

## 9.1 Internal Rate of Return

Particular	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Profit after Tax & Dividend		3,073,402.56	5,087,767.09	6,786,620.32	8,693,577.22	10,821,726.87	13,000,054.84	15,177,206.07
<b>Add:</b> Depreciation		2,689,343.65	2,689,343.65	2,689,343.65	2,689,343.65	2,689,343.65	2,689,343.65	2,689,343.65
Add: Preliminary expense written off		28,571.43	28,571.43	28,571.43	28,571.43	28,571.43	28,571.43	28,571.43
Net Cash Accrual (A)		5,791,317.64	7,805,682.17	9,504,535.40	11,411,492.29	13,539,641.95	15,717,969.92	17,895,121.15
Initial Investment/ Net Cash Accrual	(50,752,634.6515)	5,791,317.64	7,805,682.17	9,504,535.40	11,411,492.29	13,539,641.95	15,717,969.92	17,895,121.15
IRR	11.16%							
Present Value Equivalent		0.90	0.81	0.73	0.65	0.59	0.53	0.48
Present Value of Future Inflows		5,209,669.81	6,316,499.84	6,918,776.98	7,472,633.69	7,975,744.73	8,329,009.01	8,530,300.58
Operating Net Cash Inflow					50,752,634.65			
Present Capital Outflow					50,752,634.65			
					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 - Vegetable Dried Unit	47,698,575	58,310,278	68,454,339	79,467,030	91,409,855	104,348,294	118,352,053
Facility 2 - Processing Unit- Spices Man	12,272,496	15,861,884	19,444,757	23,346,263	27,589,307	32,198,290	37,199,198
Facility 3 - Warehouse	-	-	-	-	-	-	-
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Com	-	-	-	-	-	-	-
Total Receipts	59,971,071	74,172,163	87,899,097	102,813,293	118,999,162	136,546,584	155,551,251
Total Variable Exp	50,805,150	62,348,492	73,703,227	86,043,377	99,433,284	113,947,072	129,663,657
<b>Contribution</b>	<b>9,165,920</b>	<b>11,823,671</b>	<b>14,195,869</b>	<b>16,769,916</b>	<b>19,565,878</b>	<b>22,599,512</b>	<b>25,887,594</b>
<b>Total Fixed exp</b>	<b>8,157,355</b>	<b>7,249,527</b>	<b>6,497,574</b>	<b>5,873,947</b>	<b>5,357,435</b>	<b>4,931,321</b>	<b>4,582,175</b>
BEP	89%	61%	46%	35%	27%	22%	18%

**Average BEP** **42.57%**

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	3,073,403	5,087,767	6,786,620	8,693,577	10,821,727	13,000,055	15,177,206
Add: Depreciation	2,689,344	2,689,344	2,689,344	2,689,344	2,689,344	2,689,344	2,689,344
Add. Preliminary exp Written off	28,571	28,571	28,571	28,571	28,571	28,571	28,571
Net Cash Accrual (A)	5,791,318	7,805,682	9,504,535	11,411,492	13,539,642	15,717,970	17,895,121
PV Factor @ 10 %	0.91	0.83	0.75	0.68	0.62	0.56	0.51
Disc Cash Flow	5,264,834	6,450,977	7,140,898	7,794,203	8,407,052	8,872,384	9,183,027

Total Discounted Cash Flows 53,113,375

Present Value of Outflow 50,752,635

NPV 2,360,740.80

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	3,073,403	5,087,767	6,786,620	8,693,577	10,821,727	13,000,055	15,177,206
Average net profit	8948622.14						
Total Project cost	50752634.65						
ROI	17.63%						

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	50,752,635							
Profit after Tax & Dividend		3,073,403	5,087,767	6,786,620	8,693,577	10,821,727	13,000,055	15,177,206
Add: Depreciation		2,689,344	2,689,344	2,689,344	2,689,344	2,689,344	2,689,344	2,689,344
Add. Preliminary exp Written off		28,571	28,571	28,571	28,571	28,571	28,571	28,571
Net Cash Accrual (A)		5,791,318	7,805,682	9,504,535	11,411,492	13,539,642	15,717,970	17,895,121
Cashflow - Initial Investment		<b>(44,961,317)</b>	<b>(37,155,635)</b>	<b>(27,651,099)</b>	<b>(16,239,607)</b>	<b>(2,699,965)</b>		

Payback period (in years) - Project

5.20

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	7,821,920	10,412,471	12,714,109	15,214,068	17,932,238	20,884,189	24,086,505
<b>Total</b>	<b>7,821,920</b>	<b>10,412,471</b>	<b>12,714,109</b>	<b>15,214,068</b>	<b>17,932,238</b>	<b>20,884,189</b>	<b>24,086,505</b>
Total Annual EMI	<b>3,071,099</b>	<b>4,338,671</b>	<b>4,338,671</b>	<b>4,338,671</b>	<b>4,338,671</b>	-	-
<b>Debt Service Coverage Ratio (DSCR)</b>	<b>2.55</b>	<b>2.40</b>	<b>2.93</b>	<b>3.51</b>	<b>4.13</b>	-	-

