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# Youth in Sustainable Aquaculture

## The YISA program Q4 Impact Stories

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📍 Kenya



In partnership with



# Table of contents

Introduction	2
Skills to services: YISA program local service provider transforming aquaculture in Kilifi County	4
From passion to profitable enterprise: Felix Ouma's venture in fish cage farming	6
Scaling crab production in Kilifi County	8
'I am my own boss!' Waitress turned thriving BSF producer	10
From risky gold mines to soybean fields	13
Adding value, creating jobs: The Smart Kiosk model powering aquaculture growth	15
From struggle to stability: Maureen's Frywell journey	18
<b>Contributors</b>	
Maurice Goga - Farm Africa	
Anne Nasumba - Hydro Victoria	
Luiza Obor - Livingwood Consultants Ltd	
Priscillah Aketch -Aquarech	

## Introduction

This issue highlights some of the stories of the Youth in Sustainable Aquaculture, a partnership program with the Mastercard Foundation and consortium partners led by Farm Africa that aims to strengthen resilient livelihoods through innovative aquaculture practices, enabling work opportunities for young women and men.

## Background

The surge in demand for fish in Kenya represents a promising avenue for economic expansion through the aquaculture sector. Fish consumption is rapidly increasing with population growth and a shift towards healthier protein sources.

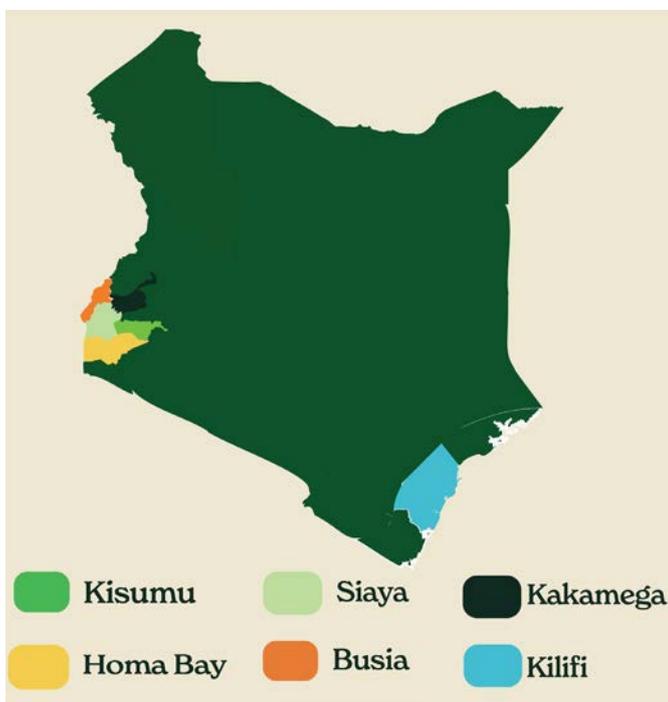
Kenya's aquaculture sector holds immense potential for economic growth, offering employment opportunities for young women and men. However, despite this potential, the sector remains largely untapped by young people due to challenges such as limited awareness, skills, access to resources like capital and land, market constraints, and perception issues.



## What we are doing

To address the issue and create employment opportunities for young people, the Mastercard Foundation in partnership with Farm Africa and consortium partners including Echo Network Africa Foundation, Lattice, Aquarech, Ramogi Institute of Advanced Technology, Hydro Victoria, and Livingwood Consultant Ltd is implementing the Empowering Youth in Sustainable Aquaculture Markets and Job Creation program also known as the Youth in Sustainable Aquaculture (YISA) program.

## Program counties



## Program value chains

- Aquaculture
- Mariculture
- Soybean production
- Black Soldier Fly production

## Program progress update

Launched in 2023, the program’s goal is to create 150,000 jobs for young women (**127,500**) and men (**22,500**), including internally displaced persons (IDPs) and persons with disabilities (PWDs), in Kenya’s aquaculture sector across Kisumu, Homa Bay, Busia, Kakamega, Siaya, and Kilifi counties.

In the first year of program implementation, which ended in November 2024, YISA program successfully reached or trained **30,357** young women and men. In the second year of program implementation (December 2024 – November 2025), we have trained an additional **46,245** bringing the total cumulative number of participants to **76,602**. Of these, **73% are young women** and **27% are young men**. Of the total number of participants, **1,955** are persons with disabilities (PWDs).

To date, the programme has created work opportunities for **51,264** across the aquaculture, mariculture, soybean production, and Black Soldier Fly (BSF) value chains.

