# Pre-feasibility Study <br> PEANUT PROCESSING UNIT 

December 2020


#### Abstract

U The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, andrevenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA's website and consult financial experts to stay current with market conditions.


## Table of Contents

1 DISCLAIMER ..... 3
2 EXECUTIVE SUMMARY ..... 4
3 INTRODUCTION TO SMEDA ..... 4
4 PURPOSE OF THE DOCUMENT ..... 5
5 BRIEF DESCRIPTION OF PROJECT \& PRODUCT ..... 5
5.1 Production Process Flow ..... 6
5.1.1 Roasted Peanuts ..... 6
5.1.2 Peanut Butter ..... 6
5.1.3 Peanut Candies. ..... 7
5.2 Installed and Operational Capacities ..... 7
6 CRITICAL FACTORS ..... 8
7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT ..... 8
8 POTENTIAL TARGET CUSTOMERS / MARKETS ..... 8
9 PROJECT COST SUMMARY ..... 9
9.1 Project Economics ..... 9
9.2 Project Cost ..... 10
9.3 Space Requirement ..... 11
9.4 Machinery \& Equipment Requirement ..... 11
9.5 Furniture \& Fixtures Requirement ..... 12
9.6 Office and Computer Equipment Requirement ..... 13
9.7 Human Resource Requirement ..... 14
9.8 Utilities and other costs ..... 14
9.9 Raw Material Requirements ..... 15
9.10 Revenue Generation. ..... 15
10 CONTACT DETAILS ..... 16
11 USEFUL WEB LINKS ..... 16
12 ANNEXURES ..... 18
12.1 Income Statement ..... 18
12.2 Balance Sheet ..... 19
12.3 Cash Flow Statement ..... 20
13 KEY ASSUMPTIONS ..... 21
13.1 Operating Cost Assumptions ..... 21
13.2 Production Cost Assumptions ..... 21
13.3 Revenue Assumptions ..... 22

## 1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data/information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

For more information on services offered by SMEDA, please contact our website:
www.smeda.org.pk

## Document Control

| Document No. | PREF-NO 166 |
| :--- | :--- |
| Prepared by | SMEDA Punjab - OS |
| Revision Date | December, 2020 |
| For information | helpdesk.punjab@smeda.org.pk |

## 2 EXECUTIVE SUMMARY

The peanut is also known as the groundnut is the most important cash crop of the barani area in Pakistan. Peanuts are high value crop that can be marketed with little processing but are extremely versatile and can be used in a wide range of products. Normally, peanuts are used in three different ways i.e., roasted peanuts, peanut butter and peanut candies.

This proposed pre-feasibility study presents an investment opportunity for establishing a manufacturing plant for processing of Peanuts. The proposed product line will consist of Roasted Peanuts, Peanut Butter and Peanut Candies. The unit is proposed to be located at the adjoining areas of major cities like Islamabad, Multan, Quetta, Lahore, Peshawar and Karachi etc. for distribution to house hold consumers and retailers. Since the demand of above products are higher in urban cities so the unit is recommended to be located near above cities.

The total production capacity of Roasted Peanuts, Peanut Butter and Peanut Candies are $90,000 \mathrm{kgs}, 30,000$ bottles ( 500 gram/bottle) and 6 million candies per year respectively. Whereas, initial capacity utilization is assumed to be at $65 \%$.

The total project cost for setting up a plant is estimated at Rs. 22.029 million out of which Rs. 20.257 million is capital cost and Rs. 1.772 million is working capital. Considering all the assumptions on which the pre-feasibility has been made, the project generates an IRR, Payback and Net Present Value of $33 \%$, 3.85 years and Rs. 21.533 million respectively as on $100 \%$ equity financed business model. The project will provide employment opportunities to 10 people including the Owner. The legal status of this project is assumed to be 'Sole Proprietorship.

## 3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.

## 4 PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in "Peanut Processing Unit" by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and it's successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later, which form basis of any Investment Decision.

## 5 BRIEF DESCRIPTION OF PROJECT \& PRODUCT

The proposed project presents an investment opportunity for setting up a peanuts processing unit with the major product line including Roasted Peanuts, Peanut Candy and Peanut Butter. Peanut is a high protein, low calorie food that possess high nutritional value. Peanut is used in various products as ingredient such as candies, butter, etc. and also it can be roasted for better taste.

Peanuts are roasted in two ways, directly roasted raw peanuts or skillet peanuts. Peanut butter is a food paste or spread made from ground, dry roasted peanuts. It commonly contains additional ingredients that modify the taste or texture, such as salt, sweeteners, or emulsifiers. It is typically served as a spread on bread, toast, or crackers, and used to make sandwiches commonly used in breakfast dishes and desserts. Candies is a traditional ready-to-eat Pakistani sweet generally made from peanuts and jaggery.

The peanuts processing unit for the production of peanuts consists of various machinery required in each step. Like shelling, roasting, packaging and others which will help in processing and packaging the products.

The peanut processing unit can be set-up in any major city with significant population such as Karachi, Hyderabad, Lahore, Rawalpindi, Islamabad, Multan, Peshawar and Quetta. It is expected that the peanuts market will continue to grow in the coming period. The proposed project will provide employment opportunity to 10 people including the owner himself of the business. The legal status is proposed to be 'Sole Proprietorship'.

