



Pre-feasibility Study

BREAD, RUSK, AND BISCUIT MANUFACTURING UNIT

December 2020

“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, and revenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA’s website and consult financial experts to stay current with market conditions.”

Small and Medium Enterprises Development Authority
Ministry of Industries and Production
Government of Pakistan

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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.

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2 EXECUTIVE SUMMARY

The bread, rusk and biscuit industry in Pakistan has seen many changes in the last twenty-five years. It has emerged as a small-scale bakery processing industry to numerous industrial bread, rusk and biscuit making units all over Pakistan.

This particular pre-feasibility study is for setting up a 'Bread, Rusk and Biscuit Manufacturing Unit'. The focus of the business would be to provide quality baked bread products and to be sold to wholesalers, retailers and restaurants in major cities of Pakistan. The proposed unit has capacity to produce 468,000 packs of bread, 132,000 packs of rusk and 65,000 kg biscuits annually. However, starting operational capacity is assumed at 50% with gradual increase of 5% in subsequent years up to maximum capacity utilization of 90%. This production capacity is estimated to be economically viable and justifies the capital as well as operational cost of the project. However, entrepreneur's knowledge of industry, competitive pricing and strong linkage with suppliers and wholesalers network are key factors for the success of this business.

The estimated total cost of the proposed 'Bread, Rusk and Biscuit Manufacturing Unit' is estimated at Rs. 7.941 million out of which Rs. 6.841 million is the capital cost and Rs. 1.100 million is for working capital. The project is based on 100% equity model. The project NPV is around Rs. 24.251 million, with an IRR of 53% and Payback Period of 2.61 years. The project will provide employment opportunities to 12 people including the Owner. The legal business 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 **Bread, Rusk, and Biscuit Manufacturing 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 its 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 bread, rusk and biscuit industry in Pakistan is flourishing very quickly and baked bread products has been accepted as a popular substitute of rice, naan, chapati, paratha etc.

The proposed project envisages the setup of a 'Bread, Rusk and Biscuit Manufacturing Unit. Bread, rusk and biscuit is a staple food that is generally prepared by the baking of dough, although steaming or frying are alternative techniques. The dough for bread and rusk primarily comprises of flour, water, salt, yeast and sugar, whereas for biscuits some additional ingredient and flavors are also added.

The unit will be equipped with basic baking, dough mixing, cutting, bread loaf pans, rusk / biscuit pans, oven trays and shaping equipment. The baking Oven of 10X12 feet size, Spoiler Machine (for dough mixing) of 120 kg capacity and 20 liter capacity Spoiler Machine is suggested for the proposed venture. The product mix will mainly comprises of different types and sizes of bread, rusk and biscuits. The varieties of bread will comprise of Plain, Milky, Sandwich and Brown in small, medium and large

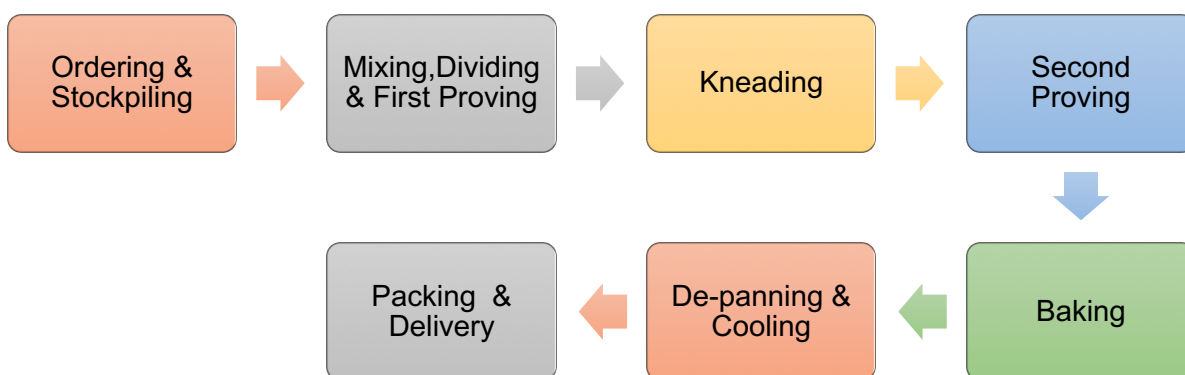
size packaging. Whereas two types of rusk (i.e. Round and Large) and different flavor of biscuits will also be produced as per the demand. The proposed merchandise will be prepared and acquired according to the demand of local customers and in quantities directly proportional to expected sales. The produced bread, rusk and biscuit will be sold in the market through wholesale distributors and retailers. The legal status is proposed to be 'Sole Proprietorship'.

