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A FEASIBILTY REPORT/BUSINESS PLAN FOR THE DEVELOPMENT OF A FIVE HUNDRED HECTARES PALM FRUIT PLANTATION AND ESTABLISHMENT OF 30TONNES PER DAY CAPACITY PALM OIL EXTRACTION PLANT AT DELTA STATE UNIVERSITY, ABRAKA, DELTA STATE, NIGERIA BY OVIE AGRI BUSINESS VENTURES AND CONSULTANCY CONFIDENTIALITY AGREEMENT.

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EXECUTIVE SUMMARY/ PROJECT DESCRIPTION

This business plan examines the feasibility of an indeed economic viability of the development of a 500hectares palm fruit plantation and the establishment of a palm oil extraction plant in Abraka by Delta State University and DELSU Farmers’ cooperative Society Limited. The farm will produce about 2,200 tonnes of palm fruit in a production cycle. The palm oil extraction plant will process about 5,200 tonnes of oil palm fruit into edible palm oil, palm kernel oil, lam sludge soap, fertilizers, palm kernel cake which is used to feed the livestock and also for fertilizers. There are high domestic demands for these product due to the high rate of population and production constraints leading to shortage of the commodity. The production is quite popular in Akwa-Ibom, Abia, Rivers, Edo, Imo, Cross River as the lead producers.

The present project will generate economic opportunities, affect positively on the people and help preserve scarce foreign exchange. The entire palm fruit to be processed will be sourced locally through direct production, contract farming in Delta State and direct production, contract farming in Delta State and direct purchase from small holder farmers in other production areas. It will improve the income of farmers, easy market access, and also contribute significantly to food security. It will also generate satisfactory returns for both the sponsors and investors.

SPONSORSHIP

This project is sponsored by Olorogun Felix Ibru, an inspirational leader and founder of Delta State University. Olorogun Felix Ibru is promoting the productivity of small holder farmers in Abraka through the DELSU Farmer’s Cooperative Limited. The university has a Department of Agriculture and experts with many years of experience in the project being advanced Ovie Agribusiness Ventures and Consultancy will be responsible for the management consultancy of the projects.

MANAGEMENT

The management will settlement of a democratically elected 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 discerned agribusiness professionals of demonstrated rectitude and vast experience in the project area. The main 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 compiled 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.

TECHNICAL ASSISTANCE

The university has a working relationship with Delta State Government, Delta State Ministry of Agriculture, Farmer’s Union, Agricultural cooperatives and individual farmers. The university will get technical support from this relationship in the area of production through contract farming or out grower scheme.

The university has a working relationship and linkages to industry players in the project area who will offtake products through a purchase and sale contract agreement. We can see Okomu oil pal company plc. The palm oil will be sold through cooperatives and other distribution channels. While the palm fruit sludge will be used in soap and fertilizer industries.

MARKET AND SALES

Market Orientation: domestic, North East, South South.

Market Share: 5% in each market in North East, South South Nigeria.

Users of the product: edible oil for human, palm kernel cake for livestock, also fertilizers for industries, palm fruit sludge for soap.

COMPETITION ANALYSIS

At the moment, the state where palm oil is produced in very large quantities is Akwa Ibom State. It is located on the coast in the South-Eastern part of the country.

TARIFFS AND IMPORT DUTIES

One of the main purposes of this establishment is to reduce import of palm fruit to the barest minimum hence there will be no import duties as concerns this project. Moreover, all equipment’s and tools required are manufactured and will be gotten here in Nigeria.

MARKET POTENTIAL

Palm oil is one of the most widely used vegetable oils and a common ingredient in biscuits, margarine, breads, instant noodles, cereals, lipstick, candles, chocolate, shampoos, ice-cream, and detergents. The applications of palm oil are therefore diverse, which aids the expansion of the global palm oil market.

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 could affect the output and profitability but smart strategies and solutions will be propounded by our able bodied team to take care of any challenge that the organization might face.