**99,922**  
young women and men recruited  
in the YISA programme

(Bottom left) Members of Dabaso Youth Group managing their crab cages. Photo: Farm Africa / Maurice Goga

# Skills to services: YISA program local service provider transforming aquaculture in Kilifi County



According to Damaris Mukuhi, a Local Service Provider (LSP) based in Kilifi County, “the blue economy is still very green,” full of untapped opportunities in production, aggregation, and value addition across both aquaculture and mariculture.

Damaris first learned about the Youth in Sustainable Aquaculture (YISA) program online while searching for opportunities to deepen her understanding of how digital tools, technologies, and innovations can transform rural livelihoods. For her, the coastal region holds a unique advantage: aquaculture is not only part of the coastal cultural heritage but also a vital income source for many households, supported by the rich resources of the Indian Ocean.

“I learned about YISA through local radio and later applied online. I wanted to explore opportunities in the rural economy and

understand how digital technology could help young people, especially women like me, access new markets in aquaculture,” she recalls.

Motivated by the knowledge gap she observed in her community, Damaris joined the program as a Local Service Provider to help bridge this divide.

“For generations, families along the coast practiced fish farming, yet most had never maximized it as a business. People had the passion, but not the technical knowledge. I wanted to transfer the knowledge I was gaining through YISA to others so that we all grow,” she says.

Through YISA’s structured training, Damaris gained comprehensive skills in mariculture, including the production of milkfish, crabs, and prawns. She was also trained in Black Soldier Fly (BSF) technology, a cost - effective

and sustainable alternative source of fish feed, Gender Equality Social Inclusion (GESI) and the Gender Action Learning System (GALS) approach and Business Development Service. Equipped with this knowledge, she now trains other young people through the program's LSP model.

"It is about teaching them the technical aspects of aquaculture - how they can become producers, aggregators, traders, or even input and feed formulators. From this, they begin to see aquaculture as a viable business, something they can build a livelihood from," she explains.

Beyond technical training, she is also involved in coaching and mentorship for the businesses and enterprises the young people have created individually or in groups. "We support them to increase their revenues, strengthen their operations, and grow their ventures over time through consistent, one-on-one guidance," she notes.

Despite her strong commitment to serving and engaging participants at the community level, Damaris faces several challenges, ranging from changing long-held perceptions about aquaculture as merely a cultural practice to addressing the financial limitations that hinder young people from fully participating. However, she notes that the YISA program has eased these barriers by providing technical support, coaching, and the catalytic fund to help young people view aquaculture as a viable and sustainable livelihood.

"Many of them have practiced fish farming for years - passed down from their forefathers - but they have never maximized it as a business. Through the YISA program, we can take them step by step, guiding them and showing them that their enterprises can grow, not just within their locality but even expand to other counties."

"The program has also enabled participants to overcome their previous financial constraints through the challenge fund and revolving loan fund, allowing them to scale operations, add more value, expand their enterprises, and explore further opportunities in the mariculture value chain, thus creating employment for more young people, which is the goal of the YISA program," she adds.

## Addressing the gender barrier in aquaculture

The program has also addressed the gender barriers that are prevalent in Kilifi County and often limit young women's participation in aquaculture.

"Through the GESI and GALS models, we are deliberately addressing persistent gender barriers within the coastal region. Although women often contribute the most labor along the fisheries, such as the landing sites, they continue to earn less and remain excluded from higher-value nodes such as aggregation and market access," remarks Damaris.

Adding: "This model demonstrates that women can successfully participate in fish aggregation, access markets directly, and sell their products in a structured and reliable way. Through aggregation, women are now able to earn a dignified and more predictable income, strengthening their economic independence. Importantly, the model challenges traditional gender roles that confine women to household responsibilities alone. It promotes shared responsibilities within households, enabling women and men to support each other economically. As a result, women are better able to engage in income-generating activities while maintaining balanced household dynamics."

As of the end of Year Two (November 2025), the YISA program had recruited 10,558 young women and men in Kilifi County, with 9,691 participants receiving technical training in aquaculture, mariculture, Black Soldier Fly (BSF) technology, business development services, and GESI/GALS models.

"It is about teaching them the technical aspects of aquaculture - how they can become producers, aggregators, traders, or even input and feed formulators. From this, they begin to see aquaculture as a viable business, something they can build a livelihood from."

Damaris Mukuhi  
LSP, YISA program

# From passion to profitable enterprise: Felix Ouma's venture in fish cage farming



Felix Ouma (centre) with his workers at one of his cages at Ogal beach in Kisumu. Photo: Courtesy

Felix Ouma, a young fish farmer from Kisumu County, studied Fisheries and Aquatic Sciences at college. From an early age, he was drawn to life around water and dreamed of turning his passion into a sustainable business on Lake Victoria. Today, Felix runs a cage fish farming enterprise at Ogal Beach, where his long-term goal has always been to expand production and supply fish to markets in Kisumu and beyond.

