

9.1 Internal Rate of Return

Particular	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Profit after Tax & Diivdend		2,387,183.78	3,204,794.22	3,933,477.59	4,748,514.40	5,654,233.00	6,812,490.66	7,884,473.98
Add: Depreciation		1,174,589.20	1,174,589.20	1,174,589.20	1,174,589.20	1,174,589.20	1,174,589.20	1,174,589.20
Add: Preliminary expense written off		250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	0.00	0.00
Net Cash Accrual (A)		3,811,772.99	4,629,383.42	5,358,066.79	6,173,103.60	7,078,822.21	7,987,079.87	9,059,063.19
Initial Investment/ Net Cash Accrual	(27,754,144.1928)	3,811,772.99	4,629,383.42	5,358,066.79	6,173,103.60	7,078,822.21	7,987,079.87	9,059,063.19
IRR	11.25%							
Present Value Equivalent		0.90	0.81	0.73	0.65	0.59	0.53	0.47
Presnt Value of Future Inflows		3,426,428.36	3,740,695.94	3,891,813.39	4,030,529.27	4,154,647.16	4,213,818.23	4,296,211.84
Operating Net Cash Inflow					27,754,144.19			
Present Capital Outflow					27,754,144.19			
					0.00			

The internal rate of return (IRR) is a ratio used in financial analysis to estimate the profitability of potential investments. IRR is a discount rate that makes the net present value (NPV) of all cash flows equal to zero in a discounted cash flow analysis.

9.2 Break even Point

Particulars	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Gross Receipts							
Facility 1 - Trading	-	-	-	-	-	-	-
Facility 2 - Processing Unit- Dal Mill	100,148,694	118,570,514	133,422,552	149,463,368	166,774,708	185,443,525	205,562,286
Facility 3 - Warehouse	420,000	472,500	529,200	590,389	656,373	689,192	723,652
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Comm	-	-	-	-	-	-	-
Total Receipts	100,568,694	119,043,014	133,951,752	150,053,756	167,431,082	186,132,717	206,285,938
Total Variable Exp	92,067,893	108,897,432	122,530,983	137,255,644	153,146,445	170,283,186	188,750,736
Contribution	8,500,801	10,145,582	11,420,770	12,798,112	14,284,637	15,849,531	17,535,202
Total Fixed exp	4,720,589	4,885,389	5,058,429	5,240,121	5,430,898	5,381,213	5,591,544
BEP	56%	48%	44%	41%	38%	34%	32%

Average BEP

41.83%

Break-even point (BEP) is a term in accounting that refers to the situation where a company's revenues and expenses were equal within a specific period. It means that there were no net profits or no net losses for the company. The main purpose of break-even analysis is to determine the minimum output that must be exceeded for a business to profit.

9.3 Net Present Value

Particular	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Profit after Tax & Dividend	2,387,184	3,204,794	3,933,478	4,748,514	5,654,233	6,812,491	7,884,474
Add: Depreciation	1,174,589	1,174,589	1,174,589	1,174,589	1,174,589	1,174,589	1,174,589
Add. Preliminary exp Written off	250,000	250,000	250,000	250,000	250,000	0	0
Net Cash Accrual (A)	3,811,773	4,629,383	5,358,067	6,173,104	7,078,822	7,987,080	9,059,063
PV Factor @ 10 %	0.91	0.83	0.75	0.68	0.62	0.56	0.51
Disc Cash Flow	3,465,248	3,825,937	4,025,595	4,216,313	4,395,392	4,508,498	4,648,732

Total Discounted Cash Flows 29,085,714

Present Value of Outflow 27,754,144

NPV 1,331,570.23

Net present value is the present value of the cash flows at the required rate of return of your project compared to your initial investment. If the NPV of a project or investment is positive, it means that the discounted present value of all future cash flows related to that project or investment will be positive.

9.4 Return On Investments

Particulars	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Net Profit	2,387,184	3,204,794	6,433,478	4,748,514	7,804,233	6,812,491	7,884,474
Average net profit	5610738.23						
Total Project cost	27754144.19						
ROI	20.22%						

Return on investment (ROI) is a performance measure used to evaluate the efficiency or profitability of an investment

9.5 Payback Period (In years) - Project

Particulars	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Initial Investment	27,754,144							
Profit after Tax & Dividend		2,387,184	3,204,794	3,933,478	4,748,514	5,654,233	6,812,491	7,884,474
Add: Depreciation		1,174,589	1,174,589	1,174,589	1,174,589	1,174,589	1,174,589	1,174,589
Add. Preliminary exp Written off		250,000	250,000	250,000	250,000	250,000	-	-
Net Cash Accrual (A)		3,811,773	4,629,383	5,358,067	6,173,104	7,078,822	7,987,080	9,059,063
Cashflow - Initial Investment		(23,942,371)	(19,312,988)	(13,954,921)	(7,781,817)	(702,995)		

Payback period (in years) - Project

5.10

The payback period refers to the amount of time it takes to recover the cost of an investment

9.6 Debt Service Covergae Ratio (DSCR)

Particulars	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Net Operating Income	2,387,184	3,204,794	3,933,478	4,748,514	5,654,233	6,812,491	7,884,474
Total	2,387,184	3,204,794	3,933,478	4,748,514	5,654,233	6,812,491	7,884,474
Total Annual EMI	1,032,613	1,445,672	1,445,672	1,445,672	1,445,672	1,445,672	1,445,672
Debt Service Coverage Ratio (DCSR)	2.31	2.22	2.72	2.28	2.91	4.71	5.45

Average DSCR

2.49

the debt-service coverage ratio (DSCR) is a measurement of a firm's available cash flow to pay current debt obligations. The DSCR shows investors whether a company has enough income to pay its debts.

