

1	INTRODUCTION	4
1.1	PROJECT BRIEF	4
1.2	OPPORTUNITY RATIONALE	4
1.3	PROPOSED CAPACITY	6
1.4	PROJECT COST	6
2	CURRENT INDUSTRY STRUCTURE	6
2.1	MAJOR PLAYERS.....	6
3	MARKETING	6
3.1	LOCAL MARKET	6
3.1.1	Size.....	6
3.1.2	Market Segments.....	6
3.2	INTERNATIONAL MARKET	7
3.2.1	Major Exporters of Rice.....	7
3.2.2	Major Rice Importers.....	7
3.2.3	Exports Trend of Pakistan.....	8
3.2.4	Pakistan's Trading Partners	8
3.3	UNIT PRICE ANALYSIS	8
4	RAW MATERIALS	9
4.1	RICE HUSKING	10
4.2	POLISHING UNIT	10
5	MACHINERY & EQUIPMENT	10
5.1	DETAILS OF HUSKING MACHINES	10
5.2	DETAILS OF RICE PROCESSING (POLISHING) MACHINES.....	11
6	HUMAN RESOURCE REQUIREMENT	13
6.1	PROPOSED SETUP.....	13
7	PRODUCTION	13
7.1	PRODUCTS OF HUSKING UNIT	13
8	LAND & BUILDING REQUIREMENT	14
8.1	LOCATION	14
8.2	RECOMMENDED MODE OF ACQUIRING LAND.....	14
	TABLE 8-1 TOTAL LAND REQUIREMENT & BUILDING COVERED AREA	14
8.3	COVERED AREA REQUIREMENT	14
9	PROJECT ECONOMICS	16
10	FINANCIAL STATEMENTS	17
10.1	INCOME STATEMENT	17
10.2	CASH FLOW STATEMENT.....	18
10.3	BALANCE SHEET	19
11	KEY ASSUMPTIONS	20

1 INTRODUCTION

1.1 Project Brief

The study provides information regarding investment opportunity for setting up a rice husking and polishing unit in Pakistan, especially in the area of Lahore, Gujranwala, Hafizabad and Sialkot districts.

Rice is consumed as a major food item after wheat. Rice is an important Kharif¹ crop, which is grown on a large irrigated area in Pakistan. The objective of this document is to provide information about investment opportunity for setting up a Rice Husking & Polishing Unit.

Rice is grown on irrigated areas of all the four provinces of Pakistan. The rice crop is sown in the months of June/July and harvested in September/October. The crop needs a fertile land and a heavy fertilizer for getting good yields.

Rice is a high water-intensive crop. It needs flood irrigation during the entire season. There are different varieties of rice crop, which differ in tastes and aromas. Two main species of rice, i.e. Basmati and Irri, are most commonly grown in Pakistan. The average yield of rice is 14 maunds (40 kg) per acre for Basmati and 29 maunds (83 kg) per acre for Irri rice. Basmati is considered to be the most superior variety of rice.

Table 1-1 H.S Codes of Rice

Sr. #	H.S Codes	Product
1	HS 02-100630	Semi Milled/Wholly Milled Rice, Whether or not polished/Glazed
2	HS 02-100620	Husked (Brown) Rice
3	HS 02-100610	Rice in the Husk (Paddy/Rough)
4	HS02-110230	Rice Flour

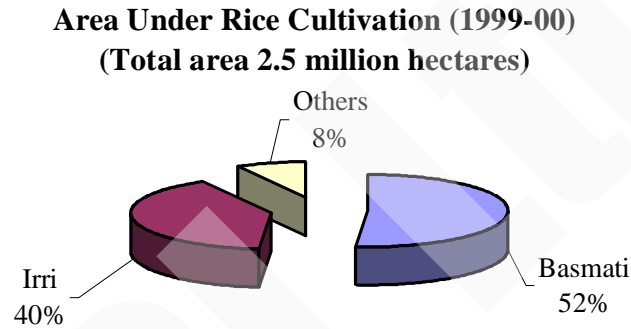
1.2 Opportunity Rationale

Pakistan's second largest staple food crop, rice, is a source of foreign exchange earnings. At the end of the eighties, Pakistan followed the USA and Thailand as the third largest rice exporting country in the world. The long grain sweet smelling rice called basmati is grown only in parts of Pakistan. The peculiar soil, climate and farming techniques combine to produce this world-renowned variety of rice, which is a gourmet's dream. Basmati rice is now available in most super markets in all over the world.

The demand for polished rice is increasing in the export market and there is still shortage of modern rice processing mills that can produce branded rice of the required quality.

Pakistan produces good quality rice in the world. Basmati rice is the most delicious variety of rice produced in Pakistan. The proximity of Middle East market has enabled Pakistan's rice to compete with the International rice. The market for coarse rice i.e. Irri is decreasing in the Middle East as the consumer preferences have changed in Saudi Arabia and other Arab countries towards the quality Basmati rice. Basmati fetch highest unit price per ton in the international market.