Felix's journey took a turning point when he joined the Youth in Sustainable Aquaculture (YISA) program. When Felix heard about the YISA program, he saw an opportunity to gain practical skills that could strengthen his business. "I wanted real business skills, not just theory," he says.

Through YISA's capacity strengthening, mentorship, peer learning and networking, Felix gained hands-on knowledge and exposure as a local service provider. He also visited other fish

farmers, allowing him to observe best practices and learn from their experiences.

Through the program, Felix learned cage culture, including fish cage management, record keeping on feeding and growth records, budgeting and planning for business expansion and management of fish mortality rate during lake upwelling

"The program did not just teach me about fish; it taught me how to think like a business person," Felix explains.

## Challenges before YISA

Despite having academic knowledge, Felix struggled to grow his business.

"I had knowledge, but not enough practical skills and capital to expand," he explains.

At the time, he operated only a few cages, which

were difficult to manage—especially during periods of lake upwelling that affected water quality and slowed fish growth. He occasionally lost part of his stock and found it hard to recover financially.

“These challenges made me question whether aquaculture was really worth the effort,” Felix admits.

### Results and impact

After applying what he learned, Felix began to see significant improvements. Fish survival rates increased, feeding became more consistent and harvest planning improved.

“Before, I was just farming fish. Now, I’m running a business,” he says proudly.

Within a year, Felix’s income increased by nearly 50 per cent. This growth enabled him to expand the number of cages and create employment for nine additional young people, who now support feeding, monitoring, and harvesting activities at the farm.

Today, Felix confidently describes his farm as both his workplace and his dream.

“When I look at my cages floating on the lake, I see my dream coming true. The sound of water is my office, and the fish are my partners,” he says.

With improved income, Felix can support his family, pay his bills on time, and save towards further expansion. His leadership skills have also grown, and he now mentors other young fish farmers at Ogal Beach, encouraging them to

“Venture into aquaculture because it is a space full of opportunities. With the right support, it can change your life.”

“When I look at my cages floating on the lake, I see my dream coming true. The sound of water is my office and the fish are my partners,”

Felix Ouma  
LSP, YISA program



# Scaling crab production in Kilifi County



Farm Africa team led by Country Director Mary Nyale (holding a crab) and YISA Programme Manager Teddy Nyanapah (in a blue shirt) during a field visit to Dabaso Youth Group to monitor progress in programme implementation in Kilifi County. Photo: Farm Africa/Maurice Goga

In Kilifi, Kenya, Farm Africa through the Youth in Sustainable Aquaculture program is empowering young women and men engaged in crab fattening as a way of enhancing the production of highly demanded seafood in the coast region.

Through the program 201 young women and men engaged in crab farming along the coastline in Kilifi County were supported with 848 crab cages to scale up the production of crabs while creating job opportunities for the young people.

### Scaling up participation of young people in crab fattening

Under the mariculture value chain, crab fattening has been identified as a high-potential enterprise. The program targeted 201 participants to benefit from crab fattening demonstration farms, distributed across nine wards in Kilifi County. These demo units provide young women and men groups with practical, hands-on experience, equipment and starter infrastructure to build viable mariculture businesses.

Crab fattening not only offers fast production cycles and strong market demand, but also aligns closely with environmental conservation—an important factor along the coast.

### From mangrove conservation to mariculture enterprise

One of the groups being supported is Dabaso Youth for Green Future, a youth-led organisation based in Kilifi. The group is chaired by Madaraka Katana, who describes their journey from environmental conservation to income generation.

“Dabaso Youth for Green Future started one year ago,” says Madaraka. “At first, we focused on mangrove conservation because, as youth, we realized we were idle and needed to do something meaningful for our environment and our lives.”

Through mangrove restoration activities, the group gained skills, organization and a shared vision. Recognizing the economic potential of conservation-linked livelihoods, they later ventured into crab farming, which has now become their flagship project.

### A boost to production and employment

The group began modestly, starting with 15 crab-fattening cages as a pilot. Even at this scale, the impact was visible.

“We saw the importance of crab farming and the benefits the 15 cages were bringing to us,” Madaraka explains.

Through the YISA program, Dabaso Youth for Green Future recently received an additional 106 crab cages, nearly doubling their production capacity.

“For us, this is a big boost,” says Madaraka. “It means increased production and another opportunity to employ more young people or engage someone full-time within the project.”

The expansion is expected to result in higher incomes for members, while strengthening the group’s long-term sustainability.

