PREFEASIBILITY STUDY ON SETTING UP DESICCATED COCONUTS PROCESSING UNIT IN NIGERIA

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ABOUT THIS REPORT

This prefeasibility study is designed to provide potential and startups entrepreneurs' valuable information on setting up coconut desiccated business in the food processing industry of Nigeria's market; aimed at encouraging and facilitating industrial activities across the country. It is our realization that industrialization is at the heart of economic development and that every effort has to be made to bring about industrial growth and encourage our people to be part of it.

The coconut desiccated business has over 80% local content in terms of availability of raw material, equipment and machinery, manpower and other requirements.

The key areas covered in this report include:

- i) Technical and economic analysis of the production, marketing and profitability of the project.
- ii) Recommendations in respect of procurement of equipments and associated problems.
- iii) Recommendation on suitable agronomic management practices to ensure efficient running of the projects.
- iv) Detailed financial analysis including project cash flows for the project among others. This prefeasibility report provides a comprehensive and detailed coverage of the above terms of reference and is designed to facilitate investment decisions.

The implementation of this project will also impact positively on the economy of the immediate community where the project is located. This is in terms of employment-direct and indirect, skilled and unskilled. Government also stands to benefit from internal revenue from taxation.

In view of the result of the analysis using some economic indicators as stated in the proposed project, it is hereby recommended that the project is viable.



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PART I EXECUTIVE SUMMARY

This particular prefeasibility study is premised on setting up desiccated coconuts processing plant in most part of Nigeria.

Desiccated coconut is produced in a variety of forms including threads, shreds, strips, chips and slices. The different cuts impart texture, while further sweetening, toasting or processing enhance the flavour. Characteristics of good quality desiccated coconut may include; crispy, pleasant and fresh taste, snow-white colour, and low fatty acid content (less than 0.2%).

The market for this product is readily available and the raw material and machinery & equipment needed to achieve the projected production capacity are locally available.

The product competes with dried fruit and nuts in the preparation of food products in five major market areas: the confectionery, bakery, frozen food, general food processing, and consumer products industries.

The industrial location of the processing plant should be based proximity of the raw cashew nut and basic infrastructure.

The estimated daily capacity is 300 packets of desiccated coconuts which translate to 93,600 packets annually working 312 days at 60% capacity utilization.

1.2 SUMMARY OF TOTAL PROJECT COST

| S/N | DESCRIPTION | COST | COST TO BE | TOTAL |
|-----|-----------------------|----------|------------|-----------|
| | | INCURRED | INCURRED | |
| 1 | Land and building | - | 360,000 | 360,000 |
| 2 | Machinery & equipment | - | 3,104,400 | 3,208800 |
| 3 | Utility equipment | - | 800,000 | 800,000 |
| 4 | Office equipment | - | 250,000 | 250,000 |
| | Total Capital Cost | - | 4,514,400 | 4,618,800 |
| 5 | Working capital | - | 1,400,000 | 1,400,000 |
| 6 | 10% contingencies & | - | | |
| | preliminary expenses | | 601,880 | 601,880 |
| | Total Project Cost | - | 6,516,280 | 6,620,680 |

1.3 FINANCIAL ACCOUNTING RATIOS ANALYSIS PERFORMANCE RATIOS AVERAGES

(a) Return on Profit =13% (b) Return on Equity =302% (c) Return on Investment =120%

(d) Positive NPV = $\frac{\text{N}}{27,913,646}$

(e) IRR = 47% (f) ARR = 120%

(g) Payback Period = 1 year and 3 months



PART II MARKET ANALYSIS

2.1 INTRODUCTION

2.0

The coconut palm is characterized by wide variety of use which is made of all parts of the plant. However, the primary object of coconut cultivation is the fruit and this prefeasibility report addresses only processing of the fruit. Although, all four components of the fruit - the water, meat, shell and husk - can be used as raw material for several products; such as:

Coconut water, obtained mostly from immature nuts, is consumed as a beverage. Although many potential uses for the water have been identified, large-scale commercial applications have not been feasible, and disposal of the water can be a problem.

