

# PREFEASIBILITY STUDY ON SETTING UP DEHYDRATED FRUITS AND VEGETABLES PLANT 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 dehydration of fruits and vegetables 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 dehydration of fruits and vegetables 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 projects.

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

#### 1.1

This prefeasibility study is on the establishment of geothermal fruit and vegetable drying facility in suitable part of Nigeria.

Fruits like grapes, oranges, papaya, mangoes, etc. are largely grown in Nigeria. However, they are harvested seasonally resulting in some seasons of relative scarcity. In order to maintain the availability of fruits and vegetables throughout the year, the activity of dehydration is undertaken.

With the grown literacy and health consciousness among many Nigerians both in the urban and rural settlements, fruit intake demand will be inexhaustible. These fruits and vegetable have become daily needs for every household as meals, soft meal or lifestyle. There is need to preserve it, to be made available and affordable all year round.

This project is small scale enterprise which can be sited in any part of Nigeria with consideration to proximity to source of raw material that meets the projected capacity of the plant and market for the products.

The production capacity is 100 Kgs working 312 day annually, at 60% capacity utilization.

#### 1.1 SUMMARY OF TOTAL PROJECT COST

S/N	DESCRIPTION	COST INCURRED	COST TO BE INCURRED	TOTAL
1	Land and building	-	480,000	480,000
2	Machinery & equipment	-	2,060,000	2,060,000
3	Utility equipment	-	1,350,000	1,350,000
4	Office equipment	-	200,000	200,000
	<b>Total Capital Cost</b>	-	<b>4,090,000</b>	<b>4,090,000</b>
5	Working capital	-	1,400,000	1,400,000
6	10% contingencies & preliminary expenses	-	549,000	549,000
	<b>Total Project Cost</b>	-	<b>6,039,000</b>	<b>6,039,000</b>

#### 1.2 FINANCIAL ACCOUNTING RATIOS ANALYSIS

##### PERFORMANCE RATIOS AVERAGES

- (a) Return on Sales = 26%
- (b) Return on Equity = 268%
- (c) Return on Investment = 91%
- (d) Positive NPV = ₦19,234,826
- (e) IRR = 47%
- (f) ARR = 91%
- (g) Payback Period = 1 years and 7 months

## **PART II**

### **MARKET ANALYSIS**

The market for fruits and vegetables exists all year round. Supply is bound to increase the returns to investment. With an increased shelf life for the fruits and vegetables, the profit sales ratio is bound to increase. Therefore, this prefeasibility report exposes viable business opportunity for entrepreneurs through solving the problem of fruit and vegetable scarcity through geothermal drying facility. The process of dehydration also helps constitute fruits and vegetables in a hygienic condition.

#### **2.1 MARKET AREA ANALYSIS**

According to Postharvest Loss Alliance for Nutrition (PLAN) project, Nigeria experiences about 50% post-harvest losses. For instance, Nigeria is Africa's second largest producer of tomatoes with over 1.5 million tonnes harvested annually. Globally, Nigeria ranks as the 16th largest tomato producing nation in the world and has the comparative advantage and potential to lead the world in tomato production and exports. The country accounts for 68.4 percent of West Africa's output; 10.79 percent of Africa's and 1.2 per cent of total world production of the crop. In the tomato value chain, processing is where an investor can capture the greatest economic value according to the Federal Ministry of Agriculture and Rural Development (FMARD). Raw materials supply can be a challenge for processors due to post-harvest losses and comparatively lower yields. Despite this, nearly 50 percent of postharvest losses occur annually due to poor storage system and poor transportation.

Consequently, we need to reduce these losses and return them back to the supply chain. Therefore all hands must be on deck to tame the trends with modern preservative and value addition technologies. Hence, this prefeasibility study exposes the investment opportunity in the dehydration of fruits and vegetable as the digit divider.

#### **2.2 MARKET DEMAND ANALYSIS**

Demand for healthy food products has risen dramatically in recent years in the world. The findings that indicate that some major diseases such as cancer and obesity are triggered by food products which do not satisfy the necessary sanitation conditions have lead the consumers use organic and decontaminated products. Experts indicate that vegetables should be consumed after drying them whether on their natural growing season or out of season. In that case, the demand for dried vegetables would always be high since the drying sector is a preferred field of business and has great contributions to economy. Consumers not only make use of the dried vegetables directly, but also they can benefit from the dried vegetables in instant soup, infant food and additive food flour.

