Pre-Feasibility Study

FLOUR MILL



Small and Medium Enterprises Development Authority

Ministry of Industries & Production Government of Pakistan

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Table of Contents

1-INTRODUCTION TO SMEDA	1
2-PURPOSE OF THE DOCUMENT	2
3-PROJECT PROFILE	2
3.1 Project Brief 3.2 Market Entry Timing 3.3 Opportunity Rationale 3.4 Proposed Business Legal Status 3.5 Project Capacity 3.6 Working Time 3.7 Project Investment 3.8 Suitable Location 3.9 Key Success Factors / Practical Tips for Success	
3.10 SWOT Analysis4-CURRENT INDUSTRY STRUCTURE	
4.1 Market Information 4.2 Market Overview & Demand 4.3 Demand and supply gap 4.4 Target Customers 4.5 Raw Material Requirement 4.6 International Scenario 4.6.1 Major Producers 4.6.2 Major Exporters 4.6.3 Major Importers 4.7 Wheat Production in Pakistan 4.7.1 Government wheat policy 4.8 Public Sectors Involved in Wheat Market 4.8.1 Ministry of Food Agriculture and Livestock 4.8.2 Trading Corporation of Pakistan 4.8.3 Provincial Food Departments 4.8.4 Seed Corporations 4.9 Private Sector involved in Wheat Market 4.9.1 Farmers 4.9.2 Traders 4.9.3 Seed Companies	
4.9.4 Flour Mills	
5.1 Machinery Cost	13 14 15
6-HUMAN RESOURCE REQUIREMENT	15
7-LAND & BUILDING REQUIREMENT	16
7.1 Land and Building Requirement	16 16
8-PROCESS FLOW	17
8.1 Process Flow of Flourmill	17

Pre-feasibility Study	Flour Mill
9-ANNEXURE- FINANCIAL STATEMENTS	19
	4

1-Introduction to SMEDA

Small and Medium Enterprise Development Authority (SMEDA) was established with the objective to provide fresh impetus to the economy through the launch of an aggressive SME support program.

Since its inception in October 1998, SMEDA had adopted a sectoral SME development approach. A few priority sectors were selected on the criterion of SME presence. In depth research was conducted and comprehensive development plans were formulated after identification of impediments and retardant. The all-encompassing sectoral development strategy involved recommending changes in the regulatory environment by taking into consideration other important aspects including financial aspects, niche marketing, technology up gradation and human resource development.

SMEDA has so far successfully formulated strategies for sectors including, fruits and vegetables, marble and granite, gems and jewelry, marine fisheries, leather and footwear, textiles, surgical instruments, urban transport and dairy. Whereas the task of SME development at a broader scale still requires more coverage and enhanced reach in terms of SMEDA's areas of operation.

Along with the sectoral focus a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of viable business opportunities for potential SME investors. In order to facilitate these investors, SMEDA provides business guidance through its help desk services as well as development of project specific documents. These documents consist of information required to make well-researched investment decisions. Pre-feasibility studies and business plan development are some of the services provided to enhance the capacity of individual SMEs to exploit viable business opportunities in a better way.

This document is in the continuation of this effort to enable potential investors to make well-informed investment decisions.

2-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 the project i.e. concept development, start-up, production, marketing, finance and business management. The document also provides sectoral information and international scenario, which have some bearing on the project itself.

3-Project Profile

The proposed project is for setting up a Flour Mill. The Mill can be established in any major city of Pakistan. The document highlights marketing, management and financial aspects required for the establishment of successful venture. The unit will be using modern automated machinery for all the processes, ensuring quality check through out the production process. After processing, the flour will be packed in 3 different packaging sizes. The unit will produce premium quality flour to be sold in the local market, competing with existing brands.

Traditionally Atta is made by stone grinding, a process that imparts a characteristic aroma and taste to the bread. The high bran content of Atta makes it a fiber-rich healthy food and essential part of the diet. The number of "mini flour mills" grinding atta at capacity of less than 5 tons /day is estimated to be 8,000 or more. Ninety percent of the mini mills are located in rural areas, whereas, about 700 small and medium flour mills are operating around the country with a capacity of 5-20 tons/ day.

3.1 Project Brief

This document describes the investment opportunity for setting up a Flour Mill. The said plant will have total installed wheat crushing capacity of 42,000 Tons per year. In the beginning it will be processing 18,000 Tons of wheat per year (assuming 75% capacity utilization in first year).

3.2 Market Entry Timing

As such there is no specific time required for the entry time in this sector. As the need is increasing day by day due to the increase in population, investment can be made any time during the year.

3.3 Opportunity Rationale

Agriculture sector contributes 24% of the total GDP for Pakistan. However, the massive population influx in Pakistan, has greatly burdened the agriculture sector as its productivity is not able to meet the current food requirements. Lack of infrastructure and growing number of population has also increased demand of food items, which has direct impact on public & private sector Flour Mills. Pakistan is a densely populated country, which creates a great demand for Flour, whereas big investment opportunity exists in this sector. Introduction of latest technology, hygienic processing and professional staff will also contribute to the popularity and success of private sector Flour mill. Investment in the private sector can, therefore, exploit this opportunity and provide good products on easy access.

3.4 Proposed Business Legal Status

A Flour Mill can be started as a sole proprietorship or on partnership basis. Although the selection totally depends upon the choice of the entrepreneur, whereas the financial aspects of this feasibility study is based on a Sole proprietorship, and the operations would be directly supervised by the owner and run through professional management.

3.5 Project Capacity

The proposed project will have the total out put capacity of 3,500,000 KG of four per year; in its first year of operation the unit will produce 2,800,000 KG flour assuming 80% capacity utilization.

3.6 Working Time

As per nature of business recommended timings would be 16hrs per day, and 25 days per month. Therefore two shifts would be necessary for smooth operations of tasks/obligations.

3.7 Project Investment

Total Initial Cost of the Project is worked out as follows:

Capital Investment	Rs. in actuals
Land	5,000,000
Building/Infrastructure	38,700,000
Machinery & equipment	34,238,500
Furniture & fixtures	206,000
Office vehicles	1,648,000
Office equipment	6,392,000
Pre-operating costs	1,723,445
Training costs	-
Total Capital Costs	87,907,945

Working Capital	Rs. in actuals
Equipment spare part inventory	46,365
Raw material inventory	31,850,000
Upfront land lease rental	-
Upfront building rent	-
Upfront machinery & equipment lease rental *	-
Upfront office equipment lease rental *	-
Upfront office vehicles lease rental *	-
Upfront insurance payment	1,451,940
Cash	500,000
Total Working Capital	33,848,305

Total Investment	121,756,249
1 Otal Hivestment	121,750,249

Initial Financing	Rs. in actuals
Debt	60,878,125
Equity	60,878,125
Lease	-
Export re-finance facility	-

The proposed pre-feasibility is based on the assumption of 50% debt and 50% equity. However, this composition of debt and equity can be changed as per the requirement of the investor.