¹ Summer crop (sown in summer)

Figure 1-1 Variety-wise Distribution of Area under Rice Cultivation (in Pakistan)**Table 1-2 District wise Area and Production of Rice Crop²**

District / Province	Area in '000' Hectares		(Production in '000' Tonnes)	
	2003-2004	2004-2005	2003-2004	2004-2005
Panjab	1687.9	1754.3	2871.4	2980.3
Sindh	551.2	543.9	1432.8	1499.7
N.W.F.P	61.7	59.9	130.8	123.2
Balochistan	159.8	161.5	412.6	421.6
Pakistan	2460.6	2519.6	4847.6	5024.8

Table 1-3 District wise Area of Rice Crop by Varieties:

District / Province	2003-2004				2004-2005			
	Basmati	Irri.	Others	Total	Basmati	Irri	Others	Total
Panjab	1426.1	138.0	123.8	1687.9	1466.5	108.1	179.7	1754.3
Sindh	0.00	495.3	55.9	551.2	0.0	485.0	58.9	543.9
N.W.F.P	14.1	18.5	29.1	61.7	13.4	14.6	31.9	59.9
Balochistan	80.3	66.0	13.5	159.8	78.5	70.1	12.9	161.5
Pakistan	1520.5	717.8	222.3	2460.6	1558.4	677.8	283.4	2519.6

² Agriculture Statistics of Pakistan

1.3 Proposed Capacity

The husking unit is assumed to operate on 60% capacity utilization in the first year. The unit will process 48 tons per day of paddy during seven months of operations.³ The rice-polishing unit will also operate on 60% capacity utilization in the first year and will process 32 tons of polished rice for the year⁴.

1.4 Project Cost

The approximate cost of the proposed project is worked out to be Rs 69.79 million.

2 CURRENT INDUSTRY STRUCTURE

Rice industry is growing over the last three decades with an increasing demand of processed rice in local as well as in export market. The rice mills have increased from 170 units in 1986 to 208 units in 1991. More than 50% of these units are integrated i.e. complete unit with both husking and polishing facilities. The major market of the processed rice is the export market of Middle East. The cluster of rice processing mills is present in major rice producing belts in Punjab. Most of the mills are located in Lahore, Gujranwala, Hafizabad and Sialkot districts.

2.1 Major Players

Major players in the rice processing industry are located in Lahore, Gujranwala and Hafizabad districts. With the development of the rice processing industry, the export and local market is progressing towards the branded rice. A large number of major players in the industry are selling branded rice like Guard Rice, Flora Rice, Roberts Rice, etc.

3 MARKETING

3.1 Local Market

3.1.1 Size

Rice is the second largest food item of the Pakistani households after wheat flour. During the last decade, the production of rice in Pakistan has been around 5 million tons per annum. Around 2.9 millions tons of rice is available for domestic consumption of Pakistan. The per capita availability of rice in Pakistan is 20.78 kg.

Pakistan has scattered population of rice eating people throughout the country. In most of the urban and rural areas of the Punjab, people eat rice at least once a week. In Azad Kashmir, the entire households consume rice in their daily meals. In Sindh province, particularly Karachi, people eat rice 3-4 times a week.

3.1.2 Market Segments

According to buying power of the rice consumers, the market for rice can be broadly categorized into three major groups.

Lower income group, includes people with income level of less than Rs 3,000 per month. The majority of this segment is looking for purchasing cheap rice. This segment is

³ Husking Plant will operate on basis of 2 shifts of 8 hours each.

⁴ Polishing Plant will operate on basis of 2 shift of 8 hours.

the major market of broken rice and Irri rice. The price of broken rice is almost equivalent to the wheat prices.

Middle income group, includes middle and upper income households in the urban areas with monthly income of Rs 5000-10,000. This segment purchases good quality rice (polished rice as well as semi-polished rice)

Upper income group includes the upper income segment of the society, they prefer to buy high quality branded rice. The hotels and restaurants also purchase polished and semi polished rice for their different dishes.

3.2 International Market

Total world rice exports market is \$ 8.2 billion during 2005.

Table 3-1 World Rice Exports

Period	Trade Value
2005	\$8,259,369,423
2004	\$8,027,936,380

3.2.1 Major Exporters of Rice

Thailand is the largest rice exporter with exports of over \$6 billion during 2005. Pakistan comes on the 3rd position in the international rice export market with exports of \$2.4 Billion during 2004-2005.

