COURSE CODE: AFE 202

COURSE TITLE: INTRODUCTION TO AGRICULTURE AND FOOD SECURITY.

NAME: AWOSIKA ANNABEL A.

MATRIC: 18/LAW01/049

LEVEL: 200LVL

DATE: 28th APRIL, 2020



A BUSINESS PLAN FOR THE DEVELOPMENT OF A 150 HECTARES FARM TO ESTABLISHMENT OF DAIRY FARM WHERE WE WILL PRODUCE BUTTER AND FRESH MILK FOR SALE AT EDEN FARM, ELEME , RIVERS STATE, NIGERIA BY MANAGEMENT OF EDEN FARMS.

**CONTENTS OF A FEASIBILITY REPORT**

1. Executive Summary/ Brief Description of the Project
2. Sponsorship, Management and Technical Assistance
3. Market and Sales
4. Technical Feasibility, Resources and Environment
5. Timelines of Projects
6. Estimated Project Cost and Revenue
7. Funding Mechanism
8. Conclusion

**Executive Summary/ Project Description**

This business plan examines the feasibility of and indeed economic viability of the development of a 150hectares for establishment of dairy farm where we will produce butter and fresh milk in Eleme by Eden Farms. The farm will produce about 28 litres of milk from a single cow in a day The extraction plant will process about 28,000 litres of milk of which 5,000 litres will be used for butter production. There is high domestic demand for these products because of our huge population and lead to a gain in the Nigerian economy and reduction on the importation of milk and butter. Production is currently popular in the Northern Nigeria as the lead producers. Nigeria imports significant quantity of milk and its derivatives to augment domestic shortages.

The proposed project will create economic opportunities, impact positively on the people and help conserve scarce foreign exchange. The entire milk to be processed will be sourced locally through direct production. The project will create market access, improve income of farmers and contribute significantly to food security. It will also generate satisfactory returns for sponsors and investors.

**Sponsorship**

The project is sponsored by owners of Eden, Awosika family as well as Webster Food Transport services, Nolan Investments, Rivers State Government and Federal Government of Nigeria, Bank of Agriculture would be sponsoring the business with funds earned and saved up collectively in Eleme, Rivers State. Eden Agribusiness Consultancy will be responsible for the management consultancy of the projects. A partner firm Webster Food Transport services who offer all forms of transport including air freight to ensure perishable goods are transported to end users as soon as possible before they are spoilt.

**Management**

The management will comprise of a Cabinet System of the owners of the Businsess Board of Directors at the apex of the organization structure. This will be made up of shareholders and member of the cooperative who have stake in the survival, growth and profitability of the business as well as distinguished agribusiness professionals of proven integrity and vast experience in the project area. The prime objective of the board will be to give strategic directions and policies that will ensure long term success of the organization. The board will ensure that the organization complied with all standards set by regulatory authorities.

The Managing Director/President shall be responsible for the co-ordination of the day to day management of the cooperative business. He is accountable to the Board of Directors; he will mobilize organization resources to achieve set goals. He will manage business risks and focus on wealth creation.

**Market and Sales**

Market orientation: Nigeria as whole

Users of Products: Fresh milk for delivery to homes and businesses in need straight from the farm and fresh animals for delivery at the abettors to be cut and sold to the masses

**Competition analysis**

The only dairy farm in Nigeria is one in Sokoto State which produces too little milk and hence can’t produce enough milk for the country to cushion the fact that milk has to be imported for consumption of the whole country.

**Tariff and Import Restriction**

Forex restriction on food importation and zero duty on imported agricultural equipment will favour the project under consideration.

**Market Potential**

There is strong demand for milk and milk product derivatives in Nigeria. The state of infrastructure though not perfect still supports production and trade within Nigeria.

**Profitability**

Weather, biological, chemical, physical and environmental factors such as temperature, sunlight, water, air, soil conditions, varieties of seed, pests, diseases, price fluctuations and other risks e.g. cow invading the farm could affect yield and profitability. However, technical, scientific and financial based solutions will be employed to hedge against risks and safeguard profit. Irrigation option will be factored in to ensure two cycle of production in a year.

**Technical Feasibility**

The projects (production of milk and derivatives) are technically feasible. In terms of technology, which involve the milking of cows and churning of milk to butter, the industrial processes are simple. The needed equipment for milk extraction and milk churning are readily available and our team of technicians have hand on experience in the usage and maintenance of the equipment.

On the milk production, we have specialists in mechanization, farm management, market development, agric extension and accounting as part of our management team. We also have specialists in quality control as part of our management team. The state of infrastructure around the Farm is adequate and suitable for the location of the farm/firm for efficient production, processing and marketing. Raw materials will be produced and sourced locally.