The white meat of the kernel can be consumed fresh, and is an important constituent of many national dishes. Shredding and pressing the fresh meat produces coconut milk which can be consumed as a dairy substitute, or further boiled to produce oil. Alternatively the shredded meat can be dried to form desiccated coconut.

2.2 MARKET AREA ANALYSIS

Development of the bakery industry due to change in lifestyle & food habit of consumers has driven the growth of the desiccated coconut powder market. Moreover, it is easily available in the market through retail stores, online, supermarkets, which has fueled the market growth. However, the supply of coconut is expected to be uncertain in future due to adverse climatic changes, which is likely to hamper the growth of the desiccated coconut powder market in the upcoming years.

Moreover, availability of several substitutes for desiccated coconut powder in the market such as fresh coconut, Brazil nuts, or macadamia that offers similar nutty flavor & texture like desiccated coconut powder acts as a key restraint of the market. On the contrary, increase in consumer preferences for organic ingredients to be used in their foods is anticipated to boost the demand for organic desiccated coconut, thereby offering remunerative opportunities for market expansion in the near future.

There has been an increase in the sales and demand for organic desiccated coconut and fair trade products which has a direct impact in driving the market growth of desiccated coconut.

2.3 TARGET MARKET ANALYSIS

The dehydrated shredded flesh of coconut known as desiccated coconut is often used as a substitute to grated coconut in food preparations such as curries, cakes, sweets and chutneys. Confectionery and bakery units are the main consumers of desiccated coconut. Desiccated Coconut Powder is obtained by drying ground or shredded coconut kernel after the removal of brown testa. From the survey, it is revealed that coconut products are highly demanded by both the middle class and upper class families residing in cities and towns.



PART III TECHNICAL ANALYSIS

3.1 PRODUCT DESCRIPTION

3.0

Desiccated coconut is the product that is obtained by drying the granulated or shredded white meat of the fully mature coconut kernel, by means of a mechanical air drying. Coconut is known outside the tropics mainly through the popularity of desiccated coconut in cakes and chocolate bars.

Desiccated coconut powder is used as an ingredient in savory and sweet recipes, for imparting coconut flavor and texture as topping. No cholesterol and is rich in dietary fiber. It can be added to hot or cold cereals and as an addition to baked goods and also its consumed as a snack item.

3.2 LOCATION STRATEGY

The location of the factory should take into consideration the accessibility to raw material sources, the availability of cheap labour, lower cost of operations and easy access to market for the products.

3.3 RAW MATERIAL REQUIREMENT

Typical Yields

Planting density for coconut palms is 75 to 150 trees per hectare and each tree yields approximately 40 fruit per year. Typical oil content of copra is 63 to 68%.

Copra cake contains approximately 19 to 22% protein. Oil content of the cake varies between 0.5% (solvent extracted) and 17%- (traditional methods).

Coconut oil belongs to the Lauric acid group and contains approximately 90% saturated acids. 35 to 45% of the fruit is husk; the percentage available for coir extraction declines with maturity.

Approximate Conversion Factors

5000 coconuts yield 1 metric ton copra.

8000 coconuts yield 1 metric ton of crude oil.

1000 coconuts yield 140 litres coconut water.

1000 coconuts yield 127 to 182 kg desiccated coconut.

1000 husks yield 130 kg coir fibre.

1 metric ton copra yields 610 kg oil and 370 kg copra cake.

3.4 PRODUCTION PROCESS

The process consists of the removal of coconut shell, de-husking, shelling and paring. The nuts are then washed, disintegrated, dried and packed for the market.

Correct drying techniques are also critical. Dried copra ought to break easily with a sharp cracking sound, showing a good pearly white color inside. Excessive moisture in bagged copra makes it susceptible to damage from fungus and insects. Properly dried copra



kept in a ventilated store will retain a free fatty acid content of less than 1% for months. Highly acidic copra of up to 8% F.F.A. can be the result of insufficient drying

3.5 SOURCES OF FUNDS

The project can be funded through a number of sources which include but not limited to the following; Agric-Business, Small & Medium Scale Investment Scheme (AGSMEIS), Bank of Industry, Bank of Agriculture (BOA), Nigeria Export-Import (NEXIM) Bank, International Finance Corporation (IFC), grants etc., though the conditions and criteria for accessing the loans and grants varies.