5.1 Production Process Flow

The production process flow of Bread, Rusks and Biscuits manufacturing is exhibited in the below diagrams:

Bread has been baked for hundreds of years, and the same basic process is still used by the baking industry today.

Figure 1: Production Process Flow – Bread



Process flow for rusks manufacturing is similar to that of bread making apart from one additional step of toasting of rusks to the final form.

Figure 2: Production Process Flow – Rusks

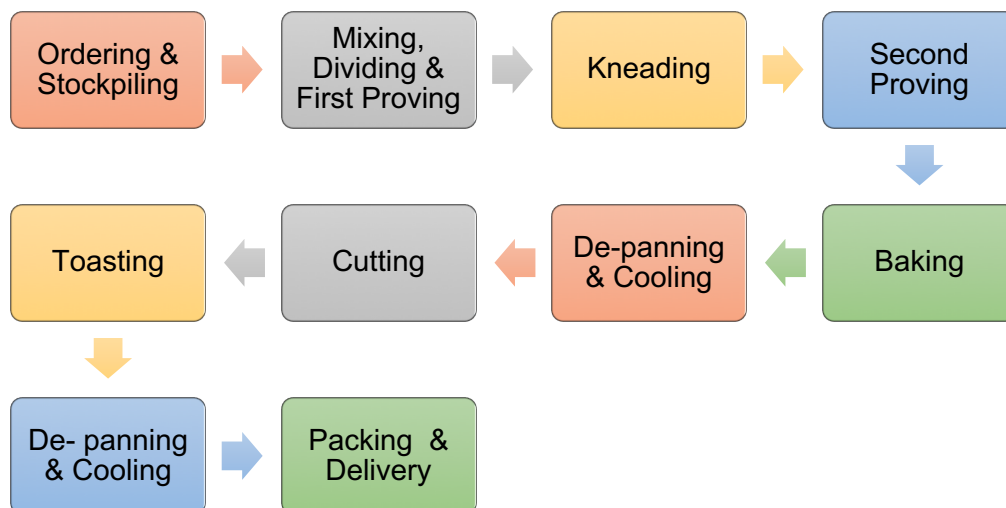
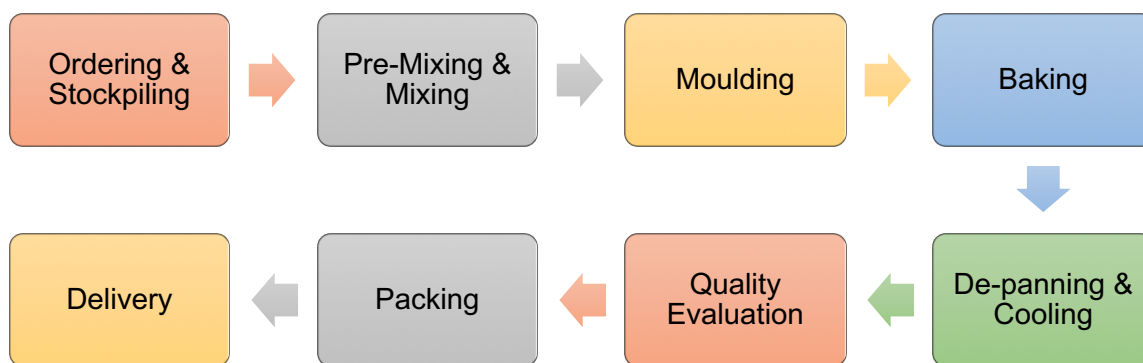