Average DSCR

2.22

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 - Vegetable Dried Unit	50,083,504	61,225,792	71,877,056	83,440,382	95,980,348	109,565,709	124,269,656
Facility 2 - Processing Unit- Spices Man	12,886,121	16,654,979	20,416,995	24,513,576	28,968,772	33,808,204	39,059,158
Facility 3 - Warehouse	-	-	-	-	-	-	-
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Com	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	62,969,624	77,880,771	92,294,051	107,953,958	124,949,120	143,373,913	163,328,813
Expenditure							
Fixed Cost (Excl. of Depreciation, Amor	1,344,000	1,411,200	1,481,760	1,555,848	1,633,640	1,715,322	1,801,089
Variable Cost	53,345,408	62,348,492	73,703,227	86,043,377	99,433,284	113,947,072	129,663,657
Total Operational Expenses	54,689,408	63,759,692	75,184,987	87,599,225	101,066,924	115,662,395	131,464,745
<b>Net Income</b>	<b>8,280,216</b>	<b>14,121,079</b>	<b>17,109,064</b>	<b>20,354,733</b>	<b>23,882,196</b>	<b>27,711,518</b>	<b>31,864,068</b>

Cost Variation (+5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Vegetable Dried Unit	47,698,575	58,310,278	68,454,339	79,467,030	91,409,855	104,348,294	118,352,053
Facility 2 - Processing Unit- Spices Man	12,272,496	15,861,884	19,444,757	23,346,263	27,589,307	32,198,290	37,199,198
Facility 3 - Warehouse	-	-	-	-	-	-	-
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Com	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	59,971,071	74,172,163	87,899,097	102,813,293	118,999,162	136,546,584	155,551,251
Expenditure							

Fixed Cost (Excl. of Depreciation, Amor	1,344,000.00	1,411,200.00	1,481,760.00	1,555,848.00	1,633,640.40	1,715,322.42	1,801,088.54
Variable Cost	53,345,407.73	65,465,916.47	77,388,388.59	90,345,545.78	104,404,947.71	119,644,425.97	136,146,839.69
Total Operational Expenses	54,689,407.73	66,877,116.47	78,870,148.59	91,901,393.78	106,038,588.11	121,359,748.39	137,947,928.23
<b>Net Income</b>	<b>5,281,662.83</b>	<b>7,295,046.34</b>	<b>9,028,947.94</b>	<b>10,911,899.43</b>	<b>12,960,573.70</b>	<b>15,186,835.66</b>	<b>17,603,322.37</b>

Quantity Variation (-5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Vegetable Dried Unit	45,313,646	55,394,764	65,031,622	75,493,679	86,839,362	99,130,880	112,434,450
Facility 2 - Processing Unit- Spices Man	11,658,871	15,068,790	18,472,519	22,178,950	26,209,842	30,588,375	35,339,238
Facility 3 - Warehouse	-	-	-	-	-	-	-
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Com	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	56,972,517	70,463,555	83,504,142	97,672,629	113,049,204	129,719,255	147,773,688
Expenditure							
Fixed Cost (Excl. of Depreciation, Amor	1,344,000	1,411,200	1,481,760	1,555,848	1,633,640	1,715,322	1,801,089
Variable Cost	48,264,893	59,231,067	70,018,066	81,741,208	94,461,619	108,249,719	123,180,474
Total Operational Expenses	49,608,893	60,642,267	71,499,826	83,297,056	96,095,260	109,965,041	124,981,563
<b>Net Income</b>	<b>7,363,624</b>	<b>9,821,287</b>	<b>12,004,316</b>	<b>14,375,572</b>	<b>16,953,944</b>	<b>19,754,214</b>	<b>22,792,126</b>

Cost Variation (-5%)	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Facility 1 - Vegetable Dried Unit	47,698,575	58,310,278	68,454,339	79,467,030	91,409,855	104,348,294	118,352,053
Facility 2 - Processing Unit- Spices Man	12,272,496	15,861,884	19,444,757	23,346,263	27,589,307	32,198,290	37,199,198
Facility 3 - Warehouse	-	-	-	-	-	-	-
Facility 4 - Custom Hiring	-	-	-	-	-	-	-
Facility 5 - Agri Input Centre	-	-	-	-	-	-	-
Facility 6 - Processing Unit - Horti Com	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-
Total Income	59,971,071	74,172,163	87,899,097	102,813,293	118,999,162	136,546,584	155,551,251
Expenditure							
Fixed Cost (Excl. of Depreciation, Amor	1,344,000	1,411,200	1,481,760	1,555,848	1,633,640	1,715,322	1,801,089
Variable Cost	48,264,893	59,231,067	70,018,066	81,741,208	94,461,619	108,249,719	123,180,474
Total Operational Expenses	49,608,893	60,642,267	71,499,826	83,297,056	96,095,260	109,965,041	124,981,563
<b>Net Income</b>	<b>10,362,178</b>	<b>13,529,896</b>	<b>16,399,271</b>	<b>19,516,237</b>	<b>22,903,902</b>	<b>26,581,543</b>	<b>30,569,688</b>

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