



COUNCIL OF GOVERNORS



Harnessing the Potential of Blue Economy: Nyeri County Supports Sustainable Fish Farming in Kieni East Sub-county.

County:	Nyeri County		
Sector/s:	Blue Economy	Sub-sector/Theme:	Agriculture
Keywords: (for search in the online platform)	Fish Farming in Nyeri County Blue Economy		
Target Audience:	Counties, Fish Farmers		
Authors (contacts and their institutions can be included as well)	Nzei Mwende- Program Assistant Maarifa Centre, Council of Governors		
Resource Persons (include their designations)	Maureen Muriuki- Head of Aquaculture Development, Nyeri County Violet Njambi- Communication Officer, Nyeri County Onesmus Githui- Fish Farmer, Nyeri County		

Introduction

Blue Economy is the sustainable utilization of aquatic resources to promote economic growth, improve livelihoods, and preserve the health of marine ecosystems. It encompasses various sectors such as fisheries and aquaculture, marine renewable energy, tourism and marine biotechnology. Aquaculture is a rapidly growing sector in Kenya. The country's numerous water bodies, including lakes, rivers, and ponds, provide ideal conditions for fish farming. Fish farming in Kenya offers significant economic opportunities and food security. The thriving of different fish species is



COUNCIL OF GOVERNORS



dependent on specific environmental conditions. For example, tilapia shows optimal growth in warm climates, whereas trout fish thrives in colder regions. This highlights the significance of providing suitable habitats for the survival of each species.

Situated in the foothills of Mount Kenya, Nyeri County shares a geographical connection with the mountain, as its boundaries extend towards the lower slopes. This close proximity fosters a significant ecological impact, influencing the County's climate, natural resources and overall terrain. To enhance food security, farmers in Nyeri County have embraced diversification in fish farming, capitalizing on the favorable conditions for trout fish farming in the cold weather. This has prompted them to expand their aquaculture activities beyond trout and explore the cultivation of various other fish species.

Farmers in Kabarú Ward, located within Kieni East sub-county, have embraced greenhouse fish farming as a method to rear diverse fish species, placing a particular emphasis on those that flourish in warm climates. By embracing greenhouses, farmers have created a controlled environment that effectively facilitates the cultivation and nurturing of various fish types including tilapia and catfish. This innovative approach empowers them to expand their aquaculture activities beyond the limitations imposed by weather conditions and traditional farming methods, promoting greater diversification and sustainability.

The County's substantial burden of non-communicable diseases (NCDs) presents a notable challenge, leading residents to rethink their dietary choices. A crucial aspect of addressing this challenge involves emphasizing the incorporation of fish and other protein sources into their meals, aiming to reduce excessive carbohydrate consumption. The County Government of Nyeri is actively supporting fish farmers by providing a range of inputs, including fingerlings and essential equipment, and availing comprehensive training sessions. These initiatives are designed to empower fish farmers and enable them to achieve sustained growth and development in their operations. By offering these professional resources and knowledge, the County



COUNCIL OF GOVERNORS



Government aims to enhance the productivity and profitability of the local fish farming sector thus contributing to the overall economic and social well-being of the region.

Implementation of the practice

In 2019, the County Government of Nyeri applied a series of strategic measures to grow the fishing sector. One of these measures involved strengthening the workforce by recruiting an additional eight officers, bringing the total number of specialized personnel dedicated to the fishing sector to 21. This proactive approach was carefully implemented to enhance the capacity and operational efficiency of the fishing sector, ensuring they can provide comprehensive support and capacity to fish farmers in the region.

The Department of Agriculture, Livestock, and Aquaculture Development took proactive steps to ensure that every sub-county had two dedicated fisheries officers. These officers are responsible for regularly visiting fish farmers and facilitating communication through various platforms, including WhatsApp groups established at the sub-county level. By serving as a direct channel of communication between the department and local farmers, these officers play a crucial role in managing effective and efficient information exchange.

The subsequent phase entailed conducting capacity-building programs for County officers, aimed at enhancing their understanding of innovative fish farming methods and broader industry practices. Additionally, a comprehensive training strategy was devised to ensure that farmers continuously benefited from their trade. Through this strategy, farmers are equipped with the necessary knowledge and skills to improve their fish farming techniques, leading to increased productivity and sustainable growth in the sector.