Figure 3: Production Process Flow – Biscuits

5.2 Installed and Operational Capacities

Following table provides the details of installed and operational capacities of Bread, Rusk and Biscuits manufacturing by the proposed unit. The initial operational capacity of the project will be 50% with an annual growth of 5%. Maximum capacity utilization of the project is assumed at 90%

Table 1: Installed and Operational Capacity

Description	Installed Capacity (Units)	Operational Capacity 50 % (Year 1)	Maximum Capacity 95% (Year 10)
Bread (Packs)			
Bread Plain (Large)	120,000	60,000	108,000
Bread Plain (Small)	180,000	90,000	162,000
Bread Milky	138,000	69,000	124,200
Sandwich Bread	24,000	12,000	21,600
Brown Bread	6,000	3,000	5,400
Rusk (Packs)			
Rusk (Round)	66,000	33,000	59,400
Rusk (Long)	66,000	33,000	59,400
Biscuits (Kgs)			
Biscuits	65,000	32,500	58,500

6 CRITICAL FACTORS

- ⇒ Background knowledge and experience of the entrepreneur in the baking and confectionary business.
- ⇒ Induction of trained human resource for production of requisite items.
- ⇒ Maintenance of quality and hygiene standards.
- ⇒ Pricing strategy & understanding requirements of the target customers.
- ⇒ Compliance with standards and obtaining license from Food Authorities and Pakistan Standards & Quality Control Authority (PSQCA).
- ⇒ Develop strong linkages with raw material suppliers for sourcing quality material on time at economical prices.
- ⇒ Efficient promotion of product through various marketing and promotional activities.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Proposed location for setting up a baking unit largely depends on the availability of labour and transportation of finished goods to the retailers at low cost. Moreover, factors like availability of raw material, utilities and easy access to the target markets should also be carefully examined. Therefore, major cities and urban centres with significant population such as Karachi, Hyderabad, Lahore, Rawalpindi, Islamabad, Multan, Peshawar, Gilgit and Quetta are the most suitable locations for the proposed 'Bread, Rusk and Biscuit Manufacturing Unit'.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Areas having presence of middle-income groups in the above stated cities will be an ideal location for the proposed business. 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. The potential target customers will mainly comprises of general household consumers, bakery shops, retailers and restaurants.

9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of 'Bread, Rusk and Biscuit Manufacturing Unit'. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

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

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 27.538 million in the year one. The capacity utilization during year one is worked out at 50% with 5% increase in subsequent years up to the maximum capacity utilization of 90%.

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)	53%
Payback Period (Yrs.)	2.61
Net Present Value (Rs.)	24,251,110

Calculation of break-even analysis is as follows:

Table 3: Breakeven (100% Equity Based)

Break-Even Analysis	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Break-Even Revenue	18,675,576	18,960,921	19,607,564	20,557,239	21,747,775	24,918,843	26,529,705	28,380,788	30,502,092	33,126,154
Break-Even Units	185,596	188,432	194,858	204,296	216,127	247,641	263,649	282,045	303,126	329,204
Margin of Safety	32%	43%	51%	57%	61%	63%	66%	69%	71%	72%

However, for the purposes of further explanation the Project Economics based on Debt:Equity (i.e. 50:50) Model has also been computed. Based on 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 Equity: Debt (50%: 50%)

Description	Details
Internal Rate of Return (IRR)	53%
Payback Period (Yrs.)	2.58

Net Present Value (Rs.)	24,276,823
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The financial assumptions for Debt:Equity are as follows:

Table 5: Financial Assumptions for Debt:Equity Model

Description	Details
Debt 50%	3,970,629
Equity 50%	3,970,629
Interest Rate on Debt	12%
Debt Tenure (Years)	5
Debt Payment / Year	2

The projected Income Statement, Cash Flow Statement and Balance Sheet enclosed 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	Amount Rs.
Capital Cost	
Plant and Machinery	4,132,220
Furniture & Fixture	1,230,050
Motor Vehicles	1,040,890
Building Security	240,000
Pre-operating Cost	135,000
Computer and Office Equipment	62,600
Total Capital Cost	6,840,760
Working Capital	
Raw Material Inventory	641,751
Cash	377,024
Up-front Building Rent	80,000

Equipment Spare Part Inventory	1,722
Total Working Capital	1,100,497
Total Project Cost	7,941,257

9.3 Space Requirement

Approximately 1 kanal (4,500 sq. ft.) of land would be required for establishment of the proposed unit. In order to reduce the initial capital expenditure, it is recommended that required land may be acquired on rental basis in the nearby areas of residential society or commercial markets.

