

NAME: OKAFOR CHIDERA

MAT NO: 18/ENG03/043

DEPARTMENT: CIVIL

ENGINEERING

COURSE: FOOD PRODUCTION

AND HEALTH AWARENESS

A FEASIBILITY REPORT/BUSINESS PLAN FOR THE INITIATION AND
DEVELOPMENT OF A THIRTY ACRES PALM TREES PLANTATION AND
ESTABLISHMENT OF 30 TONNES PER DAY CAPACITY PALM OIL & PALM KERNEL
OIL PROCESSING PLANT AT CHIDERA STATE FARM, OZARA, IMO STATE,
NIGERIA BY PLANET OIL CHEMICAL INDUSTRIES

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. Government Support and Regulation
6. Timelines of Projects
7. Estimated Project Cost and Revenue
8. Funding Mechanism
9. Conclusion

Executive Summary

This proposed plan examines the feasibility and economic usefulness of the initiation and development of a 30 acres palm seed plantation and the establishment of palm oil processing plant that in Chidera Farm by Planet Oil Chemical Industries and the Chidera Agriculture Team. The farm will produce 1,500 tons of palm fruit in a production cycle and the palm kernel processing plant yields 5,000 tons of palm kernel & 3,000 tons of palm fruits into palm kernel oil & palm oil respectively used for edible palm kernel oil, kernel shells used for livestock and other components used for soap and cosmetics. These products have a high demand both locally and foreign due to its numerous applications in the day to day activities. Production is best in Nigeria, which is one of the top exporters globally, it is cultivated mainly in Cross River, Awka Ibom state and IMO state.

The proposed project will create economic opportunities, impact positively on the people and help conserve scarce foreign exchange. The seedlings used for this project will be directly purchased from the local farmers in the state and from The Farmer society, all expenses paid by Planet Oil Chemical Industries. The employment of workers will be mainly based to find unemployed workers who have experience in farming but being commissioned or sponsored by any organization. The project is estimated to create 5,000 jobs available to the locals, partnership with other farmers to increase the productivity is being initiated.

SPONSORSHIP

This project is solely sponsored by Planet Oil Chemical Industries and The Chidera Agriculture Team. The Chidera Agriculture Team has been accepting donations by their several investors who sees great promise in working together with Planet Oil Chemical Industries to further develop an economic sector that has been scarcely touched by the government. The Chidera Agriculture Team has several experts who are well versed in this projection and also have a sub branch of the team that deals with all finances

and consultancy of the project.

MANAGEMENT

The management of this project will have a board of directors that is split into half in the power division between Planet OIL Chemical Industries and The Chidera Agriculture Team. The Board of Directors will be composed of shareholders of both parties who have stake in the survival, growth and profitability of the business and experts in the development of this project. 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 will be from one of these parties while the General Secretary shall be from the other, so as to avoid conflict of interest between both parties. The Managing Director will also be supervise each department's progress and also mobilize organization resources for the set project goals made by the Board of Directors.

TECHNICAL ASSISTANCE

The Chidera Agriculture Team is working with IITA (International Institute of Tropical Agriculture, Ibadan) through an executed MOU. IITA has mandate in Palm Trees production and processing and will provide technical assistance in this regard. The Agriculture Team is also being aided by the Bank of Agriculture to cover up any deficit in projects cost.

Planet Oil Chemical Industries will fund the processing plant and access finance from the profit made in this aspect of the project for the expansion and maintenance of the plantation. The Chidera Agriculture Team is on a cooperative relationship with the Imo State Government,

Ministry of Agriculture and The Farmers Guild who also lend a loan into the initiation and development of this project.

MARKET AND SALES

Market Orientation: domestic, medicinal; South West & South-South

Market Share: 9% niche market in South South, South East Nigeria

Users of Product: edible oil for cooking, promotes hair growth in cosmetics, preservatives, medicine, cleaning agent.

COMPETITION ANALYSIS

In Nigeria, the state that has been producing the largest quantity to put us in that position is Awka Ibom state, who has been producing 25- 30% of the national's products for the previous decade. Delta has been a close second with 22% of the national's product coming from their state. Imo has been one of the lowest producer for over a decade, with us producing less than 4% of the nation's output.

. Based on this above analysis, competition in terms of production in South East Nigeria is highly packed due to the untapped land in Imo State which was insufficiently funded by our predecessors but times have changed.