PART IV FINANCIAL ANALYSIS

4.0

Basically, the financial section of this prefeasibility study consists of three financial statements: Income statement, Balance sheet, Cash flow projection. This section determines whether or not the project is viable using some economic indicators such as Net Present Value (NPV), Internal Rate of Return (IRR), and payback period as are detailed in the appendices below.

4.1 ASSUMPTIONS

- 1. Assuming that the project will last for the period of five years and the salvage value at the end of the project life ignored.
- 2. The Machinery, Equipments and Utility Equipment have uniform depreciation of 20%.
- 3. The estimated daily capacity is 300 packets of desiccated coconuts which translate to 93,600 packets annually working 312 days, at 60% capacity utilization.
- 4. The proposed capacity utilization are 60% in the first year of commercial production, 70%, 80% in the 2^{nd} and 3^{rd} year respectively and 90% in the 4^{th} and 5^{th} years.
- 5. Raw materials will be sourced locally and Market for the product is readily available.
- 6. Staff and labour cost will increase by 10% yearly.
- 7. Prices and unit costs are assumed unchanged in the five years of projection.
- 8. The valuation currency used is Naira.

4.2 ACCOUNTING /FINANCIAL ANALYSIS

4.2.1 NET PROFIT

The projected Annual Trading Profit and Loss Account is proposed to make the following Net Profit after tax during the corresponding projected periods – all things being equal.

4.2.2 NET PRESENT VALUE (NPV)

NPV is one of the four methods of discounted cash flows techniques which state that money that is immediately available for use, has a greater value than same amount receivables in future date.

Using this method however, all net cash inflows will be discounted to present value using the estimated interest rate of 60% discount factor. At 12% discount factor the project produced a positive NPV NGN 27,913,646

4.2.3 INTERNAL RATE OF RETURN (IRR)

This is the discount rate which gives zero NPV or the rate which equates the present value of cash inflows with present value of cash outflows of the project.

The cash flow of this project was discounted systematically until the NPV of the project finally become zero. The project produces the **IRR** of **46.6%**. Thus, the project accepted as being viable. This is because **IRR** is more than the cost of capital.



4.2.4 ACCOUNTING RATE OF RETURN (ARR)

ARR uses accounting information as revealed by financial statements (Income Statement) to measure profitability of the project under consideration. The forecast **ARR** of the project is **119.8**%.

4.2.5 PROFITABILITY INDEX (PI)

This is the present value of future cash flows over the present value of cash outlays. The project PI further confirm the viability of the project, because as the rules of the accepting and rejecting hold, a project should be accepted if the PI is equal or greater than one (1). Consequently, the PI of this project is 1.72 and thus recommended as being viable to be accepted for financing.

4.2.6 PAYBACK PERIOD

The payback period of any project is the length of time it would take the business investors to recover the capital invested in a project in spite of asset replacement. For this particular project the capital investment is expected to be fully recovered in about one year and 3 months.



APPENDIX I TOTAL PROJECT COST

| S/N | DESCRIPTION | QTY | UNIT PRICE | TOTAL |
|-----|--|-----|------------|-----------|
| | LAND AND BUILDING | | | |
| 1 | Factory rentage | 1 | 360,000 | 360,000 |
| | Sub total | 1 | 360,000 | 360,000 |
| | | | | |
| | MACHINERY & EQUIPMENT | | | |
| 2 | Disintegrator | 5 | 29,400 | 58,800 |
| 3 | De-husking and paring tool | 1 | 1,500,000 | 1,500,000 |
| 4 | Sieving machine | 1 | 120,000 | 120,000 |
| 5 | Grinder | 4 | 75,000 | 150,000 |
| 6 | Weighing scale | 1 | 90,000 | 90,000 |
| 7 | Hot air tray | 1 | 1,290,000 | 1,290,000 |
| | Sub total | 5 | 3,104,400 | 3,208800 |
| | | | | |
| | UTILITY EQUIPMENT | | | |
| 8 | Generating set | 1 | 250,000 | 250,000 |
| 9 | Industrial borehole with tanks | 1 | 550,000 | 550,000 |
| | Sub total | 2 | 800,000 | 800,000 |
| | | | | |
| | OFFICE EQUIPMENT | | | |
| 10 | Computer & printer | 1 | 200,000 | 200,000 |
| 11 | Furniture & Fittings | 1- | 50,000 | 50,000 |
| | Sub total | 2 | 250,000 | 250,000 |
| | | | | |
| | Total Capital Cost | | 4,514,400 | 4,618,800 |
| | | | | |
| 12 | Working capital | | 1,400,000 | 1,400,000 |
| 13 | 10% contingencies & preliminary expenses | | 601,880 | 601,880 |
| | Total Project Cost | | 6,516,280 | 6,620,680 |



