MODEL PROJECT REPORT

**PROJECT REPORT
ON
CAPSICUM
PROCESSING**

SWAVALAMBI BHARAT ABHIYAN

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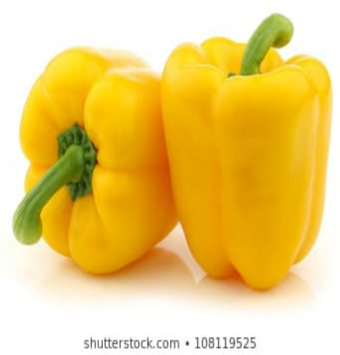
CAPSICUM
(SWEET PEPPER / BELL PEPPER) PROCESSING



INTRODUCTION

Capsicum, also known as sweet pepper, bell pepper or Shimla Mirch is one of the popular vegetables grown throughout India. It is rich in Vitamin A (8493 IU), Vitamin C (283 mg) and minerals like Calcium (13.4 mg), Magnesium (14.9 mg) Phosphorus (28.3 mg) Potassium, (263.7 mg) per 100 g fresh weight.

Capsicum is a cool season crop, but it can be grown round the year using protected structures where temperature and relative humidity (RH) can be manipulated. This crop requires day temperature of 25-30^{0}C and night temperature of 18-20^{0}C with relative humidity of 50-60%. If temperature exceeds 35^{0}C or falls below 12^{0}C, fruit setting is affected.

King Chilli (Capsicum) is traditionally cultivated in Nagaland, Assam, Manipur and other North Eastern states of India. The chilli is called by different names in different states. In Nagaland, it is called as Naga jolokia, Naga Morish, Raja Mirchi, King Chilli. In Assam, it is mostly known as Bhutjolokia / Ghost Chilli or Bihjolokia. In Manipur the Chilli is called Umorok or Go-morok. The Bhutjolokia plant is a wondelful gift of nature as its fruit is one of the hottest chilli in the world and at the same time it possesses a pleasant and palatable aroma. Besides, King chilli possess medicinal properties which are used in the treatment of various diseases. In the recent years this king chilli is gaining importance because it has been reported as one of the hottest chilli in the world. After harvesting the chillies are to be processed immediately to avoid fungal growth. Unlike other chillies, the Bhut jolokia has a moisture level of above 85% with a very soft texture which ultimately reduces significantly the shelf life. Therefore, value added item like king chilli pickle has good prospect.

This project profile is for setting up of a King Chilli processing unit based on 300 working days per annum and 8 working hours per day. The installed production capacity of the unit per annum is as follows;

King Chilli Pickle	**-**	**10 Ton**
Dried King Chilli	**-**	**5 Ton**

MARKET POTENTIAL

Pickles are important part of the Indian cuisine and are consumed along with main course as well as many food preparations and snacks. They are used as taste enrichers. King Chilly pickles are popular and are consumed round the year in North East region. The Naga King Chilli is widely cultivated in north-eastern states of India predominantly in Nagaland, Assam and Manipur. There is no doubt that the Naga King Chilli, being one of the hottest chilli in the world, has enormous potential for commercialization. Even though commercialization of this particular crop has been started, it is still at a nascent stage.

TECHNOLOGY & PROCESS DETAILS

King Chilli Pickle: King Chillies are washed in water and would be dried in solar cabinets under the sun-light. After cutting the top and bottom portion, they are cured in brine solution for 2½ to 3 days. After that, oil, turmeric powder and other suitable ingredients (depending upon local palate) are added and mixed thoroughly and then pickle is packed in bottles and plastic pouches. The flow diagram of the process is as follows:

WASHING

↓

DRYING

↓

CURING IN BRINE SOLUTION

↓

MIXING WITH INGREDIENTS

↓

PACKING/LOADING/SUPPLY

Dried King Chilli: King Chillies will be dried in Solar Cabinet Dryer. Dried Chilli's may be sold in Packets of various sizes.