3.8 Suitable Location

The said project can be set up in any Industrial Area close to major cities of Pakistan. It is recommended to establish the unit in area where raw material is easily available coupled with basic infrastructure.

3.9 Key Success Factors / Practical Tips for Success

The commercial viability of the proposed Flour Mill depends on the following Factors:

- Utmost care should be taken while selecting wheat. Only the best quality wheat should be used.
- Waste Production should be kept at minimum and production process need to be monitored very carefully.
- Advance sale orders can ensure the success of the business.
- It is recommended to estimate the wheat requirements for the year and this should be contracted for in advance with the suppliers to secure the drastic fluctuations in the prices of wheat.
- 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.
- Cost Accounting system should be strengthened so as to monitor the entire process and determine the reasons for major variances in the process such as Material, Labor and Factory Overhead Variances.
- Location of the project is of prime importance.
- Selection of technical / skilled staff would be very crucial decision to be made by the management.
- Continuous efforts should be made for up-gradation of the technology.

3.10 SWOT Analysis

Before making the decision to invest in the Flour Mill, one should carefully analyze the associated risk factors. A SWOT analysis can help in analyzing these factors, which play an important role in making the decision.

STRENGTHS

- Continuous availability of raw material, i.e. high quality wheat
- Fully automated plant, hence less labor involved
- Availability of low cost labor
- Product affordable to all income groups
- Wide range of target market

5

WEAKNESSES

- Strict controls over labor efficiency need to be observed to reduce the waste production to a minimum level
- Expected loss at the initial stages of the operation as a result of sales return from the distributors
- Inexperienced technical staff as compared to the units currently in operation

OPPORTUNITIES

- Changes in the current eating habits of the people
- A large number of people that are not brand loyal can be targeted through marketing campaign.
- About 40% of the Flour Market share comprises of un-branded flour this share can be gained through heavy marketing campaign
- Export opportunity

THREATS

- Already established businesses in same industry
- Fluctuation in the price of wheat
- Quality of the flour is to be monitored very closely as people are more directed towards health and safety issues
- Strong competition and high promotional activity by the competitors

4-CURRENT INDUSTRY STRUCTURE

4.1 Market Information

Pakistan is the seventh populous country in the world. According to the census of 1998, the population of Pakistan was 132.35 million which rose to 174.54 million (estimated for 2009). This growth rate is a tremendous challenge to the existing infrastructure, and especially, it affects the food items supply in the country. This has given rise to demand of private sector to invest in establishment of flour mill.

Wheat is the leading food grain of Pakistan and being staple diet of the people, it occupies a central position in formulation of agricultural policies. It contributes 14.4 percent to the value added in agriculture and 3.1 percent to GDP. Area and production target of wheat for the year 2009-10 had been set at 9045 thousand hectares and 25 million tons, respectively. Wheat was cultivated on an area of 9042 thousand hectares, showing a decrease of 0.04 percent over last year's area of 9046 thousand hectares. The impact of water shortages (availability at farm gate) and lower rainfall during the sowing period has been the main reason for lesser acreage under wheat crop. The size of wheat crop is provisionally estimated at 23864 million tons, 0.7 percent less than last year crop. The prospects for wheat harvest improved somewhat with healthy fertilizer off take and reasonable rainfall in pre harvesting period. However, the impact of lower acreage and

water shortages is likely take its toll and wheat harvest is estimated to be lower than the 2009-2010 targets of 25.0 million tons.

Table 1 - Area under Wheat Cultivation

Year	Wheat cultivation (000 Hectares)	Year	Wheat cultivation (000 Hectares)
1990-91	7911	2000-01	8181
1991-92	7878	2001-02	8058
1992-93	8300	2002-03	8034
1993-94	8034	2003-04	8216
1994-95	8170	2004-05	8358
1995-96	8376	2005-06	8448
1996-97	8109	2006-07	8578
1997-98	8355	2007-08	8550
1998-99	8230	2008-09	9046
1999-00	8463	2009-10	9042

4.2 Market Overview & Demand

The demand for Flour Mill is rising in accordance with the increase in population. The number of existing Mills is not at par to meet the growing demand. However, this industry has not yet been developed to any sizeable extent in the country and as such it is not capable enough to meet the demand of the growing population.

4.3 Demand and supply gap

The wheat flour produced in Pakistan is known as Atta. This is the Hindi word for wheat flour commonly used in South Asian cooking. Wheats are mainly eaten in Pakistan as chapati and roti. Wheat based products are a major part of the diet in Pakistan. A typical meal would consist of daal, bread (roti) and tea or a soft drink. The upper and middle-classes eat quite differently, but Roti is an essential item on the table to be baked fresh and eaten hot. There is huge demand of flour within Pakistan but statistically the demand of the flour in Pakistani market can be characterized by the daily protein & carbohydrates requirement of person against the protein & carbohydrates provided by flour.

A comparison of estimated supply and projected demand of wheat flour in Pakistan is given below:

Table 2: Demand and Supply of wheat flour¹

Year	Total Flour Production (Tons)	Flour Demand (Tons)	Surplus / Deficit (tons)
2001	7,766,223	9,097,830	(1,331,607)
2002	7,119,005	9,000,180	(1,881,175)
2003	7,079,831	9,195,480	(2,115,649)
2004	7,947,493	9,388,890	(1,441,397)
2005	9,057,774	9,479,610	(421,836)
2006	9,198,354	9,699,480	(501,126)

¹ Source: USAID & Competitive support fund

6

2007	9,531,099	10,080,000	(548,901)
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4.4 Target Customers

The major target market of the project consists of commercial suppliers, whole sellers & retailers, confectionary producers and households.

4.5 Raw Material Requirement

Wheat has been used as primary source for making flour, however flour can also be made from other starchy plant foods. These include barley, buckwheat, corn, lima beans, oats, peanuts, potatoes, soybeans, rice, and rye. The proposed prefeasibility is based on the assumption of wheat as raw material. There are basically six different classes of wheat: Hard Red Winter, Hard Red Spring, Soft Red Winter, Hard White, Soft White and Durum.