Following are the major exporters of the rice in the world for the year 2005

Table 3-2 Leading Exporters⁵

Country	Export Value
Thailand	\$6,843,253,020
USA	\$4,265,661,138
Pakistan	\$2,414,835,068
India	\$2,374,208,529
Italy	\$1,388,750,346
Other Exporting Countries	\$5,079,750,922

3.2.2 Major Rice Importers

European Union is the largest importer of rice along with Japan and United Kingdom with their rice imports \$1.136 and \$1.09 billion respectively during 2005.

Table 3-3 Leading Importers⁶

Country	Import Value
EU-25	\$1,407,986,556
Japan	\$1,136,022,328
UK	\$1,109,057,025
France	\$1,065,082,691

⁵ United Nations Statistical Division. (www.Unstats.un.org)

⁶ United Nations Statistical Division. (www.Unstats.un.org)

USA	\$977,961,064
Other Importing Countries	\$13,787,494,884

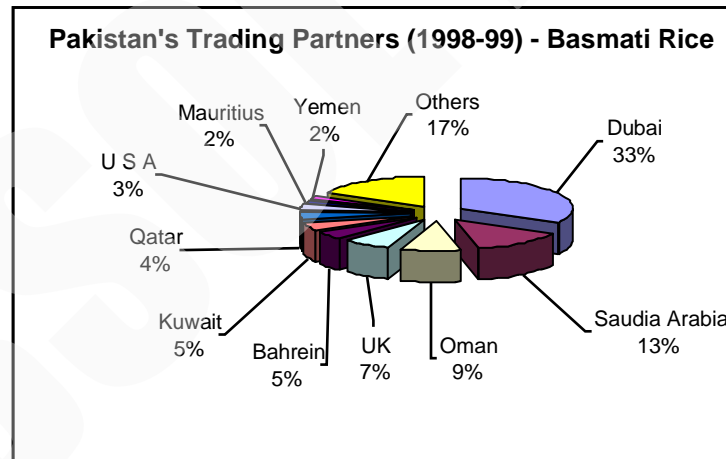
3.2.3 Exports Trend of Pakistan

Rice exports from Pakistan have showed a fluctuating trend in terms of value due to change in rice prices in the international market. Rice is the third largest export item of Pakistan. Rice exports from Pakistan were \$1.099 Billion during the year 2004-2005. The exports of rice have been fluctuating during the last three years due to price fluctuation in the international market.

3.2.4 Pakistan's Trading Partners

Major shares of Pakistani rice exports go to Middle East, which accounts for 71% of the total rice exports from Pakistan. The major chunk of Pakistan rice exports is dominated by Basmati rice.

Figure 3-1 Pakistan Trading Partners



3.3 Unit Price Analysis

The unit price of rice exported from Pakistan shown a fluctuating trend. Lack of grading, branding and proper packing are the major impeding factors in the increase of unit price of Pakistani rice.

Table 3-4 Unit Prices⁷

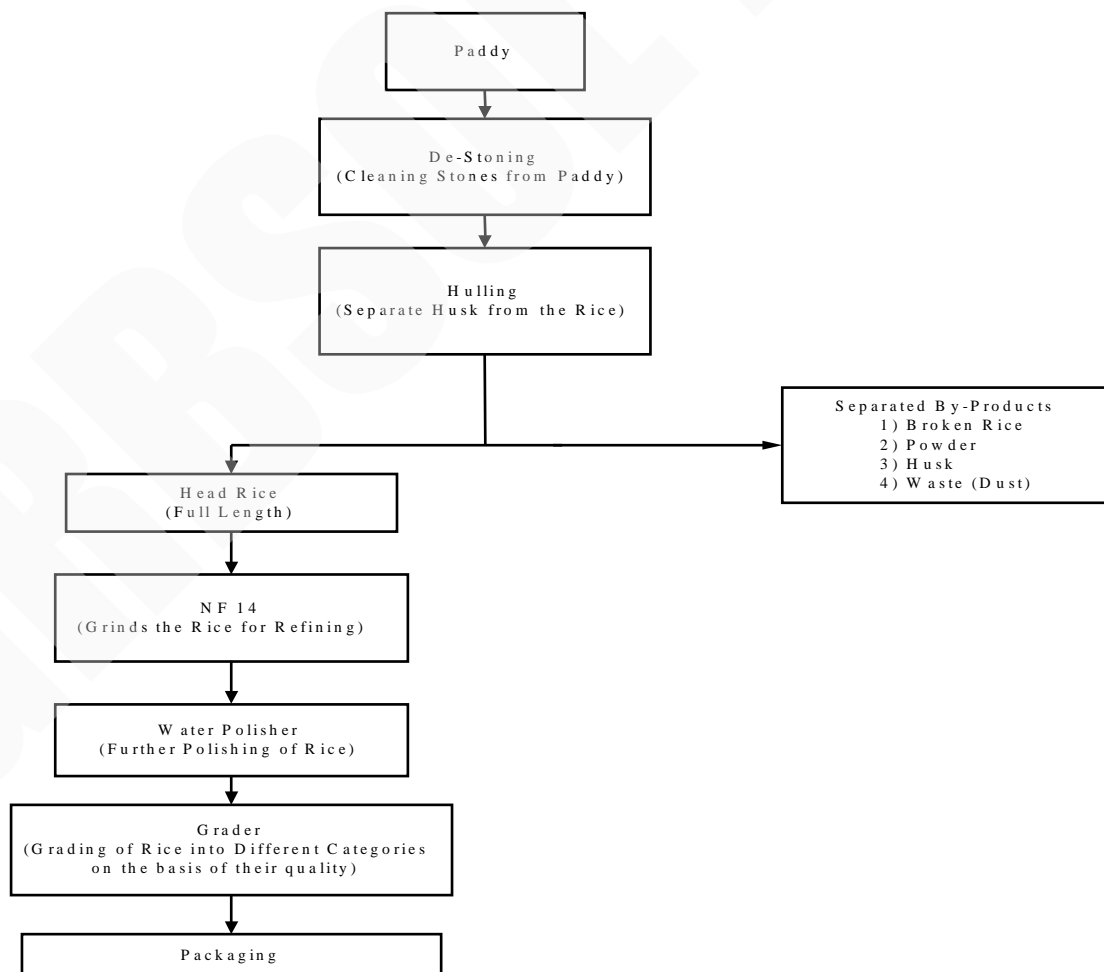
Description	2003	2004	2005
Value(Billion \$)	0.632	0.682	1.099
Quantity(Billion Kg)	1.8	1.9	3.4
Unit Price (\$/Ton)	351	359	323

