

Women in fisheries

Partners in mutual trust

Globalization has opened up new opportunities, but it has also undermined many women's economic independence

The process of globalization in fisheries is transforming the structure of markets and gender relationships. Social, political and economic processes now operate locally and globally. Women in the Kagera Region of Lake Victoria, in northwestern Tanzania, face major challenges in the fishery, due to the growing demand for Nile perch in the export market.

This article looks at the relationship between globalized markets for Nile perch and gender relations in the Lake Victoria fisheries of Tanzania. It explores the challenges women have faced and describes some of their responses to them. Particular attention will be paid to the Tweyambe Fishing Enterprise (referred to as the Tweyambe Group), a well-known women's group based in Kasheno village in Ruhanga subvillage (a *kitongoji* comprising 150-200 families) on the shores of Lake Victoria in the Muleba District of the Kagera Region.

The Tweyambe women, like those in other districts, at present face great challenges within the fishery. These include limited access to capital, interference by men in their activities, theft of fishing gear, and sociocultural problems. This article will explore their responses to these challenges, discuss the potential for new gender-based relationships linked to initiatives like the formation of the Tweyambe Fishing group, and explore the relevance of this case study for future initiatives intended to promote greater gender equality.

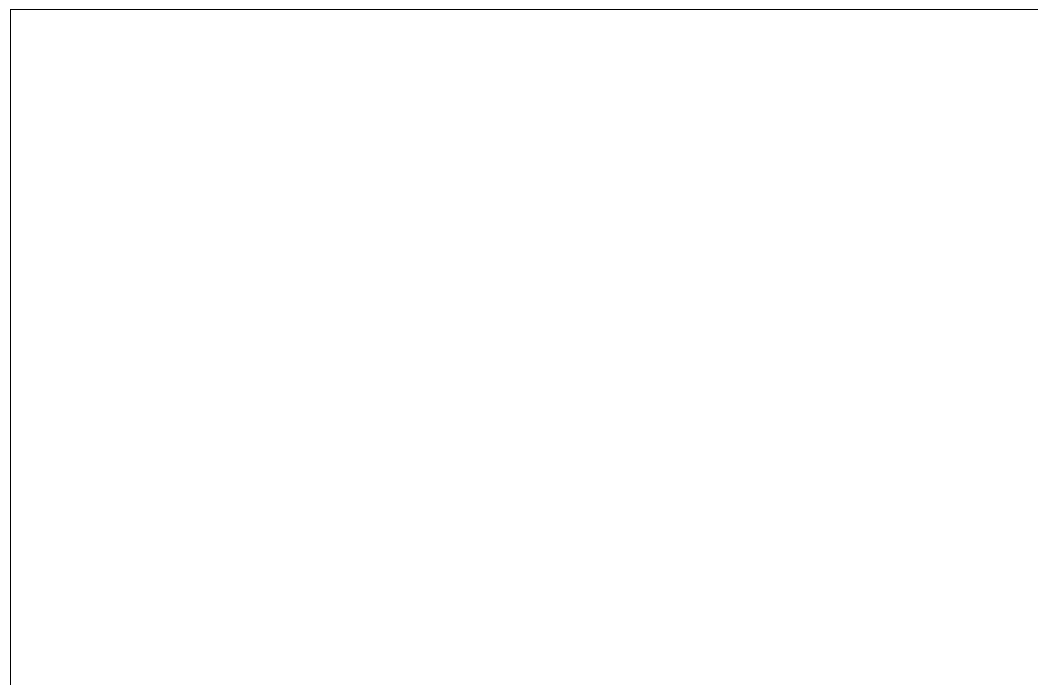
Lake Victoria is the second largest freshwater lake in the world, with a surface area of 68,800 sq km. It is shared between three countries: Tanzania (51 per cent), Uganda (43 per cent) and Kenya (6 per cent). Lake Victoria has a catchment

area of 258,700 sq km and a mean depth of 40 m. The shoreline is approximately 3,450 km long, of which 50 per cent (1,750 km) is in Tanzania. The lake accounts for an estimated 60 per cent of Tanzanian inland fish production. Fish and fisheries products from Lake Victoria are a significant source of food for the country, yielding 122,000 tonnes in 1995. They also contribute to the country's foreign exchange coffers, generating about US\$60 mn in 1997. These fisheries provide income and employment for over 32,000 fulltime fishers. An estimated 500,000 people are employed, formally and informally, in fisheries-related activities.