### Protecting ecosystems while creating jobs

Beyond income, crab farming plays a critical role in protecting coastal ecosystems. Crabs depend heavily on mangrove habitats, particularly muddy intertidal zones, for survival and growth.

“Crab farming is very important in protecting the marine ecosystem,” Madaraka notes. “When we protect mangroves, we are also protecting the habitat where crabs live.”

By integrating crab fattening within mangrove conservation areas, the young people are ensuring that economic activity goes hand in hand with environmental stewardship, a core principle of the YISA program.

### A model for sustainable coastal livelihoods

Through technical support, starter cages, and hands-on training, the YISA program is enabling young in Kilifi to turn mariculture into a dignified, climate-smart livelihood. For groups like Dabaso Youth for Green Future, crab fattening is more than a project—it is a pathway to employment, resilience and environmental protection.

# ‘I am my own boss!’ Waitress turned thriving BSF producer



Lydia holds a basin full of harvested BSF larvae ready for sale. Photo: Hydro Victoria/Anne Nasumba

Lydia is part of a growing wave of young women shaping sustainable aquaculture through the Youth in Sustainable Aquaculture (YISA) programme. At 26, she stands at the heart of a family enterprise built on Black Soldier Fly (BSF) farming, an enterprise driven by determination, innovation and a confidence she never imagined she would have. Together with her husband, Lydia manages two BSF production sites, transforming what began as a bold experiment into a stable and growing family business.

Lydia’s journey into BSF farming did not begin by choice. Her husband was first introduced to the concept after attending a training by the International Centre of Insect Physiology and

Ecology (ICIPE) and later set up a small unit at home. At first, Lydia was hesitant.

“The wriggling larvae looked scary. I wasn’t interested,” she recalls. “But with time, I saw that it was bringing income and sustaining our home.”

At the time, both Lydia and her husband held full-time jobs. As the BSF unit began generating income, someone needed to stay home to manage it. Her husband encouraged her and walked her through the process. Gradually, Lydia took over the day-to-day operations and eventually began running the enterprise full-time.

Her engagement with the YISA program began in 2024 after attending a meeting under the Aquaculture Business Development Program (ABDP). There, she met Hydro Victoria CEO Fredrick Juma, who spoke about BSF production

and opportunities within YISA.

"I approached him and told him I was already doing BSF farming and wanted to join YISA," she says.

She was subsequently linked to Hydro Victoria's field officer, received training, and was integrated into the program.

### Strengthening skills through YISA

Lydia describes the YISA training as practical and empowering. "The trainers explained everything until it made complete sense. If something wasn't clear, they repeated it until everyone understood," she explains.

Among all the modules, record-keeping had the greatest impact.

"I didn't know you must record things daily," she says with a laugh. "Now we track income and expenses clearly, and our business makes sense both practically and on paper."

The Gender Equality and Social Inclusion (GESI) and family-strengthening sessions were equally transformative. They encouraged reflection on protecting children from early pregnancy, managing household conflict constructively, and understanding family dynamics.

"It helped us understand our family tree and how to protect the girl child," Lydia notes.

### Expanding income and building stability

Through YISA, Lydia has watched the business grow steadily. Increased visibility through peer engagement, program meetings and word-of-mouth has driven demand for BSF larvae.

"Orders are many. I get calls all the time asking for supplies. I don't even know exactly which forums they got my number from," she shares, smiling.

Their main production site benefits from daily access to organic waste from slaughter activities, supplemented with market waste such as fruit trimmings and fish offcuts. Currently, the enterprise supports four young workers; two young men involved in waste collection and feed preparation and two young women employed full-time.

"I am proud that through BSF, these young women have a steady income, dignity and work

that fits their schedules," Lydia says.

Income from larvae sales alone now far exceeds Lydia's former monthly salary of KES 10,000 as a waitress. "Right now, I'm not interested in employment. BSF is sorting food, school fees—everything," she says confidently.

Beyond larvae sales, Lydia uses BSF as a protein-rich base for poultry feed and now keeps hundreds of chickens for sale.

"BSF larvae have a protein that rice bran and maize bran don't have. Chickens love live larvae and grow better on the mixed diet," she explains.

By improving feed quality, the enterprise has reduced poultry growth cycles and feed costs. In addition, Lydia sells frass—an organic fertilizer—providing farmers in her community with an affordable and sustainable soil amendment.

Lydia's journey reflects how targeted skills training, gender-responsive support, and enterprise development under the YISA program are enabling young women to build resilient livelihoods, create jobs, and drive sustainable growth within Kenya's blue and circular economy.

### A source of pride and identity

For Lydia, Black Soldier Fly (BSF) farming has transformed not only her livelihood but also how she sees herself.