PROJECT AT A GLANCE

1	Name of the Entreprenuer		XXXXXXX	
2	Constitution (legal Status)		XXXXXXX	
3	Father's/Spouce's Name		XXXXXXXX	
4	Unit Address		XXXXXXXX	
			Taluk/Block:	
			District :	XXXXX
			Pin:	XXXXX State:
			E-Mail :	XXXXX
			Mobile	XXXXX
5	Product and By Product	:	**Capsicum processing (King's Chilli/Bell Pepper)**	
6	Name of the project / business activity proposed		**Capsicum processing (King's Chilli/Bell Pepper)**	
7	Cost of Project	:	Rs21.00lac	
8	Means of Finance			
	Term Loan		Rs.9.87 Lacs	
	KVIC Margin Money	-	As per Project Eligibility	
	Own Capital		Rs.2.03 Lacs	
	Working Capital		Rs.8.36 Lacs	
9	Debt Service Coverage Ratio	:	6.74	
10	Pay Back Period	:	5	Years
11	Project Implementation Period	:	8	Months
12	Break Even Point	:	23%	
13	Employment	:	13	Persons
14	Power Requirement	:	5.00	HP
15	Major Raw materials	:	Capsicum /Bellpepper	
16	Estimated Annual Sales Turnover	:	56.70	Lacs
16	Detailed Cost of Project & Means of Finance			

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land 2500 Sqft	Rented/Owned
Building /shed 2000 Sq Ft)	5.00
Plant & Machinery	5.00
Furniture & Fixtures	0.50
Pre-operative Expenses	0.47
Working Capital Requirement	9.29
Total	**20.25**

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	2.03
Term Loan	9.87
Workign Capital Finance	8.36
Total	**20.25**

	General	**Special**
Beneficiary's Margin Money (% of Project Cost)	10%	5%

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
Solar Cabinet Dryer	1		350,000.00
Chilli Cutting Machine	1		
Stirrer	1		
Pickle Mixer	2		
Sealing Machine	1		
Shrink Packaging Machine	1		
SS Utensils, Washing Tanks, Weighing Scales, Hand Gloves, MiscellaneousTools and Equipment	LS		100,000.00
Testing Equipment	LS		50,000.00
Total			500,000.00

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
SOURCES OF FUND					
Capital Account	2.03	2.03	2.03	2.03	2.03
Retained Profit	12.98	29.32	47.07	67.93	91.77
Term Loan	9.87	7.40	4.94	2.47	0.13
Cash Credit	8.36	8.36	8.36	8.36	8.36
Sundry Creditors	1.42	1.65	1.89	2.13	2.36
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	**35.02**	**49.16**	**64.72**	**83.39**	**105.18**
APPLICATION OF FUND					
Fixed Assets (Gross)	10.50	10.50	10.50	10.50	10.50
Gross Dep.	1.28	2.41	3.40	4.26	5.02
Net Fixed Assets	9.23	8.09	7.10	6.24	5.48
Current Assets					
Sundry Debtors	2.84	3.62	4.15	4.67	5.20
Stock in Hand	7.88	9.19	10.50	11.81	13.13
Cash and Bank	12.58	25.51	39.95	57.34	77.72
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	**35.02**	**49.16**	**64.72**	**83.39**	**105.18**
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
A) SALES					
Gross Sale	56.70	72.45	82.95	93.45	103.95
Total (A)	**56.70**	**72.45**	**82.95**	**93.45**	**103.95**
B) COST OF SALES					
Raw Mateiral Consumed	28.35	33.08	37.80	42.53	47.25
Elecricity Expenses	0.43	0.50	0.57	0.64	0.72
Repair & Maintenance	-	0.72	0.83	0.93	1.04
Labour & Wages	8.98	9.87	10.86	11.95	13.14
Depriciation	1.28	1.14	0.99	0.86	0.75
Consumables,packaging and Other Expenses	2.84	3.62	4.15	4.67	5.20
Cost of Production	41.87	48.93	55.20	61.59	68.10
Add: Opening Stock /WIP	-	5.04	5.88	6.72	7.56
Less: Closing Stock /WIP	5.04	5.88	6.72	7.56	8.40
Cost of Sales (B)	36.83	48.09	54.36	60.75	67.26
C) GROSS PROFIT (A-B)	19.87	24.36	28.59	32.70	36.69
	35%	**34%**	**34%**	**35%**	**35%**
D) Bank Interest (Term Loan)	0.85	1.03	0.75	0.46	0.18
Bank Interest (C.C. Limit)	0.96	0.96	0.96	0.96	0.96
E) Salary to Staff	2.51	2.76	3.03	3.34	3.67
F) Selling & Adm Expenses Exp.	1.13	1.45	1.66	1.87	2.08
TOTAL (D+E)	**5.46**	**6.20**	**6.40**	**6.63**	**6.89**
H) NET PROFIT	14.42	18.16	22.19	26.07	29.80
I) Taxation	1.44	1.82	4.44	5.21	5.96
J) PROFIT (After Tax)	12.98	16.34	17.75	20.86	23.84