4.6 International Scenario

Wheat production in the world has been increasing dramatically fast due to the massive demand and increase in population. As per statistics provided by FAO in 2000/2001, the world's total wheat output was estimated at 17,782,000 million tons. Table 3 describes the statistics on world wheat Production, Consumption, Trade & Supply as below.

4.6.1 Major Producers

As per statistics provided by FAO, China is the leading country in wheat grain production. It produces 112 millions tons out of total world production of 683 millions tons. India is the second largest producer with a production of 78 millions tons recorded in year 2008. Pakistan comparatively stands at 7th position, by producing 20 millions tons of wheat grains in the total world production as described in table 7. However, none of the Asian giants contribute in the world export of wheat flour mainly due to the reason of high local demand.

Table 3 - Major Producers of Wheat in Year 2008¹

Rank	Country Name	Production (\$1000)	Production (MT)
1	China	15,805,966	112,463,296
2	India	11,671,546	78,570,200
3	United States of America	9,301,602	68,016,100
4	Russian Federation	6,670,506	63,765,140
5	Canada	4,462,759	28,611,100
6	France	4,388,762	39,001,700
7	Pakistan	3,023,994	20,958,800
8	Australia	2,653,403	21,420,177
9	Ukraine	2,618,186	25,885,400
10	Turkey	2,428,920	17,782,000
	World	82,992,471	683,406,527

¹ Source: FAO

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4.6.2 Major Exporters

In relevance to statistical figure provided by FAO, Kazakhstan is the world leader in export of wheat flour. In year 2008, Kazakhstan has exported 1.8 million tones of wheat flour amounting to 0.85 thousands dollars. Turkey ranks second in world exports while France is the third largest exporter of wheat flour. Table 8 describes the major exporters as follows.

Table 4 - Major Exporters of Wheat Flour in Year 2008¹

Rank	Name		Quantity	Value	Unit value
			(tones)	(1000 \$)	(\$/tones)
1	Kazakhstan		1,800,640	849,281	472
2	Turkey		1,239,120	640,674	517
3	France		786,480	449,431	571
4	Argentina		995,085	444,201	446
5	Belgium		758,568	410,554	541
6	Germany		567,793	321,408	566
7	Russian Federation		453,399	201,099	444
8	Canada		191,123	153,865	805
9	United States of	of	267,765	148,223	554
	America				
10	Ukraine		274,396	124,473	454

4.6.3 Major Importers

Afghanistan is biggest consumer of world wheat flour as per statistics provided by FAO. It has imported 0.86 million tons of wheat flour in year 2008. Uzbekistan & Brazil are other leading importers of wheat flour by importing 0.76 & 0.69 millions tones respectively in the year 2008. Table 9 illustrates the statistical data of the major wheat flour importers of the world.

Table 5 - Major Importers of Wheat Flour in year 2008

Rank	Country Name	Quantity	Value	Unit value
		(tones)	(1000 \$)	(\$/tones)
1	Afghanistan	865,333	524,621	606
2	Uzbekistan	767,394	353,136	460
3	Brazil	695,253	304,603	438
4	Libyan Arab	460,551	292,705	636
	Jamahiriya			
5	Iraq	489,000	276,155	565
6	Indonesia	532,649	271,422	510
7	Netherlands	389,729	203,598	522
8	Angola	345,555	189,030	547
9	France	247,433	161,960	655
10	United States of	200,637	156,962	782
	America			

¹ Source: FAO

8

4.7 Wheat Production in Pakistan

Wheat is Pakistan's most important agricultural commodity and represents 13.7 percent of the total value added of the agricultural sector and three percent to the gross domestic product (GDP). Its share of total crop area is 37 percent.

Pakistan has a total 8.45 million hectares of land for wheat cultivation, which is divided among four provinces; Punjab's 6.48 million hectares, Sindh's 0.93 million hectares, NWFP's 0.72 million hectares, and Balochistan's 0.31 million hectares. Out of the total annual wheat production of around 22 million MT, Punjab has the biggest share with 18 million MT followed by Sindh with 2.5 million MT, NWFP with 1.1 million MT, and Balochistan with 637,000 MT. Punjab is the breadbasket of the country, and has a 100year old canal network system for its agriculture.

In addition, Pakistan wheat markets are heavily influenced by Government of Pakistan (GoP) interventions. The government procures around 70 percent of the marketable surplus through federal storage organizations and provincial food departments. The GoP maintains a strategic wheat reserve and supplies wheat to deficit provinces. The Agricultural Prices Commission (APCOM) announces minimum support prices for farmers every year before the harvest. The respective Provincial Food Departments in consultation with flour mills announce consumer prices for wheat flour.

Table 6 - Province wise production of Wheat (Metric Ton)¹

Year	Punjab	Sindh	КРК	Balochistan
2000 – 07	18 million	2.5 million	1.1 Million	637,000
	(80%)	(12%)	(5%)	(3%)

4.7.1 Government wheat policy

Wheat market policies are guided by Government of Pakistan, basic objective is to support production and consumption policy targets. Procurement policies focus on ensuring a support price to farmers and a targeted quantity of wheat to be procured by the government. The main objective of the wheat distribution policy is to provide low priced wheat and flour to the general population.

Government wheat policy in Pakistan attempts to balance the competing interests of producers and consumers. On the production side, the policy is aimed at increasing wheat production (yields) and output, as well as supporting farmer incomes. Increased wheat production has also been seen as part of an overall national food security strategy of reducing dependence on food imports.

On the consumption side, the government has attempted to enhance household food security, particularly through ensuring availability of wheat flour at affordable prices and maintaining price stability.

The federal and provincial governments employ public procurement and announce a support price "procurement price" for intervening in domestic market to minimize monopolization and for the support of wheat growers. Provincial governments have generally set procurement targets aimed at securing enough grain for planned

9

¹ Source: Ministry of Finance & Competitive support fund

distributions and stock build-ups. Wheat grain is provided to the flour millers at an "issue price" which is often lower than the private market price.

Subsidies often come in the form of financial support for producers to produce higher volumes and support their incomes.

Year	Procurement Price (PKR/40kg)	Issue Price
2001-02	300	337.5
2002-03	300	337.5
2003-04	350	337.5
2004-05	400	387.5
2005-06	415	425
2006-07	425	430
2007-08	625	625

Wheat Procurement Mechanism¹

	Per 40 KG bag	Per Metric Ton
Procurement Price		
(Set by GoP)	PKR 350	PKR 8750
Incidental Charges		
(Monthly Costs)	PKR 25	PKR 625
Actual Basis Price:		
(procurement + charges)	PKR 475	PKR 12,500
Quota to Flour Mills	PKR 340	PKR 8450
Subsidy		
(Basis Price – Quota)	PKR 137	PKR 3437

4.8 Public Sectors Involved in Wheat Market

4.8.1 Ministry of Food Agriculture and Livestock

Ministry of Food Agriculture and Livestock (MINFAL) is authority to decide procurement location of wheat for Federal and Provincial Food Departments during harvest and also responsible for establishing procurement centers each year before the harvest. MINFAL is further involved in the distribution of wheat from surplus to the deficit provinces because provinces in deficit buy wheat either from the federal storage organization, PASSCO, or the Punjab Food Department (typically a surplus province) according to MINFAL allocation specifications.