### 5.1 Production Process Flow

### 5.1.1 Roasted Peanuts

Peanuts will be de-shelled in the shelling machine and then roasted in the electrically operated roaster. The roasting time will be around 30 minutes. These roasted peanuts will be cooled and then the salt will be mixed with it before packing them.

Figure 1: Process Flow for Roasted Peanuts

## Shelling and <br> Scattering

## Roasted

Cooling 30
minutes
Mixing with Salt

Packaging

### 5.1.2 Peanut Butter

The peanuts are roasted and cooled, they undergo blanching, removal of the skins by heat or water. The heat method has the advantage of removing the bitter heart of the peanut. Next, the blanched peanuts are pulverized and ground with salt, dextrose, and hydrogenated oil stabilizer in a grinding machine. After cooling, the peanut butter is ready to be packaged.

Figure 2: Process flow for Peanut Butter


### 5.1.3 Peanut Candies

The process is very simple. De-shelled peanuts are roasted to remove the outer red skin and they are split in the splitting machine. Simultaneously, jaggery is boiled in water till the thick syrup is formed and then filtered to remove unwanted particles. This hot syrup is mixed with peanut splits with some roasted sesame seeds and then this mixture is poured in trays for drying. After about a couple of hours, small square sized pieces are cut, and the individual piece is packed in plastic wrappers.
The Process Flow Chart is as follows
Figure 3: Process flow for Peanut Candies


### 5.2 Installed and Operational Capacities

Total installed capacity of the project based on the proposed machinery \& equipment is $90,000 \mathrm{kgs}$ of Roasted Peanuts, $6,000,000$ pieces of Peanut Candies and 30,000 Bottles ( 500 grams each) of Peanut Butter per year. The initial operational capacity of the project will be $65 \%$ with an annual growth of $5 \%$. Maximum capacity utilization of the project (i.e 100\%) will be achieved in 8th year of operations.

Table 1:Installed and Operational Capacity

| Description | Total Capacity | Operational Capacity <br> $\mathbf{6 5} \%$ (Year 1) |
| :--- | :---: | :---: |
| Roasted Peanuts (Kgs) | 90,000 | 58,500 |
| Candies (No. of Pieces) | $6,000,000$ | $3,900,000$ |
| Peanut Butter (500 grams) (No. <br> of Bottles) | 30,000 | 19,500 |

## 6 CRITICAL FACTORS

$\Rightarrow$ Selection of quality peanuts; cost efficiency through better management.
$\Rightarrow$ Appropriate arrangements for transportation of raw materials to the processing facility.
$\Rightarrow$ Appropriate storage arrangement and internal controls for processed goods; arrangements for transportation of processed peanuts to local markets.
$\Rightarrow$ Properly trained staff should be engaged and comprehensive staff training programs to be adopted for capacity building.
$\Rightarrow$ Quality maintenance will play an important role as it is evident from the behavior of the general consumers that they are more specific towards health issues than ever before.
$\Rightarrow$ Strong Distribution Network.
$\Rightarrow$ Advance sale orders can ensure the success of the business.
$\Rightarrow$ Compliance with standards \& obtaining license from (PSQCA) Pakistan Standards \& Quality Control Authority and relevant Food Authority.
$\Rightarrow$ Reasonable \& competitive prices with respect to brand positioning.
$\Rightarrow$ Efficient promotion of product through various marketing activities.

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Proposed location for setting up a Peanut Processing unit largely depends on the availability of raw material and easy transportation of finished goods to the retailers; however, factors like availability of skilled labor, utilities and easy access to the target markets should also be carefully examined. For this pre-feasibility, peanuts processing unit can be set-up in any major city with significant population such as Karachi, Hyderabad, Lahore, Rawalpindi, Islamabad, Multan, Peshawar, and Quetta.

## 8 POTENTIAL TARGET CUSTOMERS / MARKETS

The potential target market for the peanut products will be the general public of middle and upper middle-income group of urban and rural areas. In bigger cities, designated wholesalers may sell to some smaller retail shops if they do not overlap with an existing distribution agent. In smaller cities, the designated wholesaler acts as a de facto distribution agent. Major cities, for instance, Karachi, Lahore, Peshawar, Quetta, Rawalpindi, Islamabad, Multan, Sialkot, Faisalabad,

Hyderabad, etc. with large urban base would be the potential target markets for the proposed business.

## 9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of "Peanut Processing Unit". Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Balance Sheet and Cash Flow Statement are also attached as annexure.

### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 41.588 million in the year one. The capacity utilization during year one is worked out at $65 \%$ with $5 \%$ increase in subsequent years up to the maximum capacity utilization of $100 \%$ in year 8 .

The following table shows internal rate of return, payback period and net present value of the proposed venture.

