



CATCHING PROFIT FROM AQUACULTURE

"My business was on the verge of ruin when the CDE came to the rescue. I would have lost hundreds of millions of shillings in capital investment if CDE had not provided the necessary technical support to my company. Thanks to the help that I received from CDE, my company is back in business, supplying the market with healthy fingerlings."

Mr. Bernard Tugumisirire, Managing Director, Sunfish Farms Limited, Uganda.



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INTRODUCTION:

Sunfish Farms Ltd. began operations in 1997 to fully engage in the culture of table fish and, by the end of 1998, 103 million shillings had been incurred as capital investment costs. Sunfish Farms Ltd. received financial support from CDE to conduct a project on efficiency and productivity improvement in aquaculture (fish farming). The total project cost was estimated at €49,500 with CDE undertaking to finance a maximum of € 29,800 equivalent to 60% of the estimated total eligible cost.

OBJECTIVE(S):

Overall:

- To improve the productivity of Sunfish Farms Ltd in particular, and aquaculture in Uganda in general through:
 - Fish disease control and prevention;
 - Fish feed preparation and testing;
 - Efficiency and diversification of facilities for fish farming.

Specific:

- To create awareness among farm staff, develop diagnostic tools and put in place control measures against fish prevalent diseases.
- To build skills in preparation and facilitate sustainable levels of larval feeds production.
- To facilitate attainment of optimum stocking densities for the farm's production infrastructure, i.e. facilitate achievement of the firm's maximum capacity utilisation.
- To improve efficiency in the firm's overall operations to turn it into a profit-making business.

ACTIVITIES UNDERTAKEN:

Water/civil engineer:

- Critical and exhaustive review of the existing pond management practices;
- Proposals to modify and redesign the 13-year old ponds, aimed at (a) improving management of the ponds, (b) optimising fish stocking densities, and (c) easing harvesting practices.

Aquaculturist/veterinarian:

- Fish disease control and prevention activities (clinical history of fish health, handling of mortalities and control measures related to epidemiological factors).
- Collection of samples of visibly sick fish from the farm hatchery to the laboratories of Makerere for parasite investigation.
- Similar field and laboratory investigations were carried out on samples from five other farms closely linked to the Sunfish Farms' business, focusing on disease identification and treatment trials using different drugs.
- The recommended treatments were then used at the farm with different tanks, ponds and batches.
- Training of the farm staff on the identification and treatment of the common diseases.



Success Story

EASTERN AFRICA • UGANDA • Competitiveness • AQUACULTURE

- Training of the farm staff on the preparation of fish feed, using the correct mix of local ingredients and the farm's equipment, and in comparing such farm formulated feeds with imported ones.

RESULTS ACHIEVED:

Water/civil engineer:

- New farm layout plan with description of an improved pond production system which, if implemented, would improve pond management, optimise stocking densities and ease the fish harvesting process.
- Recommendations for:
 - Improvement of water quality and durability;
 - Cost efficiency in water drainage;
 - Improvement of access to the fish ponds, which would reduce mobility on the farm;
 - Improved capacity in stocking densities;
 - Combination/ or inclusion of eco-tourism in fish farming;
 - Increased product diversification by investment in a smoking and drying facility;
 - Water conservation measures through harvesting rain water and recycling used water.

Aquaculturist/veterinarian:

- Formulation of farm feeds, using cost effective local ingredients and equipment.
- Farm staff trained on methods for preparing such feeds without supervision.
- Most frequent fungal, bacterial and parasitic fish diseases at the farm identified, and control and prevention measures documented for future application.
- Recommendations for:
 - Ensuring high hygiene standards in the hatchery and pond environment;
 - Continuous monitoring of the variations in water quality;
 - Assigning specific duties for each staff engaged by the firm and ensuring periodic reports are made on activities performed;
 - Tender handling of netting, transfer and transportation operations to ensure avoidance of stress of the fish catch;
 - Disinfecting all containers, tanks and ponds before holding or stocking fish;
 - Conducting medical prophylaxis during the epidemic seasons of the year;



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- Avoid feeding dirty or spoiled feeds in order to prevent entry of pathogens into the fish environment;
- Diagnosing newly dead fish in order to keep track of any emerging disease;
- Making regular observations for abnormal fish behaviour during the feeding process.

IMPACT:

The process of collecting samples from other farms during the investigation and comparison of fish diseases occurrence enabled Sunfish Farms Ltd to get networked with other fish farmers all over the country, and also widened the firm's consultancy base. These partnerships will in future be expected to increase awareness of fish diseases in the country.

CDE ADDED VALUE:

Expertise in aquaculture.

FURTHER INFORMATION:

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