

Risks and Uncertainties

With the transformation of Lake Victoria's fisheries into a lucrative, export-oriented industry, the poor, especially women who process lower-value fish for domestic markets, are feeling the repercussions

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Lake Victoria, whose waters are shared by three countries, namely, Kenya, Tanzania and Uganda, supports Africa's largest inland fishery. Its most valuable products are Nile perch, *dagaa* and tilapia. The Lake Victoria fishery has come under increasing pressure in the last two decades as fish stocks have declined steadily since production peaked in the early 1990s. However, the demand for Nile perch in Europe, America and Asia, and for *dagaa* in regional and domestic markets, continues to grow. As a result, the Lake Victoria fishery has undergone a complete transformation. From being a local-based subsistence fishery in the early 1980s, today it is a highly commercialized, export-oriented fishery of Nile perch.

The contribution of *dagaa* to the total annual catch has increased from negligible in 1968 to 60 per cent in 2007. At 0.79 mn metric tonnes, *dagaa* currently tops the Lake Victoria fishery in terms of total biomass. One of the reasons for this surge in production has been the increasing investment in the *dagaa* fishery after the Nile perch fishery became closely associated with theft and piracy. *Dagaa* is normally fished

at night during the lunar cycle which lasts between 18 to 21 days. Boats, *dagaa* seine-nets and pressure lamps are used as fishing gear, with the light from the lamps used to attract the fish. *Dagaa* fishing is intensive, and social networks are exploited to maintain it. Boatowners—locally known as *tajiri*—are obliged to sell their catch to local buyers and regional exporters, who sometimes provide them financial and material support.

A key point is that virtually everyone involved in actually harvesting and marketing high-value fish are men. Women do the peripheral work, buying up the undersized Nile perch that are not absorbed by the filleting factories, offloading *dagaa* from fishing boats and drying them under the sun. Women are also the main buyers of *dagaa* and juvenile fish from illegal fishers and beach-seine operators, aimed at the low-income domestic market.

Globalization has changed the domestic demand for fish, in particular for *dagaa*. The poor, who form the majority of the population in the lake region, are left with low-value fish such as *dagaa* which does not compete favourably in the international market. In a study conducted by the author, it was found that most poor people in fishing and farming communities consume *dagaa*, their main source of fish protein. A large proportion of *dagaa* is consumed in Kenya and Tanzania, and some in Uganda. Given the increasing demand for *dagaa* in local and regional markets, quality and safety become important issues.

Dagaa is, however, associated with poor handling and processing practices, which lead to quantitative losses and lower its value both financially and nutritionally. Ice is never used. The fish is handled in an unhygienic manner throughout the chain, from source to consumer. The main processing method applied to the catch is sun drying. Usually, *dagaa* is dried on the sand. The sun catalyzes oxidative processes in the fish, thereby diminishing the nutritional values of protein, lipids and vitamins. Domestic animals and birds often walk over the drying fish and feed on it. During rainy season, rot may set in, resulting in huge losses. It is estimated that up to 60 percent of *dagaa* fish may be spoiled by moisture, and there is also high likelihood

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Dried *dagaa* ready for packing and transporting to the market, Kome Island, Tanzania

of contamination by rain and river-based pollutants.

What about the women who process *dagaa* for the local markets? What are the conditions under which they work and live? To find out, let us meet 30-year-old Pendo Mwanameka and 31-year-old Faidoo Kabika, who work as offloaders and processors of *dagaa* in Kome Island, Sengerema District, Mwanza.

According to these women, *dagaa* offloading and drying is “real business”, not easy to get into. “To get the job, we have to secure what is called a ‘number’ by talking to the *mjeshi* in a *dagaa* boat. We buy the number by paying money to the *mjeshi* who then becomes the guarantor and the entry point for the job,” says Faidoo Kabika. The word *mjeshi* denotes a crew member. It comes from the Kiswahili word, *jeshi*, which means ‘army’, denoting the tough nature of the job.

