The Zambezi Valley in Mozambique holds the potential for a strong and dynamic horticulture sector. This provides opportunities for a local cold chain infrastructure and handling to emerge.

Local entrepreneurs who are seeking a beneficial investment that also offers a fast payback period will find this opportunity very attractive.

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

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THE INVESTMENT

Two scenarios are offered for investors who are interested in starting a cold food chain in Mozambique. The first is to use a non-refrigerated chain and sell to the open market in Tete. The second scenario is to create a refrigerated chain with a small (pre-) cooling facility in Ulongue to sort, grade and package before transporting the products to Tete for sale in select markets.

The first scenario requires an investment of US$ 19,200 to pay local farmers for the produce and US$ 3,116 per week for transportation costs. This option will make a net profit of US$ 186,046 per year with a PBP of less than 1 year.

RISKS

Post-harvest losses are always a concern for a cold supply chain. This analysis takes this into account and provides a recommended training program to substantially decrease post-harvest losses during the supply chain.

The primary risk involved is the future demand of the market. The growth of demand from the local consumers and the mines will play a major role in keeping demand high, yet with higher diversification, this risk can be mitigated.

Another concern is that this cooling facility will only be in operation for 7 months during the growing season. This can easily be remedied by obtaining a backup product to use the cooling facility during the remaining 5 months.

The price of energy, the reliability of energy and the general costs of refrigerated transport must be considered for the success of this investment.

CURRENTLY, Mozambique’s cold supply chain is a Type A that is characterized by many steps in the chain, low quality demands, inefficiency and minimal market transparency.

A new cold supply chain would transition Mozambique from an informal type A supply chain to a commercial horticulture type B supply chain. This new supply chain will be defined by quality growers, high quality products and smooth transitions in the supply chain.

A well organized and designed cold chain can be used for a wide array of products and produce that are grown locally in Mozambique and keep up with the standards of high quality and competitive costs, compared with imported products.

OPPORTUNITIES

In today’s market, imports from South Africa are the primary source for fresh produce. Weekly truckloads of fresh produce are delivered to supermarkets and caterers in Tete. The long travel time decreases the shelf life of the produce. A local supply chain with locally grown produce will provide for a longer shelf life and lower prices.

South Africa also commonly suffers from a low harvest, as low as 60% of what is planned. This raises prices for the cost of imported produce and causes inconsistent prices in Mozambique.

There are three types of supply chains (A, B, C) that can be distinguished among the economies of developing countries. Depending on the degree of development of the producers and the market, these types range from Type A, where smallholder farmers produce for a local market, to Type C, where SME and large farmers produce for high value export markets.

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The refrigerated supply chain scenario requires US$ 200,000 in order to build the small cooling facility, purchase a refrigerated truck, the loading and technical equipment and also cover the initial payments for the produce from farmers. This option will have an annual net profit of US$ 384,966 per year, which gives a PBP of around 9 months and an ROI of 1.92.

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