4.8.2 Trading Corporation of Pakistan

Trading Corporation of Pakistan (TCP) is responsible for the import and export of agriculture and consumer goods under the specific directions of the federal government.

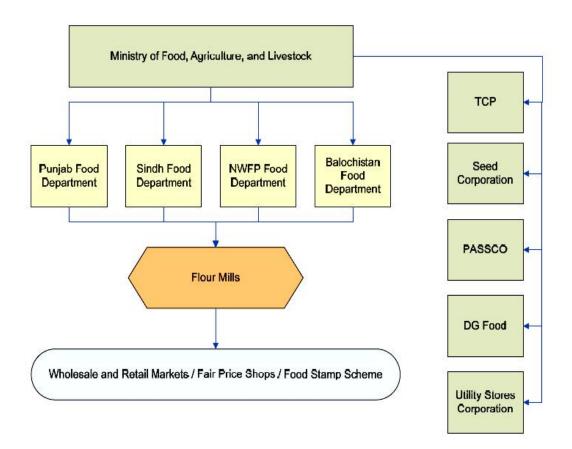
¹ Competitiveness Support Fund, Discussion Paper on the Wheat-Flour Industry in Pakistan

4.8.3 Provincial Food Departments

The Provincial Food Departments (PFDs) are responsible for all aspects of food grain marketing including purchases, storage, sales, transfer, milling, etc. under the Foodstuff (Control) Act of 1958 at provincial level. PFDs also ensure attractive support prices for farmers. PFDs supply wheat to the mills on a quota basis to ensure adequate supplies and stable prices of atta (local name for non-refined wheat flour) throughout the year. The Food Department in Punjab Province, the major wheat-producing province, supplies wheat to the deficit province as directed by MINFAL.

4.8.4 Seed Corporations

The Federal and Provincial Seed Corporations, one corporation in each of the four provinces, purchase wheat seed from the certified farmers and store the seed until it is distributed to the growers just before planting. These corporations purchase, store, and distribute around 10 percent of the total marketable surplus together with private sector seed companies.



4.9 Private Sector involved in Wheat Market

4.9.1 Farmers

Pakistani farmers use mostly traditional storage for grain. The private sector, primarily wheat traders and flour millers, have less than 1 million metric tons of grain storage

capacity. The private sector purchases up to 2 million MT of wheat from the farmers each year. Millers need to hold sufficient grain for 30 to 60 days of milling. The wheat delivered from the farm at harvest to the village market or to a government department kept in sheds, houses, large steel bins, concrete silos, or in the holding bins of a flour mill

4.9.2 Traders

Traders play an important role in purchasing and collecting wheat from the farmer at farm prices above or below the GoP's support price (depending on the wheat quality and market parameters) for further sale to public/private sector.

4.9.3 Seed Companies

More than 560 private seed companies have been registered and established under the supervision of the Federal Seed Certification Department (FSCD). Private seed companies supply certified wheat seed to the farmers. Out of 166,541 MT of wheat seed distributed during the 2005/06 crop year, private seed companies distributed 126,633 MT or about 76 percent of the total.

4.9.4 Flour Mills

In Pakistan, the flour-milling industry is privately operated. Flour mills procure wheat from the open market and from government agencies and produce wheat flour for local as well as for export markets (mostly to Afghanistan). Flour mills obtain most of their wheat from the Provincial Food Departments (PFDs) based on a fixed quota that is a function of the mill's milling capacity. PFDs issue wheat to the mills at a fixed release price that takes into consideration storage and other incidental costs. The GoP does not issue wheat to the mills during the time of the wheat harvest (June/July), when wheat is available in abundance in the markets. During the current crop year (2006/07), the GoP has fixed the release price at \$180/mt.

Table 7 - Registered flour mills in Pakistan¹

Province	Registered Mills	Milling Capacity per ton/day (tons)	Operational	Remarks
Punjab	600	120	350	Punjab is a surplus wheat-producing province. And supplies wheat to the deficit provinces (Balochistan, KPK and Sindh). Average wheat quota for a mill is 0.5 metric tons.
Balochistan	65	100	12	Balochistan gets wheat from Punjab as per allocation approved by MINFAL. Average quota for the mill is 10 ton/day (half quota as compared to the sanctioned quantity).
Sindh	325	120	65	Sindh Province meets its

¹ Source: A special report by the Famine Early Warning Systems Network (FEWS NET) and USAID

12

				wheat requirements from Punjab and through imports.
КРК	275	120	250	KPK gets wheat from Punjab as per allocation approved by MINFAL. Average quota for the mill is 0.8 ton/day.

Note: The grinding capacity of mills varies in all the provinces. Milling capacity of one medium to large mill is 100-150 MT/day.

5-Machinery Requirement

5.1 Machinery Cost

The major cost involved in establishing a Flour Mill is the cost of machinery and equipments.

Table 8 - Machinery and equipments

S. No	Description	Qty	Price/Unit	Total Cost
1	Roller Body	8	600,000	4,800,000
2	Plant Shifter 6 Sections	3	500,000	1,500,000
3	Purifier	2	400,000	800,000
4	Grooving Machine	1	600,000	600,000
5	Battery Cyclone 4 Pieces	1	250,000	250,000
6	Battery Cyclone 8 Pieces	2	350,000	700,000
7	High Pressure Fan	2	220,000	440,000
8	Low Pressure Fan	5	90,000	450,000
9	Packing Drum	7	120,000	840,000
10	Airlock	26	15,000	390,000
11	Airlock Gears	6	25,000	150,000
12	Airlock Cyclone with	26	16,000	416,000
	Headwalls			
13	Pneumatic Pipes	45 feet	2500/feet	112,500
14	Airlock Table	90 feet		220,000
15	Brawn Finishing Machine	2	180,000	360,000
16	Verm Conveyer 10x12	350	3500	1,225,000
	inches	feet		
17	Roller Body Hopper	17	9000	153,000
18	Divider Wall	20	8000	160,000
19	Lift Receiver (3/4)	26	9000	234,000
20	Motor Stand Cast iron	16	12,000	192,000
21	Airlock Coupling	26	1000	26,000

