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## **Adding Value to Aquaculture Products: Kati Farms (Uganda) Ltd.**

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### **Abstract**

Kati Farms (U) Ltd is a fish agro-processing enterprise led by Lovin Kobusingye, a young entrepreneur linking Ugandan fish farmers with markets. Because fish farmers were having trouble finding marketing outlets for fresh farmed fish, Lovin started adding value to fish. Her breakthrough came when she thought of making sausages from fish. Lovin went through the process of developing her and her suppliers' capacities and finding markets for her innovative products with the support of Ugandan government institutions. Kati Farms and her fish suppliers now reliably deliver processed fish products to 30 local supermarkets and 23 hotels, in addition to many low-income consumers through street vendors.

**Keywords:** fish processing, supply chain management, business incubator, Uganda

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## Introduction

When Lovin Kobusingye first graduated from Makerere University in Uganda, she could only find a job with the Walimi Fish Farmers Cooperative Society (WAFICOS). So she started working in 2008 as a secretarial administrator for what was then a 34-member fish farmers' cooperative. Lovin was to conduct training programs helping farmers produce more fish. Very quickly the productivity of aquaculture ponds increased and the farmers started bringing in more fish to the cooperative office every day and complaining that there was no market for their fresh fish. So Lovin also started looking for marketing outlets for the farmers' fish. She approached processing plants in Uganda. None wanted to consider processing fish: small volumes, bad taste, too many bones, and irregular supply by smallholder farmers. WAFICOS managers did not wish to invest into processing but they encouraged Lovin to start her own fish processing business as a side job. That was the start of Kati Farms (U) Ltd, based in Kampala, which now buys 15 metric tons of fresh fish from Ugandan farmers every week for processing into various fish-based processed foods for the local market and for export to East, Central and Southern African neighboring countries.

## Company Background

Uganda is an East-African land-locked country between Kenya, Tanzania, Rwanda, the Democratic Republic of Congo (DRC) and South Sudan. Uganda lies on the Eastern shore of Lake Victoria and captured fish is a usual food source for Ugandans living close by. However, based on data from the Ugandan Ministry of Agriculture, Animal Industry and Fisheries – Department of Fisheries Resources (MAAIF 2012), per capita annual consumption of fish is only 5.7 kg in Uganda. Per capita income is growing thanks to economic development in the country (World Bank data). Furthermore, governments of developing countries are being encouraged to promote sustainable



fish consumption given its importance as a source of energy, protein and nutrients in these countries (FAO and WHO 2010). Therefore, it is likely that fish consumption in Uganda and in neighboring countries will increase in future. However, there are likely to be difficulties in marketing fish. First, farmed fish is not a regular diet item for a majority of Ugandans so product promotion will be needed. Second, many consumers are still dependent on very small daily wages so portions of fish products will need to be cheap enough to be bought by poor consumers. Third, sanitary infrastructure is still a luxury for most of the country so untreated waste waters end up in waterways and undermine the safety of fish raised or captured in these waterways. Thus, although there is likely to be a good market potential for farmed fish products, new products will have to be inventive to address these challenges.

Lovin's idea was to use all the fish being delivered by WAFICOS farmers to launch a brand new product: fish sausages. But because she didn't know how to run a business let alone produce a sausage, she needed to build her own capacity in business management and food processing. She heard about the business incubator at the Uganda Industrial Research Institute (UIRI). It funds, trains and hosts the businesses of young entrepreneurs to develop industrial innovations. UIRI's Head of Production had never thought about fish sausages before.