The Kagera Region is located northwest of Tanzania and shares borders with Uganda in the north, Rwanda and Burundi in the west, and the administrative regions of Kigoma, Shinyanga and Mwanza in the southwest. The region is isolated from the rest of the country by poor transportation and communication networks. Kagera is subdivided into six administrative districts: Bukoba Rural, Bukoba Urban, Muleba, Biharamulo, Karagwe and Ngara. The total population of the region is estimated to be 1.6 mn. The livelihood of over 90 per cent of Kagera's population is derived from agriculture and fishing. Inhabitants from the Haya ethnic group make up 95 per cent of the population of the Kagera Region.

Poor recognition

Women comprise 51 per cent of Kagera's population, but contribute 70 per cent of all the labour input to farming, the region's dominant economic activity. Despite this, women's contributions are poorly recognized and greatly undervalued. Women assume an inferior position within certain customs, taboos and within the sexual division of labour. Research on Lake Victoria suggests that



women dominate the fish trade . If true, this would mean that the fishermen are dependent on women to convert the fish into money and to buy other food. However, recent work on the Tanzanian sector of Lake Victoria suggests that women no longer dominate: out of 198 fish traders and respondents interviewed in 1998, 78 per cent were male .

Historically, fish was primarily consumed fresh, except for some sales to distant markets of sun-dried or smoked fish. The sexual division of labour varied from place to place, depending on the ethnic origin of the group. Women were more likely to participate in fish trading in the eastern portion of Lake Victoria, than in the central and western portions. Traditionally, the Sukuma from the central portion were mainly farmers, and the Haya from the western portion did not value fish-related activities. Local culture generally prohibited women from being away from their homes, limiting their ability to trade fish. The dominant means of transport were travel on foot and by bicycle, which tended to limit fish traders to local markets.

Since the 1980s, the Nile perch fishery has attracted tremendous investment. It has become one of the most important economic activities in the area. Industrial fish processing factories and fishing camps generate revenue for communities

in the regions surrounding Lake Victoria. Recent research on the Tanzanian sector of Lake Victoria indicates some of the problems that small-scale fish traders and processors have faced in attempting to benefit from the export-oriented Nile perch fishery that developed in the 1980s. Irrespective of gender, the two dominant problems are transport and the availability of funds. However, both quantitative and qualitative data indicate that most fish suppliers in the Nile perch fishing industry are men. In 2000, male suppliers made up 84 per cent of those providing raw material to the processing sector, compared to 16 per cent women suppliers. In addition, men largely control the new technologies associated with the Nile perch fishery. Fish factory owners attribute the dominance of male fish suppliers to the access men have to the capital needed to buy boats, provide seed money and hire labourers. Other advantages for men are their ability to travel frequently, having better access to business collateral, and being more aggressive than women in persuading owners to grant them loans and advances for fish procurement.

Other work

There are important differences between men and women in the way they engage in the Tanzanian Lake Victoria fish trade. Women, more than men, combine fish trade with other types of work. A majority of women (57 per cent) participate only in

fish trading, but 43 per cent combine fish trading with other business activities. In contrast, on the Tanzanian side, 74 per cent of men participate only in fish trading, while 24 per cent combine fish trading and other business. The high percentage of women who combine fish trading with other business may indicate women's greater vulnerability and greater income insecurity within fisheries-related activities.

In contrast to the fish-supply sector, women made up a majority of those purchasing and processing the waste from the fish plants in the first three years of factory development in Tanzania. Nile perch fish frames (skeletons), locally known as *punk*, were considered waste and factories had to pay to dispose them. To eliminate this cost, factories began selling them to local processors. Women were the first to look for Nile perch byproducts in factory doorways. This business started in 1993, one year after fish processing firms invested in Tanzania.