Table 2: Project Economics

| Description | Details |
| :--- | :--- |
| Internal Rate of Return (IRR) | $33 \%$ |
| Payback Period (yrs.) | 3.85 |
| Net Present Value (Rs.) | $21,533,255$ |
| Calculation of break-even analysis is as follows: |  |

Table 3 :Breakeven ( $100 \%$ Equity Based)

| Break-Even <br> Analysis | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Break-Even <br> Revenue | $28,404,083$ | $29,487,761$ | $30,857,892$ | $32,523,505$ | $34,442,100$ | $36,352,682$ | $38,885,191$ | $41,711,154$ | $45,160,720$ | $48,979,503$ |
| Break-Even <br> Units | 388,301 | 379,899 | 372,471 | 366,150 | 360,359 | 352,468 | 348,566 | 345,008 | 339,702 | 335,046 |
| Margin of <br> Safety | $32 \%$ | $40 \%$ | $47 \%$ | $52 \%$ | $57 \%$ | $61 \%$ | $64 \%$ | $67 \%$ | $67 \%$ | $68 \%$ |

However, for the purposes of further explanation the Project Economics based on Debt:Equity (i.e. 50:50) Model has also been computed. On the basis of Debt
:Equity model the Internal Rate of Return, Payback Period and Net Present Value of the proposed project are provide in the table below.

Table 4: Project Economics Based on Debt:Equity (50\%:50\%)

| Description | Details |  |
| :--- | ---: | :---: |
| Internal Rate of Return (IRR) | $33 \%$ |  |
| Payback Period (Yrs.) | 3.85 |  |
| Net Present Value (Rs.) | $27,810,760$ |  |

The financial assumptions for Debt:Equity are as follows:

## Table 5: Financial Assumptions for Debt:Equity Model

| Description | Details |
| :--- | ---: | ---: |
| Debt (50\%) | $11,014,504$ |
| Equity (50\%) | $11,014,504$ |
| Interest Rate on Debt | $12 \%$ |
| Debt Tenure | 5 Years |
| Debt Payment / Year | 2 |
| The projected Income Statement, Cash Flow Statement and Balance Sheet |  |
| attached as annexures are based on 100\% Equity Based Business Model. |  |

### 9.2 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business.

Table 6: Project Cost

## Description <br> Amount Rs.

## Capital Cost

| Plant and Machinery | $18,188,000$ |
| :--- | ---: |
| Furniture \& Fixture | $1,052,900$ |
| Building Security | 450,000 |
| Pre-operating Cost | 400,000 |
| Office equipment | 83,500 |
| Computer equipment | 82,500 |
| December 2020 |  |


| Total Capital Cost | $\mathbf{2 0 , 2 5 6 , 9 0 0}$ |
| :--- | ---: | ---: |
| Working Capital | $1,164,905$ |
| Raw Material Inventory | 449,247 |
| Cash | 150,000 |
| Upfront building rent | 7,957 |
| Equipment spare part inventory | $\mathbf{1 , 7 7 2 , 1 0 9}$ |
| Total Working Capital | $\mathbf{2 2 , 0 2 9 , 0 0 9}$ |
| Total Project Cost |  |
| 9.3 Space Requirement |  |
| The space requirement for the proposed "Peanuts Processing Unit" is estimated |  |
| considering various facilities including management office, production hall, |  |
|  |  |
| building is given below. |  |

Table 7: Space Requirment

| Description | Estimated Area (Sqft) |
| :--- | :---: |
| Owner/Manager Office | 168 |
| Accounts/Supervisor | 72 |
| Production Hall | 2,400 |
| Store Raw Material | 168 |
| Store Finished Goods | 168 |
| Stores and Spares Room | 100 |
| Wash Rooms | 72 |
| Security Guard Room | 80 |
| Car Parking | 144 |
| Open Area | 1,128 |
| Total | $\mathbf{4 , 5 0 0}$ |

The monthly rent of the above area is estimated at Rs. 150,000 per month. Three months advance will be given as security for acquiring the proposed area.

### 9.4 Machinery \& Equipment Requirement

Plant, machinery and equipment for the proposed project are stated below.

## Table 8: Machinery \& Equipment

| Description | Quantity | Unit Cost (Rs.) | Total Cost (Rs.) |
| :---: | :---: | :---: | :---: |
| Color Sorting Machine | 1 | 3,800,000 | 3,800,000 |
| Filling Machine for Peanut Butter | 1 | 2,452,000 | 2,452,000 |
| Generator | 1 | 2,250,000 | 2,250,000 |
| Peanut Roasting Machine | 3 | 725,000 | 2,175,000 |
| Packing Machine for Roasted Peanuts | 1 | 1,120,000 | 1,120,000 |
| Packing Machine for Gachak | 1 | 1,120,000 | 1,120,000 |
| Peanut Sheller | 1 | 955,000 | 955,000 |
| Mixer Machine for Salt and Jaggery | 1 | 860,000 | 860,000 |
| Mixer Machine for Salt, Sugar for peanut butter | 1 | 860,000 | 860,000 |
| Size Shaker Machine | 1 | 825,000 | 825,000 |
| Peanut Butter Machine | 1 | 771,000 | 771,000 |
| Other Miscellaneous Equipment | 1 | 550,000 | 550,000 |
| Installation |  | 450,000 | 450,000 |
| Total |  |  | 18,188,000 |