22	Washing Machine	1	1,000,000	1,000,000
23	Separator (10 ton)	1	1,200,000	1,200,000
24	Separator (7.5 ton)	2	850,000	1,640,000
25	Scoller Machine	2	550,000	1,100,000
26	Dust Cyclone 9x35 Feet	4	90,000	360,000
27	Elevator Head Bottom	5	250,000	1,250,000
28	Elevator Pipe	500	2000	1,000,000
		feet		
29	Dew Separator Machine	2	220,000	440,000
30	Magnetic Column	1	120,000	120,000
31	Accessories rubber etc.			180,000
32	Fine Net-Nylone			950,000
33	Body Roll	16 set	220,000	3,520,000
1	Roller Body	8	330,000	2,640,000
2	Channels, Angle Patti,			1,100,000
	Tools etc.			
3	Lift Pipe, production			1,100,000
	pipe etc.			
4	Boarding/Lodging			120,000
5	Transportation of			500,000
	Machinery			,
Total C	ost of Machinery		•	32,238,500

5.2 Other fixed assets requirement

Following additional fixed assets are required for the factory and management offices.

Item	No.	Cost/Item (Rs.)	Total Cost (Rs.)
Office Equipments			
Computers	4	20,000	80,000
Printers	1	25,000	25,000
UPS	4	7,500	30,000
Networking		25,000	25,000
Photocopy Machine	1	100,000	100,000
Fax Machine	1	20,000	20,000
Telephone Sets	8	1,500	12,000
			292,000
Fitting & Installations			
Air Conditioners	2	50,000	100,000
Generator (500 KVA)	1	4,000,000	4,000,000
Tube well with installation	1	2,000,000	2,000,000
			6,100,000
Furniture & Fixture			
Office furniture – Miscellaneous		100,000	100,000
Table	4	10,000	10,000

Chairs	12	3,000	36,000
Shelves	6	10,000	60,000
			206,000
Total			6,598,000

5.3 Utilities Requirement

- Electricity
- Telephone
- Gas
- Water (Tube well recommended for proposed setup, water will be required in ample quantity for washing up the wheat)

5.4 Vehicle requirement

The proposed project will require mini truck i.e. Shehzor, costing around Rs. 1 Million and depreciation on the vehicle will be charged at the rate of 20% on written down value basis.

6-Human Resource Requirement

Following table shows the requirements of Human Resources in the Flour Mill. Salaries and wages are assumed to grow at 10% per annum.

Table 9 - Personnel required

Description	No. of employees	Salary/month	Total salary/moth
Miller	1	40,000	40,000
Mill Mistri	1	20,000	20,000
Accountant	2	20,000	40,000
Rollman (Body)	1	15,000	15,000
Washing man (wheat)	1	12,000	12,000
Silkman (Shifter)	1	12,000	12,000
Fitter (maintenance)	1	12,000	12,000
Machinery helpers	9	8,000	72,000
Godown keeper	1	8,000	8,000
Sweepers	2	7,000	14,000
Unskilled labor	20	7,000	140,000
Guards	2	8,000	16,000
TOTAL			401,000

The duties of unskilled laborers will be as follows:

- Loading & unloading of raw materials and finished products.
- > Feeding the machines with raw materials.

The duties of skilled laborers

- > Operating the machinery.
- ➤ Maintenance of machinery

7-Land & Building Requirement

7.1 Land and Building Requirement

Total land required for the Flour Mill is approximately 2 Acres. Land price per Acre is taken at Rs. 2.5 million (Industrial Estate Quetta) The total cost of purchasing the land is estimated at Rs. 5 million.

7.1.1 Land

For above recommended size of Flour Mill, approximately two acres of land is required one acre of land will be kept open for future expansion and other requirements. The total cost of the Land is as follows:

Table 10 - Cost of Land

Land Cost		
Total Plot Area (Acre)	Rate/Acre	Total Land Cost (Rs)
2	2,500,000	5,000,000

7.1.2 Building

The break up of the required area and construction cost of the building is given in the table below:

Table 11 - Cost of Building

Description	Total area (Sq. Ft)	Rate/Sq Ft (Rs.)	Total Cost (Rs.)
PLANT			
Area of ground floor	4,500		
Area of 1 st floor	4,500		
Area of 2 nd floor	4,500	1	
Area of 3 rd floor	4,500		
Sub total plant	18,000	1,800	32,400,000
Management Building	- 1	1	1
Power room	400		
Godown	2450		
Office	225		
4 rooms for labor	480		
Masjid	400		
Guard room	80		
7 washrooms	84	1	
Kitchen	64	1	

Building		1500	20 (54 500
Total Building Constr		38,674,500	

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7.2 Cost of Water Connection

Water is required in ample quantity for the washing of raw wheat and for other associated requirements. For this purpose independent tube well will be required. The cost of tube well is Rs. 2 million¹.

8-PROCESS FLOW

8.1 Process Flow of Flourmill

Following is the process flow of flourmill:

Intake hopper is made up of concrete, steel and cement. A pit is dig in the soil below the ground level about 2 to 2.5 meters depth. It is covered with a net of 10 mm round steel duly welded with 5 mm round at a particular distance. Around 5,000 Kg. weights can be placed in this pit at a time.

There is a controlled mechanical system for opening the gate of Intake Hopper to 1st Elevator. 1st single **Bucket Elevator** lifts the grain vertically and feeds it in Drum Sieve machine. It is a rotary drum type sieving machine which can separate out the fine dust by aspiration system developed by negative pressure whereas thrash, jute sutli, lumps etc. are separated out by sieving.

After sieving through the **Drum Sieve**, the grain will feed in vibro-type Seed Cleaner by gravity. The impurities, which are bigger or smaller than the size of grain, is separated out by sieving with the help of different size sieves and the light impurities will be separated out by Aspiration System. These light impurities will be collected in the Dust Cyclone.

After sieving the material from Seed/Grain cleaner, the raw wheat will go into the 2nd single Bucket Elevator by gravity. This Elevator will lift the material vertically and feed it in the Worm Conveyor, which is fitted on the top of 1st & 2nd Concrete Bins. The cleaned material will go into 1st & 2nd Bins. These bins are designed for multiple hoppers from the bottom side. The output flow of the material can be controlled with variable pocket feeder and the wheat can be put in the Worm Conveyor. The Worm Conveyor takes the wheat from 1st & 2nd Bins to feed it to Elevator No. 3 by gravity.