A study carried out in *punk* processing camps indicated that 70 per cent of *punk* dealers were women. In six operational Nile perch processing industries on the Tanzanian side of the lake, about 67 per cent of those buying and utilizing byproducts from the fish-processing industries were women. The women collected fish frames in troughs, baskets,

hand-drawn carts and wheelbarrows, and took them to the processing camps.

By 1997, 4–7 tonnes of fresh fish frames cost Tshs60,000–90,000 (US\$75–112.50) wholesale. After processing (smoking and sun-drying), the processed *punk* could be sold for Tshs100,000–120,000 (US\$125–150). Women used the revenue from this activity to build houses, feed their families, buy clothing, and pay for school fees and medical care. Over time, however, the Nile perch processing factories improved their filleting process so that no meat content was left on the frames. This meant the *punk* community could not get enough fish frames for human consumption. In response, some women started to grind *punks* in locally made mortars to feed their chickens.

More recent changes in this sector have further eroded the capacity of women to generate livelihoods from fish frames. In 1996–97, processing *punk* for animal feed got commercialized, resulting in new investments in local fishmeal factories.

Fishmeal products

The major markets for processed fish frames were Shinyanga, Tabora, Dodoma, Morogoro, Singida, Mwanza, Mara and in some parts of Kagera Region. The main markets for fishmeal products were Dar es Salaam, Arusha, Mwanza, Morogoro, Dodoma and neighbouring countries such as Zambia and Kenya. In 1998, the

higher standards of hygiene required by the European Union (EU) encouraged Nile perch factory owners to seek wholesale buyers for their byproducts.

This ensured that the factory doorways were quickly cleared, reducing congestion by both humans and byproduct waste. When the factory owners started selling their fish frames to wholesalers, many women were forced out of the trade. Most could not compete with the men buying these products for animal feed as well as human consumption.

The strong export orientation of the Nile perch industry and limited opportunities for women to derive employment and incomes from the sector have encouraged some to focus on purchasing juvenile Nile perch harvested with illegal gear. The minimum weight for legally harvested Nile perch is half a kilogram. Purchasing this fish requires access to capital to compete with the factory agents, who are the main buyers. These agents are not allowed to purchase juvenile Nile perch of less than half a kilogram. Since legally harvested fish has become more expensive for the small traders who serve the local markets, and because falling incomes among local consumers limit the price they can pay for fish, the women traders have resorted to buying fish harvested with illegal, small-mesh gear.

Studies at Ihale beach in Tanzania indicate a preference for illegal beach-seines and nets with a mesh size below the recommended minimum mesh size of 5 in (127mm). The fishermen claim that smaller mesh sizes earned them higher incomes from their fish sales to industrial fish collectors. However, marketing this fish provides a precarious source of income for small traders. Fish less than half a kilogram caught in beach seines and undersized gillnets may be sold to industrial agents who can offer higher prices.

Some women fish traders have resorted to staying in the beach-seine fishing camps overnight so that they can get priority access to the available catch. Others have dropped out of the fish trade and moved to trading in other goods. If illegal gear is eliminated, the surviving women traders

and processors could lose their access to fish.

Women also work in the Nile perch processing factories. Women processing workers tend to be segregated into the low-status, poorly paid types of work commonly associated with 'caring' professions such as laundry work, fillet trimming, packing, sweeping and cleaning. Men dominate the highly paid jobs, including those involving fish procurement, quality control, environmental engineering, accounting, production supervision, ice machine operation, administration, and fish filleting and skinning (Table 1).

Women workers were poorly represented among support staff and in actual production, compared to men. The most valuable Nile perch byproduct is processed and dried swim bladders. Swim bladders receive a high price in export markets. Of those who process and dry these bladders, 81.4 per cent were women, while 18.5 per cent were men. Only one factory employs 10 women on a permanent basis.

An interview with one of the factory owners, however, suggested that filleting and skinning are regarded as rough jobs that men manage better than women. In contrast, women are considered to be better than men at trimming and packaging. The employer considered this work required greater attention because mistakes could result in the rejection of an entire shipment in the foreign markets.

Kagera's women have sought to solve their multiple burdens by organizing into groups. However, their socioeconomic situation makes it difficult for them to do so. They face multiple household roles with heavy workloads, capital shortages and minimal access to credit. They are also ill-educated, often lack confidence and have to confront socially accepted 'bad' beliefs concerning women.