"I'm proud as a young woman doing work that is considered 'dirty'. People look at me and wonder how a girl like me does this, but that only motivates me more. I am my own boss," she says.

Seeing other young women engaged in BSF farming during YISA trainings and peer engagements further strengthened her confidence. "I saw other young, beautiful women doing this work too, and it made me realize I should be proud of what I do."

She also credits her husband's consistent encouragement as a key source of motivation.

"I'm proud of my husband because he encourages me to try new things, even when I feel I can't do it. In the end, it always becomes something meaningful."

Over time, community perceptions have shifted as well. Neighbors who once complained about odor from the BSF unit now purchase larvae for their

own poultry, reflecting growing awareness and acceptance of the enterprise.

Lydia recognizes that more support is still needed, particularly in community sensitization. She believes the older generation should also be trained and exposed to BSF farming to expand both demand and supply.

“Knowledge about BSF needs to be spread. When people see the larvae, they always ask what they are. Once they understand, they start calling to place orders.”

She envisions a future where BSF products are mainstream.

“One day at the market, people shouldn’t only find ochong’a (freshwater shrimp) for chicken feed; they should find sacks of dried BSF larvae too.”

To strengthen her role within the BSF ecosystem, the YISA program supported Lydia with a BSF dryer, enabling her to take on a new role as a local aggregator. With this equipment, she can now purchase larvae from other BSF farmers, dry them, and sell to off-takers and feed millers, expanding her income while positioning her as a leader within the value chain.

#### A vision for the future

Lydia’s ambitions continue to grow. “I want to see myself on TV one day, a young farmer known for BSF. I want to be a bigger boss,” she says.

She plans to expand into animal rearing, establish an animal feed company, and train more people in BSF production. She has already begun gaining recognition: professors from several universities recently visited her family’s BSF unit during a learning expedition, connected through a farmer who purchases manure from her.

“They were surprised to see a young woman like me doing BSF farming, but once I explained how the production works, they were impressed.”

To fellow young people, Lydia offers a simple but powerful message:

“Don’t walk around with your papers waiting for a job. If you have skills, start small, it will take you far. If I can do it, so can you. Start with larvae, chickens, or fish. They will multiply. Be serious with your life.”



Lydia inspects the family’s larvae feeding section. Photo: Hydro Victoria/Anne Nasumba

“I’m proud as a young woman doing work that is considered ‘dirty’. People look at me and wonder how a girl like me does this, but that only motivates me more. I am my own boss.”

Lydia  
YISA program participant

# From risky gold mines to soybean fields



Edwin Oduor sieving his soybean produce. Photo: Farm Africa / Maurice Goga

Edwin Oduor's journey into sustainable agriculture began with a difficult choice between survival and safety. A graduate of Biochemistry from the University of Nairobi, Edwin once earned his living as a gold miner in Barding. While the work provided short-term income, it came at a high cost risk to his life.

"Gold mining was risking my life more than the money I was earning. On a good week, I would make about KES 2,000. In a month, that was barely KES 8,000. The danger was simply not worth it."

Faced with this reality, Edwin began exploring alternatives that could offer dignity, stability and long-term growth. When a friend informed him that the Youth in Sustainable Aquaculture (YISA) program was recruiting Village-Based Advisors (VBAs), Edwin saw an opportunity to align his passion for farming with self-employment.

"I really like farming, and I also value being self-employed," he explains. "When I learned that the YISA program empowers young people to run their own agribusinesses, I knew this was the right path for me."

## Choosing soybean: high returns, high impact

Edwin chose to specialize in soybean production due to its strong productivity and profitability. With proper agronomic practices, soybean delivers impressive yields even on a small acre of land.

"On half an acre, you can harvest up to 500 kilograms," he says. "If you produce one ton in three months, you are assured of about KES 65,000. Compared to mining, the difference is clear."

Through the YISA program, Edwin received both technical and life skills training. Beyond crop production, he was equipped with gender equality and social inclusion tools, including the happy family tree, and journey mapping tools -strengthening household decision-making and inclusive participation.

On the technical side, Edwin was trained across the entire soybean production cycle: land preparation, planting, spraying, use of biological inputs such as bio fits for improved yields and post-harvest handling to ensure clean, high-quality seed.

### From one acre to aggregation at scale

Edwin joined the YISA program in 2024 and was supported with a one-acre demonstration farm, certified seed, agrochemicals, spraying equipment and aggregation materials. From this demo farm alone, he harvested one ton of soybean in his first season.

Inspired by the results, Edwin expanded his production in the following season from one acre to three acres, harvesting four tons of soybean. Beyond his own farm, his role as a VBA enabled him to work closely with farmers in his community.