### 2.3 TARGET MARKET ANALYSIS

The target market is not limited to any particular segment, however, supply is recommended to supermarket chains, grocery shops, main markets, as they can help a lot in capturing a portion of the market. Consequently, the entrepreneur should focus mainly on these groups.



## **PART III**

### **TECHNICAL ANALYSIS**

#### **3.1 PRODUCTION DESCRIPTION**

This prefeasibility study is on the establishment of geothermal fruit and vegetable drying facility. This includes the drying of banana, palm, quince, orange, pineapple, pear, apple kiwi, peach, watermelon and melon using the above facility.

The proper selection of vegetable type according to climate conditions and proper irrigation techniques would ensure more productive in field of vegetable growing. Among countless vegetables; tomato, water melon, melon, pepper, cucumber, eggplant, onion, green beans, white cabbage, lettuce, spinach, garlic, leek and carrot would take the first place to grow.

#### **3.2 SUITABLE LOCATION**

Grain legumes, fruits vegetables, root and tuber crops are produced in large quantities in Nigeria most especially in the rural communities. This project can be sited at abundant fruit bearing areas in any part of Nigeria sufficing the desired quantity of the maximum capacity.

#### **3.3 PRODUCTION PROCESS AND TECHNOLOGY**

The process starts with major selection of the fruits and vegetables, and washing them. They are peeled, shelled, sliced, blanched and dehydrated under controlled conditions.

The dehydrated fruits and vegetables are finally packed in suitable containers to avoid moisture absorption. Dehydration of fruits & vegetables is done by various processes like Traditional Sun Drying, Solar Dryers, Mechanical Dryers, vacuum freeze drying, vacuum drying, Osmotic dehydration, dehydration through explosion puffing and microwave based technique.

The required drying temperatures for vegetables usually range from 50-60 °C, and drying duration is usually about 2-18 hours. For some vegetables, drying process takes place in two stages. For example, for carrots, first stage is to dry at 70 oC, and second stage is to dry at 65°C. Total drying duration for carrots is about 14-24 hours. For onions, the first stage drying temperature is 70-88oC, and second stage drying temperature is 55-60°C. Total drying duration for onions is about 10-15 hours among others.

#### **3.4 PRODUCTION CAPACITY**

The envisaged project has minimum capacity of 100kg per day working 312 days annually.

#### **3.5 CRITICAL FACTORS**

The project should observe the following important factors:

- Abundance of required low cost fruits/vegetable to ensure optimum working days and capacity utilization.
- Effective Marketing campaign.
- Suitable location with availability of electric power and access roads.

- Daily supply and processing of Fruits/Vegetable due to being highly perishable.

### **3.6 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 Machineries, Equipments and Utility Equipment have uniform depreciation of 20%
3. Production costs assumed are for 312 days per year with daily capacity of 100 Kgs assumed to be 60% installed capacity.
4. The proposed capacity utilization are 60% in the first year of commercial production, 70%, 80% in the 2<sup>nd</sup> and 3<sup>rd</sup> year respectively and 90% in the 4<sup>th</sup> and 5<sup>th</sup> 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 19,234,826**

##### 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 47%**. 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 **91%**.

#### 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 seven months**.

**APPENDIX I**  
**TOTAL PROJECT COST**

S/N	DESCRIPTION	QTY	UNIT PRICE	TOTAL
	<b>LAND AND BUILDING</b>			
1	Factory rentage	1	480,000	480,000
	<b>Sub total</b>	<b>1</b>	<b>480,000</b>	<b>480,000</b>
	<b>MACHINERY &amp; EQUIPMENT</b>			
2	Syrup tank	1	200,000	200,000
3	Heating vessels	1	400,000	400,000
4	Nylon net	1	400,000	400,000
5	Plastic vats	1	400,000	400,000
6	Cross flow drier	1	400,000	400,000
7	Impulse sealer	1	60,000	60,000
	<b>Sub total</b>	<b>6</b>	<b>2,060,000</b>	<b>2,060,000</b>
	<b>UTILITY EQUIPMENT</b>			
8	Generating set	1	750,000	750,000
9	Industrial borehole with tanks	1	600,000	600,000
	<b>Sub total</b>	<b>2</b>	<b>1,350,000</b>	<b>1,350,000</b>
	<b>OFFICE EQUIPMENT</b>			
10	Computer & printer	1	150,000	150,000
11	Furniture & Fittings	1-	50,000	50,000
	<b>Sub total</b>	<b>2</b>	<b>200,000</b>	<b>200,000</b>
	<b>Total Capital Cost</b>		<b>4,090,000</b>	<b>4,090,000</b>
12	Working capital		1,400,000	1,400,000
13	10% contingencies & preliminary expenses		549,000	549,000
	<b>Total Project Cost</b>		<b>6,039,000</b>	<b>6,039,000</b>