The infrastructural requirement is estimated considering various facilities including Management Office, Production Hall and Storage Space etc. Details of space requirement / allocation are as follows.

Table 7: Space Requirement

Description	Estimated Area (Sq. ft.)
Owner/Manager Office	100
Accounts/Supervisor	72
Rusk and Bread Department Rooms	768
Biscuit Department Room	360
Oven / Baking Area	360
Store Raw Material	360
Store Finished Goods	576
Stores and Spares Room	64
Washrooms	108
Staff Rest Room	288
Car Parking	80
Open Area	1,364
Total	4,500

The estimated monthly rent of the purpose-built building is assumed as Rs. 80,000 per month. In addition to monthly rent, 3 months' rent as security deposit will be required for acquiring the space.

9.4 Machinery & Equipment Requirement

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

Table 8: Machinery & Equipmen

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Oven 10 ft*12ft	1	1,200,000	1,200,000
Generator	1	980,000	980,000
Spoiler Machine (120 kg Capacity)	1	300,000	300,000
Baking Pans for Bread	288	830	239,040
Cutter (Bread)	1	200,000	200,000
Steel Trolleys	3	60,000	180,000
Baking Pans for Rusk	192	830	159,360
Spoiler Machine (20 Ltr Capacity for Biscuits)	1	150,000	150,000
Cutter (Rusk)	1	140,000	140,000
Steel Shelves	30	4,500	135,000
Miscellaneous items	1	100,000	100,000
Trays (for round rusk)	288	240	69,120
AC(1 Ton)	1	60,000	60,000
Fridge	1	51,500	51,500
Security Equipment	1	45,000	45,000
Deep Freezer	1	47,000	47,000
LED TVs	1	33,200	33,200
Water Filter (Purifier)	1	24,000	24,000
Water Dispenser	1	19,000	19,000
Total			4,132,220

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 (Rs.)	Total Cost (Rs.)
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Initial Renovation	1	1,000,000	1,000,000
Bracket Fans	11	3,750	41,250
Table Steel Mixing room	4	8,200	32,800
Table & Chairs	1	25,000	25,000
Table & Chairs (Account/Admin office)	1	20,000	20,000
Exhaust Fans	7	2,200	15,400
Visitor Chairs (Manager Office)	2	3,500	7,000
Visitor Chairs (Admin/Manager Office)	2	3,500	7,000
LED Bulbs (18 Watts)	22	300	6,600
Shelf for Files	1	6,000	6,000
Miscellaneous Furniture		69,000	69,000
Total			1,230,050

9.6 Office Equipment Requirement

Following office equipment will be required for the project are given below.

Table 10: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computers	2	18,000	36,000
Printer	1	23,000	23,000
Telephone Exchange	3	1,200	3,600
Total			62,600

9.7 Office Vehicle Requirement

Following office vehicle will be required for Bread, Rusk and Biscuit Manufacturing Unit.

Table 11: Office Vehicle

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Pickup	01	1,040,890	1,040,890

Total	01	1,040,890
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9.8 Raw Material Requirements

White flour is the main raw material required for manufacturing of Bread, Rusks and Biscuits, which will be procured from local markets. In addition to the white flour, other material such as sugar, salt, yeast, and ghee etc., will also be required. Variability in flour prices is the biggest threat while working in food industry. This risk can be minimized by making long term supply contracts with the flour mills/suppliers which is a common practice of large-scale industrial consumers of flour.

According to the estimated installed and operational capacity of the proposed unit, the quantities of raw material required during first year of operation is provided as Annexure 12.4. The raw material requirement in subsequent years will be determined according to the capacity utilization of the unit. The purchasing cost of raw material is assumed to increase at 10% annually.

9.9 Human Resource Requirement

In order to run operations of Bread, Rusk and Biscuit Manufacturing Unit smoothly, details of human resources required along with number of employees and monthly salary is recommended as under.