The County Government of Nyeri has actively extended support to fish farmers through various channels- providing fingerlings, feeds, dam liners and training. The County Government has facilitated the restocking of 266,000 fingerlings and supplied 16,825 Kg of feed to 3,000 farmers to enhance their operations. Further, these farmers have been equipped with 287 liners, which serve as essential equipment for their fish



COUNCIL OF GOVERNORS



farming activities. These comprehensive interventions are carefully designed to empower fish farmers, enabling them to significantly improve their productivity and achieve greater success in the sector. The Nyeri County Government is among Counties that are beneficiaries of the Aquaculture Business Development Program (ABDP), which is an IFAD project. The ABDP program seeks to promote and market fish from the region and increase the visibility and demand for local fish.

To ensure the long-term sustainability of the program, the Department of Agriculture, Livestock, and Aquaculture Development has taken proactive measures. One such step is the development of a comprehensive fisheries policy, which has been drafted and is currently awaiting review by the Executive and thereafter approval by the Assembly. This policy will serve as a guiding framework for the management and regulation of fisheries within the County. By establishing clear guidelines and strategies, the Department aims to promote sustainable practices, the conservation of aquatic resources, and the overall growth and development of the fish farming sector.

Results of the practice

- The comprehensive support extended to the 3,000 fish farmers in Kabaruru Ward has yielded positive outcomes. Through training, restocking of fingerlings, supply of feed, and provision of necessary equipment, the farmers have experienced an increase in income from fish farming. This has translated into improved standards of living, as they are now able to sell their fish locally and to neighboring Counties.
- Food security has been significantly enhanced as fish farmers now have the means to afford better nutrition and access a diverse range of food options, including the fish they rear. This improved access to nutritious food has not only directly benefited the farmers and their families but has also played a crucial role in promoting overall food security within the community.
- Through the provision of training programs, the County Government has contributed to enhanced productivity, increased profitability, and improved sustainability within the sector.



COUNCIL OF GOVERNORS



- The Aquaculture Business Development Program (ABDP) has facilitated marketing initiatives, promoted the products of fish farmers and expanding market access. This has resulted in improved market opportunities and economic growth for the fish farming community.
- The fishing sector has experienced a substantial boost in both capacity and operational efficiency. This positive outcome can be directly attributed to the deliberate expansion of a specialized workforce. By providing enhanced support and empowerment to fish farmers in the region, this proactive approach has successfully propelled the County to secure its position as the third-ranked region in fish farming, as highlighted in the 2021/22 Aquaculture Business Development Program report.

Lessons learnt:

- **Collaboration and partnerships:** The importance of collaborative efforts between the County Government, agricultural programs, and other stakeholders cannot be overstated. Working together allows for the pooling of resources, knowledge, and expertise, resulting in more effective and impactful outcomes.
- **Capacity building:** Investing in capacity-building programs and training for both farmers and County officers is crucial. By equipping individuals with the necessary skills and knowledge, they are better prepared to adopt new practices, improve productivity, and contribute to the overall growth of the sector.
- **Diversification and adaptation:** Recognizing the diverse environmental conditions and market demands, fish farmers in Nyeri County have diversified fish farming by embracing greenhouses. This approach enables them to cater to different fish species and adapt to changing market dynamics, ultimately enhancing their resilience and profitability.
- **Need for sustainable policies and regulations:** Establishing clear policies and regulations helps guide the sector, promotes responsible resource management, and ensures the long-term viability of fish farming operations.
- **Monitoring and evaluation:** Regular monitoring and evaluation of initiatives and practices is essential for assessing their effectiveness and making necessary



COUNCIL OF GOVERNORS



adjustments. Continuous monitoring allows for the identification of challenges, successes, and areas for improvement, enabling the refinement of strategies and the achievement of better outcomes.

Conclusion

Nyeri County has made significant progress in the development of its fish farming sector through various initiatives and practices. The County Government's commitment to empowering fish farmers, providing training, restocking fingerlings, supplying feeds and equipment, and collaborating with organizations like the Aquaculture Business Development Program (ABDP) has yielded positive results.

Photos of Greenhouse fish farming in Nyeri County





COUNCIL OF GOVERNORS



Maarifa Centre
Sharing Kenya's Devolution Solutions