Shared trust

On the positive side, women have identified several factors that have contributed to their successful organization. Central to their success have been the trust they share, a characteristic that is lacking in men's groups.

Women from Ruhanga put forth several reasons for being unsuccessful in obtaining loans and credit from the revolving credit funds. These include the fact that women typically lack collateral; that men often interfere in their wives' attempts to apply for these funds; and that men are better able to more aggressively pursue loans. In addition, women often do not know how to apply for the loans, while men bribe loan officials. Also, the new men entering the fish business tend to lower women's chances of getting loans. Among those women whose loan applications were successful, some quarreled with their husbands over the loans, ending up divorced for their refusal to surrender the loans to their husbands. Other women found themselves unable to fully repay their loans because the funds were mismanaged or misused by their husbands

The Tweyambe Fishing Group started as a self-help group for women in Ruhanga, Kagera. The living conditions are tough in Ruhanga village, which has no primary school, hospital or reliable shops. Women's workloads are heavy and comprise responsibilities for work in the household, agriculture and in the fisheries. The women spend much of their time on farms located on the slope behind the village. The fishermen's work routine determines the daily pattern of household activities in many fishing

communities. Fishermen leave at night or in the evening, while their wives work during the day. Men have little or no opportunity for family life and this adds to women's responsibilities and work. The women sell fish to supplement their incomes. They are forced to accept the prices offered by buyers on the beaches and want to change this. One woman said: "We can't afford to sell the fish in the distant markets. Transport is a big problem, accompanied by the lack of a well-established market in our village." Ruhanga's women thought that if they could acquire some kind of transportation, like a mini-bus, they could get a better price for their fish. In order to do this, however, they needed a way to raise the capital to buy the vehicle.

In 1992, a group of 14 women came together to form the Tweyambe Fishing Group. They agreed on the following objectives: to co-ordinate women's economic and day-to-day activities; to improve the household dietary status and socioeconomic condition of communities in Ruhanga by investing in fishing activities; to protect all women's rights; to help each other and to solve the road transportation problem in their community.

Maximum membership

They also agreed that 14 would be the maximum membership for their group and that all of these members had to be

married women, settled in Ruhanga. This requirement was intended to avoid the potential negative effects migration could have on the group's success. Finally, all members had to be mature and trustworthy.

In February 1993, the group collected US\$82 from the revolving credit scheme and supplemented this with weekly membership fees of approximately 40 cents per woman. Members sold bananas, groundnuts, handicrafts and grass for roofing and home 'carpeting'. (The Haya communities cover their floor with grass, which they will normally change every two weeks.) They used the money raised to invest in smoked and fried-fish processing, bought six nets and hired a boat.

Towards the end of 1997, the group applied for a loan from the Kagera Fisheries Project to buy a vehicle to solve the transport problem. The application was rejected by the Fisheries Department on the grounds that running and maintenance costs for the vehicle would be high in view of the bad roads in the area. The Department suggested the group consider developing alternative transport solutions, in particular, water transport. The women agreed, and obtained a loan of Tshs3,580,000 (US\$4,475), with which they were able to buy a 25-horsepower outboard engine and a transport boat. This investment has since yielded dividends. Income from fish sales between 9 June 1998 and 29 September 1999 was Tshs2,309,600 (US\$2,887), while expenditures amounted to Tshs1,559,600 (US\$1,950), leaving the group with a clear profit.

Women generally confront many challenges in their trade and household work. In order to sell their fish, they have to make prior arrangements with male buyers to assure a guaranteed market. This is particularly the case during the farming season, when many buyers return to their farms. In the fish trade, women's main competitors are men. Most of these male buyers are fishermen, and there is an understanding between them and the other fishermen that the male buyers would help them out if they ran into trouble with their boats while on the lake. These male buyers control the fish

auctions at the landing site and have come to dominate fish trading activities at the site. The Tweyambe women acknowledge that they cannot easily compete with the men, and could possibly get destroyed.