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
SOURCES OF FUND					
Share Capital	2.03	-			
Reserve & Surplus	14.42	18.16	22.19	26.07	29.80
Depriciation & Exp. W/off	1.28	1.14	0.99	0.86	0.75
Increase in Cash Credit	8.36	-	-	-	-
Increase In Term Loan	9.87	-	-	-	-
Increase in Creditors	1.42	0.24	0.24	0.24	0.24
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	**37.73**	**19.57**	**23.45**	**27.22**	**30.84**
APPLICATION OF FUND					
Increase in Fixed Assets	10.50	-	-	-	-
Increase in Stock	7.88	1.31	1.31	1.31	1.31
Increase in Debtors	2.84	0.79	0.52	0.53	0.53
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	2.47	2.47	2.47	2.33
Taxation	1.44	1.82	4.44	5.21	5.96
TOTAL :	**25.15**	**6.63**	**9.02**	**9.82**	**10.46**
Opening Cash & Bank Balance	-	12.58	25.51	39.95	57.34
Add : Surplus	12.58	12.93	14.44	17.39	20.37
Closing Cash & Bank Balance	**12.58**	**25.51**	**39.95**	**57.34**	**77.72**

COMPUTATION OF MANUFACTURING OF CAPSICUM (KINGS CHILLI (BELL PEPPER) PROCESSING

Items to be Manufactured	**King chilli Pickle**	10 MT
	Dried King Chilli	5 MT

Manufacturing Capacity per day	75 Kg	0.050	MT
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		15.00	MT
Year		Capacity Utilisation	MT
IST YEAR		60%	9.00
IIND YEAR		70%	10.50
IIIRD YEAR		80%	12.00
IVTH YEAR		90%	13.50
VTH YEAR		100%	15.00

COMPUTATION OF RAW MATERIAL

Item Name		Quantity of Raw Material /MT	Recovery	Unit Rate of /MT	Total Cost Per Annum (100%)
Capsicum	100%	15.00		285,000.00	4,275,000.00
Edible Oil, Salt, Turmeric Powder, Ginger, Lemon and Spices	LS	-		-	250,000.00
Packing Material including Plastic Jars, Pouches, Labels and other Packaging Items.		LS			200,000.00
Expenses on Raw Material at 100% capacity (Rs)			Total (Rounded off in lacs)		4,725,000.00
Annual Consumption cost	(In Lacs)				47.25

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	60%	28.35
IIND YEAR	70%	33.08
IIIRD YEAR	80%	37.80
IVTH YEAR	90%	42.53
VTH YEAR	100%	47.25

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Finished Goods					
(30Days requirement)	5.04	5.88	6.72	7.56	8.40
Raw Material					
(30 Days requirement)	2.84	3.31	3.78	4.25	4.73
Closing Stock	**7.88**	**9.19**	**10.50**	**11.81**	**13.13**