Table 12: Human Resource Requirement

Description	No. of Employees	Monthly Salary per Person (Rs.)
Owner/ Manager	1	60,000
Head Baker	1	50,000
Bakery Assistants	8	25,000
Accounts	1	25,000
Driver	1	25,000
Total	12	

9.10 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. 92,180 per month, whereas gas expenses are estimated to be Rs. 33,000 / year (including both natural gas and LPG). Furthermore, promotional expense being essential for marketing of Bread, Rusk and Biscuit Manufacturing Unit is estimated as 10% of administrative expenses.

9.11 Revenue Generation

Based on the capacity utilization of 50%, sales revenue during the first year of operations is estimated as under.

Table 13 Revenue Generation – Year 1

Description	No. of Units Produced	Units available for Sale (No.)	Sale Price / unit (Rs.)	Sales Revenue (Rs.)
Biscuits (Kgs.)	32,500	32,500	380	12,350,000
Bread Plain (Large Packs)	60,000	60,000	65	3,900,000
Bread Plain (Small Packs)	90,000	90,000	30	2,700,000
Bread Milky (Packs)	69,000	69,000	35	2,415,000
Rusk – Round (Packs)	33,000	33,000	70	2,310,000
Rusk – Long (Packs)	33,000	33,000	70	2,310,000
Sandwich Bread (Packs)	12,000	12,000	115	1,380,000
Brown Bread (Packs)	3,000	3,000	40	120,000
Wastage (2% of Rusk)*	1,320	1,320	40	52,800
Total	333,820	333,820		27,537,800

* Broken rusks are sold separately as wastage.

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: Machinery Suppliers

Name of Supplier	Address	Phone
Sons of Imam Din Group of Companies	Ferozwal Road, Gujranwala	055-4241982

Rizwan Dhudhi Bhalwal Bakers Bhalwal.	Tehsil Bhalwal, Main Colony Adda, Noor Hayat Colony, Sargodha, Punjab	0300-6039602
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Table 15: Raw Material Suppliers

Name of Supplier	Address	Phone
Inam Traders	Mohammadi Bazar Rd, Mohammadi Bazar, Block 1, 1 Block, Sargodha, Punjab	(048) 3712240
Adil Zafar / Novozymes Industries	F-80/1, Block F. North Nazimabad, Karachi, Pakistan.	+92-300-9257055

11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries & Production	www.moip.gov.pk
Ministry of Education, Training & Standards in Higher Education	http://moptt.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk
Government of Baluchistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jammu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Security and Exchange Commission of Pakistan (SECP)	www.secp.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
State Bank of Pakistan (SBP)	www.sbp.org.pk
Punjab Vocational Training Council (PVTC)	www.pvtc.gov.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Punjab Food Department	food.punjab.gov.pk
Ministry of National Food Security & Research	www.mnfsr.gov.pk
Pakistan Standards and Quality Control Authority	updated.psqca.com.pk
Sindh Food Authority (SFA)	www.sfa.gos.pk
Punjab Food Authority (PFA)	www.pfa.gop.pk