“I have worked with over 300 farmers,” he says. “From their farms, I aggregated soybeans and reached a total of 25 tons in the second season.”

Altogether, from 2024 to 2025, Edwin has aggregated 26 tons of soybeans, strengthening local market access while positioning himself as a reliable agribusiness service provider.

### Building wealth, creating jobs, securing the future

Through soybean aggregation alone, Edwin has earned KES 1.5 million- a milestone that has transformed his life. He invested the income wisely, purchasing land, securing a title deed and fencing the property.

“This land is my foundation for the future,” he explains. “I will continue soybean production here and also lease additional land to expand.”

Edwin’s work has also had a significant ripple effect. As a VBA in Alego Usonga, he has trained 850 farmers and supported the creation of over 400 jobs, contributing directly to YISA’s broader goal of creating 150,000 dignified jobs for young women and men.

### A Dignified path forward

Edwin firmly believes that soybean production offers dignified and sustainable employment for young people.

“This program gave me more than income -it gave me direction, confidence, and a future,” he says. “I no longer risk my life to survive. I grow food, train others, and build resilience.”



Edwin Oduor while working at the gold mines. Photo: Edwin Oduor.



The piece of land Edwin bought using proceeds earned from soybean farming. Photo: Edwin Oduor.

26

metric tons of soybean Edwin has harvested during season one and two of soybean farming under the YISA program.

# Adding value, creating jobs: The Smart Kiosk model powering aquaculture growth



Damaris Mukuhi frying fish at her Smart Kiosk at Mnarani in Kilifi town. Photo: Farm Africa / Maurice Goga

Driven by a shared vision to address the existing market gap in aquaculture and mariculture products in Kilifi County, two friends, Damaris Mukuhi and Mary Wambui, founded The Daily Catch Farm. Their venture was born out of a clear need: the local market lacked a consistent and sustainable supply of aquaculture and mariculture products.

“A real gap in the market drove the establishment of The Daily Catch Farm. It was not easy to find sustainable aquaculture products such as fish, prawns, or even crabs in Kilifi. I personally experienced this when I bought fish from a local

aggregator, only to later realize it was plastic fish. That incident opened my eyes to the magnitude of the problem. We saw the gap, and that is how The Daily Catch Farm was born,” recalls Damaris.

With the vision of making aquaculture and mariculture products available in the markets, the Daily Catch was founded with a vision to develop a farm - to - table model that promotes sustainable aquaculture while creating income and employment opportunities for young people. “Through the YISA program, we have already begun achieving key milestones towards this vision,” says Damaris.

To achieve the model of farm-to-table, the

two are engaged in various nodes such as aggregation, fish value addition, poultry and farming.

“One of our major achievements has been value addition through smart kiosks, where we sell ready – to – eat fish products. In addition to aquaculture, we are gradually diversifying into poultry farming, vegetable production, and ecological conservation practices, with the understanding that growth is a step – by – step process,” she explains.

Adding: “Our core focus remains aquaculture and the fisheries value chain development. We are actively involved in fish aggregation, sourcing products from smallholder farmers across Kilifi, Homa Bay and Kisumu counties. We aggregate tilapia, Nile perch, crabs and prawns, which we then supply to small-scale traders and local markets.”

### Acquisition of Smart Kiosk

Through the YISA program, Damaris and Mary were able to acquire the Smart Kiosk Smart-a 6x20 ft container equipped with a chest freezer, a three-point gas burner, a stainless steel table, a solar system and starter tools, including cooler boxes, parasols, energy efficient stoves, cooking pots and frying spoons for mama karanga’s (fishmongers).

“Our smart kiosk is designed to support both sustainability and efficiency. It is fully equipped and self-contained, running entirely on green energy. The kiosk is powered by solar panels and batteries, which ensure an uninterrupted power supply and enable reliable cold storage, protecting fish from spoilage despite frequent power outages.”

“Further, the kiosk is also fitted with value-addition cooking equipment, allowing us to serve many customers efficiently, as well as stainless steel worktables that meet food safety and hygiene standards. In addition, it includes a modern frying unit, enabling small-scale fish traders from the surrounding areas, including mama karanga (fishmongers), to aggregate and sell their products through the kiosk,” she adds.

The acquisition of the Smart Kiosk brought significant and notable changes to the Daily Catch Farm business. “With Smart Kiosk, we now engage in fish value addition, including frying, grilling and selling fish-based snacks. These

activities not only improve market access but also enhance profitability,” she explains.

With the availability of cooler boxes that can preserve fish for up to 24 hours, post-harvest losses have significantly reduced. In addition, fishmongers have parasols to protect them from harsh weather and use eco-friendly energy stoves, reducing reliance on firewood and charcoal.