Elevator No. 3 lifts the material vertically and feeds it to the Gravity Separator Cum Destoning machine. In this machine we can separate out heavy metals, stones, glass pieces and also the light impurities from the wheat. Thereafter, the wheat will go to scouring machine by gravity. In the scouring machine dust is removed from the upper layer of wheat by friction. Dust and some part of bran are separated out from the wheat by

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¹ Source: SMEDA survey

sieving. Aspiration channel is also provided with Scouring machine for further cleaning of the wheat by negative pressure of air stream.

From the **Scourer Aspiration** channel the wheat goes to Intensive **Dampner** through Bucket Dampner by gravity system with the help of Bucket Dampner where measured quantity of water will be added in the wheat. Water will be mixed immediately with the help of Intensive Dampner. From Intensive Dampner wheat will go to single Bucket Elevator No. E1- 4 by gravity.

Elevator No. 4 lifts the material vertically and feeds it into Worm conveyor No. W3 and feeds the wheat in Bin No. III, IV, V & VI for conditioning. The wheat is kept in the conditioning for 16-24 hours depending upon the variety of wheat and atmospheric temperature.

After conditioning, the wheat is taken out from the multiple hoppers. This wheat is feeded in the Elevator No. E1-5 through Worm Conveyor W4. Elevator E1-5 lifts the material vertically and puts it in the second Intensive Dampner through Bucket Dampner. Desired moisture is added here and the material is put in Bin No. VII & VIII for about 4 to 6 hours.

Material is taken out from the Bin No. VII & VIII through the conveyor and is feeded into the Elevator E1-6 by gravity.

Elevator E1-6 lifts the material vertically and feeds it into the Scouring/Brush Machine, so that the bran could be removed from the upper layer of wheat. This bran is separated by sieving and aspiration channel. Then this material goes to final Seed cleaner by gravity. The Seed cleaner finally performs the cleaning of the seed and keeps the material in Worm conveyor and then it goes to Elevator E1-7.

Bucket Elevator E1-7 lifts the material vertically and feeds it into Milling Bin. From Milling Bin it goes to 1st break of Roller Mill. In Roller Mill material is grind with the help of Chilled Cast Iron Rolls. After grinding, the material is lifted vertically by pneumatic conveying system and feeded into the Plan Sifter through Pneumatic cyclone and air Lock.

In the Plan Sifter (sieve) we can sieve the material into many segments. The final product goes to Worm conveyor and then packed. Intermediate product goes to Purifier machine for further purification. Desired quantity of Sujji is taken out for packing and the remaining material goes to Roller Mill for further grinding and sieving. Coarse material also goes to further grinding and sieving. This process is continued in sequence up-to-desired product.

In the whole process we grind the wheat in grooved rolls softly, so that purest form of Bran can be obtained. In this process by separating the bran we can get Samolina, Sujji in the purest form. In the intermediate product where we cannot separate out the bran from Semoline, the Semoline obtained at this stage is called 'Atta'.

9-Annexure- Financial Statements

Statement Summaries										SMEDA
Income Statement										Rs. in actual
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Revenue	859,950,000	1,018,710,000	1,200,622,500	1,408,730,400	1,646,453,655	1,917,634,257	2,109,397,683	2,320,337,451	2,552,371,196	2,807,608,31
Cost of goods sold	787,471,251	891,012,884	1,003,118,974	1,124,408,116	1,255,541,763	1,397,227,240	1,469,281,097	1,545,155,487	1,625,063,086	1,709,229,35
Gross Profit	72,478,749	127,697,116	197,503,526	284,322,284	390,911,892	520,407,017	640,116,586	775,181,964	927,308,110	1,098,378,96
General administration & selling expenses	1 200 000	1 21 6 02 4	1 445 042	1 505 504	1.740.122	1 000 511	2 005 450	2 200 455	2 522 255	2.750.02
Administration expense	1,200,000	1,316,834	1,445,042	1,585,734	1,740,123	1,909,544	2,095,460	2,299,477	2,523,357	2,769,03
Rental expense	-	-	-	-	-	-	-	-	-	-
Utilities expense	-	-	-	-	-	-	-	-	-	-
Travelling & Comm. expense (phone, fax, etc.)	66,000	72,426	79,477	87,215	95,707	105,025	115,250	126,471	138,785	152,29
Office vehicles running expense	49,440	54,384	59,822	65,805	72,385	79,624	87,586	96,345	105,979	116,57
Office expenses (stationary, etc.)	12,000	13,168	14,450	15,857	17,401	19,095	20,955	22,995	25,234	27,69
Promotional expense	8,599,500	10,187,100	12,006,225	14,087,304	16,464,537	19,176,343	21,093,977	23,203,375	25,523,712	28,076,08
Insurance expense	1,451,940	1,298,506	1,145,072	991,638	838,204	817,476	653,981	490,486	326,990	163,49
Professional fees (legal, audit, etc.)	4,299,750	5,093,550	6,003,113	7,043,652	8,232,268	9,588,171	10,546,988	11,601,687	12,761,856	14,038,04
Depreciation expense	5,961,250	5,961,250	5,961,250	5,961,250	5,961,250	6,162,474	6,162,474	6,162,474	6,162,474	6,162,47
Amortization expense	344,689	344,689	344,689	344,689	344,689	· -	-	· -	· · · · -	-
Property tax expense	· -	_	´-	´-	´-	_	_	_	_	_
Miscellaneous expense	25,798,500	30,561,300	36,018,675	42,261,912	49,393,610	57,529,028	63,281,930	69,610,124	76,571,136	84,228,249
Subtotal	47,783,069	54,903,207	63,077,816	72,445,056	83,160,174	95,386,780	104,058,601	113,613,432	124,139,523	135,733,942
Operating Income	24,695,680	72,793,909	134,425,710	211,877,228	307,751,718	425,020,237	536,057,985	661,568,531	803,168,588	962,645,022
operating meonic	21,075,000	72,775,767	13 1, 125,710	211,077,220	301,131,110	123,020,237	230,027,703	001,200,231	000,100,000	,02,010,02
Other income	178,381	753,935	1,939,611	3,777,003	6,196,341	10,070,683	15,226,350	20,738,477	26,858,513	38,778,109
Gain / (loss) on sale of assets	-	-	-	-	659,200	-	-	-	-	_
Earnings Before Interest & Taxes	24,874,061	73,547,845	136,365,322	215,654,231	314,607,260	435,090,920	551,284,335	682,307,008	830,027,101	1,001,423,13
*	0.524.000	6010.004	4.022.705	2 445 550	1.051.500					
Interest expense	8,534,998	6,010,024	4,823,795	3,447,770	1,851,580	425,000,020				1 001 102 12
Earnings Before Tax	16,339,063	67,537,821	131,541,526	212,206,461	312,755,679	435,090,920	551,284,335	682,307,008	830,027,101	1,001,423,13
Tax	6,699,016	27,690,506	53,932,026	87,004,649	128,229,829	178,387,277	226,026,577	279,745,873	340,311,111	410,583,484
NET PROFIT/(LOSS) AFTER TAX	9,640,047	39.847.314	77,609,500	125,201,812	184,525,851	256,703,643	325,257,758	402,561,135	489,715,990	590,839,64
THE THE THE TEN	2,040,047	57,047,514	,507,500	125,201,012	10.,525,651	25 5,7 65,645	323,237,730	.02,501,155	.05,715,550	270,037,04
Balance brought forward		9,640,047	24,743,681	51.176.591	88,189,201	136,357,526	196,530,584	260,894,171	331,727,653	410,721,82
Total profit available for appropriation	9,640,047	49,487,361	102,353,181	176,378,403	272,715,052	393,061,169	521,788,342	663,455,306	821,443,643	1,001,561,46
Dividend	7,040,047	24,743,681	51,176,591	88,189,201	136,357,526	196,530,584	260,894,171	331,727,653	410,721,821	500,780,73
Balance carried forward	9,640,047	24,743,681	51,176,591	88,189,201	136,357,526	196,530,584	260,894,171	331,727,653	410,721,821	500,780,73
Datance carried forward	9,040,047	24,743,081	31,170,391	88,189,201	130,337,326	190,330,384	200,894,171	331,727,653	410,721,821	300,780,73