12 ANNEXURES

12.1 Income Statement

Calculations										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	27,537,800	33,320,738	39,984,886	47,648,655	56,445,330	66,524,853	78,055,828	91,227,749	106,253,496	116,878,845
<i>Cost of sales</i>										
Raw Material Cost	15,402,031	18,636,458	22,363,749	26,650,134	31,570,159	37,207,688	43,657,020	51,024,142	59,428,119	65,370,931
Direct labor	3,000,000	3,300,000	3,630,000	3,993,000	4,392,300	4,831,530	5,314,683	5,846,151	6,430,766	7,073,843
Machinery Maintenance	41,322	45,454	50,000	55,000	60,500	66,550	73,205	80,525	88,578	97,436
Direct Electricity	774,309	851,740	936,914	1,030,605	1,133,666	1,247,032	1,371,735	1,508,909	1,659,800	1,825,780
Direct Water	137,689	166,604	199,924	238,243	282,227	332,624	390,279	456,139	531,267	584,394
Direct Gas	1,772,188	1,949,406	2,144,347	2,358,782	2,594,660	2,854,126	3,139,538	3,453,492	3,798,841	4,178,725
Total cost of sales	21,127,539	24,949,662	29,324,934	34,325,764	40,033,511	46,539,550	53,946,461	62,369,359	71,937,372	79,131,109
Gross Profit	6,410,261	8,371,076	10,659,952	13,322,891	16,411,819	19,985,304	24,109,367	28,858,390	34,316,124	37,747,737
<i>General administration & selling expenses</i>										
Administration expense	1,320,000	1,452,000	1,597,200	1,756,920	1,932,612	2,125,873	2,338,461	2,572,307	2,829,537	3,112,491
Building rental expense	960,000	1,056,000	1,161,600	1,277,760	1,405,536	1,546,090	1,700,699	1,870,768	2,057,845	2,263,630
Electricity expense	331,847	365,031	401,534	441,688	485,857	534,442	587,887	646,675	711,343	782,477
Water expense	33,000	36,300	39,930	43,923	48,315	53,147	58,462	64,308	70,738	77,812
Travelling expense	413,067	499,811	599,773	714,730	846,680	997,873	1,170,837	1,368,416	1,593,802	1,753,183
Communications expense (phone, fax, mail, internet, etc.)	39,600	43,560	47,916	52,708	57,978	63,776	70,154	77,169	84,886	93,375
Office vehicles running expense	83,271	91,598	100,758	110,834	121,917	134,109	147,520	162,272	178,499	196,349
Office expenses (stationary, entertainment, janitorial services, etc)	39,600	43,560	47,916	52,708	57,978	63,776	70,154	77,169	84,886	93,375
Promotional expense Year 1-5	132,000	145,200	159,720	175,692	193,261	-	-	-	-	-
Promotional expense Year 6-10	-	-	-	-	-	106,294	116,923	128,615	141,477	155,625
Professional fees (legal, audit, consultants, etc.)	137,689	166,604	199,924	238,243	282,227	332,624	390,279	456,139	531,267	584,394
Depreciation expense	764,235	764,235	764,235	767,894	767,304	1,421,786	1,426,022	1,425,339	1,425,339	1,430,242
Amortization of pre-operating costs	27,000	27,000	27,000	27,000	27,000	-	-	-	-	-
Miscellaneous expense I	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477	155,625
Subtotal	4,347,309	4,763,499	5,227,367	5,747,945	6,323,296	7,486,084	8,194,320	8,977,793	9,851,098	10,698,577
Operating Income	2,062,952	3,607,577	5,432,584	7,574,946	10,088,523	12,499,220	15,915,048	19,880,597	24,465,026	27,049,160
Other income (interest on cash)	21,020	63,932	130,120	205,710	274,174	341,225	433,140	550,786	694,674	892,741
Other income 2	-	-	-	-	1,652,888	-	-	-	-	-
Gain / (loss) on sale of machinery & equipment	-	-	-	-	-	-	-	-	-	-
Gain / (loss) on sale of computer equipment	-	-	14,750	-	-	31,825	-	-	51,591	41,188
Gain / (loss) on sale of office vehicles	-	-	-	-	416,356	-	-	-	-	-
Earnings Before Interest & Taxes	2,083,972	3,671,509	5,577,455	7,780,656	12,431,941	12,872,270	16,348,187	20,431,384	25,211,292	27,983,088
Earnings Before Tax	2,083,972	3,671,509	5,577,455	7,780,656	12,431,941	12,872,270	16,348,187	20,431,384	25,211,292	27,983,088
Tax	202,596	537,877	1,093,236	1,843,229	3,471,179	3,625,294	4,841,865	6,270,984	7,943,952	8,914,081
NET PROFIT/(LOSS) AFTER TAX	1,881,376	3,133,632	4,484,218	5,937,427	8,960,762	9,246,976	11,506,322	14,160,400	17,267,340	19,069,008