To ensure the business stays afloat, the Farm Africa business development team has trained Damaris and Mary on various components of fish value additions as well as business management skills.

“We were also trained on value addition, which inspired us to establish a fish snacks kiosk—one of the first of its kind in Kilifi County. At the kiosk, we produce and sell affordable fish-based snacks such as fish balls, fish fingers and fish kebabs, creating an additional income stream while making nutritious fish products accessible to the community,” narrates Damaris

“Additionally, with support from the YISA program, we gained critical business development skills, including how to write a business plan, prepare enterprise budgets and make financial projections. These skills now guide our decision-making and help us plan clearly for growth and sustainability,” she adds.

### Before acquiring the Smart Kiosk

Before acquiring the Smart Kiosk, the duo used to operate their business online; as a result, they used to serve a limited number of customers, yielding low income since they used to sell a low volume of fish.

“Through the YISA program, we have been able to transform and scale our aquaculture business. Before engaging with YISA and establishing the Smart Kiosk, we mainly relied on online sales of aquaculture products, supplying a limited market, particularly local. We operated from our home premises, where we received products from suppliers and organized deliveries to customers,” Damaris recalls.

“Before setting up the Smart Kiosk, our business generated an average monthly revenue of about KES. 30,000. Following the establishment of the Smart Kiosk, revenues increased tremendously to KES 156,000 per month. The Smart Kiosk now

allow customers to visit, sit and enjoy freshly prepared fish and seafood, depending on client needs. This shift significantly strengthened our market presence and customer engagement,” she adds.

Beyond the significant improvements recorded at Daily Catch Farm, the model has also positively impacted the eight fishmongers operating under the Smart Kiosk initiative, all of whom have reported increased sales volumes and improved profit margins.

For instance, Mama Karanga has doubled the value of her sales through value-added fish products, currently earning approximately KES 20,000 from fried fish compared to KES 10,000 from raw fish sales. Building on this success, they plan to expand their fresh and value-added fish capacity from the current 500 pieces to a target of 1,000 pieces in response to growing market demand.

“YISA has brought my dream to life. Therefore, I believe it is just a stepping-stone,” she says.

Through the YISA program, Damaris and Mary are now able to achieve more than they had imagined. “Before joining the YISA program a year ago, we did not realize that knowledge itself could be a source of income. Today, I understand that training and consultancy are viable opportunities alongside fish production,” says Damaris.

“The skills and knowledge I have gained can now be shared beyond YISA participants. When other farmers approach me for guidance on aquaculture practices and agribusiness expertise, it becomes an opportunity to help solve their challenges while also earning an income. This journey has not only diversified my livelihood but has also expanded my professional network and positioned me as a resource person within my community,” she adds.

Damaris and Mary’s journey demonstrates that the blue economy—especially aquaculture – remains largely untapped. Through the YISA program, young women and men are gaining the skills, confidence, and opportunities to explore areas such as production, aggregation, value addition, input supply, feed formulation, training, and consultancy. The sector holds immense potential for sustainable livelihoods and job

creation for young people.

As at end of year two, the YISA program has trained 9691, resulting in 5106 youth in work in Kilifi County.

**“Before setting up the Smart Kiosk, our business generated an average monthly revenue of about KES. 30,000. Following the establishment of the Smart Kiosk, revenues increased tremendously to KES 156,000 per month. The Smart Kiosk now allow customers to visit, sit and enjoy freshly prepared fish and seafood, depending on client needs. This shift significantly strengthened our market presence and customer engagement.”**

Damaris Mukuhi  
LSP, YISA program



Structure of the Smart Kiosk owned by Damaris and Mary at Mnarani in Kilifi County.  
Photo: Farm Africa / Maurice Goga

# From Struggle to Stability: Maureen's Frywell Journey



Maureen setting up fish to dry on a stall. Photo: Aquarech/Prisicillah Aketch

Maureen Onyango is 29 years old. She lives in Guba, Kisumu, with her two children and a husband. For a long time, life was about getting through each day. Stability felt far away and planning for the future felt like a risk she could not afford.

Before joining Frywell, Maureen sold second-hand clothes to earn a living. On a good day, she made about 3000 to 5000 shillings. On many days, she sold nothing at all. In a month, her income averaged between 7000 and 10,000 shillings, barely enough to cover food, rent and school needs. Saving was impossible.

Maureen had never imagined herself working with fish. Aquaculture was unfamiliar to her and fish trading was not something she had ever considered. What caught her attention was not the fish itself, but the opportunity behind it. While

scrolling through Facebook one day, she came across an Aquarech post about Frywell, a fish frying business model designed for young women. As she read more, she began to see a gap she recognized in her own community. In her area, no one was selling fried fish and she realized it could be a way to earn a second income alongside her clothing business. The promise of training, a starter kit and a clear path to earning made the idea feel possible. "I saw an opportunity," she says. "I thought, why not try?"