### 9.5 Furniture \& Fixtures Requirement

Details of the furniture and fixture required for the project are given below.
Table 9: Furniture \& Fixture

| Description | Quantity | Unit Cost <br> (Rs.) | Total Cost <br> (Rs.) |
| :--- | :---: | :---: | :---: |
| Interior/Renovation | 1 | 600,000 | 600,000 |
| Table \& Chairs (Accountant Office) | 3 | 35,000 | 105,000 |
| Air conditioners (1 ton Split) | 1 | 60,000 | 60,000 |


| Miscellaneous Furniture | 1 | 50,000 | 50,000 |
| :--- | :---: | :---: | :---: |
| Sofas (Owner/Manager) | 4 | 12,000 | 48,000 |
| Bracket Fans | 12 | 3,800 | 45,600 |
| Table \& Chairs(Owner/Manager) | 1 | 35,000 | 35,000 |
| Visitor Chairs(Accountant Office) | 3 | 8,000 | 24,000 |
| Cupboard/Racks | 2 | 12,000 | 24,000 |
| Visitor Chairs Owner/ Manager | 2 | 8,000 | 16,000 |
| Cupboard | 1 | 15,000 | 15,000 |
| Visitor Chairs (Design \& Printing Area) | 2 | 6,500 | 13,000 |
| Exhaust Fans | 5 | 2,200 | 11,000 |
| LED bulb (18 Watts) | 18 | 350 | 6,300 |
| Total |  |  | $\mathbf{1 , 0 5 2 , 9 0 0}$ |
| 9.6 Office and Computer Equipment Requirement |  |  |  |
| Fowin |  |  |  |

Following office and computer equipment will be required for the project;
Table 10: Office Equipment

| Description | Quantity | Unit Cost <br> (Rs.) | Total Cost <br> (Rs.) |
| :--- | :---: | :---: | :---: |
| Security Equipment | 1 | 60,000 | 60,000 |
| Computers | 2 | 25,000 | 50,000 |
| Computer printer | 1 | 23,000 | 23,000 |
| Water Dispenser | 1 | 19,000 | 19,000 |
| Scanner | 1 | 9,500 | 9,500 |


| Telephones | 3 | 1,500 | 4,500 |
| :--- | :--- | ---: | ---: |
| Total |  |  | $\mathbf{1 6 6 , 0 0 0}$ |

### 9.7 Human Resource Requirement

To run operations of "Peanut Processing Unit" smoothly, details of human resources required along with the number of employees and monthly salaries are recommended as under;

Table 11: Human Resource Requirement

| Description | No. of <br> Employees | Monthly Salary <br> per person (Rs.) | Total Monthly <br> Salary |
| :--- | :---: | ---: | ---: |
| Owner/Manager | 1 | 60,000 | 60,000 |
| Food Technologist | 1 | 50,000 | 50,000 |
| Sales \& Marketing In-charge | 1 | 45,000 | 45,000 |
| Supervisor/Accountant | 1 | 35,000 | 35,000 |
| Storekeeper | 1 | 35,000 | 35,000 |
| Skilled Workers | 2 | 25,000 | 50,000 |
| Helpers | 2 | 20,000 | 40,000 |
| Security Guards | 1 | 20,000 | 20,000 |
| Total | $\mathbf{1 0}$ |  | $\mathbf{3}$ |

### 9.8 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and gas. The electricity expenses are estimated to be around Rs. 104,359 (Direct \& In-direct) per month. Furthermore, promotional expense being essential for marketing of peanut processing unit is estimated as $0.5 \%$ of revenue.

### 9.9 Raw Material Requirements

Peanuts is the main raw material for the proposed business, which will be procured directly from the distributors or farms. Following table provides the detail of raw material.

Table 12 : Raw Material Requirements (Year 1)

| Description | No. of <br> Units <br> Produced <br> (No.) | Finished <br> Goods <br> Inventory <br> (No.) | Unit <br> Available <br> for Sale | Cost <br> (Rs. / <br> Unit) | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cost (Rs.) |  |  |  |  |  |
| Roasted Peanuts <br> (Kgs) | 58,500 | 1,138 | 57,363 | 198.24 | $11,371,641$ |
| Candies (No.) | $3,900,000$ | 75,833 | $3,824,167$ | 2.62 | $10,004,021$ |
| Peanuts Butter <br> (Bottles) | 19,500 | 379 | 1,9121 | 238.24 | $4,555,387$ |
| Total |  |  |  |  | $\mathbf{2 5 , 9 3 1 , 0 4 9}$ |

9.10

### 9.10 Revenue Generation

Based on the capacity utilization of $65 \%$, sales revenue during the first year of operations is estimated as under.

Table 13: Revenue Generation - Year 1

| Description | Units Available <br> for Sale | Sale Price <br> (Rs. / Unit) | Sales <br> Revenue (Rs.) |
| :--- | :---: | :---: | ---: |
| Roasted (Kgs.) | 57,363 | 400 | $22,945,000$ |
| Candy (No.) | $3,824,167$ | 3 | $11,472,500$ |
| Butter Peanuts (Bottles) | 1,9121 | 375 | $7,170,313$ |
| Total |  |  | $\mathbf{4 1 , 5 8 7 , 8 1 3}$ |

## 10 CONTACT DETAILS

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project be given.

