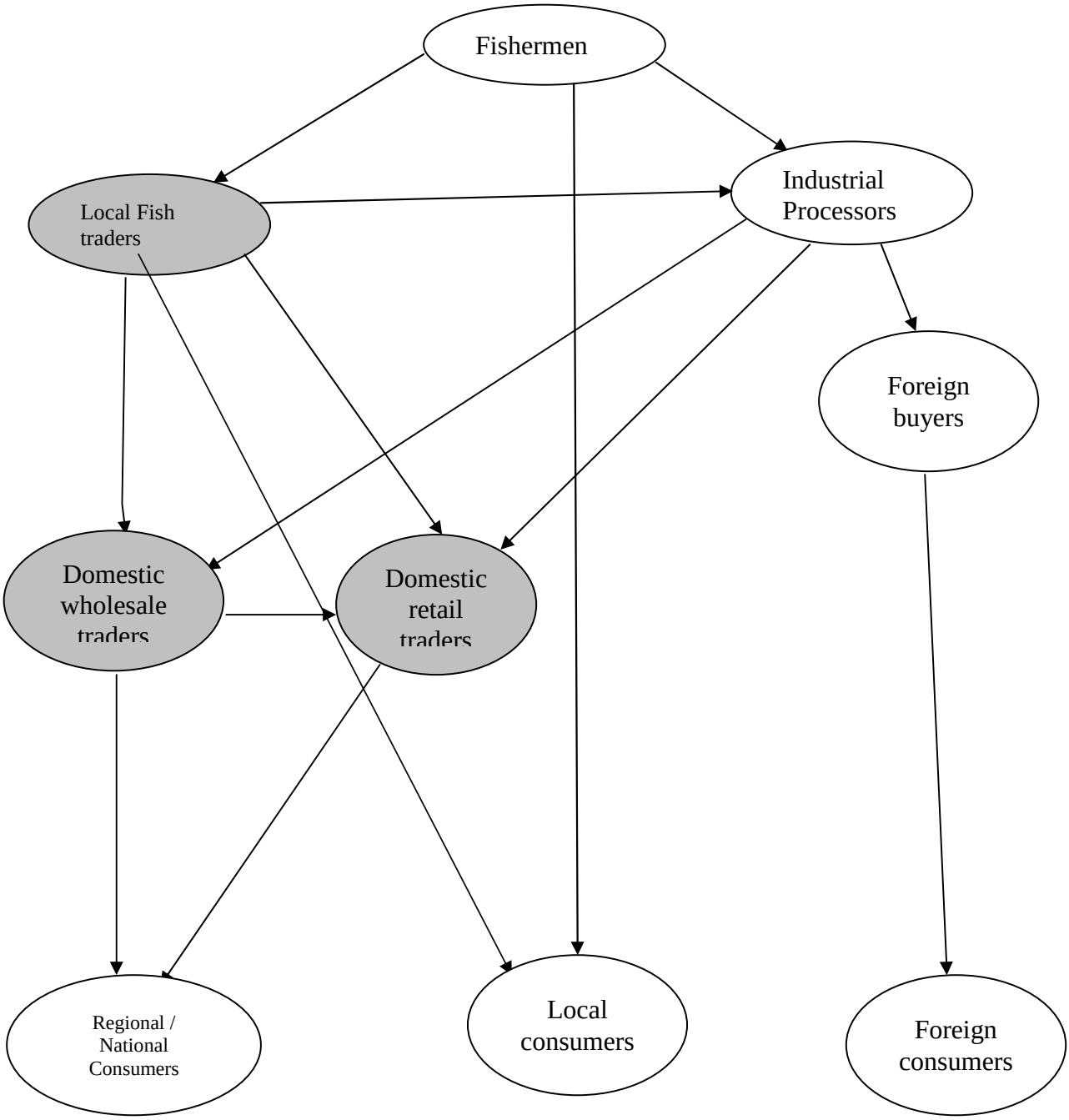
to collect qualitative data. This was facilitated by use of harmonized interview guides for women actors, fish folks, members and leaders of Beach Management Unit and local government leaders. Case studies were also used to capture in-depth understanding of involvement in the fish value chains.