APPENDIX II ESTIMATION OF WORKING CAPITAL REQUIREMENT

N'

| Year of Commercial Operation | 2 Months |
|---------------------------------------|-----------|
| % Capacity Utilization (Inventory) | 60% |
| 2 Months stock of raw material | 900,000 |
| 7 Days stock of finished products | 300,000 |
| Work in Progress | 200,000 |
| Bank/ Cash (5% sales of the products) | - |
| Working capital | 1,200,000 |

APPENDIX III FINANCING PLAN

N

| DESCRIPTION | EXISTING | PROPOSED | TOTAL |
|--------------------|-----------|-----------|-----------|
| Equity | 2,620,680 | - | 2,620,680 |
| Term loan from | - | 4,000,000 | 4,000,000 |
| Total project cost | 2,620,680 | 4,000,000 | 6,620,680 |
| % Contribution | 15% | 75% | 100% |

APPENDIX IV TERM LOAN REPAYMENT SCHEDULE

LOAN AMOUNT: 4,000,000 (Four Million Naira)

TYPE : ANY LOCAL AVAILABLE SME FUND

INTEREST RATE USED: 12%

REPAYMENT: 5 YEARS EQUAL INSTALLMENT (Annually)

| YEAR | OPENING | REPAYMENT | INTEREST | TOTAL YEAR |
|-------|-----------|-----------|-----------------|------------|
| | BALANCE | | DUE | INTEREST |
| 1 | 4,000,000 | 800,000 | 480,000 | 1,280,000 |
| 2 | 3,200,000 | 800,000 | 800,000 384,000 | |
| 3 | 2,400,000 | 800,000 | 288,000 | 1,088,000 |
| 4 | 1,600,000 | 800,000 | 192,000 | 992,000 |
| 5 | 800,000 | 800,000 | 96,000 | 896,000 |
| Total | | 4,000,000 | 1,440,000 | 5,440,000 |



APPENDIX V FORECAST STAFFING SCHEDULE (1ST OPERATIONAL YEAR) N'000

| POSITION | No | Unit Scale | Scale/ | Scale / Year |
|---------------------------------------|----|------------|--------|--------------|
| | | | Month | |
| DIRECT LABOUR | | | | |
| Factory Manager | 1 | 60 | 60 | 720 |
| Unskilled labour | 2 | 30 | 60 | 720 |
| Sub total | 3 | 90 | 120 | 1,440 |
| INDIRECT LABOUR | | | | |
| Accounts/ Admin | 1 | 40 | 40 | 480 |
| Marketing Officer | 2 | 30 | 60 | 720 |
| Sub total | 3 | 100 | 100 | 1,200 |
| Total on staff (1 st year) | 6 | 190 | 220 | 2,640 |

APPENDIX VI ESTIMATE OF ANNUAL DEPRECIATION ALLOWANCE

N

| ITEMS | INITIAL VALUE | DEPRECIATION (20%) |
|--------------------------|---------------|--------------------|
| Machinery and Equipments | 3,104,400 | 620,880 |
| Utility Equipments | 800,000 | 160,000 |
| Office Equipments | 250,000 | 50,000 |
| TOTAL | 4,154,400 | 830,880 |