**APPENDIX II**  
**ESTIMATION OF WORKING CAPITAL REQUIREMENT**  
**N'**

<b>Year of Commercial Operation</b>	<b>2 months</b>
<b>% Capacity Utilization (Inventory)</b>	<b>60%</b>
1 week stock of raw material	1,000,000
1 Day stock of finished products	300,000
Work in Progress	100,000
Bank/ Cash (5% sales of the products)	-
<b>Working capital</b>	<b>1,400,000</b>

**APPENDIX III**  
**FINANCING PLAN**  
**N**

<b>DESCRIPTION</b>	<b>EXISTING</b>	<b>PROPOSED</b>	<b>TOTAL</b>
Equity	2,039,000	-	2,039,000
Term loan from	-	4,000,000	4,000,000
<b>Total project cost</b>	<b>2,039,000</b>	<b>4,000,000</b>	<b>6,039,000</b>

**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)

<b>YEAR</b>	<b>OPENING BALANCE</b>	<b>REPAYMENT</b>	<b>INTEREST DUE</b>	<b>TOTAL YEAR INTEREST</b>
1	4,000,000	800,000	480,000	1,280,000
2	3,200,000	800,000	384,000	1,184,000
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
<b>Total</b>		<b>4,000,000</b>	<b>1,440,000</b>	<b>5,440,000</b>

**APPENDIX V**  
**FORECAST STAFFING SCHEDULE (1<sup>ST</sup> OPERATIONAL YEAR)**  
**N'ooo**

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

**APPENDIX VI**  
**ESTIMATE OF ANNUAL DEPRECIATION ALLOWANCE**  
**N'**

ITEMS	INITIAL VALUE	DEPRECIATION (20%)
Machinery and Equipments	2,060,000	412,000
Utility Equipments	1,350,000	270,000
Office Equipments	200,000	40,000
<b>TOTAL</b>	<b>3,610,000</b>	<b>722,000</b>

**APPENDIX VII**  
**ESTIMATION OF ADMINISTRATIVE / OVERHEAD EXPENSES**  
**N'**

COST ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Selling and Distribution	240,000	294,000	248,000	312,800	312,800
Miscellaneous	80,000	98,000	116,000	137,600	137,600
Utilities (Electricity & Diesel)	270,000	297,000	324,000	356,400	356,400
<b>TOTAL</b>	<b>590,000</b>	<b>689,000</b>	<b>688,000</b>	<b>806,800</b>	<b>806,800</b>

**APPENDIX VIII**  
**ESTIMATION OF PRODUCTION AND OPERATION COSTS**  
 N'

Cost Item	Units	@	Qty	Pdn cost	Pdn cost
<b>Direct Costs</b>					
Fruits	Kgs	90	16	1,443	37,500
Sugar syrup	ltrs/kgs	330	0.8	264	6,870
Citric acid	Ltrs	10,800	0.32	3,462	90,000
Packing material	Kgs	150	48	7,212	187,500
<b>Sub-total</b>		<b>11,370</b>		<b>12,300</b>	<b>321,876</b>

**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%
<b>1. Output</b>					
Dehydrated Fruit & Vegetable	31,200	34,320	37,440	41,180	41,180
<b>Total output</b>	<b>31,200</b>	<b>34,320</b>	<b>37,440</b>	<b>41,180</b>	<b>41,180</b>
<b>2. Cost of Production</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>
Dehydrated Fruit & Vegetable @ N240 (kgs)	7,488,000	8,236,800	8,985,600	9,883,200	9,883,200
<b>Total cost of production</b>	<b>7,488,000</b>	<b>8,236,800</b>	<b>8,985,600</b>	<b>9,883,200</b>	<b>9,883,200</b>
<b>3. SALES</b>					
Dehydrated Fruit & Vegetable @ N590(kgs)	18,408,000	20,248,800	22,089,600	24,296,200	24,296,200
<b>TOTAL SALES/ TURNOVER</b>	<b>18,408,000</b>	<b>20,248,800</b>	<b>22,089,600</b>	<b>24,296,200</b>	<b>24,296,200</b>