Data analysis was conducted using quantitative and qualitative approaches. Filled questionnaires were coded and the data was entered in SPSS (Statistical package for social scientist) template. After data entry, data editing, cleaning and then analysis followed. Quantitative analysis provided both descriptive and association analyses. Qualitative data was analyzed using pre determined themes which were coded after a thorough reading of all interviews notes. Key issues of qualitative data analysis related to role of culture in participation of value chains. In assessing if there was any variation in women composition in the fish value chain activities, the study adopted an Index of Qualitative Variation (IQV). The Index varies from 0 (no variation) to 1 (maximum variation) and has been used most commonly with variables measured at the nominal level. However, the index of qualitative variation can be used with any variable when scores have been grouped into a frequency distribution.

Fish Value Chain

Fishing is an important economic activity in Kenya which provides both employment and incomes to a significant percentage of the local communities. It is characterised by dominance of foreign demand, the persistence of artisanal fishing and processing and prominent industrial processors. The interaction among different actors in the chain is governed by institutions and organisations in the fish trade. Figure one demonstrates how a typical fish value chain is structured.

Figure 1: Fish Value Chain



NB: The shaded nodes are where women dominate.

In this paper, we use a conceptual framework drawn from value chain analysis which invariably defines a sequence of all activities required to bring a product, or a service, from its conception, through different phases of production and finally the delivery to consumers (Gereffi, 1994; Gereffi and Memodevic, 2003). Starting with the work of Gereffi and Korzeniewicz (1994) the concept of value chain recognises that the design, production and marketing of many products involves a chain of activities embedded in value addition and controlled by firms and enterprises in different localities. The value chain analysis

describes a whole range of activities involved in the design, production, and the marketing of a product. In other words a value chain describes the sequence of productive value-adding activities leading to, and supporting, end use of a commodity. They tie production process with consumption (Kinyanjui and McCormick, 2010). These activities are divided among enterprises located in different places either within a region, nation or the world.Value chains is usually extended with a whole range of activities within each link and links between different value chains. At each stage of a value chain there is value addition.

Conceptually, a value chain shows the process of creating value, and clearly pinpoints that creation of value is not by production alone. A product is brought to the market through a combination of activities in which production is just but one of the value added links (Kaplinsky and Morris, 2007). The value of a product increases at each point of the process, which is why the whole process is described as a value chain (McCormick and Schmitz, 2002 p. 41). A value chain can be straightforward or complex. Value chains exist at local, regional, national and global level. Value chain is an important model that can help one to understand activities, participation and power relations among different actors in a chain. It is very useful conceptual tool in understanding the factors that impact the long-term profitability of an enterprise. Thirdly, value chain can help answer questions revolving around: how products reach final consumer; the economic relationships between players in the chain; threats to the entire chain and key determinants of profitability across the various nodes of the chain. Value chains take a variety of forms: local, national and international depending on how actors in a chain are located. The term ‘global value-chain’ is used when value adding processes are organised in such a way that design, production and marketing involve a chain of activities taking place in different parts of the world. Seemingly, increasing amount of international trade occurs within trading networks whose understanding is only possible through value-chain research (Kamau 2009, McCormick and Schmitz 2002, Kaplinsky and Morris 2007).

A value chain is a sequence of target-oriented combinations of production factors that create a marketable product or service from its conception to the final consumption. The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production and delivery to final consumers (Porter, 1980; Kaplinsky and Morris, 2000). This includes activities such as design, production, marketing, distribution and support services up to the final consumer. The activities that comprise a value chain can be contained within a single firm or divided among different firms, as well as within a single geographical location or spread over wider areas. The term Value Chain refers to the fact that value is added to preliminary products through the combination with other resources (for example tools, manpower, knowledge and skills, other raw materials or preliminary products). As the product passes through several stages of the value chain, the value of the product increases.

The value chain is a concept from business management that was first described and popularized by Michael Porter in his 1985 best-seller, 'Competitive Advantage'. A value chain is a chain of value adding activities which generally describes a product from its conceptualization to the time it reaches the final consumer. Fish like any other product passes through a number of activities of the chain in order and at each activity the product gains some value.