Table 14: Suppliers

| Name of Supplier | Address | Phone |
| :--- | :--- | :--- |
|  <br> Engineering | Sabzazar Society, <br> Lahore | $0332-4856869$ |
| The Edibles Impex, | 517-A, Faisal <br> Town, Lahore. | $0324-4675246$ |
| Khizra Diamonds (Importers, <br> Traders and General Order <br> Suppliers) | Lahore - Saudi | Arabia |

## 11 USEFUL WEB LINKS

| Small \& Medium Enterprises Development <br> Authority (SMEDA) | www.smeda.org.pk |
| :--- | :--- |
| Government of Pakistan | $\underline{\text { www.pakistan.gov.pk }}$ |
| Ministry of Industries \& Production | $\underline{\text { www.moip.gov.pk }}$ |
| Government of Punjab | $\underline{\text { www.punjab.gov.pk }}$ |
| Government of Sindh | $\underline{\text { www.khyberpakhtunkhwa.gov.pk }}$ |
| Government of Khyber Pakhtunkhwa |  |
| Government of Baluchistan | $\underline{w w w . g i l g i t b a l t i s t a n . g o v . p k ~}$ |
| Government of Gilgit Baltistan | $\underline{\text { www.ajk.gov.pk }}$ |
| Government of Azad Jammu Kashmir | $\underline{\text { www.tdap.gov.pk }}$ |
| Trade Development Authority of Pakistan <br> (TDAP) | $\underline{\text { www.secp.gov.pk }}$ |
| Security and Exchange Commission of <br> Pakistan (SECP) | $\underline{\text { www.fpcci.com.pk }}$ |
| Federation of Pakistan Chambers of |  |
| Commerce and Industry (FPCCI) |  |

Punjab food authority www.pfa.gop.pk

Technical Education and Vocational Training www.tevta.org Authority (TEVTA)