APPENDIX VII ESTIMATION OF ADMINISTRATIVE / OVERHEAD EXPENSES N'

| COST ITEM | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|---------------------------|-----------|-----------|-----------|-----------|-----------|
| Selling and Distribution | 936,000 | 1,029,600 | 1,123,200 | 1,235,520 | 1,235,520 |
| Utilities (Power & water) | 540,000 | 594,000 | 648,000 | 712,800 | 712,800 |
| Miscellaneous | 180,000 | 198,000 | 216,000 | 237,600 | 237,600 |
| Fuel / Diesel | 270,000 | 297,000 | 324,000 | 356,400 | 356,400 |
| TOTAL | 1,926,000 | 2,118,600 | 2,311,200 | 2,542,320 | 2,542,320 |



APPENDIX VIII ESTIMATION OF PRODUCTION AND OPERATION COSTS

N'

| Cost Item | Units | @/ day | Qty/ day | Pdn cost/ day | Pdn cost/ month | Pdn cost/ year |
|-----------------------|-------|-----------|-------------|------------------|--------------------|-------------------|
| Fresh mature coconuts | kg | 300 | 400 | 120,000 | 3,120,000 | 37,440,000 |
| Sub-total | | | 400 | 120,000 | 3,120,000 | 37,440,000 |

APPENDIX IX ESTIMATION OF RAW MATERIAL/PRODUCTION COST AND SALES

| Year of Commercial Production | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------------|------------|------------|------------|------------|------------|
| % Capacity Utilization | 60% | 70% | 80% | 90% | 90% |
| 1. Output | | | | | |
| Fresh mature coconuts | 93,600 | 102,960 | 112,320 | 123,552 | 123,552 |
| Total output | 93,600 | 102,960 | 112,320 | 123,552 | 123,552 |
| | | | | | |
| 2. Cost of Production | N' | N' | N' | N' | N' |
| Desiccated coconut@ N399 (kg) | 37,346,400 | 41,081,040 | 44,815,680 | 49,297,248 | 49,297,248 |
| Total cost of production | 37,346,400 | 41,081,040 | 44,815,680 | 49,297,248 | 49,297,248 |
| | | | | | |
| 3. SALES | | | | | |
| Desiccated coconut@ N570(kg) | 53,352,000 | 58,687,200 | 64,022,400 | 70,424,640 | 70,424,640 |
| TOTAL SALES/ TURNOVER | 53,352,000 | 58,687,200 | 64,022,400 | 70,424,640 | 70,424,640 |



APPENDIX X FORECAST INCOME STATEMENT (PROFIT & LOSS ACCOUNT)

| Year of commercial | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------------|------------|------------|---------------------|-------------|-------------|
| operation | | | | | |
| % Capacity Utilization | 60% | 70% | 80% | 90% | 90% |
| 1. SALES | N' | N' | N' | N' | N' |
| Gross Sales | 53,352,000 | 58,687,200 | 64,022,400 | 70,424,640 | 70,424,640 |
| VAT @ 5% | 2,667,600 | 2,934,360 | 3,201,120 | 3,521,232 | 3,21,232 |
| Net Revenue | 50,684,400 | 55,752,840 | 60,821,280 | 66,903,408 | 66,903,408 |
| | | | | | |
| 2. OPERATION COST | | | | | |
| Cost of Raw materials | | | | | |
| consumed | 37,346,400 | 41,081,040 | 44,815,680 | 49,297,248 | 49,297,248 |
| Staff and labour | 2,640,000 | 2,904,000 | 3,168,000 | 3,485,000 | 3,485,000 |
| Admin. & Overhead Expenses | 1,926,000 | 2,118,600 | 2,311,200 2,542,320 | | 2,542,320 |
| Depreciation | 830,880 | 830,880 | 830,880 830,880 | | 830,880 |
| Total Operating Cost | 42,743,280 | 46,934,520 | 51,125,760 | 56,155,448 | 56,155,448 |
| | | | | | |
| 3. OTHER COSTS | | | | | |
| Interest on Term Loan (12%) | 960,000 | 768,000 | 576,000 | 384,000 | 192,000 |
| Loan Repayment | 1,60,000 | 1,60,000 | 1,60,000 | 1,60,000 | 1,60,000 |
| Total (Other Costs) | 43,703,280 | 47,702,520 | 51,701,760 | 56,539,448 | 56,347,448 |
| | | | | | |
| Profit Before Tax | 6,981,120 | 8,050,320 | 9,119,520 | 10,363,960 | 10,555,960 |
| Tax @ 12% | 837,734.4 | 966,038.4 | 1,094,342.4 | 1,243,675.2 | 1,266,715.2 |
| Profit after tax (NET PROFIT) | 6,143,386 | 7,084,282 | 8,025,178 | 9,120,285 | 9,289,245 |
| | | | | | |
| % Return on Sales | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 |
| % Return on Equity | 2.34 | 2.70 | 3.06 | 3.48 | 3.55 |
| % Return on Investment | 0.93 | 1.07 | 1.21 | 1.38 | 1.40 |