⁷ United Nations Statistical Division. (www.Unstats.un.org)

4 RAW MATERIALS

The raw material of the husking unit is paddy, obtained from rice harvesting. The paddy can be purchased from the local grain market (Mandi) as well as directly from the farmers on cash basis. The paddy-harvesting season starts in mid of September and ends in December. The paddy husking is a seasonal process and is limited to only seven months after the harvesting of rice crop. The husking operations start in November and end in May. It is assumed that the polishing plant will work throughout the year, in first 7 seven months the entrepreneur will polish (process) in house rice later it will polish the unpolished rice that is available in markets. By this a plant can be run throughout the year.

Figure 4-1 Production Process Flow



4.1 Rice Husking

Rice husking unit will use the paddy as raw material. Husking is the process of separating the rice from the husk. Rubber roll and hullers are used to shatter the paddy to produce rice. Different processes are used for separation of head rice, broken rice, rice powder, dust & bran.

4.2 Polishing Unit

Rice polishing unit will use the brown rice (head/broken rice) for cleaning and polishing. Various types of cleaners/polishers are used to give shining and silkiness to the rice.

The husking of paddy produces different products, including 53% head rice, 10% broken rice, 2.5% powder rice, 33.50% husk and 1.00% waste & dust particles.

The rice-polishing unit processes the head rice (brown rice) to make different value added rice products like silky and non-silky rice.

The operations of a polishing unit are spread over a period of eight months. In the current industrial practice, both the husking and polishing units are not operated at one time due to certain reasons. After the husking operation, the brown rice requires a time of six to ten weeks for the drying and conditioning. So, the brown rice is stored for a period of at least two months before taking it to the polishing process. For the purpose of this report major portion of head rice (brown rice) will be supplied from in-house husking unit while rest will be purchased from the local market. The processed rice (both brown rice and polished rice) will be stored during the first few months of harvesting season, as the prices are generally lower due to oversupply of rice in the market.

5 MACHINERY & EQUIPMENT

5.1 Details of Husking Machines

Majority of the machinery required for husking and polishing unit is manufactured locally apart from few items like SM and NF machine, which are used for refining the rice. Machinery can also be imported from China at cheaper rates compared to those from Japan or Korea. The major machinery components of the rice husking mill are manufactured in the local market of Daska, Jallalpur Bhattian, Gujranwala and Lahore. Amongst the foreign suppliers, China is considered to be more competitive than other countries. It's better to purchase S.M.18 and NF 14 machines from China and other from local market. The local market manufacturers are supplying the China made S.M. 18 and NF 14 along with other machinery components.

