

PROVINCIAL AQUACULTURE WOMEN AND YOUTH PROJECTS AID FOR TRADE-COMPACT LOANS

AQUACULTURE COMPACT LOANS FOR SMALL SCALE FARMERS

Introduction

Kachi Agriculture Micro Finance is at access to finance arm of Schweizer Agri who is aiming at providing Aquaculture compact loans to small scale farmers, NGOs, churches, cooperatives, schools, universities, orphanages, prisons, individuals in four (4) regions namely; western, north western, Lusaka and Central Provinces of Zambia. Aquaculture is the growing of fish and any other water creatures. It is not a foreign culture in our Zambian society. There has been a lot of encouragement to local communities to get involved but it has not yet formed grip. However, despite the initial capital outlay, this type of farming would generate some good financial earning to the farmers, private and public institutions.

There is no completion to the produce because the lakes, swamps, rivers which are the source of fish are almost depleted by big time dealers using unfriendly methods of fishing. This opportunity if anchored by an anchor project' estimated fixed capital of US\$ 14,409 and operating costs of US\$ 17,925 generating revenue of US\$ 184,800 in the first year of operation.

Processes and Capacity

A modest farmer, an NGO, church, school, prison or cooperative would need a minimum of three ponds of 4,000 square meters each. These are normally shallow to about 1.5 meters deep. When ready they are fertilized using agriculture lime and organic fertilizers like chicken, ducks, or turkey droppings. However, artificial fertilizers like NPK and Urea could be used. This takes two weeks and then stocking is done. Stocking is on a five pieces per square meter basis and at ratio of 3:2 i.e. 3 Tilapias and 2 Catfish. The stocked fries would be 5gms to 10 gms for Tilapia and 3-5cm for the Catfish. Feeding is by applying Aqua Starter for 6weeks and then after use Grower feeds. After six months the feeds are reduced because the fish would have gained the desired weight and so can reduce on the cost as the farmer is ready to sell.

Requirements

This business venture requires land with a permanent swamp preferably owned by the promoter. Construction of ponds is better done by hiring experts in that field. Once ponds are stocked, then a project would need wheelbarrows, spades, slashers and hoes for day today operations and a seing net for harvesting.

Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit cost	total
Land	No	-	-	1,500
Pond Construction	No	3	4,000	12,000
Wheelbarrow	No	3	25	75
Spades	No	4	4	14
Slashers	No	10	1	10
Hoes	No	5	2	10
Seing Net	No	1	800	800
Total				14,409

Production and Operating Costs in US\$

Cost Item	Units	Unit Cost	Qty/day	Pdn Cost/day	Pdn Cost/mth	Pdn Cost/yr
Direct Costs						
Fingerlings (tilapia)	Pcs	0.06	72,000	4,320	4,320	4,320
Fries (Catfish)	Pcs	0.10	48,000	4,800	4,800	4,800

Cost Item	Units	Unit Cost	Qty/day	Pdn Cost/day	Pdn Cost/mth	Pdn Cost/yr
Fertilizers	Kgs	-	-	-	83	1,000
Fish feeds	Kgs	0.51	17	9	225	2,705
Sub-total			120,017	9,129	9,429	12,825
General Costs (Overheads)						
Labor					225	2,700
Selling and Distribution					125	1,500
Miscellaneous					75	900
Sub-total					425	5,100
Total Operating Costs					9,854	17,925

Production costs assumed 312 days per year with daily capacity of fish farming 60,000 fish.

Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.

Direct costs include: materials, supplies and other costs that directly go into production of the product.

- Total monthly days assumed are 26-days.
- The valuation currency used is United States Dollars.

Market Analysis

This business proposal does not yield any profits in the first harvest after six months. This is due to a huge excavation cost for quality Ponds that lasts for 60 years. The fish market is readily available because the lake fish is very expensive and scarce since most of it is processed for export. Secondly, the fish skeletons which were being sold to the public after processing for export are also currently exported. Furthermore, aquaculture would be sustained better if the farmers would indulge in poultry and Piggery because their dropping would be of great use in the ponds.

Project Product Costs and Price Structure

Item	Period	Out put	Unit Cost	Pdn Cost/yr	Unit Price	Total Rve
Tilapia	6-month	36,000	0.15	5,378	0.9	32,400
	Per year	72,000	0.15	10,800	0.9	64,800
Cat-fish	6-month	24,000	0.15	3,600	2.5	60,000
	Per year	48,000	0.15	7,200	2.5	120,000
Total		120,000		18,000		184,800

Profitability Analysis Table

Profitability Item	Per day	Per Mnth	Per year
Revenue	592	15,400	184,800
Less: Production and Operating Costs	57	1,494	17,925
Profit	535	13,906	166,875

Government Incentive

The Government Republic of Zambia (GRZ) has got funds to support development of Aquaculture. Options available include accessing AfDB, CEEC and others at very attractive rates. There are also some NGOs that have come out to support the growing of fish because fish is very nutritive in terms of proteins and vitamins therefore very good for feeding children to fight malnutrition. It is well aligned with the policy of poverty eradication programme.