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A value chain can be broken into four elements namely: design and product development; production; marketing and consumption/recycling. These elements describe the transition processes that a product undergoes as before it is finally consumed. These key elements can further be broken into various sub-components and sub-processes depending on the product under analysis (McCormick & Schmitz, 2002).

A typical value chain has three distinctive dimensions which include the *input-output* structure, the *geographical spread* and the *governance.*[1] The *input-output* structure is concerned with activities that add value to inputs in order to generate output. A product is first designed, then raw materials are purchased, and production takes place, the product is then distributed through wholesalers and retailers (McCormick and Schmitz, 2002). As the value chain describes the activities required to bring a product from its conception to the stage of final

[1] For more details on dimensions of a value chain, see Gereffi and Korzeniewicz (1994), Gibbon (2001), McCormick and Schmitz (2002), and Kaplinsky and Morris (2002).

consumption, it thus include, the descriptive configuration of product development stages, namely, design, inputs, production, marketing, and distribution. A value chain has less visible input-output structure because it is made up flow of knowledge and expertise necessary for the physical structure to function (Kaplinsky and Morris, 2002). The flow of knowledge generally parallels the material flows, but with different intensity.

The second dimension of value chain is the *geographical spread*. The geographical spread within a value chain ranges from global, regional, or local. Value chain framework are said to be global when value adding activities take place in different countries. Local, regional and national chains are geographically limited in the sense that all their activities take place within smaller area (McCormick and Schmitz, 2001). It is possible to identify national, regional, or local value chains. They operate in the same way as global chains, but their geographic reach is more limited. The fish industry is faced with a challenge of ensuring satisfaction of consumers in the international market. With the growing interdependence of fish trade actors for increasing competitiveness has become increasingly important paradigm. Value chain analysis, enables us to examine how efficiency is significant in penetrating global fish market. It also demonstrates the dynamic factors that determine the sharing of benefits among actors participating in the fish trade.

The third dimension of value chains is the control that different actors have over the activities in a chain. Actors control their own activities and they are directly or indirectly controlled by other actors. Conversely, an actor may also exert control over activities of other actors in the chain. This pattern of direct and indirect control in a value chain is referred to as the governance. Governance is exercised in different ways and these differences in governance are critical in determining upgrading prospects for fish producers in developing countries (Kiggundu, 2007). Governance in a value chain may be in the form of market, networks or hierarchy. The market governance occurs when buyers and sellers deal with each other in arm's-length exchange transactions, and that no actor exerts control over others. In this case, the chain is characterized by market-type relationships. In the case of *network*, co-operation occurs among equal actors in the chain, while in the 'quasi-hierarchy', buyers have a high degree of control over suppliers. In the hierarchy, buyers assume direct ownership of some operations in the chain. Depending on the nature of governance, value chains can be described as either ''supplier-driven'' or buyer'- driven'' depending on which actors control key activities of the chain. The fish value chain is generally a buyer driven chain with the buyer playing key role in determining how other actors within the chain operate.

Basic Characteristics of Women Fish Traders in Kenya

Of the 100 fish traders randomly sampled in our study, 91% were women and only 9% were male. The inclusion of males in our sample was to serve as a control for perception given by female traders. Given than the study mainly targeted female fish traders, the proportion of male in the sample was purposively set to be less than 10%.

The sample was distributed among the three major landing sites around Lake Victoria namely Usare, Ogal and Pagal. The choice of these study sites was informed by activities being undertaken by other stakeholders such as WIFIP. In addition to participants from these landing sites, other respondents were drawn from the Oile fish international market (otherwise known as Jubilee market).

Most of the respondents (66%) were in the 21-40 years of age implying that majority of them were in their productive age. Only one respondent indicated her age as below 21 years of age.