APPENDIX XI
FORECAST HIGH RATE AND LOW RATE COMPUTATION

| Year | C/F | DF 12% | NPV | |
|---------------------|-------------|--------|--------------|--|
| | N' | | N'000 | |
| 0 | (6,620,680) | 1 | (6,620,680) | |
| 1 | 6,143,386 | 0.893 | 5,486,043.7 | |
| 2 | 7,084,282 | 0.797 | 5,646,172.75 | |
| 3 | 8,025,178 | 0.712 | 5,713,926.74 | |
| 4 | 9,120,285 | 0.636 | 5,800,501.26 | |
| 5 | 9,289,245 | 0.567 | 5,267,001.92 | |
| Total Profit | 39,662,376 | | 27,913,646 | |
| Average Profit | 7932475.2 | | | |

| Year | C/F | DF 60% | NPV | |
|---------------------|-------------|--------|--------------|--|
| | N' | | N' | |
| 0 | (6,620,680) | 1 | (6,620,680) | |
| 1 | 6,143,386 | 0.625 | 3,839,616.25 | |
| 2 | 7,084,282 | 0.3906 | 2,767,120.55 | |
| 3 | 8,025,178 | 0.2441 | 1,958,945.95 | |
| 4 | 9,120,285 | 0.1526 | 1,391,755.49 | |
| 5 | 9,289,245 | 0.0954 | 886,193.973 | |
| Total Profit | 39,662,376 | | 10,843,632 | |
| Average Profit | 7,932,475.2 | | | |