That stayed with her. With little to lose, she reached out and was invited to join the Frywell model under the YISA program.

When the training began, everything felt new. She learned about business development, costing, pricing and safe fish handling. At first, it was overwhelming.

"I didn't even know how to properly handle fish," she remembers.

Still, she showed up. She listened. She learned.

During the launch of the Frywell model, Maureen received a fish frying starter kit, which included 30 kg of fish valued at KES 12,000, to help her start her business. She could collect about 5 kg per day from Fish Farmilia shops, an Aquarech initiative where farmers harvest and sell their fish to traders. Maureen began by frying five to seven kilograms of tilapia per day until she exhausted her initial capital.

She did not have an established market. She started with people she already knew neighbours, church members, and families in the village. At the beginning, her profits were modest, averaging KES 500–800 per day, but the income was consistent.

"I didn't wait to feel ready," she says. "I started immediately."

Every morning, Maureen wakes up early to buy fish, comparing prices from different vendors and purchasing based on the daily market rate. From her home, she does everything herself: cleaning, gutting, salting, drying and frying. Although she has a stall at a nearby shopping center, most of her fish is sold through pre-orders.

"People come to me because they trust my fish," she says.

As demand grew, so did her confidence. Today, Maureen fries between ten and fifteen kilograms of fish a day, depending on orders. In a month, she sells hundreds of pieces. Her income now averages between KES 10,000 to 25,000 a month, enough to meet her family's needs, pay school expenses, and save.

One moment stands out as a turning point. During an exhibition at the sports ground, held alongside the Kenya Public Private Sector MSMEs Dialogue, Maureen shared her work with new people. Soon after, she received an order from a school for 50 pieces of fried fish for a school tour. The sale brought in about KES 12,500 with enough profit left to restock and save.

"That's when I knew this business could grow," she says. "I was proud of myself."

The journey has not been easy. When a video circulated online criticizing tilapia from Lake

Victoria, customers grew fearful and orders dropped. The criticism questioned the safety and quality of the fish. Instead of giving up, Maureen relied on what she had learned. She explained her sourcing process, maintained strict hygiene, and shared accurate information with her customers. Through Frywell, Aquarech also supported participants with guidance on food safety and customer communication. Slowly, trust returned.

Beyond income, the program changed more than Maureen's business. Through the Gender Action Learning System (GALS) and Gender Equality and Social Inclusion (GESI) sessions, she learned how to set goals, plan her finances and communicate better at home. She says her mindset has changed and that through open communication with her husband, they now make better decisions together. With more stable income and shared planning, relationships at home improved.

"We talk more now," she says. "We plan together."

Today, life feels different.

"I am not as broke as I used to be," Maureen says. "My children's needs are met. I can plan. I can think about tomorrow."

Maureen's journey reflects the wider impact of the Frywell model as implemented by Aquarech. By the end of year two (November 2025), Frywell had supported 293 young women fish traders, each of whom received a fish frying starter kit to launch or strengthen their businesses. These kits translated into 293 and 66 indirect job opportunities.

A validation exercise conducted by Inuka found that 227 of these women are currently active, running fish frying businesses within their communities. The remaining 66 participants have transitioned into other fish-related enterprises, such as common trading, using the skills, experience and confidence gained through Frywell. While they are no longer frying fish, their businesses continue to generate income, contributing to 66 indirect jobs created through the model.

Together, these outcomes demonstrate how Frywell goes beyond equipment distribution to create sustained livelihoods, support business diversification, and strengthen local fish value chains led by young women.

James Fikir, YISA program participants and a fish aggregator at Gongoni market. Photo: Farm Africa/Maurice Goga

### YISA program: Quarter four impact stories

The YISA program quarter four impact stories provides up-to-date insights into the progress of program implementation and highlights impactful stories from the field.

Cover Photo: Damaris Mukuhi preparing fish for frying.  
Photo: Farm Africa/Maurice Goga.

To learn more about the YISA program, please contact the Farm Africa Kenya team.

Farm Africa Kenya  
Devsons Court, Apartment 09,  
Argwings Kodhek Close, Hurlingham, Nairobi Kenya  
InfoKenya@farmafrika.org  
P. O. Box 49502-00100, GPO  
Tel. 0721 576 531

 **FARM AFRICA**



[www.farmafrica.org](http://www.farmafrica.org)  
[info@farmafrica.org](mailto:info@farmafrica.org)