Table 1: Characteristics of Fish Traders in Kenya

Variable & Category		Number	%
Sex	Male	9	9
	Female	91	91
Age (years)	10-20	1	1
	21-30	31	31
	31-40	35	35
	41-50	21	21
	> 50	12	12
Marital status	Single	7	7
	Married	64	64.4
	Divorced	2	2
	Widowed	27	27
Experience in business (years)	< 5	31	31
	5-10	32	32
	11-16	16	16
	17-22	7	7

Variable & Category		Number	%
	> 22	14	14
Level of education	No formal	13	13
	Primary	67	67
	Secondary	5	5
	Dipl. & above	1	1

Marital status has implication on the choice of enterprise and extent to which women participate in entrepreneurship. There is a widespread belief that women who are divorced, widowed or single dominate in the fish trade. This is informed by the perception that they have limited options to support their livelihoods and have relative more independence compared to women who are married. Contrary to this believe, our study found that 64% of the respondents were married while 27% were widowed and only 7% were single. Those who were divorced accounted for only 2%. Women fish traders indicated that they had to seek consent of their husbands to be involved in fish trade because of the negative perception that the community have on fish women traders.[1]

On education, 67% of the respondents indicated that they had completed primary school education, while 13 per cent did not have formal education. There was only one respondent that indicated to have attained a diploma. Those that had completed secondary education were only 5% of the sample. It is therefore evident that fish trade is dominated by either illiterate or people with only basic education. This may to a large extent limit their potential for upgrading. Given their lack of education most of the fish traders cannot venture into markets in other regions where there may be expected to communicate in English or Kiswahili. Export market is even a huge challenge for these traders, who are more often than not exploited by middle men. Education contributes to development of entrepreneurial human capital, which is the ability to discover and exploit market opportunities through taking the appropriate risky decisions (Ngigi, 2008). This ability is influenced by innate and acquired skills. The innate skills include creativity, alertness and imagination. Other skills are acquired through formal education, access to social capital and

[1] It widely believed that women must pay with sex to get fish (product) from the fishermen, and also in to transporters so that their loads can be transported to the fish markets (see Kivolonzi, 2009). Because of this negative connotation, many married men would not easily allow their wives to engage in fish trade.

general experiences (Kirzner, 2002 cited in Ngigi, 2008).

Business experience varies considerably among fish traders in Kenya. 31% of the respondents indicated that they had less than 5 years experience in fish trade. Moreover those with less than 10 years of business experience accounted for more than 60% of the respondents.

The status of the business ownership is key in determining activities that one is involved in within the value chain. First, it affects the flexibility of the owner in the case sole proprietorship. Secondly, it may affect the amount of resources available to the business. Eventually, this may have an implication on the performance of the business. Most of the fish traders in Kenya (98%) operated a sole proprietorship business. Available evidence shows that most respondents operated their businesses single handedly. Family businesses accounted for only 2% of the sampled businesses. Most of the businesses were not registered with the local authority. The only registration that appeared to be related to licenses was the ministry of fisheries. This license was to authorize fishing and also transport of fish from landing sites to the markets.

For a business to be established, availability of initial start-up capital is critical. The surveyed women entrepreneurs identified several sources of their initial capitals. The survey indicates that most of the respondents mobilized initial start-up capital through own savings (43%), followed by income generating activities such as small-scale agriculture (24%). Others obtained their start-up capital from relatives, husbands and savings from merry-go-round.

Potential for Upgrading

Gender division of roles generally characterizes fish trade. Though this is slowly ebbing away, it can still be seen to be governing fish trade especially in fishing and collection nodes. Fishing is a preserve of men while women dominate handling, processing and marketing nodes of the chain. The table 4.3 indicates the activities that the women respondents engage in, along the tilapia value chain. The answers are however multiple, as the question required the respondents to tick all the activities that she performed in fish trade.

The value chain activities considered in this study are actual fishing, fish processing and fish marketing. The study has found that, a large number of women in all the three countries are engaged in fish marketing as out of 300 sample surveyed, 244 (81.3%) fall in this category. On the other hand, it was revealed that there are very few women, only 9 (3%) who are engaged in actual fishing. This is because, traditionally actual fishing is considered as men's job as most of the women suggested in the ground and actual fishing requires time, be outside the home environment, capital and working in difficult environment, circumstances which favors men than their women counterpart.