APPENDIX XII

FORECAST IRR AND ARR COMPUTATION

$$IRR = a + (\underline{A}) * (b-a)$$

A+B

Where

a = 12%

b= 60%

A = 27,913,646

B= 10,843,632

27,913,646 + 10,843,632

12%+ 34.6

47%

ARR = <u>Estimated Average Profit</u> x 100

Estimated initial investment

$$ARR = 7,932,475.2 \times 100$$

6,620,680

120%



APPENDIX XIII
CASH FLOW PROJECTION

| Year of Comm. Production | Year o | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------------|-----------|------------|------------|-------------|-------------|-------------|
| % Capacity Utilization | | 60% | 70% | 80% | 90% | 90% |
| A) CASH RECEIPTS | N' | N' | N' | N' | N' | N' |
| Equity Capital | 2,620,680 | - | - | - | - | - |
| Term Loan | 4,000,000 | - | - | - | - | - |
| Gross Revenue | - | 50,684,400 | 55,752,840 | 60,821,280 | 66,903,408 | 66,903,408 |
| Total Receipts | 6,620,680 | 50,684,400 | 55,752,840 | 60,821,280 | 66,903,408 | 66,903,408 |
| B) CASH PAYMENTS | | | | | | |
| Capital Payment | | | | | | |
| Machinery & Equipments | 3,104,400 | - | - | - | - | - |
| Utility Equipment | 800,000 | - | - | - | - | - |
| Office equipments | 250,000 | - | - | - | - | - |
| TOTAL | 4,154,400 | - | - | - | - | - |
| (ii) Operating Expenses | | | | | | |
| Depreciation | - | 830,880 | 830,880 | 830,880 | 830,880 | 830,880 |
| Change in working capital | 2,466,280 | 41,912,400 | 46,103,640 | 50,294,880 | 55,324,568 | 55,324,568 |
| Sub total | 2,466,280 | 42,743,280 | 46,934,520 | 51,125,760 | 56,155,448 | 56,155,448 |
| (iii) Financial Expenses | | | | | | |
| Repayment of Term Loan | - | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 |
| Interest on Term Loan | - | 960,000 | 768,000 | 576,000 | 384,000 | 192,00 |
| Value Added Tax | - | 2,667,600 | 2,934,360 | 3,201,120 | 3,521,232 | 3,21,232 |
| Corporate Tax | - | 837,734.4 | 966,038.4 | 1,094,342.4 | 1,243,675.2 | 1,266,715.2 |
| Sub total | - | 6,065,334 | 6,268,398 | 6,471,462 | 6,748,907 | 2,866,715 |
| Total cash payment (ii)-(iii) | 2,466,280 | 36,677,946 | 40,666,122 | 44,654,298 | 49,406,541 | 53,288,733 |
| Net cash flow c/f | 2,466,280 | 36,677,946 | 40,666,122 | 44,654,298 | 49,406,541 | 53,288,733 |



APPENDIX XIV
BALANCE SHEET PROJECTION

| Year of comm. Operation | Year o | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------------|-----------|-------------|-------------|---------------|---------------|---------------|
| ASSETS | N'000 | N'000 | N'000 | N'000 | N'000 | N'000 |
| (i) Fixed assets | | | | | | |
| Machinery and Equipments | 3,104,400 | - | - | - | - | - |
| Utility equipment | 800,000 | | | | | |
| Office Equipment | 250,000 | | | | | |
| Value at Acquisition | | 4,154,400 | 4,154,400 | 4,154,400 | 4,154,400 | 4,154,400 |
| Less Cumulated Depreciation | - | 830,880 | 1,661,760 | 2,492,640 | 3,323,520 | 4,154,400 |
| Net fixed assets | 4,154,400 | 3,323,520 | 2,492,640 | 1,661,760 | 830,880 | 0 |
| (ii)Current Assets/ liability | | | | | | |
| Stock of Raw Materials | 1,400,000 | 8,749,256 | 16,302,715 | 19,031,183 | 21,472,264 | 24,048,184 |
| Debtors /prepayment | - | 1,453,000 | 2,098,000 | 3,308,000 | 4,139,000 | 5,653,000 |
| Bank and Cash Balances | 1,066,280 | 4,150,024 | 5,160,031 | 6,170,539 | 7,180,674 | 7,180,741 |
| Creditor / accruals | - | (4,074,000) | (6,039,000) | (8,947,000) | (11,013,000) | (13,785,000) |
| Tax | - | (837,734.4) | (966,038.4) | (1,094,342.4) | (1,243,675.2) | (1,266,715.2) |
| Net current assets | 2,466,280 | 9,440,546 | 16,555,708 | 18,468,380 | 20,535,263 | 21,830,210 |
| TOTAL NET ASSETS | 6,620,680 | 12,764,066 | 19,048,348 | 20,130,140 | 21,366,143 | 21,830,210 |
| (ii) <u>FINANCED BY</u> | | | | | | |
| Equity Capital | 2,620,680 | 2,620,680 | 2,620,680 | 2,620,680 | 2,620,680 | 2,620,680 |
| P&L | - | 6,143,386 | 7,084,282 | 8,025,178 | 9,120,285 | 9,289,245 |
| Retained Profit | - | - | 6,143,386 | 7,084,282 | 8,025,178 | 9,120,285 |
| SHAREHOLDERS FUND | 2,620,680 | 8,764,066 | 15,848,348 | 17,730,140 | 19,766,143 | 21,030,210 |
| Long Term Loan | 4,000,000 | 4,000,000 | 3,200,000 | 2,400,000 | 1,600,000 | 800,000 |
| TOTAL EQUITY & LIABILITY | 6,620,680 | 12,764,066 | 19,048,348 | 20,130,140 | 21,366,143 | 21,830,210 |