Table 5-1 Husking Machinery Details⁸⁹

Husking Plant Machines	Quantity	Rate(Rs.)	Amount/other (Rs)
Pre cleaner PH 40 type 5'x10'	2	125,000	250,000
Paddy Husker (pneumatic)	2	175,000	350,000
Husk Cleaner	1	35,000	35,000

⁸ Machinery Prices has been quoted by Muhafiz industries, Maqbara Morr, old Gt road, Shahdara, Lahore. Ph: 042-7923998-9

⁹ These prices does not include sales tax

Husk Blower 7'	1	60,000	60,000
Pre cleaner half portion 5' x 10'	1	85,000	85,000
Paddy Separator 90comp	1	325,000	325,000
Polisher SM-18 (China made)	2	110,000	220,000
Polisher NF-14(China made)	2	110,000	220,000
Rice grader 3 stage 5' x 10'	1	235,000	235,000
Length grader	2	68000	136,000
Width grader	1	100,000	100,000
Elevator 10"x 30' comp	1	42000	42,000
Elevator 10"x 25' comp	13	36,000	468,000
Pipe Line 18, 22 gauge	1	75,000	75,000
Steel structure with wooden platform	1	130,000	130,000
Dust blower with ducting	1	50,000	50,000
Cyclone 3.5' dia	1	18,000	18,000
Blower for bran 25" impeller	1	25,000	25,000
Total			2,824,000
Fitting charges			150,000
Total Cost of the Husking Plant			2,974,000

5.2 Details of Rice Processing (Polishing) Machines

Major machinery required for rice polishing is also manufactured locally. It is being manufactured at towns of Daska, Jalalpur Bhatian, Gujranwala and Lahore. Modern machinery can also be imported from China, Japan, Germany and Korea. It is recommended for the proposed project to use NF-14, S.M. 18 and Paddy separator from China and other machinery components from local market.

Table 5-2 Polishing Machinery Details

Rice Polishing Machines	Qty	Unit Price	Total
Combi cleaner with blower	1	105,000	105,000
Paddy Separator (China made)	2	95,000	190,000
Width grader	2	100,000	200,000
De-Stoner (satake type, with blower)	1	120,000	120,000
Polisher SM-18 (China made)	2	110,000	220,000
Polisher NF-14 (China made)	2	110,000	220,000
Water polisher (with Auto sensor & blower)	2	250,000	500,000
Rice grader 3 stage 5'x10'	1	260,000	260,000
Length grader (28" x 100")	6	105,000	630,000
Elevator 10"x36'	20	55,500	1,110,000

Pipe Line 18, 22 gauge	1	100,000	100,000
Steel structure with platform	1	175,000	175,000
Dust blower 25" with pipe line	1	65,000	65,000
Blower for polishers bran 25"	1	25,000	25,000
Blower with aspiration screen (for color sorter)	1	40,000	40,000
Holding Bin 10' x 10'	3	145,000	435,000
Feeding Tank for Color sorter	1	15,000	15,000
Feeding Tank	11	85,000	935,000
Cyclone 2.5'	4	16000	64,000
Cyclone 3'	4	20,000	80,000
Fitting charges			150,000
Total Cost of Polishing Plant			5,639,000

Table 5-3 Furniture & Fixtures

Furniture & Fixtures	Qty	Unit cost	Total
Desks / Workstations	5	7000	35,000
Office Chairs	10	4500	45,000
Visitor Chairs	14	4500	63,000
Small Cabinet	7	3500	24,500
Stool	5	2000	10,000
Bench	5	2500	12,500
Miscellaneous			10,000
Total			200,000

Table 5-2 Office Equipment

Office Equipment	Qty	Unit cost	Total
Computer P4	3	50,000	150,000
UPS	3	7,000	21,000
Air Conditioners	1	40,000	40,000
Printer	1	30,000	30,000
Scanner	1	10,000	10,000
Fax Machine	1	15,000	15,000
Telephone Sets	6	1500	9,000
Photocopying Machine	1		100,000
Total			375,000

6 HUMAN RESOURCE REQUIREMENT

6.1 Proposed Setup

During husking season, the skilled labor is required for drying the paddy, loading and unloading of paddy bags. For a husking plant with processing capacity of 3.00 tons per hour, about 60 workers are required for six months of operations.

During first year of polishing season, 8 un-skilled workers are required for weighing, bagging and stacking of rice bags.

Table 6-1 Human Resource Requirement

Description	No of Staff	Monthly Salary	Annual Salary in (Rs)
Administrative & Marketing Staff			
CEO	1	50,000	600,000
Accounts Manager	1	20,000	240,000
Accounts Officer	1	6000	72,000
Office Boys	2	4,000	96,000
Security Guards	2	4,500	108,000
Marketing manager	1	20,000	240,000
Export Documentation Officer	1	12,000	144,000
Total Admin & Marketing Salaries			1,500,000
Production Staff			
Foreman	1	10,000	120,000
Helper	2	5,000	120,000
unskilled workers	8	4,000	384,000
Seasonal Paddy workers	60	4,500	1,620,000
Total Direct Salaries			2,244,000
Total Salaries			3,744,000

7 PRODUCTION

7.1 Products of Husking Unit

The products produced from the husking unit include, Head Rice, Broken Rice, Powder and Husk in the following proportion:

Figure 7-1 Details of Different Products of Husking Unit

Product Mix	Percentage
Polished Rice	53%
Broken rice	10%
Powder	2.50%

Husk	33.50%
Trash	1.00%

Table 7-1 Details of Different Products of Polishing Unit

Product mix of polishing unit	Percentage
Polished silky rice	40%
Polished non silky rice	40%
Polished broken rice	10%
Bran	10%
Polished rice	100%

8 LAND & BUILDING REQUIREMENT

8.1 Location

The most important factor for setting up a rice unit is accessibility to raw material. So, it should be set up in areas, where rice is grown. It is recommended that the unit should be located on the main road. The area should have basic infrastructure available, like electricity, water, gas, etc.