Lovin assured him that she had a reliable source of fish meat with the WAFICOS farmers and she prepared her business plan to complete her application for the business incubator. She got accepted at UIRI and followed a course in food processing there. UIRI also suggested a fish sausage recipe made from captured Nile perch; Lovin started experimenting around it with different types of captured fish in 34-kg batches of sausages but was unsatisfied with the result. All her savings were used up in buying the raw materials for her sausage trials until she went back to her original idea of using live farmed catfish supplied by WAFICOS farmers to produce fish sausages. Everybody who tried this batch liked it: the sausages had white flesh, the filling was clean of bones, and the texture was soft. She used this recipe to start marketing her new product. Lovin started selling her fish sausages to friends and to small itinerant street sausage roasters. Her customers were always asking: where did these fish sausages come from? Word-of-mouth created her initial customer network which allowed Kati Farms to move on to a semi-industrial scale of 500 kg of sausages per week, all the while using the food laboratory of UIRI.

Lovin was lucky to be identified by the Department of Fisheries Resources which invited her to showcase her products in a trade fair. Giving out samples of her fish sausages to representatives of the media, hotels, restaurants and supermarkets made Kati Farms' fish sausages famous on the Ugandan market and opened up regular supply contracts. She got more free publicity when the Smartfish Program identified her to join a fish products trade event in Zambia where Lovin showed off her product to an international audience. At this event, Lovin received extremely useful suggestions on how to improve the labeling and packaging of her product. All agreed the sausages were delicious; she now had to work on other elements of the product. This event was Kati Farms' international breakthrough. It provided international and free press coverage of the business's fish products; this resulted in numerous phone calls from all over East and Southern Africa to start doing business. So Kati Farms now had to increase production to supply all its orders while further improving the quality of its products.

Capital was needed to fund this expansion. Lovin was unsuccessful obtaining loans from commercial banks because the enterprise was considered too risky. The only people that helped out financially were the fish farmers of WAFICOS. The fish suppliers agreed to provide their raw material on credit and only be paid at the end of each week. With the fish production training program ongoing at WAFICOS and the new market outlet created by Kati Farms, the cooperative now has 1000 members. Kati Farms purchases 15 tons of fish every week, equivalent to 75% of the cooperative farmers' total production. The fish meat is processed into 1.5 tons of sausages and other products like chilled gutted whole fish, chilled fish fillets, fish samosas, fish mince for pet food, etc. To produce fish sausages, the fish purchased from farmers are cut to separate meat fillets, trimmings and fatty tissues; all are cut into small pieces. The fish fillet and fats are ground separately in 3-mm mesh. The resulting fish mince and fats are chopped together with ice, spices and food additives and chilled to +12°C. This mixture is stuffed into sausage casings of 26–28 mm diameter, and sausages are linked and twisted to form 50-g individual pieces. The sausages are packed in plastic pouches to reach retail weight of 0.5 kg (10 pieces) or 1 kg (20 pieces). Finally, the packed sausages are frozen to –18°C, at which temperature they can be stored for three to six months. It is recommended they be heat-treated only before consumption.

Having started alone in the UIRI business incubator with US\$800 of savings, Lovin's Kati Farms is now worth an equivalent of \$400,000 USD shared between three investors and provides direct employment to 38 people. Through its extended networks of fish supply and fish product sales, Kati Farms helps support the livelihoods of at least 500 other people as well as the WAFICOS farmers.

## Current Management Structure

Lovin is the general manager and main investor in Kati Farms holding 75% of the shares. She is also directly in charge of international sales and marketing. To help her manage the business, Jackline Ahimbisibwe holds 20% of the shares and is in charge of the domestic marketing of fish products. Jacky had experience in marketing and finance and shared a similar business-orientation mind to Lovin's. So when they met, Lovin requested her to join her in running Kati Farms. James is employed as a production manager to oversee the processing. Joseph is the accountant and makes sure that all aspects of the business stay profitable. WAFICOS is still a very close collaborator employing one person to provide technical assistance to the fish farmers and make sure that the quality of the supply to Kati Farms remains satisfactory. Finally, Lovin recognizes the invaluable contribution of the free legal advice provided by Prof. Sempebwa Fredrick. She submitted all decisions for his legal advice and is now in a position to pay for it through a legal services contract.