TARIFF AND IMPORT RESTRICTION

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

MARKET POTENTIAL

The practical use of the product makes it constantly demanded by the market both locally and globally.

TECHNICAL FEASIBILITY

The project is technically feasible due to the basic procedures to derive the output of the palm trees (palm kernel oil and palm oil). The industrial process is simple for both products and are relatively cheap compared to other cash crops. The needed equipment for oil extraction are readily available and our experts have hand on experience in the usage and maintenance of the equipment.

On the extraction, The Chidera Agriculture Team has experts in all aspects of the project in their management team. The quality of the products shall be tested by quality specialists from both parties of the project. The infrastructure needed in this process is adequately provided by Planet Oil Chemical Industries and is efficient for production, processing and marketing.

This project shall be mainly implemented by taking consideration into environment, international practices and cost efficient production techniques. The Imo State Government will supervise the rate of deforestation to ensure the environment is not severely harmed during the process. The fertilizers used shall be locally produced, so as to other aid farmers in the state region. **GOVERNMENT SUPPORT**

AND REGULATION

The project will contribute significantly to employment, output increase, stable price and stable exchange rate. This is due to the government's support in the agricultural sector of the country. The project will also reduce the rate of importation of palm oil from other countries due to the lack of trust by local farmers. The forex restriction policy on palm oil will increase the market demand on the products, hence bringing larger profit back to The Chidera Agriculture Team. Due to the increase of

exports and decrease in import, the GDP of the country will drastically increase.

PROJECT TIMELINE

The project will be completed within 6 months, preferably from April 2019 to October 2020. This is because the palm trees grow best when the rainy season is almost over so clearing of land should best be done during the rainy season.

Estimated Cost and Revenue

Fixed Cost

Land Clearing Processes

Activity	Quantity	Cost (N)
Land Clearing	5 acre	80,000
Harrowing	5 acre	11,500
Cross Cutting	5 acre	16,500
Excavation	5 acre	22,000
Ploughing	5 acre	24,500
Sub-Total	5 acre	178,500
Total	30 acres	332,500

Equipment & Vehicles

Name	Quantity	Model	Cost Price (N)	Total (N)
Tractor	3	YTO-904	3,500,000	10,500,000
Combine Harvester	2	4XA-7	19,000,000	38,000,000
Disc Harrow	8	ICJ- 2.0	400,000	3,200,000
Pesticide Sprayer	9	DDJ-5.0	150,000	1,350,000
Palm seeder	1	BLY-6F	2,500,000	2,500,000
Front Loader	5	SQ10D	500,000	2,500,000
Trippler	3	5HJ6Z	1,200,000	3,600,000
Pick-Up Truck	2	Hilux	15,000,000	30,000,000
Total				91,650,000

Operating Cost

Activity	Quantity	Cost(N)
Ploughing	1 acre	15,000
Harrowing	1 acre	10,000
Tilling	1 acre	15,000
Mechanization	1 acre	110,000
Power Supply	1 acre	3,500

Geo-Spatial Service	1 acre	4,500
Produce aggregation	1 acre	5,500
Water supply	1 acre	2,000
Farm Insurance	1 acre	6,500
Irrigation	1 acre	9,500
Sub-Total	1 acre	181,500
Total	60 acres	10,890,000

Amortization

Land clearing amortization (per acre)	N25,000
Land clearing amortization (60 acres)	N1,500,000

Revenue

Yield per acre 2 tons (N 170,000 per ton)	
	Cost (N)
Revenue per acres	650,000
Revenue at 60 acres	39,000,000
Net Revenue (at 60 acres) without amortization	18,200,000
Net Revenue (at 60 acres) with amortization	16,560,000

2nd Cycle

Net Revenue with amortization	13,023,000
Annual net Cycle (1 st + 2 nd cycle)	29,583,000

Funding Mechanism

The Chidera Family shall lease 60 acres of land to the Planet Oil Chemical Industries. Planet Oil Chemical Industries. Equity investor to provide equity for equipment and vehicles purchased by The Chidera Agriculture Team. Where possible equity investor to provide equity for working capital or otherwise secure loan at the rate of 9% from the Bank of Agriculture and commercial banks.

Conclusion

The proposed project as observed is feasible, and as foreseen it guarantees maximum profit and is it promising