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total
			Amount
Stock in Hand			7.88
Sundry Debtors			2.84
		Total	10.71
Sundry Creditors			1.42
Working Capital Requirement			**9.29**
Margin			0.93
Working Capital Finance			**8.36**

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor Food specialist		12,000.00	1	12,000.00
Skilled Worker		8,000.00	4	32,000.00
Unskilled Worker		6,000.00	6	36,000.00
				68,000.00
Add: 10% Fringe Benefit				6,800.00
Total Labour Cost Per Month				74,800.00
Total Labour Cost for the year (In Rs. Lakhs)			11	8.98

BREAK UP OF SALARY

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		self		
Accountant		9,000.00	1	9,000.00
Sales		10,000.00	1	10,000.00
Total Salary Per Month				19,000.00
Add: 10% Fringe Benefit				1,900.00
Total Salary for the month				20,900.00
Total Salary for the year (In Rs. Lakhs)			2	2.51

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation		**10.00%**	**15.00%**	**10.00%**	
Opening Balance	Leased	-	-	-	-
Addition	-	5.00	5.00	0.50	10.50
	-	5.00	5.00	0.50	10.50
Less : Depreciation	-	0.50	0.75	0.03	1.28
WDV at end of Ist year	-	4.50	4.25	0.48	9.23
Additions During The Year	-	-	-	-	-
	-	4.50	4.25	0.48	9.23
Less : Depreciation	-	0.45	0.64	0.05	1.14
WDV at end of IInd Year	-	4.05	3.61	0.43	8.09
Additions During The Year	-	-	-	-	-
	-	4.05	3.61	0.43	8.09
Less : Depreciation	-	0.41	0.54	0.04	0.99
WDV at end of IIIrd year	-	3.65	3.07	0.38	7.10
Additions During The Year	-	-	-	-	-
	-	3.65	3.07	0.38	7.10
Less : Depreciation	-	0.36	0.46	0.04	0.86
WDV at end of IV year	-	3.28	2.61	0.35	6.24
Additions During The Year	-	-	-	-	-
	-	3.28	2.61	0.35	6.24
Less : Depreciation	-	0.33	0.39	0.03	0.75
WDV at end of Vth year	-	2.95	2.22	0.31	5.48

REPAYMENT SCHEDULE OF TERM LOAN 11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
IST YEAR	Opening Balance						
	Ist Quarter	-	9.87	9.87	-	-	9.87
	Iind Quarter	9.87	-	9.87	0.28	-	9.87
	IIIrd Quarter	9.87	-	9.87	0.28	-	9.87
	Ivth Quarter	9.87	-	9.87	0.28	-	9.87
					0.85	-	
IIND YEAR	Opening Balance						
	Ist Quarter	9.87	-	9.87	0.28	0.62	9.26
	Iind Quarter	9.26	-	9.26	0.27	0.62	8.64
	IIIrd Quarter	8.64	-	8.64	0.25	0.62	8.02
	Ivth Quarter	8.02		8.02	0.23	0.62	7.40
					1.03	2.47	
IIIRD YEAR	Opening Balance						
	Ist Quarter	7.40	-	7.40	0.21	0.62	6.79
	Iind Quarter	6.79	-	6.79	0.20	0.62	6.17
	IIIrd Quarter	6.17	-	6.17	0.18	0.62	5.55
	Ivth Quarter	5.55		5.55	0.16	0.62	4.94
					0.75	2.47	
IVTH YEAR	Opening Balance						
	Ist Quarter	4.94	-	4.94	0.14	0.62	4.32
	Iind Quarter	4.32	-	4.32	0.12	0.62	3.70
	IIIrd Quarter	3.70	-	3.70	0.11	0.62	3.09
	Ivth Quarter	3.09		3.09	0.09	0.62	2.47
					0.46	2.47	
VTH YEAR	Opening Balance						
	Ist Quarter	2.47	-	2.47	0.07	0.62	1.85
	Iind Quarter	1.85	-	1.85	0.05	0.62	1.23
	IIIrd Quarter	1.23	-	1.23	0.04	0.55	0.68
	Ivth Quarter	0.68		0.68	0.02	0.55	0.13
					0.18	2.33	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
CASH ACCRUALS	14.25	17.48	18.74	21.72	24.59
Interest on Term Loan	0.85	1.03	0.75	0.46	0.18
Total	15.10	18.51	19.49	22.18	24.77
REPAYMENT					
Instalment of Term Loan	2.47	2.47	2.47	2.33	2.33
Interest on Term Loan	0.85	1.03	0.75	0.46	0.18
Total	3.32	3.50	3.21	2.80	2.51
DEBT SERVICE COVERAGE RATIO	**4.55**	**5.29**	**6.06**	**7.94**	**9.86**
AVERAGE D.S.C.R.			**6.74**		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	0.90	1.05	1.20	1.35
Production	9.00	10.50	12.00	13.50	15.00
	9.00	11.40	13.05	14.70	16.35
Less : Closing Stock	0.90	1.05	1.20	1.35	1.50
Net Sale	8.10	10.35	11.85	13.35	14.85
Sale Price per MT	700,000.00	700,000.00	700,000.00	700,000.00	700,000.00
Sale (in Lacs)	**56.70**	**72.45**	**82.95**	**93.45**	**103.95**

