Mozambique’s freshwater aquaculture industry mostly consists of small-scale tilapia production in earthen ponds and has grown considerably since 2005. The largest problem with the pond farming industry is the limited access to fish feed and training.

This investment opportunity is a 3 year project to create a successful value chain to support local pond farmers and train them to use a specific business plan for a 500 m² fish farming pond. This can be achieved by creating aquaparks that locally connect the fish farmers to fish traders and local aquaculture technical service.

Do you need more information? No problem. The extended business plan for tilapia pond farming and other business opportunities in aquaculture, potato, dairy, poultry, fish feed factory, tilapia cage farming and cold chains, can be requested from the Zambezi Valley Development Agency (ZVDA). These have been prepared with support from Wageningen University & Research/CDI, the Netherlands.

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INVESTMENT COSTS

- This project will begin with the creation of a management structure, which provides senior experts and technical advice from Inaqua. This structure requires a financial investment of US$220,000 over the next 3 years. This structure will give local pond farms all the technical advice they need in order to build their own pond farm clusters and understand the supply chain that will benefit them. This investment could be financed publicly through a subsidy or privately by a company that wants to make a long term investment in aquaculture.

- Beyond the service and training structure that this project will provide, it will also give local farmers the resources to build a tilapia pond that is their own personal investment. The cost to build a fish pond is estimated at 43,500 MZN for the local pond farmers.

- After the local farms build their personal tilapia pond they can take advantage of the aquapark grouping system and produce fish at a price of 64 MZN/kg. These farmers will then be able to produce 422 kilos of fish per year, sell them on the open market for 75 MZN/kg and make an annual net profit of 7,344 MZN. If these local farmers produce this quantity of fish, they will then pay off their initial investment in 6 years.

- It is assumed that these local farmers will be able to produce fish that weighs 500 grams per piece and that they can sell off their entire production.

RISKS

- Access to water is one of the most limiting factors for fish farming. Proper training and education of the local pond fish farmers to integrate fish farming in their agriculture practices can help them overcome dry periods.

- If the fish ponds are supplied with a lower quality of fingerlings or fish feed it will cause a decrease in the size or quality of the fish to be sold. Furthermore, infrastructural constraints could affect access to the ponds for suppliers of fingerlings and fish feed, sellers, traders and technical staff. The use of aquaparks or fish pond clusters could mitigate this issue as in this manner one only needs to reach the fish pond cluster rather than each individual fish pond.

- This project is designed to have a manager/operator for the aquaparks and someone who is responsible for the training program of local farmers. If these staff fail at properly training, organizing or establishing an effective value chain, this project will experience severe setbacks. To mitigate this risk, the operator must have previous hands-on experience with aquaculture.

OPPORTUNITIES

- According to a report from Inaqua (National Aquaculture Institute of Mozambique) in 2012, there is the potential of about 50 ha of fish ponds in each of the four provinces of the Zambezi Valley. In the Zambezia province, which is blessed with thousands of hectares of irrigated fields, potential is even higher. This region has a climate with water temperatures which are close to optimal for fish growth.

- This project will develop 10 fish farming ponds over the next 3 years by taking advantage of the cheap manual labour, optimal heavy clay soil (for construction) and consistent water levels.

- The building of these fish ponds will be the responsibility of the farmers and they will be able to take advantage of the training and technical support included in this plan. The 10 fish farms to be constructed should be grouped together in 1 or 2 aquaparks in order to ease the arrival of sellers, trainers and technical staff.

- Inaqua is a major player in this project as they will provide the technical assistance and training for farmers. The plan is to link the government with local fish farmers and fish traders throughout rural areas.

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