## Key Success Factors

An innovative product. The most important success factor was the innovative fish sausages. Kati Farms is still the only producer of fish sausages in the region; this gives Lovin a leading advantage over potential competitors. She intends to stay ahead of other food processors by sticking to providing outstanding, quality products.

Unlimited supply of main raw material. Kati Farms was lucky to have an abundance of raw materials. When Lovin started her business, nobody wanted to use farmed fish, so she had no difficulty in sourcing her main ingredient.

Customizing products to customers' different tastes. Kati Farms' flagship product is fish sausages. Despite the supply contracts with supermarkets and hotels, the main customers are still informal street roasters and consumers from Kampala who buy 2/3 of the weekly production. Large fish are gutted and sold fresh to DRC consumers. Smaller fish are filleted or smoke-dried for the emerging middle class which cannot necessarily afford to buy a whole fish. Likewise, small pre-cooked fish products like samosas are cheaper than whole fish and allow fish protein to reach mouths of lower-income households. Even the leftovers and bones from the filleting are processed into fish mince for pet food. All parts of the fish supplied from the farmers are put to productive use by Kati Farms.

Regular endorsements boost entrepreneur's confidence. Joining the UIRI business incubator allowed Lovin to start a business while inside an enabling environment. The incubator provided her with technical knowledge on food processing to develop the product, a working space for her firm after she completed the training, and the institutional encouragement needed by young entrepreneurs to keep going. Her selection to participate in local and international trade fairs gave her free promotion and press coverage. Lovin has won the Rising Star Award of the Uganda Women Entrepreneurs' Association in 2012. Kati Farms also won 1st prize in the 2012 African Agribusiness forum in a competition between 52 African countries sponsored by the European Markets Research Center and Rabobank. Recognition has given Lovin a sense of purpose and encouragement to keep going despite the real challenges of doing business in Africa.

The trust of 1000 mainly small fish producers. Because Lovin had worked for WAFICOS, there was some mutual trust between the fish farmers and the young business entrepreneur. Lovin was the one who helped



train most of the farmers in successful aquaculture fish production. She also personally started the whole marketing venture to create an outlet for the farmers. In the end, they were instrumental in getting the business growing by providing their fish on credit trusting that Lovin would pay them back at the end of each week. The private company is thus founded on its reliance on a cooperative supply base and a history of interpersonal trust. It is now in the interest of Kati Farms to help the fish farmers keep improving their quality by securing and stocking better fish feed so Lovin has invested into feed storage units where she can stock large quantities of relatively scarce good-quality fish feed ready for sale to her supplier farmers.

### **Strategic Issue: Doing Business in Africa is Hard**

Especially in the land-locked country of Uganda, it is difficult to find adequate packing material, spices for the sausages or machines for processing. Everything has to be imported at high cost and high risk. Chilling and transport infrastructure is also lacking, particularly challenging to market a perishable product made from fish. Most challenging is the lack of money for investing; commercial banks seem mainly to be interested in funding projects that are safe and guarantee a return on their investment.



Kati Farms thus plans to import the feed for its suppliers, processing and packing material, and exotic ingredients. It is often less risky and quicker to ship the goods by plane than by truck, overland. Lovin is also relying on new private investors who are aware of, and passionate about, the development potential of agribusinesses in Africa to help fund her expansion. One of these is Anu Frank Lawale of Gloucester Point, Virginia. He was introduced to Lovin by a common friend: Nelly Isyagi of Aquaculture Management Consultants.

### **Looking Ahead**

#### *Replicating Successful Fish Processing for Other Untapped Raw Materials*

Lovin's father is a farmer with a small plot of avocados. Every year at harvesting season avocados fall down and rot because there is no processing plant to make use of all this raw material. There are thousands of other small avocado growers like Lovin's father in East Africa. Lovin is now thinking of how she could replicate what she has achieved with fish farmers on other African agrifood commodities produced in abundance but unfortunately wasted for lack of markets and processing into innovative products.

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