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											
<i>Current assets</i>											
Cash & Bank	377,024	1,304,567	3,810,028	6,599,605	9,857,215	12,076,728	15,221,287	19,429,894	24,633,014	30,940,911	40,478,376
Accounts receivable		1,131,690	1,250,518	1,506,280	1,800,689	2,138,918	2,526,785	2,970,836	3,478,430	4,057,834	4,584,911
Equipment spare part inventory	1,722	1,989	2,297	2,653	3,064	3,539	4,088	4,721	5,453	6,298	-
Raw material inventory	641,751	776,519	931,823	1,110,422	1,315,423	1,550,320	1,819,043	2,126,006	2,476,172	2,723,789	-
Pre-paid building rent	80,000	88,000	96,800	106,480	117,128	128,841	141,725	155,897	171,487	188,636	-
Total Current Assets	1,100,497	3,302,765	6,091,466	9,325,440	13,093,520	15,898,346	19,712,927	24,687,354	30,764,555	37,917,468	45,063,287
<i>Fixed assets</i>											
Building Security	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000
Machinery & equipment	4,132,220	3,718,998	3,305,776	2,892,554	2,479,332	7,339,986	6,399,377	5,458,767	4,518,157	3,577,548	2,636,938
Furniture & fixtures	1,230,050	1,107,045	984,040	861,035	738,030	615,025	492,020	369,015	246,010	123,005	-
Office vehicles	1,040,890	832,712	624,534	416,356	208,178	1,676,364	1,341,091	1,005,818	670,546	335,273	-
Computer equipment	59,000	39,530	20,060	68,890	45,761	23,222	79,749	52,974	26,882	92,319	61,324
Office equipment	3,600	3,240	2,880	2,520	2,160	1,800	1,440	1,080	720	360	-
Total Fixed Assets	6,705,760	5,941,525	5,177,290	4,481,355	3,713,461	9,896,397	8,553,676	7,127,654	5,702,315	4,368,504	2,938,262
<i>Intangible assets</i>											
Pre-operation costs	135,000	108,000	81,000	54,000	27,000	-	-	-	-	-	-
Total Intangible Assets	135,000	108,000	81,000	54,000	27,000	-	-	-	-	-	-
TOTAL ASSETS	7,941,257	9,352,290	11,349,756	13,860,795	16,833,981	25,794,742	28,266,603	31,815,008	36,466,870	42,285,972	48,001,549
Liabilities & Shareholders' Equity											
<i>Shareholders' equity</i>											
Paid-up capital	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257	7,941,257
Retained earnings		1,411,032	3,408,498	5,919,537	8,892,723	17,853,485	20,325,346	23,873,751	28,525,613	34,344,715	40,060,292
Total Equity	7,941,257	9,352,290	11,349,756	13,860,795	16,833,981	25,794,742	28,266,603	31,815,008	36,466,870	42,285,972	48,001,549
TOTAL CAPITAL AND LIABILITIES	7,941,257	9,352,290	11,349,756	13,860,795	16,833,981	25,794,742	28,266,603	31,815,008	36,466,870	42,285,972	48,001,549

12.3 Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		1,881,376	3,133,632	4,484,218	5,937,427	8,960,762	9,246,976	11,506,322	14,160,400	17,267,340	19,069,008
Add: depreciation expense		764,235	764,235	764,235	767,894	767,304	1,421,786	1,426,022	1,425,339	1,425,339	1,430,242
amortization of pre-operating costs		27,000	27,000	27,000	27,000	27,000	-	-	-	-	-
Accounts receivable		(1,131,690)	(118,827)	(255,762)	(294,409)	(338,228)	(387,867)	(444,051)	(507,594)	(579,404)	(527,077)
Equipment inventory	(1,722)	(267)	(308)	(356)	(411)	(475)	(549)	(634)	(732)	(845)	6,298
Raw material inventory	(641,751)	(134,768)	(155,304)	(178,599)	(205,001)	(234,897)	(268,722)	(306,963)	(350,166)	(247,617)	2,723,789
Pre-paid building rent	(80,000)	(8,000)	(8,800)	(9,680)	(10,648)	(11,713)	(12,884)	(14,172)	(15,590)	(17,149)	188,636
Cash provided by operations	(723,473)	1,397,886	3,641,627	4,831,056	6,221,851	9,169,753	9,998,740	12,166,523	14,711,658	17,847,664	22,890,896
<i>Financing activities</i>											
Issuance of shares	7,941,257	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	7,941,257	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(6,840,760)	-	-	(68,300)	-	(6,950,240)	(79,066)	-	-	(91,528)	-
Cash (used for) / provided by investing activities	(6,840,760)	-	-	(68,300)	-	(6,950,240)	(79,066)	-	-	(91,528)	-
NET CASH	377,024	1,397,886	3,641,627	4,762,756	6,221,851	2,219,513	9,919,674	12,166,523	14,711,658	17,756,135	22,890,896