8.2 Recommended mode of acquiring land

The covered area of 31,800 square feet consists of the machinery hall, management building and stores. It is recommended to purchase land for setting up this project as the amount of capital spend on infrastructure and other costs is high and it is not advisable to spend so much money on leased or rented area.

The total land (including covered area and the grounds) needed is around 4 acres, the approximate price per acre is Rs 1,500,000.

Table 8-1 Total Land Requirement & Building Covered Area

Land Cost	Area (sq ft)	Kanal
Required Land	144,000(4 Acre)	32
Rate per kanal		187,500
Total cost		6,000,000

8.3 Covered Area Requirement

The majority of area will be open, as it will be used for drying the rice. The detail of the covered space required is given below:

Table 8-2 Covered Area Details

Description	Area in sq. ft	Per unit cost	Total const. cost
Management building	2,500	650	1,625,000

Paddy storage1	6,500	600	3,900,000
paddy storag2	4,500	600	2,700,000
Brown Rice Hall	5,000	600	3,000,000
Processing Hall	3,000	650	1,950,000
Processed Brown Rice Godown	4,500	600	2,700,000
Weighting And Packing	1,000	600	600,000
Packed rice godown	4,800	600	2,880,000
Total covered area	31,800		1,548,400
Free space	112,200	8% of total const. cost	123,872
Boundary Wall (4 acres perimeter, 9 ft high)		200	332,000
Total Required Area	144,000		21,359,272

9 PROJECT ECONOMICS

Table 9-1 Project Cost

Project Summary	Total Cost
Land	6,000,000
Building	21,359,272
Plant and Machinery	9,859,950 ¹⁰
Furniture an Fixture	200,000
Office Equipment	375,000
Vehicles ¹¹	2,039,000
Pre operating Expenses ¹²	770,000
Contingencies	106,890
Initial working Capital	29,086,402
Total Project Costs	69,796,514

Table 9-2 Project Economics

Bank	40%	27,918,606
Equity	60%	41,877,908
Total Financing	100%	69,796,514

Table 9-3 Project Economics

Project Return		
IRR	%	64%
Pay Back period	Yrs.	2.54
NPV	Rs.	309,603,813

¹⁰ Total machinery cost includes sales tax of 15% of Machinery Cost

¹¹ Liana at Rs.839,000

Mazda truck at Rs. 1,200,000

¹² These expenses are incurred before the unit is operational, e.g. salaries of key personnel for 1 month, stationery, company formation expenses, legal and registration, etc.