Particulars	Qty	Price per Unit (Rs.)	Amount (Rs.)
King Chilli Pickle	10 Ton	130,000.00	1,300,000.00
Dried King Chilli	5 Ton	1,000,000.00	5,000,000.00
Total Sales per annum at 100% capacity	15 Ton		6,300,000.00

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	5	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				71,616.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				0.72
Year		**Capacity**		**Amount**
				(in Lacs)
IST YEAR		60%		0.43
IIND YEAR		70%		0.50
IIIRD YEAR		80%		0.57
IVTH YEAR		90%		0.64
VTH YEAR		100%		0.72

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	56.70	72.45	82.95	93.45	103.95
Less : Op. WIP Goods	-	5.04	5.88	6.72	7.56
Add : Cl. WIP Goods	5.04	5.88	6.72	7.56	8.40
Total Sales	**61.74**	**73.29**	**83.79**	**94.29**	**104.79**
Variable & Semi Variable Exp.					
Raw Material & Tax	28.35	33.08	37.80	42.53	47.25
Electricity Exp/Coal Consumption at 85%	0.37	0.43	0.49	0.55	0.61
Manufacturing Expenses 80%	2.27	3.48	3.98	4.49	4.99
Wages & Salary at 60%	6.89	7.58	8.34	9.17	10.09
Selling & adminstrative Expenses 80%	0.91	1.16	1.33	1.50	1.66
Intt. On Working Capital Loan	0.96	0.96	0.96	0.96	0.96
Total Variable & Semi Variable Exp	**39.74**	**46.68**	**52.89**	**59.19**	**65.56**
Contribution	**22.00**	**26.61**	**30.90**	**35.10**	**39.23**
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.57	0.87	1.00	1.12	1.25
Electricity Exp/Coal Consumption at 15%	0.06	0.08	0.09	0.10	0.11
Wages & Salary at 40%	4.59	5.05	5.56	6.11	6.73
Interest on Term Loan	0.85	1.03	0.75	0.46	0.18
Depreciation	1.28	1.14	0.99	0.86	0.75
Selling & adminstrative Expenses 20%	0.23	0.29	0.33	0.37	0.42
Total Fixed Expenses	**7.58**	**8.45**	**8.71**	**9.03**	**9.43**
Capacity Utilization	**60%**	**70%**	**80%**	**90%**	**100%**
OPERATING PROFIT	**14.42**	**18.16**	**22.19**	**26.07**	**29.80**
BREAK EVEN POINT	**21%**	**22%**	**23%**	**23%**	**24%**
BREAK EVEN SALES	**21.27**	**23.28**	**23.61**	**24.26**	**25.19**