To them marketing and trading for example is easy and suitable. Only 9 (3.0%) of all those who were interviewed showed to have been doing actual fishing, this includes the few men which were captured in the sample. There are also a

small number across countries. 21 (7.0%) which does the fish processing, like sun drying, smoking and frying, the activity seem to them as not profitable, so you find many are engaged in trading and marketing

In patriarchal societies an elaborate division of labor, sex (male or female) is usually the basis for the allocation duties. As it were this division of labor was found to exist in fishing industry with some activities being out rightly for men and others for women. For example, no woman was supposed to indulge in actual fish harvesting due to the fact that are many taboos and beliefs associated with womanhood and holiness. Due to the monthly menstruation women were and are still forbidden from fish harvesting since "they are deemed not to be clean when they are in the periods". Thus to avoid annoying the water gods all women were prohibited from fish harvesting.

Furthermore, it was reported that fish harvesting is done by scantily dressed men (one ought to dress lightly as possible so that in case of accident it is easy to swim to safety and body retrieval). While it is easy for men to fish with bare chests it was inconceivable for women to fish with their breasts open. To capture this, a respondent reported that: -

> *The gods would not be happy with us if women with their nakedness were to fish. Remember that these waters are "sacred" and should be used thus. Women nakedness may not only lead to little or no catch but also drowning of the boat carrying women fishers.*

While the above beliefs have informed the fishing activity for centuries, they have formed a belief system where even women accept it and justify their participation in fish value chain.

Gender roles are a major constraint to women participation the fish value chain. Gender, which is the socially and culturally constructed differences between women and men impacted on the kind of activities and amount of time a woman invested in her business or activity. Communities living around the lake are largely patriarchal societies where gender inequality is highly witnessed between women and men. Many women respondents reported how in addition to their business they had to attend to the domestic chores of caring and looking after children. Though many voices were heard regarding women's domestic chores, one of the respondents had this to say: -

> *As women we have to balance between our business and the family. We have family chores, this is a challenge to all women, specifically because the general feeling is that women are expected to stay at home or work in the nearby places where they can easily take care of cooking for the family, bringing up the children and making sure that the family is well cared.*

At the time of bulk landings, women undertake salting and/or drying of 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 and far regions of country.

Conclusion

Women fish traders in the Lake Victoria often experience some gender and cultural conflicts. With regard to gender, a clear and remarkable difference is seen on actual fishing. The society considers actual fishing as men's job and cannot be done by women. In fact this is a combination of both gender and cultural issues. Though cultural barriers have shown to have insignificant effect in constraining women from fish trade activities as the large percentage approved it to be supportive, still there is a need to address the two issues to the stakeholders concerned. This will be done in the later days as indicated in the work plan. Women also face difficulties in obtaining start-up capital from financial institutions. Collaterals required by the banks are not affordable and in some other financial institutions, they are told to form groups in order to obtain credits, with this criteria it is difficult to obtain mates with same characteristics since the responsibility for paying back the loan is of the group and not individuals. Such issues are worth mentioning and need to be addressed as well.

All in all, women need to be encouraged, empowered with capital investments and allowed opportunities to trade and participate fully in all the fish trade activities along the chain including actual fishing, processing (smoking, drying, frying etc) regardless of their gender and the existing cultural norms. When they are given opportunities, we hope that they are going to be good entrepreneurs and in one way or another, poverty is going to be alleviated through them.

Women importance and contribution to the fish industry has got little or no attention from the respective governments and organizations. The study revealed further that fish catching is predominantly a male job and women are much involved in trading, marketing, transporting and fish processing. Despite the fact that cultural values do not prevent women involvement in the fish trade, there has been a feeling that in some places there are norms that prevent them from doing the actual fishing. With regard to business networking, all women interviewed were found to be networking with others.

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

This study has also revealed that majority of the fish traders had experience of at least 5 years in the trade and generally have low levels of education. In fact, 86% of all the respondents had attained at least primary education. Therefore, with this level of they are able to understand some trading activities in the fish value chains. However, cultural and gender issues seriously impede their potential.

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