										SMEDA
										D : .
Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actua Year
			2002							
500,000	3,464,018	13,290,104	29,812,372	54,121,027	83,575,445	140,217,506	198,145,828	262,709,215	334,146,639	527,589,
-	23,560,274	25,735,068	30,401,815	35,744,560	41,851,836	48,823,122	55,164,821	60,681,303	66,749,434	73,424,
-	-	-	-	-	-	-	-	-	-	
46,365	55,049	65,027	76,471	89,579	104,570	115,289	127,106	140,134	154,498	
31,850,000	37,815,750	44,669,855	52,531,749	61,536,019	71,834,253	79,197,264	87,314,984	96,264,769	106,131,908	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
						,.		,		
33,848,305	66,193,597	84,905,126	113,814,045	152,329,389	198,183,581	269,007,161	341,243,225	420,122,412	507,345,975	601,013
5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5,000
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1,723,445	1,378,756	1,034,067	689,378	344,689	-	_	-	_	-	
-	-	-	_	-	_	-	-	-	-	
1,723,445	1,378,756	1,034,067	689,378	344,689	-	-	-	-	-	
121,756,249	147,795,602	160,201,192	182,804,173	215,013,578	257,215,951	321,877,057	387,950,647	460,667,360	541,728,448	629,233,
	22.015.752	25.444.552	12 102 001	17.051.001	53.051.400	50 050 22 4		c= 251 02c	co 504 504	en en e
-	33,015,762	37,411,773	42,182,004	47,354,984	52,961,408	58,853,234	61,967,016	65,254,026	68,724,724	67,574
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
	33 015 762	37 411 773	42 182 004	47 354 984	52 961 408	58 853 234	61 967 016	65 254 026	68 724 724	67,574.
	33,013,702	37,411,773	42,162,004	47,334,964	32,901,408	36,633,234	01,507,010	03,234,020	08,724,724	07,574,
-	_	-	-	-	-	_	-	_	-	
-	6,699,016	7,018,893	7,018,893	7,018,893	7,018,893	5,615,114	4,211,336	2,807,557	1,403,779	
60,878,125	37,562,652	30,148,721	21,548,561	11,572,375	-	-	-	-	-	
60,878,125	44,261,668	37,167,614	28,567,454	18,591,268	7,018,893	5,615,114	4,211,336	2,807,557	1,403,779	
60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60 979 125	60.070
00,878,125						, ,	, ,			60,878 500,780
60 979 125	. , ,		, , , , , , ,	, , .		/ /	, ,		. / . / .	561,658
	, , .	160,201,192	182,804,173	215,013,578	257,215,951	321,877,057	387,950,647	460,667,360	541,728,448	629,233
121,756,249	147,795,602									
	46,365 31,850,000 - - 1,451,940 33,848,305 5,000,000 34,238,500 206,000 1,648,000 6,392,000 86,184,500 1,723,445 121,756,249	500,000 3,464,018 - 23,560,274 - 46,365 55,049 31,850,000 37,815,750	500,000	500,000 3,464,018 13,290,104 29,812,372 - 23,560,274 25,735,068 30,401,815 46,365 55,049 65,027 76,471 31,850,000 37,815,750 44,669,855 52,531,749 - - - - - - - - - - - - 1,451,940 1,298,506 1,145,072 991,638 33,848,305 66,193,597 84,905,126 113,814,045 5,000,000 5,000,000 5,000,000 5,000,000 38,700,000 37,152,000 35,604,000 34,056,000 34,238,500 30,814,650 27,390,800 23,966,950 206,000 185,400 164,800 144,200 4,648,000 1,318,400 988,800 659,200 6,392,000 5,752,800 5,113,600 4,474,400 86,184,500 80,223,250 74,262,000 68,300,750 1,723,445 1,378,756 1,034,067 689,378	500,000 3,464,018 13,290,104 29,812,372 54,121,027 - 23,560,274 25,735,068 30,401,815 35,744,560 46,365 55,049 65,027 76,471 89,579 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 - - - - - - 1,451,940 1,298,506 1,145,072 991,638 838,204 33,848,305 66,193,597 84,905,126 113,814,045 152,329,389 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 30,000,000 34,056,000 32,508,000 38,700,000 37,152,000 35,604,000 34,056,000 32,508,000 20,543,100 206,000 185,400 164,800 144,200 123,600 206,000 1,318,400 988,800 659,200 329,600 6,392,000 5,752,800 5,113,600 4,474,400 3,835,200 86,184,500 80,223,250 74,262,000 68,300,750	500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 46,365 55,049 65,027 76,471 89,579 104,570 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 - - - - - - - 1,451,940 1,298,506 1,145,072 991,638 838,204 817,476 33,848,305 66,193,597 84,905,126 113,814,045 152,329,389 198,183,581 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 34,238,500 30,814,650 27,390,800 23,966,950 20,543,100 17,119,250 206,000 185,400 164,800 144,200 123,600 103,000 46,184,500 80,223,250 74,262,000 68,307,50 62,339,500 59,032,370 1,723,445 1,378,756	500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 48,823,122 46,365 55,049 65,027 76,471 89,579 104,570 115,289 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 - <td>500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 48,823,122 55,164,821 46,365 55,049 65,027 76,471 89,579 104,570 115,289 127,106 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 -</td> <td>500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 262,709,215 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 48,823,122 55,164,821 60,681,303 46,365 55,049 65,027 76,471 89,579 104,570 115,289 127,106 140,134 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 96,264,769 1.451,940 1,298,506 1,145,072 991,638 838,204 817,476 653,981 490,486 326,990 33,848,305 66,193,597 84,905,126 113,814,045 152,329,389 198,183,581 269,007,161 341,243,225 420,122,412 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000</td> <td>500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 262,709,215 334,146,639 46,365 35,049 65,027 76,471 89,579 104,570 115,289 127,106 140,134 154,498 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 96,264,769 106,131,008 1,451,940 1,298,500 66,193,597 84,905,126 113,814,045 152,329,389 198,183,581 269,007,161 341,243,225 420,122,412 507,345,975 5,000,000</td>	500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 48,823,122 55,164,821 46,365 55,049 65,027 76,471 89,579 104,570 115,289 127,106 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 -	500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 262,709,215 - 23,560,274 25,735,068 30,401,815 35,744,560 41,851,836 48,823,122 55,164,821 60,681,303 46,365 55,049 65,027 76,471 89,579 104,570 115,289 127,106 140,134 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 96,264,769 1.451,940 1,298,506 1,145,072 991,638 838,204 817,476 653,981 490,486 326,990 33,848,305 66,193,597 84,905,126 113,814,045 152,329,389 198,183,581 269,007,161 341,243,225 420,122,412 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000	500,000 3,464,018 13,290,104 29,812,372 54,121,027 83,575,445 140,217,506 198,145,828 262,709,215 334,146,639 46,365 35,049 65,027 76,471 89,579 104,570 115,289 127,106 140,134 154,498 31,850,000 37,815,750 44,669,855 52,531,749 61,536,019 71,834,253 79,197,264 87,314,984 96,264,769 106,131,008 1,451,940 1,298,500 66,193,597 84,905,126 113,814,045 152,329,389 198,183,581 269,007,161 341,243,225 420,122,412 507,345,975 5,000,000