Since the crew migrates frequently, in some cases, women deal not with the *mjeshi* but with the boatowner. In the 1990s, a single boat generated work for four women but today, a single boat employs only one woman, while in larger fishing camps, two women might find work on a boat. On good days, when the catch is heavy, these women hire other women workers at a daily wage of T.Shs1,000 to 15,000 (US\$0.7 to US\$1) to divide and complete the work of offloading and drying the fish. These activities could take up to 12 hours.

The women report that while they might get some sleep at night during the start of the lunar fishing cycle, they get none at all towards the end. “It is a risky time because this is when drunkards, beach-seine pullers, domestic traders on bicycle and foot, are all moving about in search of fish from illegal operators,” says Pendo Mwanameka.

Processing *dagaa* is hard work. It involves turning the fish around for more than eight hours under the hot sun, working in pouring rain and keeping a lookout for birds, dogs, goats and cows. Regardless of the tough conditions, the women admit that it is better than nothing, and that their experience allows them to find work on two or three boats at a time. “This work is important to me. Thanks to it, I have been able to buy two plots and kept some capital aside for future business,” says Pendo Mwanameka. There are other opportunities as well. “We get free *dagaa* for home use every day; sometimes we sell part of it to bait fishers (longliners) at up to T.Shs2,000 (US\$1.4). We also use it to barter for tomatoes, onions, vegetables, potatoes, fruits, firewood and other fishes such as tilapia and

haplochromines at our local markets,” reveals Faidoo Kabika.

Payment is based on a share of the total amount of dried catch. For 18 buckets of dried *dagaa*, the woman receives one bucket as payment for labour. However, there are costs she has to incur. She pays out T.Shs18,000 (US\$12.1) to get her ‘number’ for a single lunar cycle. Out of this money, T.Shs10,000 (US\$6.7) is distributed among the four crew members and T.Shs8,000 (US\$5.4) is spent on expenditure for food at the camp. The woman might then sell her catch either at the market under the ‘*bora* system’ or at the beach under the ‘expenditure system’. Under the *bora* system, the boat owner pays all food costs, takes all the fish, including the woman’s share for sale, and then pays the woman her share, usually at a rate that is half the market rate, while under the ‘expenditure system’, food costs are shared between the boat owner and the woman. All fish, including the woman’s share, is sold at a higher price by the owner and the woman is paid half price of her share after deducting her food costs.

Getting a ‘number’ on the boat is becoming increasingly difficult because of the influx of women—young, divorced and widowed, as well as single mothers. As a result, the payment for obtaining a ‘number’ has increased from T.Shs4,000 to 5,000 (US\$2.7 to 3.4) in the 2002-2004 period to T.Shs8,000 to 10,000 (US\$5.4 to 6.7) in 2008-2009.

It is also impossible to get a ‘number’ without offering sexual favours. As Pendo Mwanameka put it, “*Lazima uombwe uroda*,” which means one must be prepared to engage in sex. Mandevu, a beach management unit (BMU) Chairman from Ntama confirms that *dagaa* processors have multiple partners. “This is due to the nature of the job. They are tied to forcible sexual affairs wherever they go,” he says.

Do the wives of *tajiris* and *mjeshi* work as processors? “Never!” exclaim Pendo Mwanameka and Faidoo Kabika. “Men know very well that other men will do to their wives what they do to us. As the Kiswahili saying goes ‘*muosha huoshwa*’—what you do to others will one day happen to you.”

This system of sexual transaction means that older women get edged out of the work. To quote Pendo Mwanameka again: “I am aware that when I get old I will not be able to compete with young women. Not only that, but my energy and strength will be gone. I better work, starve and save for my future.”

While most women in the *dagaa* fishery have multiple partners, a small percentage

enters into longer-term partnerships with men, establishing what is known as a '*nyumba ndogo*' (a small home). For the most part, however, all relationships tend to be fragile and temporary. By '*giza ijayo*' or the end of the lunar cycle, bar maids, hotel- and guest-house attendants and stray loiterers arrive in large numbers for sex work, and

payment for day or night sex can go up to T.Shs20,000 (US\$13.5).

The women report that it is hard to raise children as single mothers. The children miss school often and usually end up in temporary, uncertain jobs. "You can't predict anything here," says Faidoo Kabika, "our lives are full of risks and uncertainties." ❏