9.7 Sensitivity Analysis

Quantity Variation (+5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Trading	-	-	-	-	-	-	-
Facility 2 - Processing Unit- Dal Mill	105,156,129	124,499,040	140,093,680	156,936,536	175,113,444	194,715,701	215,840,400
Facility 3 - Warehouse	441,000	496,125	555,660	619,908	689,192	723,652	759,834
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Comm	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	105,597,129	124,995,165	140,649,340	157,556,444	175,802,636	195,439,353	216,600,235
Expenditure							
Fixed Cost (Excl. of Depreciation, Amort)	3,296,000	3,460,800	3,633,840	3,815,532	4,006,309	4,206,624	4,416,955
Variable Cost	96,671,288	108,897,432	122,530,983	137,255,644	153,146,445	170,283,186	188,750,736
Total Operational Expenses	99,967,288	112,358,232	126,164,823	141,071,176	157,152,753	174,489,810	193,167,691
Net Income	5,629,841	12,636,933	14,484,517	16,485,268	18,649,883	20,949,543	23,432,544

Cost Variation (+5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Trading	-	-	-	-	-	-	-
Facility 2 - Processing Unit- Dal Mill	100,148,694	118,570,514	133,422,552	149,463,368	166,774,708	185,443,525	205,562,286

Facility 3 - Warehouse	420,000	472,500	529,200	590,389	656,373	689,192	723,652
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Comm	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	100,568,694	119,043,014	133,951,752	150,053,756	167,431,082	186,132,717	206,285,938
Expenditure							
Fixed Cost (Excl. of Depreciation, Amort	3,296,000.00	3,460,800.00	3,633,840.00	3,815,532.00	4,006,308.60	4,206,624.03	4,416,955.23
Variable Cost	96,671,287.84	114,342,303.84	128,657,531.65	144,118,426.48	160,803,766.97	178,797,345.44	198,188,272.34
Total Operational Expenses	99,967,287.84	117,803,103.84	132,291,371.65	147,933,958.48	164,810,075.57	183,003,969.47	202,605,227.57
Net Income	601,406.56	1,239,910.30	1,660,380.51	2,119,797.98	2,621,006.24	3,128,747.38	3,680,710.12

Quantity Variation (-5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Trading	-	-	-	-	-	-	-
Facility 2 - Processing Unit- Dal Mill	95,141,260	112,641,988	126,751,425	141,990,199	158,435,973	176,171,349	195,284,172
Facility 3 - Warehouse	399,000	448,875	502,740	560,869	623,555	654,732	687,469
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Comm	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	95,540,260	113,090,863	127,254,165	142,551,069	159,059,528	176,826,081	195,971,641
Expenditure							
Fixed Cost (Excl. of Depreciation, Amort	3,296,000	3,460,800	3,633,840	3,815,532	4,006,309	4,206,624	4,416,955
Variable Cost	87,464,499	103,452,561	116,404,433	130,392,862	145,489,122	161,769,027	179,313,199
Total Operational Expenses	90,760,499	106,913,361	120,038,273	134,208,394	149,495,431	165,975,651	183,730,154
Net Income	4,779,761	6,177,503	7,215,891	8,342,675	9,564,097	10,850,430	12,241,487

Cost Variation (-5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Trading	-	-	-	-	-	-	-
Facility 2 - Processing Unit- Dal Mill	100,148,694	118,570,514	133,422,552	149,463,368	166,774,708	185,443,525	205,562,286
Facility 3 - Warehouse	420,000	472,500	529,200	590,389	656,373	689,192	723,652
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Comm	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	100,568,694	119,043,014	133,951,752	150,053,756	167,431,082	186,132,717	206,285,938
Expenditure							
Fixed Cost (Excl. of Depreciation, Amort	3,296,000	3,460,800	3,633,840	3,815,532	4,006,309	4,206,624	4,416,955
Variable Cost	87,464,499	103,452,561	116,404,433	130,392,862	145,489,122	161,769,027	179,313,199
Total Operational Expenses	90,760,499	106,913,361	120,038,273	134,208,394	149,495,431	165,975,651	183,730,154
Net Income	9,808,196	12,129,654	13,913,479	15,845,362	17,935,651	20,157,066	22,555,784

Sensitivity analysis is a financial model that determines how target variables are affected based on changes in Quantity or cost variance known as input variables. Here it is assumed 5% (+,-) while calculating sensitivity analysis