**APPENDIX X**  
**FORECAST INCOME STATEMENT (PROFIT & LOSS ACCOUNT)**

Year of commercial operation	Year 1	Year 2	Year 3	Year 4	Year 5
% Capacity Utilization	60%	70%	80%	90%	90%
<b>1. SALES</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>
Gross Sales	18,408,000	20,248,800	22,089,600	24,296,200	24,296,200
VAT @ 5%	920,400	1,012,440	1,104,480	1,214,810	1,214,810
<b>Net Revenue</b>	<b>17,487,600</b>	<b>19,236,360</b>	<b>20,985,120</b>	<b>23,081,390</b>	<b>23,081,390</b>
<b>2. OPERATION COST</b>					
Cost of Raw materials consumed	7,488,000	8,236,800	8,985,600	9,883,200	9,883,200
Staff and labour	2,640,000	2,904,000	3,168,000	3,485,000	3,485,000
Admin. & Overhead Expenses	590,000	689,000	688,000	806,800	806,800
Depreciation	722,000	722,000	722,000	722,000	722,000
<b>Total Operating Cost</b>	<b>11,440,000</b>	<b>12,551,800</b>	<b>13,563,600</b>	<b>14,897,000</b>	<b>14,897,000</b>
<b>3. OTHER COSTS</b>					
Interest on Term Loan (12%)	480,000	384,000	288,000	192,000	96,000
Loan Repayment	800,000	800,000	800,000	800,000	800,000
<b>Total (Other Costs)</b>	<b>12,720,000</b>	<b>13,735,800</b>	<b>14,651,600</b>	<b>15,889,000</b>	<b>15,793,000</b>
<b>Profit Before Tax</b>	<b>4,767,600</b>	<b>5,500,560</b>	<b>6,333,520</b>	<b>7,192,390</b>	<b>7,288,390</b>
Tax @ 12%	572,112	660,067.2	760,022.4	863,086.8	874,606.8
<b>Profit after tax (NET PROFIT)</b>	<b>4,195,488</b>	<b>4,840,493</b>	<b>5,573,498</b>	<b>6,329,303</b>	<b>6,413,783</b>
% Return on Sales	0.24	0.25	0.27	0.28	0.28
% Return on Equity	2.06	2.37	2.74	3.10	3.15
% Return on Investment	0.70	0.80	0.92	1.05	1.06

## APPENDIX XI

## FORECAST HIGH RATE AND LOW RATE COMPUTATION

Year	C/F	DF 12%	NPV
	N'		N'000
0	(6,039,000)	1	(6,039,000)
1	4,195,488	0.893	3,746,571
2	4,840,493	0.797	3,857,872
3	5,573,498	0.712	3,968,331
4	6,329,303	0.636	4,025,437
5	6,413,783	0.567	3,636,615
<b>Total Profit</b>	<b>27,352,565</b>		<b>19,234,826</b>
<b>Average Profit</b>	<b>5,470,513</b>		

Year	C/F	DF 60%	NPV
	N'		N'
0	(6,039,000)	1	(6,039,000)
1	4,195,488	0.625	2,622,180
2	4,840,493	0.3906	1,890,697
3	5,573,498	0.2441	1,360,491
4	6,329,303	0.1526	965,852
5	6,413,783	0.0954	611,875
<b>Total Profit</b>	<b>27,352,565</b>		<b>7,451,094</b>
<b>Average Profit</b>	<b>5,470,513</b>		

## APPENDIX XII

### FORECAST IRR AND ARR COMPUTATION

$$IRR = a + \left( \frac{A}{A+B} \right) * (b-a)$$

Where

$$a = 12\%$$

$$b = 60\%$$

$$A = 19,234,826$$

$$B = 10,843,632$$

$$12\% + \frac{19,234,826}{19,234,826 + 10,843,632} (60-12)$$

$$12\% + 34.6$$

$$47\%$$

$$ARR = \frac{\text{Estimated Average Profit} \times 100}{\text{Estimated initial investment}}$$

