# CASE STUDY: TRANSFORMING LIVELIHOODS THROUGH FISH FARMING, MR. MICHAEL BOUNG'S JOURNEY IN FISH FARMING

# BONDO SUB COUNTY-WEST YIMBO WARD, SIAYA COUNTY

DATE PRESENTED: JUNE 2023



Mr. Buong's renovating one of his flooded old earthen pond

### Introduction:

Fish farming, also known as aquaculture, has gained significant attention as a sustainable solution to meet the growing demand for fish and alleviate pressure on dwindling wild fish population. Farmers across Siaya County have taken up aquaculture as a promising economic activity and means of subsistence. This case study focuses on the journey of a farmer in Bondo Sub-County who ventured into fish farming, examining the challenges faced, strategies employed, and the overall impact on the farmer's livelihood and the local community.

# Background of Siaya County and Bondo Sub-County:

Siaya County is situated in the western part of Kenya. It borders Lake Victoria, Africa's largest freshwater lake. Bondo Sub-County, one of the administrative divisions in Siaya County, is characterized by fertile land and a high population density. Historically, the residents of this region relied heavily on subsistence agriculture. This predominantly includes cultivating maize, millet, vegetables and fishing.

## Farmer Background (Michael Buong – 12/BON/WYI/0625)

Michael Buong is a male fish farmer aged 55 years. He resides in West Yimbo Ward, an ABDP working area in Bondo Sub County. With just three fish ponds, he began his fish farming business in January of 2016. However, due to several challenges, he was forced to abandon the venture. Michael rehabilitated two of his ponds with support from the Aquaculture Business Development Programme (ABDP), and is now a proud owner of one earthen pond and one liner pond. Each pond measures 300m<sup>2</sup> and are both stocked with 2000 tilapia fish. He is a member of Ururi Field School with 30 membership.

#### Challenges Faced by the Farmer:

The fish farming journey for our case study the fish farmer began with numerous challenges. He had 3 fish ponds stocked with **3,000** fingerlings. He did partial harvesting three consecutive times in 2016 September, 2017 June and 2018 March and got a total of **226 kgs** equivalent to **Kshs.67, 800.** Challenges faced include:

- i) Lack of awareness and technical knowledge regarding fish farming practices
- ii) Limited access to finance and technical support.
- iii) Lack of quality feeds and fingerlings.
- iv) Inadequate infrastructure, such as poor road connectivity, which hampered the transportation of inputs.
- v) Predation further compounded the difficulties.

Towards the end of 2018, Michael's ponds were swept away by floods with all the fish but never lost hope.

#### Strategies Employed:

Despite the challenges, the farmer persevered and implemented several strategies to overcome them. Recognizing the need for knowledge enhancement, the farmer actively sought for training programs and workshops organized by governmental and non-governmental organizations. These initiatives provided valuable insights into fish farming techniques, including pond construction, water quality management, and fish feeding practices. He rehabilitated two fish ponds. One of these experienced a seepage due to soil structure. As an intervention by the programme, he was issued with a PVC liner.

To address the financial constraints, the farmer explored various financing options. This involved seeking support from governmental schemes and grants specifically designed for agricultural enterprises. He was successful in obtaining subsidies for agricultural input. He also diversified into horticulture and crops farming to supplement the failing fish farming.

## Collaboration and Networking:

The farmer understood the importance of collaboration and networking in the fish farming sector. The farmer avidly engaged in farmer groups and fish fair activities despite not having a fish pond because he understood the power of collective initiative. These platforms provided opportunities for knowledge exchange, bulk purchase of inputs, collective marketing, and access to government extension services. By working together, the farmer and other fish farmers in the community leveraged their collective power to negotiate better prices for inputs and achieve economies of scale.