## 12 ANNEXURES

### 12.1 Income Statement

| Calculations <br> Income Statement |  |  |  |  |  |  |  |  |  | SMEDA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Revenue | 41,587,813 | 49,265,563 | 58,062,984 | 68,127,235 | 79,623,706 | 92,738,199 | 107,679,353 | 124,681,356 | 137,149,492 | 150,864,441 |
| Cost of sales |  |  |  |  |  |  |  |  |  |  |
| Roasted peanuts | 11,371,542 | 13,470,904 | 15,876,422 | 18,628,335 | 21,771,867 | 25,357,821 | 29,443,248 | 34,092,182 | 37,501,400 | 41,251,540 |
| Candies | 10,004,020 | 11,850,916 | 13,967,151 | 16,388,124 | 19,153,620 | 22,308,334 | 25,902,454 | 29,992,315 | 32,991,547 | 36,290,701 |
| Peanut butter | 4,555,347 | 5,396,335 | 6,359,966 | 7,462,360 | 8,721,633 | 10,158,137 | 11,794,726 | 13,657,051 | 15,022,756 | 16,525,032 |
| Packing material |  |  |  |  |  |  |  |  |  |  |
| Roasted peanuts | 1,147,250 | 1,261,975 | 1,388,173 | 1,526,990 | 1,679,689 | 1,847,658 | 2,032,423 | 2,235,666 | 2,459,232 | 2,705,155 |
| Candies | 458,900 | 543,620 | 640,695 | 751,749 | 878,606 | 1,023,318 | 1,188,186 | 1,375,794 | 1,513,374 | 1,664,711 |
| Peanut butter | 420,658 | 498,318 | 587,304 | 689,103 | 805,389 | 938,042 | 1,089,170 | 1,261,145 | 1,387,259 | 1,525,985 |
| Direct labor | 2,400,000 | 2,640,000 | 2,904,000 | 3,194,400 | 3,513,840 | 3,865,224 | 4,251,746 | 4,676,921 | 5,144,613 | 5,659,074 |
| Machinery maintenance | 190,974 | 200,523 | 210,549 | 221,076 | 232,130 | 243,737 | 255,923 | 268,720 | 282,156 | 296,263 |
| Direct electricity | 1,198,080 | 1,317,888 | 1,449,677 | 1,594,644 | 1,754,109 | 1,929,520 | 2,122,472 | 2,334,719 | 2,568,191 | 2,825,010 |
| Total cost of sales | 31,746,772 | 37,180,478 | 43,383,936 | 50,456,781 | 58,510,883 | 67,671,790 | 78,080,350 | 89,894,513 | 98,870,528 | 108,743,473 |
| Gross Profit | 9,841,041 | 12,085,084 | 14,679,049 | 17,670,454 | 21,112,823 | 25,066,409 | 29,599,003 | 34,786,843 | 38,278,964 | 42,120,968 |
| General administration \& selling expenses |  |  |  |  |  |  |  |  |  |  |
| Administration expense | 1,620,000 | 1,782,000 | 1,960,200 | 2,156,220 | 2,371,842 | 2,609,026 | 2,869,929 | 3,156,922 | 3,472,614 | 3,819,875 |
| Building rental expense | 1,800,000 | 1,980,000 | 2,178,000 | 2,395,800 | 2,635,380 | 2,898,918 | 3,188,810 | 3,507,691 | 3,858,460 | 4,244,306 |
| Electricity expense | 54,225 | 59,648 | 65,613 | 72,174 | 79,391 | 87,330 | 96,064 | 105,670 | 116,237 | 127,861 |
| Water expense | 72,000 | 79,200 | 87,120 | 95,832 | 105,415 | 115,957 | 127,552 | 140,308 | 154,338 | 169,772 |
| Travelling expense | 129,600 | 142,560 | 156,816 | 172,498 | 189,747 | 208,722 | 229,594 | 252,554 | 277,809 | 305,590 |
| Communications expense (phone, fax, mail, internet, etc.) | 243,000 | 267,300 | 294,030 | 323,433 | 355,776 | 391,354 | 430,489 | 473,538 | 520,892 | 572,981 |
| Office expenses (stationary, entertainment, janitorial services, etc. | 162,000 | 178,200 | 196,020 | 215,622 | 237,184 | 260,903 | 286,993 | 315,692 | 347,261 | 381,988 |
| Promotional expense | 207,939 | 246,328 | 290,315 | 340,636 | 398,119 | 463,691 | 538,397 | 623,407 | 685,747 | 754,322 |
| Professional fees (legal, audit, consultants, etc.) | 311,909 | 369,492 | 435,472 | 510,954 | 597,178 | 695,536 | 807,595 | 935,110 | 1,028,621 | 1,131,483 |
| Depreciation expense | 1,959,665 | 1,959,665 | 1,959,665 | 1,964,781 | 1,963,956 | 1,963,956 | 1,969,879 | 1,968,924 | 1,968,924 | 1,975,780 |
| Amortization of pre-operating costs | 80,000 | 80,000 | 80,000 | 80,000 | 80,000 | - | - | - | - | - |
| Miscellaneous expense 1 | 81,000 | 89,100 | 98,010 | 107,811 | 118,592 | 130,451 | 143,496 | 157,846 | 173,631 | 190,994 |
| Subtotal | 6,721,338 | 7,233,492 | 7,801,261 | 8,435,761 | 9,132,581 | 9,825,845 | 10,688,799 | 11,637,661 | 12,604,535 | 13,674,952 |
| Operating Income | 3,119,703 | 4,851,592 | 6,877,788 | 9,234,692 | 11,980,242 | 15,240,564 | 18,910,205 | 23,149,182 | 25,674,429 | 28,446,015 |
| Other income (interest on cash) | 39,067 | 121,533 | 233,272 | 354,331 | 488,701 | 635,168 | 796,243 | 977,745 | 1,167,734 | 1,437,829 |
| Gain / (loss) on sale of computer equipment | - | - | 20,625 | - | - | 44,501 | - | - | 72,140 | 57,593 |
| Earnings Before Interest \& Taxes | 3,158,769 | 4,973,124 | 7,131,684 | 9,589,023 | 12,468,943 | 15,920,233 | 19,706,448 | 24,126,927 | 26,914,303 | 29,941,437 |
|  |  |  |  |  |  |  |  |  |  |  |
| Earnings Before Tax | 3,158,769 | 4,973,124 | 7,131,684 | 9,589,023 | 12,468,943 | 15,920,233 | 19,706,448 | 24,126,927 | 26,914,303 | 29,941,437 |
| Tax | 409,692 | 911,937 | 1,616,089 | 2,476,158 | 3,484,130 | 4,692,081 | 6,017,256 | 7,564,424 | 8,540,006 | 9,599,503 |
| NET PROFIT/(LOSS) AFTER TAX | 2,749,077 | 4,061,187 | 5,515,595 | 7,112,866 | 8,984,813 | 11,228,152 | 13,689,191 | 16,562,503 | 18,374,297 | 20,341,934 |