10 FINANCIAL STATEMENTS

10.1 Income statement

Projected Income Statement										
Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sales	201,648,324	235,182,441	274,293,281	319,908,253	435,157,022	435,157,022	507,523,634	591,924,815	656,268,299	715,332,411
CGS	147,342,265	165,539,014	185,983,059	208,951,942	234,757,479	263,749,997	296,323,087	332,918,952	355,562,758	373,340,999
Wages and salaries	2,244,000	2,468,400	2,715,240	2,986,764	3,285,440	3,613,984	3,975,383	4,372,921	4,810,213	5,291,213
Electricity	1,200,000	1,320,000	1,452,000	1,597,200	1,756,920	1,932,612	2,125,873	2,338,461	2,572,307	2,829,500
Sui Gass	96,000	105,600	116,160	127,776	140,554	154,609	170,070	187,077	205,785	226,300
Repair and Maintenance	197,199	207,059	217,412	228,282	239,697	251,681	264,266	277,479	291,353	305,920
Depreciation	985,995	985,995	985,995	985,995	985,995	985,995	985,995	985,995	985,995	985,995
Cost of Sales	152,065,459	170,626,068	191,469,866	214,877,959	241,166,084	270,688,878	303,844,674	341,080,884	364,428,411	382,980,000
Gross Profit	49,582,865	64,556,373	82,823,415	105,030,294	193,990,938	164,468,143	203,678,960	250,843,931	291,839,889	332,352,411
Administrative & Selling salary	1,500,000	1,650,000	1,815,000	1,996,500	2,196,150	2,415,765	2,657,342	2,923,076	3,215,383	3,536,920
Telephone & telex	120,000	132,000	145,200	159,720	175,692	193,261	212,587	233,846	257,231	282,920
Printing & stationery	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,411
Legal & professional charges	50,000	55,000	60,500	66,550	73,205	80,526	88,578	97,436	107,179	117,830
Insurance	3,624,600	3,265,878	2,907,156	2,548,433	2,189,711	1,830,989	1,472,267	1,113,544	754,822	396,100
Entertainment	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,411
Depreciation on Motor Vehicles	407,800	407,800	407,800	407,800	407,800	407,800	407,800	407,800	407,800	407,800
Depreciation on Building	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927	2,135,927
Depreciation on Furniture & Office equipment	57,500	57,500	57,500	57,500	57,500	57,500	57,500	57,500	57,500	57,500
Traveling & conveyance	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	707,300
Amortization	175,378	175,378	175,378	175,378	175,378	-	-	-	-	-
Others	100,000	110,000	121,000	133,100	146,410	161,051	177,156	194,872	214,359	235,700
Operating Expenses	8,591,205	8,451,483	8,333,661	8,239,929	8,172,695	7,959,233	7,953,212	7,982,462	8,050,509	8,161,211
Operating Profit	40,991,660	56,104,890	74,489,754	96,790,366	185,818,242	156,508,910	195,725,748	242,861,469	283,789,380	324,191,191
Less:										
Financial expenses	3,770,271	3,163,682	2,469,197	1,674,082	763,755	-	-	-	-	-
	3,770,271	3,163,682	2,469,197	1,674,082	763,755	-	-	-	-	-
Profit Before Taxation	37,221,389	52,941,208	72,020,557	95,116,283	185,054,487	156,508,910	195,725,748	242,861,469	283,789,380	324,191,191
Income Tax	7,444,278	10,588,242	14,404,111	19,023,257	37,010,897	31,301,782	39,145,150	48,572,294	56,757,876	64,838,211
Net profit After Taxation	29,777,111	42,352,967	57,616,445	76,093,027	148,043,590	125,207,128	156,580,598	194,289,175	227,031,504	259,352,980
Retained earnings	-	29,777,111	72,130,078	129,746,523	205,839,550	353,883,140	479,090,268	635,670,867	829,960,041	1,056,991,545
Profit transferred to balance sheet	29,777,111	72,130,078	129,746,523	205,839,550	353,883,140	479,090,268	635,670,867	829,960,041	1,056,991,545	1,316,344,411

10.2 Cash flow statement

Cash Flow Statement										
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Operating activities										
Net profit	-	29,777,111	42,352,967	57,616,445	76,093,027	148,043,590	125,207,128	156,580,598	194,289,175	227,031,504
Amortization (Pre-operational Expenses)	-	175,378	175,378	175,378	175,378	175,378	175,378	175,378	175,378	175,378
Depreciation	-	3,587,222	3,587,222	3,587,222	3,587,222	3,587,222	3,587,222	3,587,222	3,587,222	3,587,222
Raw Material Inventory	(28,334,880)	(3,499,358)	(3,931,528)	(4,417,072)	(4,962,581)	(5,575,459)	(6,264,028)	(7,037,636)	(4,354,545)	(3,418,854)
Finished Goods Inventory	-	(28,335,051)	(3,499,375)	(3,931,547)	(4,417,093)	(4,962,603)	(5,575,484)	(6,264,056)	(7,037,666)	(4,354,578)
Accounts receivable	-	-	-	-	-	-	-	-	-	-
Accounts payable	-	-	-	-	-	-	-	-	-	-
Tax Payable	-	7,444,278	3,143,964	3,815,870	4,619,145	17,987,641	(5,709,115)	7,843,368	9,427,144	8,185,582
Building rent prepayments	-	-	-	-	-	-	-	-	-	-
Prepaid Payments	-	-	-	-	-	-	-	-	-	-
<i>Cash provided by operations</i>	(28,334,880)	9,149,581	41,828,628	56,846,296	75,095,099	159,255,768	111,245,722	154,709,496	195,911,330	231,030,876
Financing activities										
Long term debt principal repayment	-	(4,186,263)	(4,792,852)	(5,487,337)	(6,282,452)	(7,192,779)	-	-	-	-
Addition to long term debt	27941682	-	-	-	-	-	-	-	-	-
Owner's investment	41912524	-	-	-	-	-	-	-	-	-
<i>Cash provided by/ (used for) financing activities</i>	69854206	(4,186,263)	(4,792,852)	(5,487,337)	(6,282,452)	(7,192,779)	-	-	-	-
Investing activities										
Capital expenditure	(40,710,112)	-	-	-	-	-	-	-	-	-
<i>Cash (used for)/ provided by investing activities</i>	(40,710,112)	-	-	-	-	-	-	-	-	-
Net Cash	809,214	4,963,318	37,035,775	51,358,959	68,812,647	152,062,989	111,245,722	154,709,496	195,911,330	231,030,876
Cash balance brought forward	-	809,214	5,772,532	42,808,307	94,167,267	162,979,914	315,042,903	426,288,626	580,998,122	776,909,452
Cash carried forward	809,214	5,772,532	42,808,307	94,167,267	162,979,914	315,042,903	426,288,626	580,998,122	776,909,452	1,007,940,328