Another challenge occurs when the EU closes the markets for Nile perch, for whatever reason, causing prices to drop so low that they barely cover production costs. Women understand the extent to which they rely on export markets and so want reliable alternative markets for their Nile perch. Export bans and intense competition can destroy their savings. Tweyambe Group members also complain of lack of funds to expand their businesses.

The Group's water transport business has faltered and their income from this source has been halved because of competition from men who have also invested in water transport. The Tweyambe Group has also had to cope with gear theft. Competition and theft have forced some women to drop out of fishing or to shift to less competitive and less remunerative parts of the fishery.

Absentee owners are particularly likely to be cheated of their catch and gear. Since most women hire out their fishing gear to fishermen and do not take part in fishing activities away from the shore, they are most at risk of gear theft. This risk limits the number of units each woman investor is willing to operate. Women often employ men who are related to them or their own sons, in order to avoid theft of nets and catch. In Ruhanga, for example, the women employed their sons as crew. Despite such precautions, in 1997, profits dwindled when 45 of the group's gill-nets, valued at Tshs1,350,000 (US\$1,688), were stolen. These nets had targeted Nile perch, the group's most profitable fish. In some cases, women fishers have arranged for night patrols on Lake Victoria, and have selected times for fishing and landing that make it easier for them to monitor their catch and gear.

Poor training

A fish marketing study conducted along the Tanzanian part of Lake Victoria in 1998 indicates that the extent of training amongst fish traders and processors was low. Out of 198 fish traders and processors

interviewed in this area, only 6 per cent were trained in bookkeeping and only 2 per cent in fish processing. Of those with training, only three (2 per cent) were women. These women, like others, believe that education plays an important role in directing their lives and limiting their opportunities.

However, any information received by the leaders was conveyed to the members of the group in both Kiswahili (the language spoken all over Tanzania) and Haya, thereby diffusing, to some extent, the knowledge that they had acquired. They believed that mutual trust and teaching one another have helped the group survive in a competitive environment.

Members of the Tweyambe Group perceive themselves as primarily responsible for the economic well-being of their families. Their domestic and work responsibilities made it hard for them to find time for their group activities. In response, the women looked for ways to create some free time for themselves, for example, by establishing a nursery school. The Tweyambe Group has a schedule of activities that ensures each member allocates time for group activities as well as for her farming or domestic activities.

In contrast, the women who work in the fish-processing factories have had little

opportunity to budget their own time. In all the six factories we studied, women worked both day and night shifts. They were hired as casual labourers, and thus denied access to holidays, maternity and emergency leave. Some women factory workers are reported to have quarrelled with, and even divorced, their partners in order to comply with the factory rules, while others found it difficult to marry because men would not accept them working night shifts or taking time away from their household duties.

Tweyambe Group members have adopted a strategy of income diversification, so as to protect their households from hunger. When income from the fishing business is down, the women independently sell *matoke*, groundnuts, cassava, yams, second-hand clothes, tea and burns (candies), fresh beans and sweet potatoes at the village market.

Non-fish products

Women also travel long distances to the beaches in the early morning. Once there, they sit under the trees with their commodities for exchange, while waiting for fishermen to come out of the lake. Intense competition for fish has encouraged the women to resort to bartering for other, non-fish products along the beaches. Firewood, fruits, tomatoes, maize and cassava flour are commonly exchanged for fish. Bargaining

is common. These independent activities, the women argue, have helped their husbands and children understand that the Tweyambe Fishing Group is not an extension of their households, which they can exploit, but a separate entity.

Economic hardship and the important roles played by these women in supporting their households have changed men's attitudes. Group members say that men have realized that they can no longer provide for their families by themselves, and that the prevailing economic conditions are forcing both men and women to devise strategies for their mutual survival. However, problems persist. In the words of one woman, "When we buy and prepare the meals, pay school fees, buy clothes for the children and sometimes buy small gifts as a surprise, men see and realize our potential, although they don't appreciate it. Quietly, they feel offended by our initiative."