## Impact OF ABDP on the Farmer's Livelihood

Siaya County was on boarded into the programme in 2020 October. Fish farmers were mobilized and sensitized through their sub county coordinators. Farmer Field Schools (FFS) and small aquaculture groups were established; one of these is Ururi FFS, to which Mr. Buong belongs. A PVC pond liner, 1000 fingerlings, and technical support from the extension officers who have been assisted were all beneficial to him. Mr. Buong is now a happy fish farmer who participated in several trainings and capacity built by ABDP through Participatory Rural Appraisal (PRA), Gender Action Learning Systems (GALS), Community nutrition Initiatives (nutrition diversity through kitchen garden establishment) and fish farmer exchange visit in Machakos County – Kamuthanga Fish Farm. The farmer's journey in fish farming brought about significant changes in his livelihood and the surrounding community. The farmer's income increases substantially, leading to improved living standards. He further created employment opportunities to young women and youths within the community through his diversifies farming activities which enhances socio-economic conditions.

Furthermore, the adoption of fish farming created a ripple effect in the community, with neighboring farmers also showing interest and following suit. This has led to the creation of more local fish farming cluster, fostering knowledge exchange, collective marketing, and shared infrastructure development. As a result, the community witness an overall improvement in food security and nutrition, with increased access to affordable and nutritious fish.

#### **Conclusion:**

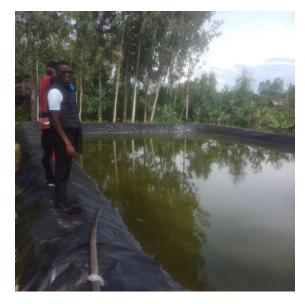
The case study of this farmer in Siaya County's Bondo Sub-County demonstrates the transformative potential of aquaculture in rural communities. Despite the initial challenges faced, the farmer's perseverance, adoption of innovative strategies, collaboration, and market-oriented approach led to positive outcomes. The success story serves as an inspiration for other farmers and highlights the importance of supportive policies, access to finance and support from programmes collaborating with the Government and knowledge dissemination in fostering sustainable livelihoods and rural development through fish farming.

#### Pictorials



Extension Fisheries Officers and Interns – Bondo Sub County supporting Mr. Buong rehabilitating one of his fish pond for liner installation





Liner installed, filled with water and stocked.



Mr. Buong's horticulture farm done around his fish farm.



PRA and GALS training in West Yimbo ADA





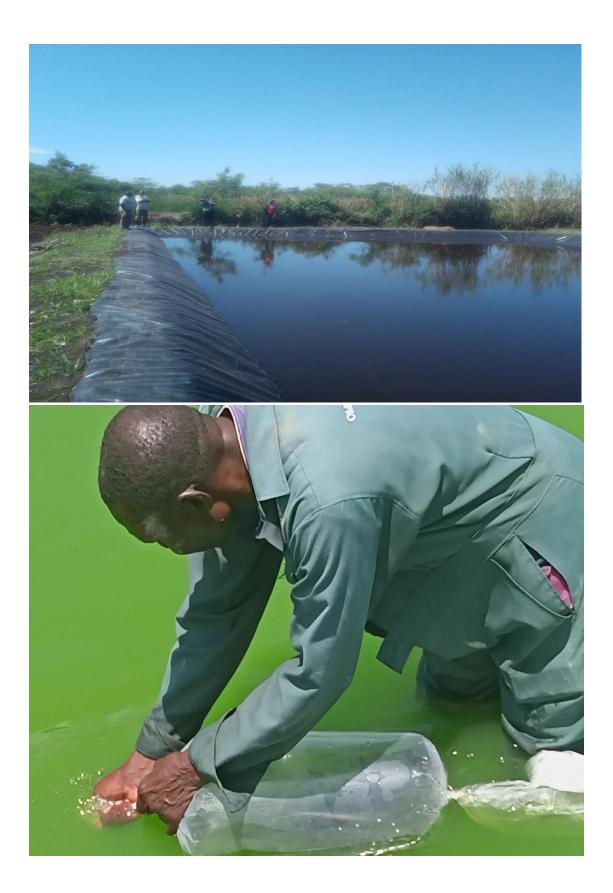
PRA participants graduating after CAP development

Ururi AFS meeting





*Ururi* AFS undergoing GYN training - Kitchen garden establishment.,Mr. Buong being one of the participants.



Mr. Buong stocking his liner pond with 1000 tilapia fingerlings - Support by ABDP in January 2023