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A FEASIBILITY REPORT FOR THE DEVELOPMENT OF AN OIL PALM PLANTATION AT
WARRI, WARRI SOUTH LGA IN DELTA STATE, NIGERIA BY COLE AGRIBUISNESS
VENTURE AND CONSULTANCY CONFIDENTIALITY AGREEMENT

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Executive Summary/ Project Description

The business plan examines the feasibility of and indeed economic viability of the development of a 200 hectares oil palm plantation in Delta state by Songhai Delta farm. The plan is to plant about 25,000 oil palm trees which will produce about 3,400 tons of fresh fruit bunch and 700 tons of palm oil in the first production cycle (3 years after planting) which can be used in the production of cosmetics, soaps, toothpaste, waxes, lubricants, ink, cooking oil and other important products. There is a high demand for the product due to the high number of uses for it and production constraints leading to shortage of the commodity. Production is currently popular in the South-eastern and South-southern parts of the country with Akwa Ibom as the lead producer. Nigeria imports a significantly high amount of oil palm derivatives to augment domestic shortages.

The proposed project will create economic opportunities, impact positively on the community and help conserve scarce foreign exchange. It will also generate satisfactory returns for sponsors and investors.

Sponsorship

The project will be sponsored by Egbuwe Kelvin, an engineering visionary and a practicing farmer. Egbuwe Kelvin aim to promote the productivity of smallholder farmers in Delta state with the aid of Songhai Delta. The society has many years of experience in the project being proposed and Cole Agribusiness ventures and consultancy will be responsible for the management consultancy of the projects.

Managements

The management will comprise of a democratically elected Board of Directors at the apex of the organization structure with 2 members from the Board of Directors of Songhai Delta. 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 authority.

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

Technical assistance will be given by Songhai Delta, Bank of Industry, Presco oil PLC, Bank of Agriculture. Presco oil PLC specializes in the cultivation of oil palm and in the extraction, refining and fractionation of crude palm oil into finished products and will

provide technical assistance in this regard. Songhai Delta has a relationship with the Bank of Agriculture and it has agreed to give a loan of 8% interest rate. This will be used to cover all fixed investments. The cooperative will also seek grant from United State African Development Foundation (USADF). The funds for the processing factory and extraction equipment will be financed by the Bank of Industry (BOI). Songhai Delta will provide the area of land used for farming

Market and Sales

Market orientation: domestic; South-West and Northern Nigeria

Market share: 4% niche in South-West, Northern Nigeria

Users of Products: edible oil for human, cosmetics and personal care, pharmaceuticals production of fatty oil used in paint and soap companies; production of palm wine for export trade to European market; and distilling of gin from raffia and oil palm wine, production of industrial chemicals

Competition Analysis

. The 9 Nigerian states that are considered to be the largest producers of palm oil which consists of Akwa-Ibom, Abia, Rivers, Edo, Imo, Ondo, Bayelsa, Cross River and Delta account for about 57% of total Nigerian palm oil production but 80% of production comes from dispersed smallholders who harvest semi-wild plants and use manual processing techniques. Several million smallholders are spread over an estimated area ranging from 1.65 million hectares to 2.4 million hectares and to a maximum of 3 million hectares. The estimate for oil palm plantations in Nigeria ranges from 169,000 hectares (72,000 ha of estate plantations and 97,000 ha of smallholder plantations) to

360,000 hectares of plantations. Based on this analysis, competition in terms of production in South-West and Northern Nigeria is low compared to the South-South and South-East

Tariff and Importation Restriction

The import tariff of 35% on Crude Palm Oil (CPO) introduced by the government will serve as a boost to the project

Market potential

There is a strong demand for oil palm and oil palm derivatives all over the country as it is believed that we import millions of dollars' worth of crude palm oil with importing approximately \$1.28 billion USD

Profitability

Factors that can affect profit include:

- Pests and diseases
- Fluctuation in market value
- Climatic/Environmental factors
- Poor management
- Natural disasters
- Civil unrest

However, there is technical, scientific and financial support available to hedge off or

cushion this risks and project profile

Technical feasibility

The projects (production of oil palm and palm oil extraction) are technically feasible. In terms of technology, which involve the crushing of oil palm seed and extraction of oil, the industrial processes are simple and a specialist in oil extraction with more than 20years 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.