Tweyambe Group members continue to depend on men for many things, including advice and access to fish. Although the group has gained local respect through their association with donor agencies and the government, this association and their financial success and investments have also caused some members of the community to be very jealous of them. Women from polygamous households sometimes complained that it was difficult for their husbands to care for all their wives and children and some wives were neglected. Such women work extra hard to bring up their children. Some of the men in Ruhanga have demanded full involvement in their women's Nile perch fishing activities, defining it as a project for the entire community, including both members and non-members. Men have also tried to participate in the selection of crew members and engine operators. Members' husbands have demanded to know the exact income of the women's group and have interfered with planning and operations related to their investments. One woman explained: "I almost broke my marriage because of group funds. My husband forced me to give him TShs100,000.00 (US\$124) for his court case, but we eventually resolved the

dispute." In Vihiga District of Kenya, according to one study, many of the men who belonged to, or were associated with, women's groups as 'advisors' were considered to be 'crafty' and 'sly'.

Further research is needed to investigate the various issues that concern women's groups. Research topics should include ways to increase women's economic productivity and reduce the burden of their traditional household responsibilities; and ways to increase the participation of women in decisionmaking, as well as in access to, and control over, various resources. Women's time constraints will need to be taken into account too.

Changes in Lake Victoria's fisheries and fishing communities from primary reliance on local markets, equipment and sources of capital to reliance on export markets, external equipment suppliers and external sources of funding have affected, and have been mediated by, gender relations. Globalization has opened up new opportunities for some women but it has also undermined many women's economic independence and increased the challenges they face in supporting themselves and their families. It has done this by contributing to environmental change, undermining their access to fish for processing and trading, enhancing competition and theft within fishing and trading, and ghettoizing women in poorer paid occupations within industrial fish processing as contingent, vulnerable workers. As elsewhere, gender divisions of labour in households and communities within Ruhanga have persisted.

Post-harvest activities

Most development efforts in Tanzania, as in other parts of the world, have tended to discount the potential contributions of women to economy and society, and have thus failed to mobilize this vital human resource. The idea that those who fish are fishermen and that fishing predominantly involves men going fishing in boats has generally not been challenged by the institutions extensively involved in Tanzania's fisheries. Women are thought to engage only in post-harvest activities (smoking, drying and marketing), where they earn less profits than those earned by

fishermen, particularly the owners of fishing equipment and gear. The case study of the Tweyambe Group shows the importance of integrating women into fishery programmes and development projects. This should be done in ways that address women's dual responsibility for income generation and family care.

Women's interests should be built into the design of programmes aimed at obtaining sustainable resource management. Several indicators confirm the value of the Tweyambe Fishing Group for its members and the larger community. Group members report that face-to-face interaction allowed them to get to know one another, build a reputation and develop trust. Openness on the part of the members helped them to resolve small conflicts within the group. In many cases, they have managed to separate project from individual activities and thereby helped to insulate the group from wider household pressures.

These features of the group point to its relevance for community organization initiatives, such as the development of co-management regimes designed to respond to the often larger-scale economic and social dilemmas affecting fishing communities affected by globalization.

When people consider themselves to be a member of a group, they are able to collectively achieve more. The benefits that accrued to the community as a whole support women's groups in their attempts to break through some of the constraints they face, particularly within an industry that is dependent on export markets and global processes. This means providing women with support not just for income-earning opportunities, but also for advocacy, mobilization in the public sphere and empowerment. It means ensuring that women's voices are heard in all the main decision-making processes, and not just in a small, isolated, women's office. Available evidence suggests that by working with more women's groups, the reach of extension services can be doubled and costs reduced. The result would be greater food security for rural

families. Women's needs and interests are more likely to be satisfied if they are made the primary beneficiaries of certain welfare programmes. Examples like the Tweyambe Group remind us that donor organizations and governments must understand that people, especially poor women, are capable of promoting their own development if their efforts and initiatives are recognized and supported.

A gender-sensitive approach to development that assesses and monitors the impact of rules and regulations at all levels on women, men and gender relations is more than a political imperative. It is, in fact, a basic condition for sustainable economic and social progress. It requires radical changes, particularly in areas where the belief that women are inferior to men continues to prevail. It would be advantageous for men and women to collaborate in the development of a gender-sensitive approach in order to avoid problems and conflicts. However, in order for this to happen, men would need to learn how to work in partnership with women. ♀

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