From our analysis, integration of production and processing will give us a competitive advantage.

We are implementing our project using best international practices, sustainable production and due consideration for the environment. Although some degree of deforestation will occur, the EIA(Environmental Impact Assessment) report shows little or no damage to the environment as it relates to the issue of climate change.

**Government Support and Regulation**

The project conform with the economic diversification objective of the government. It also supports foreign exchange and import reduction conservation of government. It creates economic opportunities, market access and support food security objective of government. The project will benefit from government intervention fund in the agriculture sector. The project will also benefit from the favourable policy of zero duty for agricultural and equipment import. Restriction of forex for all food products will also widen market opportunity. The project will contribute significantly to employment, output increase, stable price and stable exchange rate.

**Project Timeline**

The project will be completed within 6months preferably between November 2020 and April 2021 because land clearing is mostly done in the dry season.

**7.0 Estimated Project Costs and Revenue**

**Fixed Cost**

1. **Land Clearing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **QTY** | **₦** | **K** |
| Land Clearing | 1Hectare | 25,000 | 00 |
| Cross cutting | 1Hectare | 25,000 | 00 |
| **Sub total** | 1Hectare | **100,000** | **00** |
| **Total** | 150 Hectare | **15,000,000** | **00** |

**(B) Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **QTY** | **USD** | **₦** | **K** |
| Dairy fan | 20 | 8,600 | 3,096,000 | 00 |
| Automatic online rotary milk line | 10 | 50,000 | 18,000,000 | 00 |
| Milk cooling tank  4000liter | 8 | 24000 | 8,640,000 | 00 |
| cattle barn equipment cattle headlock cow farm equipment | 500 | 25000 | 9,000,000 | 00 |
| Complete milk production line | 1 | 20000 | 7,200,000 | 00 |
| fully automatic milk butter production line equipment | 1 | 50000 | 18,000,000 | 00 |
| **Sub total** |  | **177,600** | **63,936,000** | **00** |

**(C) Vehicle**

**Type Model QTY ₦ K**

|  |  |  |  |
| --- | --- | --- | --- |
| **Pick up Truck** | **TUNDRA** | **3** | **36,099,000 : 00** |

**Operating Cost**

|  |  |  |
| --- | --- | --- |
| **Working Capital** |  |  |
|  | **₦** | **K** |
| Mechanization and storage | 105,000 | 00 |
| **For 400Ha** | **42,000,000** | **00** |
| Input / Ha | 91,825 | 00 |
| **For 400Ha** | **36,730,000** | **00** |
| Area yield insurance | 13,500 | 00 |
| Produce aggregation | 5,500 | 00 |
| Geo Spatial Service | 4,500 | 00 |
| Sub total | 23,500 | 00 |
| **For 150Ha** | **30,000,000** | **00** |
| Interest per hectare | 30,000 | 00 |
| **For 400Ha** | **4,500,000** | **00** |
| Total cost per hectare | ,325 | 00 |
| **Total cost for 400Ha** | **98,130,000** | **00** |
| Loan principal and interest (cost per Hectare) | 267,404 | 25 |
| **Total for 400Ha** | **106,961,700** | **00** |

**Amortization**

**₦ K**

|  |  |
| --- | --- |
| **Land clearing amortization (per hectare)** | **30,000 : 00** |
| **Land clearing amortization (150hectare)** | **4,500,000 : 00** |

**REVENUE**

|  |  |
| --- | --- |
| **Yield per hectare 3tonnes@ ₦145000 per tonne** |  |
|  | **₦ K** |
| **Revenue per hectare** | **435,000 : 00** |
| **For 150Ha** | **65,250,000 : 00** |
| **Net revenue for 150Ha(without amortization)** | **60,050,000 : 00** |
| **Net revenue with amortization(150ha clearing)** | **55,050,000 : 00** |
| **2nd Production Cycle** |  |
| **Net revenue** | **43,020,180 : 00** |
| **Annual Net Revenue ( 1st + 2nd Cycle)** | **98,058,480 : 00** |

**Currency conversion rate:₦360.00 to 1USD**

**Funding Mechanism**

Rivers State Government will provide 150Ha of cleared farmland around Eleme for the establishment of the farm. Federal Capital will also give funding of about ¾ of the total sum needed to establish the farm as equity contribution

Nolan investment to provide equity for equipment and vehicles purchase

Where possible equity investor to provide equity for working capital or otherwise secure loan at the rate of 9% through government intervention window at the Bank of Agriculture, Bank of Industry and Commercial banks.

**Conclusion**

The project is technically feasible and commercially viable. It is therefore recommended for funding.