### 12.2 Balance Sheet

| Calculations |  |  |  |  |  |  |  |  |  |  | SMEDA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance Sheet |  |  |  |  |  |  |  |  |  |  |  |
|  | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Assets |  |  |  |  |  |  |  |  |  |  |  |
| Current assets |  |  |  |  |  |  |  |  |  |  |  |
| Cash \& Bank | 449,247 | 2,676,079 | 7,046,525 | 11,615,199 | 16,731,276 | 22,364,792 | 28,448,683 | 35,250,751 | 42,968,856 | 50,449,834 | 64,576,454 |
| Accounts receivable |  | 2,278,784 | 2,489,134 | 2,940,508 | 3,457,266 | 4,047,971 | 4,722,244 | 5,490,892 | 6,366,047 | 7,173,448 | 7,890,793 |
| Finished goods inventory |  | 629,539 | 737,290 | 860,305 | 1,000,559 | 1,160,272 | 1,341,934 | 1,548,336 | 1,782,611 | 1,960,605 | 2,156,386 |
| Equipment spare part inventory | 7,957 | 8,773 | 9,672 | 10,663 | 11,756 | 12,962 | 14,290 | 15,755 | 17,370 | 19,150 | - |
| Raw material inventory | 1,164,905 | 790,499 | 1,024,825 | 1,322,708 | 1,700,507 | 2,178,649 | 2,782,619 | 3,544,178 | 4,288,455 | 5,189,031 | - |
| Pre-paid building rent | 150,000 | 165,000 | 181,500 | 199,650 | 219,615 | 241,577 | 265,734 | 292,308 | 321,538 | 353,692 | - |
| Total Current Assets | 1,772,109 | 6,548,675 | 11,488,946 | 16,949,033 | 23,120,980 | 30,006,223 | 37,575,504 | 46,142,218 | 55,744,876 | 65,145,760 | 74,623,633 |
| Fixed assets |  |  |  |  |  |  |  |  |  |  |  |
| Building Security | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 | 450,000 |
| Machinery \& equipment | 18,188,000 | 16,369,200 | 14,550,400 | 12,731,600 | 10,912,800 | 9,094,000 | 7,275,200 | 5,456,400 | 3,637,600 | 1,818,800 | - |
| Furniture \& fixtures | 1,052,900 | 947,610 | 842,320 | 737,030 | 631,740 | 526,450 | 421,160 | 315,870 | 210,580 | 105,290 | - |
| Computer equipment | 82,500 | 55,275 | 28,050 | 96,329 | 63,988 | 32,471 | 111,513 | 74,074 | 37,590 | 129,090 | 85,750 |
| Office equipment | 83,500 | 75,150 | 66,800 | 58,450 | 50,100 | 41,750 | 33,400 | 25,050 | 16,700 | 8,350 | - |
| Total Fixed Assets | 19,856,900 | 17,897,235 | 15,937,570 | 14,073,409 | 12,108,628 | 10,144,671 | 8,291,273 | 6,321,394 | 4,352,470 | 2,511,530 | 535,750 |
| Intangible assets |  |  |  |  |  |  |  |  |  |  |  |
| Pre-operation costs | 400,000 | 320,000 | 240,000 | 160,000 | 80,000 | - | - | - | - | - | - |
| Total Intangible Assets | 400,000 | 320,000 | 240,000 | 160,000 | 80,000 | - | - | - | - | - | - |
| TOTAL ASSETS | 22,029,009 | 24,765,910 | 27,666,516 | 31,182,442 | 35,309,608 | 40,150,894 | 45,866,777 | 52,463,612 | 60,097,346 | 67,657,291 | 75,159,382 |
| Liabilities \& Shareholders' Equity |  |  |  |  |  |  |  |  |  |  |  |
| Current liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Accounts payable |  | 537,639 | 629,148 | 734,270 | 854,976 | 993,536 | 1,152,567 | 1,335,090 | 1,538,724 | 1,705,154 | 1,718,323 |
| Short term debt | - | - | - | - | - | - | - | - | - | - | - |
| Total Current Liabilities | - | 537,639 | 629,148 | 734,270 | 854,976 | 993,536 | 1,152,567 | 1,335,090 | 1,538,724 | 1,705,154 | 1,718,323 |
| Shareholders' equity |  |  |  |  |  |  |  |  |  |  |  |
| Paid-up capital | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 | 22,029,009 |
| Retained earnings |  | 2,199,262 | 5,008,359 | 8,419,163 | 12,425,623 | 17,128,349 | 22,685,201 | 29,099,514 | 36,529,613 | 43,923,128 | 51,412,050 |
| Total Equity | 22,029,009 | 24,228,271 | 27,037,368 | 30,448,172 | 34,454,632 | 39,157,358 | 44,714,210 | 51,128,522 | 58,558,622 | 65,952,137 | 73,441,059 |
| TOTAL CAPITAL AND LIABILITIES | 22,029,009 | 24,765,910 | 27,666,516 | 31,182,442 | 35,309,608 | 40,150,894 | 45,866,777 | 52,463,612 | 60,097,346 | 67,657,291 | 75,159,382 |