Statement Summaries											SMEDA
Cash Flow Statement											Rs. in actual
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Operating activities											
Net profit	_	9,640,047	39,847,314	77,609,500	125,201,812	184,525,851	256,703,643	325,257,758	402,561,135	489,715,990	590,839,64
Add: depreciation expense	_	5,961,250	5,961,250	5,961,250	5,961,250	5,961,250	6,162,474	6,162,474	6,162,474	6,162,474	6,162,47
amortization expense	_	344,689	344,689	344,689	344,689	344,689	_	-	_	_	_
Deferred income tax	_	6,699,016	319.877	-	-	-	(1.403,779)	(1.403.779)	(1,403,779)	(1.403,779)	(1,403,77
Accounts receivable	_	(23,560,274)	(2,174,795)	(4,666,747)	(5,342,745)	(6,107,276)	(6,971,286)	(6,341,699)	(5,516,482)	(6,068,130)	(6,674,94
Finished good inventory	_	(23,500,271)	(2,17.,755)	-	(0,0.2,7.0)	(0,107,270)	(0,771,200)	(0,5.1,0))	(5,510,102)	(0,000,150)	(0,07.1,5
Equipment inventory	(46,365)	(8,684)	(9,978)	(11.445)	(13,108)	(14,991)	(10,718)	(11,817)	(13,028)	(14,364)	154,49
Raw material inventory	(31,850,000)	(5,965,750)	(6,854,105)	(7,861,894)	(9,004,270)	(10,298,234)	(7,363,011)	(8,117,720)	(8,949,786)	(9,867,139)	106,131,90
Pre-paid building rent	(51,020,000)	(5,705,750)	(0,02 1,102)	(7,001,051)	(>,001,270)	(10,2>0,25.)	(7,505,011)	(0,117,720)	(0,> 1>,700)	(>,007,15>)	100,131,70
Pre-paid lease interest		_	_	-	_	_	_	_	_	_	
Advance insurance premium	(1,451,940)	153,434	153,434	153,434	153,434	20,728	163,495	163,495	163,495	163,495	163,49
Accounts payable	(1,431,540)	33,015,762	4,396,011	4,770,231	5,172,980	5,606,424	5,891,826	3,113,781	3,287,010	3,470,698	(1,150,09
Other liabilities	-	33,013,702	4,390,011	4,770,231	3,172,980	3,000,424	3,091,020	3,113,761	3,267,010	3,470,098	(1,130,03
Cash provided by operations	(33,348,305)	26,279,490	41,983,698	76,299,019	122,474,042	180,038,441	253,172,644	318,822,494	396,291,040	482,159,246	694,223,20
Change in long term debt Change in short term debt Change in short term debt Change in export re-finance facility Add: land lease expense Land lease payment Change in lease financing Issuance of shares Purchase of (treasury) shares Cash provided by / (used for) financing: Investing activities Capital expenditure Acquisitions Cash (used for) / provided by investing a	60,878,125 - - - - - - - - - - - - -	(23,315,472)	(7,413,931) (7,413,931)	(8,600,160) (8,600,160)	(9,976,186) (9,976,186)	(11,572,375) (11,572,375) (2,654,120) - (2,654,120)	-				- - - - - - - - - - - - - - - - - - -
NET CASH	500,000	2,964,018	34,569,767	67,698,859	112,497,856	165,811,945	253,172,644	318,822,494	396,291,040	482,159,246	694,223,20
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Cash balance brought forward		500,000	3,464,018	13,290,104	29,812,372	54,121,027	83,575,445	140,217,506	198,145,828	262,709,215	334,146,6
Cash available for appropriation	500,000	3,464,018	38,033,784	80,988,962	142,310,228	219,932,972	336,748,090	459,039,999	594,436,868	744,868,461	1,028,369,8
Dividend	-	-	24,743,681	51,176,591	88,189,201	136,357,526	196,530,584	260,894,171	331,727,653	410,721,821	500,780,7
Cash carried forward	500,000	3,464,018	13,290,104	29,812,372	54,121,027	83,575,445	140,217,506	198,145,828	262,709,215	334,146,639	527,589,1

Pre-feasibility Study	23	Flour Mill	
			23