

Fine Fish Ltd. is playing a crucial role in the development of the aquaculture sector in Rwanda. The company has partnered with the government to make significant investments aimed at addressing the persistent gap in fish production and exports.

In light of this, the fish farming company, based in Rwamagana with other operations in Rubavu District, has chosen to enhance government efforts to increase fish production through substantial investments in the aquaculture sub-sector.

The company has successfully established itself as a market leader in commercial modern fish farming and boasts of excellent performance in fish breeding, hatchery management and aquafeed production.



And, the government set a target of producing 80,000 metric tonnes of fish by 2035 according to the National Aquaculture Strategy.

Besides boasting a swelling domestic market, the fish firm has witnessed a growing foreign market including Goma, the Resort City in the Eastern DR Congo. In 2005, only about 37 tonnes were exported, but by 2020, Rwanda exported 20,986 metric tonnes and the rise in local demand for fish is largely attributed to a growing population.

Fine Fish boasts an impressive record as regards contribution towards the transformation of Rwandans' living standards alongside the country's economic development.

Fine Fish Ltd is the best producer of the six certified hatcheries countrywide according to the ranks obtainable at the Rwanda Agriculture and Animal Resources Development Board (RAB). The company leverages advanced breeding techniques and strict biosecurity measures to produce high-quality fingerlings, mature fish, and fish feed.

"We started fish farming on Lake Muhazi and focused on ensuring sustainable growth by addressing the acute shortage of local quality fingerlings and the high cost of imported fish feed," explains Themistocles Munyangayo, Founder of Fine Fish Ltd.



Themistocles Munyangayo, Founder and CEO of Fine Fish Ltd

“Our decision to breed our own fingerlings and produce local fish feed was key to ensuring the long-term success of our operations,” he added.

Fine Fish Ltd operates across three main units: breeding, incubation and fish farming, and runs an aquafeed production factory in Rwamagana District industrial area, the company’s technical team ensures high quality of the products throughout the production process.

The company’s main hatchery at Lake Muhazi provides easy access to an abundant supply of fresh water, creating an ideal environment for the breeding of mostly tilapia. The facility is equipped with state-of-the-art infrastructure, including indoor breeding pens, outdoor fish cages, a laboratory, greenhouse nurseries and heavy-duty water purification systems.



Breeding Process

The breeding process begins with mature tilapia housed in fish cages where one male is paired with two females. This promotes effective fertilization while preventing overcrowding, and optimizing breeding conditions. After the females produce their eggs, they are harvested and transferred to the lab incubators. The millions of eggs are closely monitored until they hatch.



Juvenile fish are kept in the lab at various developmental stages, measured, and categorized by weight. Once ready to start feeding, they are moved to greenhouse nurseries with stable temperatures between 28°C and 30°C. The greenhouses offer 18 cool pens with water, oxygen, and specially formulated food, with feeding every hour to ensure optimal growth in the controlled environment.

As the fingerlings grow, they are grouped by age and size, fed for a month, and then transferred to larger lake cages, to promote healthy growth and reduce competition.

Jean Claude Niyonkuru, a technician at the hatchery, highlights the importance of producing healthy fingerlings for the local aquaculture sector: “Strong fingerlings

have a higher survival rate and grow more rapidly, directly impacting the productivity and profitability of fish farming operations.”



Jean Claude Niyonkuru, a technician at Fine Fish hatchery

“This focus on quality also supports food security in Rwanda, as fish is an important source of protein for many communities,” Niyonkuru says.

He adds that fingerlings are typically kept in cages for about 3 months, depending on the target size. During this time, they thrive on the lake’s nutrients, with regular monitoring and feeding to ensure healthy growth. Once they reach the desired size, they are harvested for sale or distributed to aquaculture farmers, cooperatives and RAB.

Fish Farming

In addition to its breeding operations, Fine Fish Ltd specializes in farming adult tilapia in the fresh waters of Lake Muhazi and Lake Kivu in Rubavu District. The fish pens at the lake shores, carefully nurture the tilapia until they reach weights between 500 grams and 1.5 kilograms. Niyonkuru adds, that these mature fish are raised in controlled environments (cages) within the lakes, where they benefit from the nutrient-rich waters, ensuring optimal growth and quality.

Once the tilapia have reached the desired size, they are harvested and transported to the market, either to retailers, wholesalers, or directly to consumers across Rwanda.

Fine Fish’s distribution method is what truly sets it apart from other fish producers in Rwanda. By utilizing oxygen-filled plastic tanks, the company ensures that its fish remain not only fresh but alive throughout the distribution journey to their destination. This transportation technique preserves the quality of the fish, allowing customers to purchase live, unprocessed fish straight from the water.

With prices ranging from Rwf 3,500 to Rwf 5,000 per kilogram, depending on size, customers can enjoy the unparalleled freshness of tilapia that arrives in prime condition, ready to be enjoyed at its finest.

Aquafeed Production

To ensure healthy fish growth and improve the productivity, Fine Fish Ltd. operates a state-of-the-art aquafeed production facility. The facility manufactures a variety of fish feed products, including sizes such as 1.5mm, 3mm, 4mm, poulder, and crumble.



The founder, Munyangeyo explains that plans are underway to expand its production capacity to 1,200 tonnes per month to meet growing demand. With a dedicated workforce of over 150 employees, the facility runs across three shifts, ensuring continuous production and efficiency.

To maintain a reliable and diversified supply chain, the company sources its raw materials both locally and through imports, with 50% of key supplies coming from countries like Tanzania, Zambia, and Europe.

Jean Pierre Njezewayo, a mechanical engineer at Fine Fish, explains that the production process begins with mixing of ingredients such as maize bran, rice bran, wheat flour, cassava, meat and bone meal, fish meal, and blood meal, all according to a carefully crafted formula. The mixture is then milled using clashing, spinning, and milling machines to create fishfeed flour.



This flour is then transported by an elevator to a receiving tanker, where it is dried to remove excess moisture and ensure the final product's quality. Once dried, the fish feed is packaged in 25 kg bags for distribution. About 19% of production goes to the company's farms at Lake Muhazi and Lake Kivu, with the remaining feed sold to RAB, farmers, and cooperatives across Rwanda.

Munyangeyo attributes the company's rapid rise to several key factors, including support from the government and the Food and Agricultural Organization (FAO). "The FAO provided us with breeding machines, and training, while the government helped by identifying suitable water bodies for our operations."



"Our current focus is on meeting domestic demand, and transformation after processing but we've faced challenges along the way. We've lost tonnes of fish in Lake Muhazi due to its shallow depth, which makes it harder to maintain the fish.

That's why we use cages. In contrast, Lake Kivu is deeper, and the pens are less likely to reach the bottom, reducing the risks we face in shallower lakes like Muhazi." he noted.

Fine Fish Ltd exemplifies a forward-thinking approach to aquaculture in Rwanda, blending innovative farming techniques with sustainable practices to meet the growing demand for fresh fish. As it continues to expand and enhance its operations, the company is poised to play a pivotal role in transforming the fish farming industry in the region, contributing to food security and economic development in Rwanda.