TECHNICAL FEASIBILITY

The production of pal fruit and palm oil extraction is technically feasible. It involves the crushing of the palm fruit and extraction of oil, the industrial processes are simple and we have expert in oil extraction with more than 10years of experience is part of our team. The needed equipment for oil extraction are readily available and our experts have hand on experience in the usage and maintenance of the equipment

GOVERNMENT SUPPORT AND REGULATION

The project shall be Government approved seeing as it is in compliance with the plan of the Federal government to make the nation an agricultural zone for the production of palm oil in the world. It also supports foreign exchange and import reduction. It creates economic opportunities, market acce4ss, improved income for farmers and support food security objective of the government. The project will benefit from the government intervention fund in the agricultural sector. Restriction of forex for all food products will also widen market opportunities. The project will contribute significantly to employment, output increase, stable price and stable exchange rate. The project will also benefit from the policy of zero duty for the import of agricultural products.

PROJECT TIMELINE

It takes about four years for oil palms to produce fruits suitable for harvest. Each tree will then continue to produce fruit for up to 30years, at which point they will have grown around 40feet tall.

ESTIMATED PROJECT COST AND REVENUE

FIXED COST

A) Land Clearing

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Qty | ₦ | K |
| Land Clearing | 1hectare | 210,000 | 00 |
| Cross cutting | 1hectare | 20,000 | 00 |
| Rome ploughing | 1hectare | 50,000 | 00 |
| Subtotal | 1hectare | 280,000 | 00 |
| Total | 500hectares | 140,000,000 | 00 |

B) EQUIPMENTS

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Qty | ₦ | K |
| Tractor | 1 | 7,000,000 | 00 |
| Disc harrower | 2 | 1,690,000 | 00 |
| Palm fruit threshing machine | 2 | 1000,000 | 00 |
| Palmfruit sterilization machine | 3 | 3,350,000 | 00 |
| Palmfruit digesting and pressing machine | 5 | 4,000,000 | 00 |
| Palmoil refinery plant | 2 | 5,000,000 | 00 |
| Total |  | 22,040,000 | 00 |

C) VEHICLE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Types | Model | Qty | ₦ | K |
| Pick-up Truck | HILUX | 3 | 50,000,000 | 00 |

D) IRRIGATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type | Qty | Model | ₦ | K |
| Hose Reel | 2 | 140-440MT | 2,000,000 | 00 |

OPERATING COST

|  |  |  |
| --- | --- | --- |
| Working capital |  |  |
|  | ₦ | K |
| Ploughing | 15,000 | 00 |
| Harrowing | 5,000 | 00 |
| Sub Total | 20,000 | 00 |
| **For 500 Ha** | **10,000,000** | **00** |
| Mechanization and Storage | 80,000 | 00 |
| **For 500 Ha** | **40,000,000** | **00** |
| Input/Ha | 50,000 | 00 |
| **For 500 Ha** | **25,000,000** | **00** |
| Area yield insurance | 8,000 | 00 |
| Produce aggregation | 5,000 | 00 |
| Geo spatial service | 4,500 | 00 |
| Subtotal | 17,500 | 00 |
| **For 500 Ha** | **8,750,000** | **00** |
| Interest per hectare | 17,000 | 00 |
| **For 500 Ha** | **8,500,000** | **00** |
| Total cost per Ha | 150,000 | 00 |
| **Total cost for 500 Ha** | **75,000,000** | **00** |
| **Irrigation cost for 500 Ha(excluding fixed cost)** | **15,000,000** | **00** |

AMORTIZATION

|  |  |  |
| --- | --- | --- |
|  | ₦ | K |
| Land clearing per hectare | 20,000 | 00 |
| **For 500 Ha** | **10,000,000** | **00** |

REVENUE

|  |  |  |
| --- | --- | --- |
| **Yield per hectare 25 tonnes @ ₦57,000 per 50 tonnes** |  |  |
|  | **₦** | **K** |
| **Revenue per hectare** | **1,120,000** | **00** |
| **For 500 Ha** | **560,000,000** | **00** |
| **Net revenue for 500 Ha**  **(without amortization)** | **100,000,000** | **00** |
| **Net revenue for 500 Ha**  **(With amortization)** | **60,000,000** | **00** |

FUNDING MECHANISM

DELSU will provide 400 Ha of cleared farmland around the university

Equity investor to provide for equipment and vehicles purchase

Where possible equity investor to provide equity for working capital

CONCLUSION

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