On the oil palm production, we have specialists in mechanization, irrigation, farm management, crop production, weed science, 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 and generally in Delta 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.

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. Organic fertilizer will be substituted for chemical fertilizer within three years of farm operations.

Government support and regulation

In line with the agenda to reduce import dependence, palm oil was included in the 41 items made ineligible for forex from commercial banks in 2015, a move designed to manage foreign reserves and increase investment in the industry locally. A duty of 35% was also applied in crude palm oil (CPO) imports to further encourage local production

Alongside these indirect inducements, the government is also providing direct support, announcing in June 2019 that it would invest \$500 million towards increasing palm oil production by 700% across the next eight years. More specifically, in January 2020, the central bank committed \$190 million to the Edo State Oil Palm Programme to help revive the sector.

Project Timeline

The project will be completed in at least 3 years after which the first set of produce will be pushed out to the market, then there will be continuous production for at least 35 years.

Estimated profit and cost

Fixed Cost

A) Land clearing

Activity	Quantity	₦	k
Land Clearing	1 hectare	210,000	00
Cross cutting	1 hectare	19,500	00

Rome ploughing	1 hectare	50,000	00
Sub total	1 hectare	279,500	00
Total	200 hectares	55,900,000	00

(B) Equipment

Name	QTY	₦	K
Tractor	1	8,800,000	00
Disc harrow	1	1,300,000	00
Sub soiler	1	1,120,000	00
Soy seeder	1	1,900,000	00
Weeding machine	10	550,000	00
Tripper	1	3,400,000	00
Combine Harvester	1	37,250,000	00
Boom sprayer	1	2,500,000	00
Front loader	1	2,365,000	00
Total		59,185,000	00

(C) Vehicle

Type	QTY	₦	K
Pick up Truck	2	30,000,000	00

(D) Irrigation

Type	QTY	₦	K
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Hose Reel	1	1,0146,960	00
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Operating Cost

Working Capital	₦	K
Ploughing/Ha	15,000	00
Seeds/Ha	105,000	00
Harrowing/Ha	10,000	00
Sub total	130,000	00
For 200 Ha	26,000,000	00
Mechanization and storage	105,000	00
For 200Ha	21,000,000	00
Input / Ha	91,825	00
For 200Ha	18,365,000	00
Area yield insurance	13,500	00
Produce aggregation	5,500	00
Geo Spatial Service	4,500	00
Sub total	23,500	00
For 200Ha	4,700,000	00
Interest per hectare	22,079	00
For 200Ha	4,415,800	00
Total cost per hectare	245,325	00

Total cost for 200Ha	49,065,000	00
Loan principal and interest (cost per Hectare)	267,404	00
Total for 200Ha	53,480,800	00
Irrigation cost for 200Ha (excluding fixed cost)	12,009,060	00

REVENUE

The Palm Kernel Oil itself is sold for N120,000 Naira per ton. While the Sludge goes for N100,000 Naira per ton. The cost of palm kernel is 80,000 Naira per ton.

700 ton of oil = $700 \times 120,000 = \text{N } 84,000,000$

3,400 ton of palm kernel = $3400 \times 80,000 = \text{N } 272,000,000$

680 ton of sludge will be produced = $680 \times 100,000 = \text{N}68,000,000$

Funding Mechanism

Songhai Delta will provide 200Ha of cleared farmland and lease it to members of the cooperative. Presco oil will also lease 6,000MT capacity silo as equity contribution

Equity investor 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 commercially viable and profitable. It is therefore recommended for funding