### 12.3 Cash Flow Statement

| Calculations <br> Cash Flow Statement |  |  |  |  |  |  |  |  |  |  | MEDA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Operating activities |  |  |  |  |  |  |  |  |  |  |  |
| Net profit |  | 2,749,077 | 4,061,187 | 5,515,595 | 7,112,866 | 8,984,813 | 11,228,152 | 13,689,191 | 16,562,503 | 18,374,297 | 20,341,934 |
| Add: depreciation expense |  | 1,959,665 | 1,959,665 | 1,959,665 | 1,964,781 | 1,963,956 | 1,963,956 | 1,969,879 | 1,968,924 | 1,968,924 | 1,975,780 |
| amortization of pre-operating costs |  | 80,000 | 80,000 | 80,000 | 80,000 | 80,000 | - | - | - | - | - |
| Accounts receivable |  | $(2,278,784)$ | $(210,349)$ | $(451,375)$ | $(516,758)$ | $(590,705)$ | $(674,273)$ | $(768,648)$ | $(875,155)$ | $(807,401)$ | $(717,345)$ |
| Finished goods inventory |  | $(629,539)$ | $(107,751)$ | $(123,015)$ | $(140,255)$ | $(159,713)$ | $(181,661)$ | $(206,402)$ | $(234,275)$ | $(177,995)$ | $(195,781)$ |
| Equipment inventory | $(7,957)$ | (816) | (899) | (991) | $(1,093)$ | $(1,205)$ | $(1,329)$ | $(1,465)$ | $(1,615)$ | $(1,780)$ | 19,150 |
| Raw material inventory | $(1,164,905)$ | 374,406 | $(234,326)$ | $(297,883)$ | $(377,798)$ | $(478,142)$ | $(603,970)$ | $(761,559)$ | $(744,277)$ | $(900,576)$ | 5,189,031 |
| Pre-paid building rent | $(150,000)$ | $(15,000)$ | $(16,500)$ | $(18,150)$ | $(19,965)$ | $(21,962)$ | $(24,158)$ | $(26,573)$ | $(29,231)$ | $(32,154)$ | 353,692 |
| Accounts payable |  | 537,639 | 91,509 | 105,121 | 120,706 | 138,560 | 159,031 | 182,523 | 203,634 | 166,430 | 13,170 |
| Cash provided by operations | $(1,322,862)$ | 2,776,648 | 5,622,536 | 6,768,968 | 8,222,483 | 9,915,603 | 11,865,749 | 14,076,946 | 16,850,508 | 18,589,745 | 26,979,632 |
| Financing activities |  |  |  |  |  |  |  |  |  |  |  |
| Issuance of shares | 22,029,009 | - | - | - | - | - | - | - | - | - | - |
| Cash provided by / (used for) financing activities | 22,029,009 | - | - | - | - | - | - | - | - | - | - |
| Investing activities |  |  |  |  |  |  |  |  |  |  |  |
| Capital expenditure | (20,256,900) | - | - | $(95,504)$ | - | - | $(110,558)$ | - | - | $(127,985)$ | - |
| Acquisitions |  |  |  |  |  |  |  |  |  |  |  |
| Cash (used for)/ provided by investing activities | (20,256,900) | - | - | $(95,504)$ | - | - | $(110,558)$ | - | - | $(127,985)$ | - |
| NET CASH | 449,247 | 2,776,648 | 5,622,536 | 6,673,464 | 8,222,483 | 9,915,603 | 11,755,191 | 14,076,946 | 16,850,508 | 18,461,761 | 26,979,632 |

## 13 KEY ASSUMPTIONS

### 13.1 Operating Cost Assumptions

| Description | Details |
| :--- | :--- |
| Travelling Expenses | $8 . \%$ of administration expense |
| Communication Expenses | $15 \%$ of administration expense |
| Office expenses (stationery, entertainment, <br> janitorial services, etc.) | $10 \%$ of administration expense |
| Promotional expense | $0.5 \%$ of revenue |
| Depreciation Method | Straight Line Method |
| Depreciation on Machinery \& Equipment | $10 \%$ |
| Depreciation on Furniture and Fixture | $10 \%$ |
| Depreciation on Office Equipment | $33 \%$ |
| Electricity Price Growth Rate | $10 \%$ |
| Wage Growth Rate | $10 \%$ |

### 13.2 Production Cost Assumptions

| Description | Detail |
| :--- | :---: |
| Roasted Peanuts |  |
| Peanuts | 198.00 |
| Salt | 0.24 |
| Packing | 20.00 |


| Total Per Kg | Rs. 218.24 |
| :--- | :---: |
| Candy | 2.02 |
| Peanuts | 0.60 |
| Jaggery Syrup | 0.12 |
| Packing | Rs. 2.74 |
| Total Per Candy |  |
| Peanut Butter |  |


| Peanuts | 198.00 |
| :--- | :---: |
| Salt | 0.24 |
| Dextrose | 28.00 |
| Honey | 12.00 |
| Packing | 22.00 |
| Total Per Bottle | Rs. 260.24 |
| Production Capacity in First Year | $65 \%$ |
| Percentage Increase in Production Capacity every Year | $5 \%$ |
| Maximum Production Capacity | $100 \%$ |
| CGS Growth Rate | $10 \%$ |
| 13.3 Revenue Assumptions | Details |
| Description | $10 \%$ |
| Growth in Sales Price | 300 |
| Days Operational / Year | 8 |
| Hours Operational / Day | 8 |
| Shift Length (Hours) |  |

# Small and Medium Enterprises Development Authority HEAD OFFICE 

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore Tel: $(9242) 111111$ 456, Fax: $(9242)$ 36304926-7

www.smeda.org.pk, helpdesk@smeda.org.pk

| REGIONAL OFFICE | REGIONAL OFFICE | REGIONAL OFFICE | REGIONAL OFFICE |
| :---: | :---: | :---: | :---: |
| PUNJAB | SINDH | KPK | BALOCHISTAN |
| $3^{\text {rd }}$ Floor, Building No. 3, | $5^{\text {TH }}$ Floor, Bahria |  |  |
| Aiwan-e-Iqbal Complex, | Complex II, M.T. Khan Road, | State Life Building | Bungalow No. 15-A |
| Egerton Road Lahore, | Karachi. | The Mall, Peshawar. | Chaman Housing Scheme |
| Tel: (042) 111-111-456 | Tel: $(021) 111-111-456$ | Tel: $(091) 9213046-47$ | Tel: $(081) 831623,831702$ |
| Fax: (042) $36304926-7$ | Fax: $(021) 5610572$ | Fax: $(091) 286908$ | Fax: $(081) 831922$ |
| helpdesk.punjab@smeda.org.pk | helpdesk-khi@smeda.org.pk | helpdesk-pew@smeda.org.pk | helpdesk-qta@ smeda.org.pk |