10.3 Balance sheet

Balance Sheet										
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Capital and Reserves										
Share Capital	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524	41,912,524
Retained Earnings	0	29,777,111	72,130,078	129,746,523	205,839,550	353,883,140	479,090,268	635,670,867	829,960,041	1,056,991,545
	41,912,524	71,689,635	114,042,602	171,659,047	247,752,074	395,795,664	521,002,792	677,583,390	871,872,565	1,098,904,069
Long Term Loan	27,941,682	23,755,420	18,962,567	13,475,231	7,192,779	-	-	-	-	-
Current Liabilities										
Tax Payable		7,444,278	10,588,242	14,404,111	19,023,257	37,010,897	31,301,782	39,145,150	48,572,294	56,757,876
	-	7,444,278	10,588,242	14,404,111	19,023,257	37,010,897	31,301,782	39,145,150	48,572,294	56,757,876
	69,854,206	102,889,332	143,593,411	199,538,389	273,968,109	432,806,561	552,304,574	716,728,540	920,444,859	1,155,661,945
Fixed Assets										
Land	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Building	21,359,272	19,223,345	17,087,418	14,951,490	12,815,563	10,679,636	8,543,709	6,407,782	4,271,854	2,135,927
Plant and Machinery	9,859,950	8,873,955	7,887,960	6,901,965	5,915,970	4,929,975	3,943,980	2,957,985	1,971,990	985,995
Furniture and Fixture	200,000	180,000	160,000	140,000	120,000	100,000	80,000	60,000	40,000	20,000
Office Equipment	375,000	337,500	300,000	262,500	225,000	187,500	150,000	112,500	75,000	37,500
Vehicles	2,039,000	1,631,200	1,223,400	815,600	407,800	-	(407,800)	(815,600)	(1,223,400)	(1,631,200)
Fixed Assets	39,833,222	36,246,000	32,658,778	29,071,555	25,484,333	21,897,111	18,309,889	14,722,667	11,135,444	7,548,222
Pre-operating expenses & Contengencies	876,890	701,512	526,134	350,756	175,378					
Current Assets										
Raw Material Inventory	28,334,880	31,834,238	35,765,766	40,182,838	45,145,419	50,720,878	56,984,906	64,022,542	68,377,087	71,795,941
Finished Goods Inventory		28,335,051	31,834,426	35,765,973	40,183,066	45,145,669	50,721,153	56,985,209	64,022,875	68,377,454
Cash/Bank	809,214	5,772,532	42,808,307	94,167,267	162,979,914	315,042,903	426,288,626	580,998,122	776,909,452	1,007,940,328
	29,144,094	65,941,821	110,408,499	170,116,078	248,308,398	410,909,450	533,994,685	702,005,873	909,309,414	1,148,113,723
	69,854,206	102,889,332	143,593,411	199,538,389	273,968,109	432,806,561	552,304,574	716,728,540	920,444,859	1,155,661,945

11 KEY ASSUMPTIONS

Table 11-1 Operational Assumptions

Hours operational/shift	8
Days operational/month	26
Days operational/year	312
Husking Plant Operations	7 months
No of Shifts in Husking Plant	2 shift per day
Polishing Plant Operations	12 months
No of Shifts in Polishing Plant	2 Shift per day

Table 11-2 Production Related Assumptions

Maximum Production Capacity Husking Plant (100%)	8,736.00(at 3 tons per hour)
Production Capacity Polishing Plant (100%)	9,984.00(at 2 tons per hour)
Starting Capacity Utilization Husking Plant	60%
Starting Capacity Utilization Polishing Plant	60%
Annual Growth Rate in Capacity Utilization	7%
Ratio of Basmati to Irri Rice	80:20
Maximum Capacity Utilization of plants	98%

Table 11-3 Product Mix of Polishing Plant

Polished silky rice	40%
Polished non silky rice	40%
Polished broken rice	10%
Bran	10%

Table 11-4 Revenue assumption

Revenue (Sale price)	Sale price/ton
Polished silky Rice	
Basmati	43,000
Irri	29,000
Polished non silky rice	
Basmati	42,000
Irri	28,000
Polished broken rice	
Basmati	12,000
Irri	7,000

Bran	855
Services	37,500
Broken rice	9,000
Powder	7,000
Husk	1,500

Table 11-5 Raw Material prices

Raw material	Price per ton
Paddy	13,750
Price per ton (un polished rice)	28,000

Table 11-6 Cash Flow Related Assumptions

Account Receivable Cycle Head Rice	15 days
Account Receivable Cycle Polished Rice (Local)	15 days