$$ARR = \frac{5,470,513 \times 100}{6,039,000}$$

$$91\%$$

**APPENDIX XIII**  
**CASH FLOW PROJECTION**

Year of Comm. Production	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
% Capacity Utilization		60%	70%	80%	90%	90%
<b>A) CASH RECEIPTS</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>	<b>N'</b>
Equity Capital	2,039,000	-	-	-	-	-
Term Loan	4,000,000	-	-	-	-	-
Gross Revenue	--	17,487,600	19,236,360	20,985,120	23,081,390	23,081,390
<b>Total Receipts</b>	<b>6,039,000</b>	<b>17,487,600</b>	<b>19,236,360</b>	<b>20,985,120</b>	<b>23,081,390</b>	<b>23,081,390</b>
<b>B) CASH PAYMENTS</b>						
<b>Capital Payment</b>						
Machinery & Equipments	2,060,000	-	-	-	-	-
Office Equipment	1,350,000	-	-	-	-	-
Vehicle	200,000	-	-	-	-	-
<b>TOTAL</b>	<b>3,610,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>(ii) Operating Expenses</b>						
Depreciation	-	722,000	722,000	722,000	722,000	722,000
Change in working capital	2,429,000	10,718,000	11,829,800	12,841,600	14,175,000	14,175,000
<b>Sub total</b>	<b>2,429,000</b>	<b>11,440,000</b>	<b>12,551,800</b>	<b>13,563,600</b>	<b>14,897,000</b>	<b>14,897,000</b>
<b>(iii) Financial Expenses</b>						
Repayment of Term Loan	-	800,000	800,000	800,000	800,000	800,000
Interest on Term Loan	-	480,000	384,000	288,000	192,000	96,000
Value Added Tax	-	920,400	1,012,440	1,104,480	1,214,810	1,214,810
Corporate Tax	-	572,112	660,067.2	760,022.4	863,086.8	874,606.8
<b>Sub total</b>	<b>-</b>	<b>2,772,512</b>	<b>2,856,507</b>	<b>2,952,502</b>	<b>3,069,897</b>	<b>2,985,417</b>
<b>Total cash payment (ii)-(iii)</b>	<b>2,429,000</b>	<b>8,667,488</b>	<b>9,695,293</b>	<b>10,611,098</b>	<b>11,827,103</b>	<b>11,911,583</b>
<b>Net cash flow c/f</b>	<b>2,429,000</b>	<b>8,667,488</b>	<b>9,695,293</b>	<b>10,611,098</b>	<b>11,827,103</b>	<b>11,911,583</b>

**APPENDIX XIV  
BALANCE SHEET PROJECTION**

Year of comm. Operation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>ASSETS</b>	<b>N'000</b>	<b>N'000</b>	<b>N'000</b>	<b>N'000</b>	<b>N'000</b>	<b>N'000</b>
<b>(i) Fixed assets</b>						
Machinery and Equipments	2,060,000	-	-	-	-	-
Office equipment	1,350,000					
Vehicle	200,000	-	-	-	-	-
Value at Acquisition		<b>3,610,000</b>	<b>3,610,000</b>	<b>3,610,000</b>	<b>3,610,000</b>	<b>3,610,000</b>
Less Cumulated Depreciation	-	722,000	1,444,000	2,166,000	2,888,000	3,610,000
<b>Net fixed assets</b>	<b>3,610,000</b>	<b>2,888,000</b>	<b>2,166,000</b>	<b>1,444,000</b>	<b>722,000</b>	<b>0</b>
<b>(ii) Current Assets/ liability</b>						
Stock of Raw Materials	1,400,000	6,389,576	12,350,017	15,237,474	17,776,214	20,607,952
Debtors /prepayment	-	1,453,000	2,098,000	3,308,000	4,139,000	5,653,000
Bank and Cash Balances	1,029,000	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)
Company Tax	-	(572,112)	(660,067.2)	(760,022.4)	(863,086.8)	(874,606.8)
<b>Net current assets</b>	<b>2,429,000</b>	<b>7,346,488</b>	<b>12,908,981</b>	<b>15,008,991</b>	<b>17,219,801</b>	<b>18,782,086</b>
<b>TOTAL NET ASSETS</b>	<b>6,039,000</b>	<b>10,234,488</b>	<b>15,074,981</b>	<b>16,452,991</b>	<b>17,941,801</b>	<b>18,782,086</b>
<b>(ii) FINANCED BY</b>						
Equity Capital	2,039,000	2,039,000	2,039,000	2,039,000	2,039,000	2,039,000
P&L	-	4,195,488	4,840,493	5,573,498	6,329,303	6,413,783
Retained Profit	-	-	4,195,488	4,840,493	5,573,498	6,329,303
<b>SHAREHOLDERS FUND</b>	<b>2,039,000</b>	<b>6,234,488</b>	<b>11,074,981</b>	<b>12,452,991</b>	<b>13,941,801</b>	<b>14,782,086</b>
Long Term Loan	4,000,000	4,000,000	3,200,000	2,400,000	1,600,000	800,000
<b>TOTAL EQUITY &amp; LIABILITY</b>	<b>6,039,000</b>	<b>10,234,488</b>	<b>15,074,981</b>	<b>16,452,991</b>	<b>17,941,801</b>	<b>18,782,086</b>