12.4 Raw Material Requirements

	Rusk			Bread Plain (Large)			Bread Plain (Small)			Bread Milky			Sandwich Bread			Brown Bread			Biscuits		
Input Material	Qty.	Rate	Amount	Qty.	Rate	Amount	Qty.	Rate	Amount	Qty.	Rate	Amount	Qty.	Rate	Amount	Qty.	Rate	Amount	Qty.	Rate	Amount
White Flour (Kg)	84	49	4,100	100	49	4,881	100	49	4,881	100	49	4,881	100	49	4,881	5	49	244.05	7.5	49	366
Yeast (Gm)	400	0.98	390	750	1	731	750	1	731	750	1	731	750	1	731	40	1	39.00	5.0	1	5
Eka (Gm)	150	0.98	146	100	1	98	100	1	98	100	1	98	100	1	98	20	1	19.50		1	-
Sugar (Kg)	30	85	2,550	4	85	340	4	85	340	20	85	1,700	4	85	340		85	-		85	-
Salt (Gm)	850	0.01	9	1,000	0	10	1,000	0	10	1,000	0	10	1,000	0	10		0	-		0	-
Ghee (Kg)	5	206	1,030	8	206	1,648	8	206	1,648	8	206	1,648	8	206	1,648	0.40	206	82.40	1.0	206	206
Till (Kg)	-	350	-	-	350	-	-	350	-	3	350	875	-	350	-		350	-		350	-
Oil (Ltr)	2	215	430	1	215	108	1	215	108	1	215	108	0.50	215	108	0.25	215	53.75		215	-
CPC Powder (Gm)		3.2	-	20	3	64	20	3	64	20	3	64	20	3	64		3	-		3	-
Chokker (Kg)	-	25	-		25	-	-	25	-		25	-	-	25	-	0.5	25	12.50		25	-
Eggs (No.)		10	-		10	-	-	10	-		10	-	-	10	-	3	10	30.00	12.0	10	120
Essence + Food Colour	-		-		-	-	-	-	-		-	-	-	-	-		-	-	1.0	200	200
Icing Sugar (Kg)		85	-		85	-	-	85	-		85	-	-	85	-		85	-	2.0	85	170
Frozen Ghee (Kg)		206	-		206	-	-	206	-		206	-	-	206	-		206	-	4.0	206	824
Raw Material Cost	8,655			7,879			7,879			10,114			7,879			481			1,891		
Output (With above input materials)	Qty	Units		Qty	Units		Qty	Units		Qty	Units		Qty	Units		Qty	Units		Qty	Units	
	218	Packs (450 gms)		186	Breads		372	Breads		435	Breads		145	Breads		18	Breads		12	Kgs	

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumption

Description	Details
Machinery Maintenance	1% of Machinery Cost
Office Expenses (Stationery, Entertainment etc.)	3% of Administration expenses
Communication Expenses	3% of Administration Cost
Promotional Expenses	10% of Administration Cost
Vehicle Running Expenses	8% of Vehicle Cost
Depreciation Method	Accelerated depreciation
Depreciation Rate	10% on Machinery 20% on Office Vehicle 10% on Furniture & Fixture
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

13.2 Revenue Assumptions

Description	Details
Growth in Sales Price	10%
Days Operational / Year	360
Maximum Operational Capacity	Bread 468,000 Packs Rusk 132,000 Packs Biscuits 65,000 kg
Rusk Wastage	2%

13.3 Production Cost Assumptions

Description	Details
Capacity Utilization First Year	50%

Production Capacity Utilization Growth Rate	5%
Maximum Capacity Utilization	90%
Raw Material Cost Growth Rate	10%

Small and Medium Enterprises Development Authority

HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore
Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7

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

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