PROJECT REPORT ON SOLAR CHARKHA SPINNING, WEAVING, PROCESSING AND GARMENTS

PRIME MINISTER'S EMPLOYMENT GENERATION PROGRAMME



KHADI & VILLAGE INDUSTRIES COMMISSION PROJECT AT A GLANCE - TOP SHEET

1	Name of the Entrepreneur			
2	Constitution (legal Status)		Individual	
3	Father's/Spouse's Name			
4	Unit Address :		Taluka/Block: District: Pin: Phone: E-Mail:	State:
5	Product and By Product		WEAVING ,	ARKHA SPINNING, PROCESSING & GARMENTS FURING UNIT
6	Cost of Project	:	Rs.	24,87,694
7	Means of Finance Term Loan KVIC Margin Money Own Capital			22,38,925.00 6,21,924.00 248769.00
8	Debt Service Coverage Ratio	:		2.39
9	Pay Back Period	:		5 Years
10	Project Implementation Period	:		12 Months
11	Break Even Point	:		47.66%
12	Employment	:		47
13	Power Requirement	:		1 KW
14	Major Raw materials	:	Sliver/Rovin	g
15	Estimated Annual Sales Turnover	:		Rs.8000000.00

DETAILED PROJECT REPORT

1 INTRODUCTION:

The overall objective of the Khadi and Village Industries Commission (KVIC) is to provide employment opportunities to spinners /weavers/artisans/individuals/entrepreneurs with remunerative wages through Khadi & V.I. activities.

KVIC is implementing Khadi programme through the certified Khadi Institutions of KVIC. At present there are over 2300 Khadi institutions registered under Societies Registration Act, Trust Act, Co-operative Societies Act etc. are implementing Khadi programme throughout the country. In order to extend requisite fillip and to help the sector to emerge as most potent employment provider, KVIC has decided to introduce solar power charkha for production of solar spun yarn through the willing khadi institutions and also entrepreneurs. The yarn produced in this solar powered charkha will be used to convert into cloth using handlooms available with the weavers and wherever possible by introducing new looms to weavers.

Looking to the low cost technology, production of yarn through solar charkha activities can easily be undertaken in the rural areas by the Khadi institutions and entrepreneurs. Training for a week on solar charkha will assist the hand spinners to operate the solar charkha at their dwelling place itself.

Production Process

The project captioned "Production of Solar Charkha cloth" envisages deployment of 25 solar power operated charkhas and 10 looms (5 new and 5 old) to one composite unit. The Khadi institutions already possesses infrastructure for production of Khadi using hand spinning and hand weaving process and arrangement for processing the grey cloth.

The raw material supply for the solar charkhas will be ensured through KVIC's departmental Sliver / Roving plants situated at 6 locations in the country. Beside KVIC's departmental units the few Khadi institutions also possess the sliver / roving production facilities. They will also cater the need of raw material to the solar power operated charkhas. However, entrepreneurs will have option to procure sliver/roving from textile manufacturing units.

The yarn produced out of solar charkhas will be converted into cloth using the weaving implements available with the weavers and subsequent processing for dyeing, finishing etc. The units will utilize the garmenting capacity available in the vicinity to convert the cloth into readymade particularly shirts etc.

Market Potential

The change of climate has caused major concern about conservation of ecology and nature. Therefore, Government of India is encouraging to use non-conventional energy such as solar energy wherever possible. The products such as towels, bed sheets, pillow covers, duster cloth etc. produced using solar yarn will

be sold to Government departments, Railways etc. with the support of KVIC.

Production planning

The instant project envisages for introduction of minimum of 25 Nos. solar power operated charkha each having 8 to 10 spindles (per charkha) in each unit with 10 weaving implements and Garment Unit containing 5 single needle locked stitch machine, one overlocking machine and automatic fabric cutting machine with allied accessories.

The cost of charkha and minimum cycle of working capital will be provided to the Khadi institutions/entrepreneurs through PMEGP Scheme by Banks. The yarn produced through these solar charkhas will be taken-up for further production of garment especially men shirts by the Khadi institutions. It is estimated that around 60 shirts will be produced each day. Therefore, the annual production of the unit will be around 18000 for 300 days operation and the average price of each shirt comes around Rs.445/-.

The unit will also have the option to produce finished products such as bed sheets, towels, pillow covers, duster cloth, uniforms, dungri cloth etc. KVIC through its Marketing Directorate will assist the Khadi institutions for extending support to market their shirts through KVIC Departmental Sales Outlets and also facilitate supply of solar charkha cloth to Government departments, Railways etc.

Financial Assistance

Financing of Solar charkha units to be set by Khadi Institutions under PMEGP will receive financial assistance as per the provision of PMEGP with Margin money assistance as provided under PMEGP scheme.

2	ABOUT THE PROMOTER :	Khadi institutions / Entrepreneurs			
3	COST OF PROJECT :				
	A. Fixed Capital Investment				
	Land and Workshed	Renta	l Workshed	Own	
	The requirement of area will be around 250	0 sq.ft. (c	overed-2000, i	uncovered-500)	
	with rent of Rs.5/- per sq.ft. per month.				
	B. Machinery	Qty.	Rate	Amount (in Rs.)	
	8 Spindle Charkha	25	13500.00	337500.00	
	Solar Panel, Battery, Motor, Etc.	25	18000.00	450000.00	
	Improved Looms	5	40000.00	200000.00	
	(5 new and 5 owned by weaver)				
	Garments Machine & Equipment Set	1	375000.00	375000.00	
	Total			1362500.00	

	d. Prelim	ninary & Pre-ope		Rs.50000.00	
	e. Furnit		Rs.100000.00		
	Total Ca	pital Expenditu	re:		Rs. 1512500.00
	Working	Capital			Rs. 975194.00
	Total Co	st Project			Rs. 2487694.00
3.1	Means o	f Financing:			
	Own Cor			10%	Rs.248769.00
	Bank Fin	ance :		90%	
	Dankiiii	ance.	Term Lo		Rs.1361250.00
			Working Capi		Rs.877675.00
				ital	Rs. 2238925.00
	Margin M	loney (Govt. Sub	osidy) From KVIC	25%	Rs. 621924.00
			ly received From K SP in the name of B financing br	eneficiary for thr	
3.2	per	norms of PMEG	SP in the name of B	eneficiary for thr ranch TERM LOAN & V	ee years in the
3.2	per	ENT SHOWING	Fin the name of B financing br	eneficiary for thr ranch TERM LOAN & V AN Closing	VORKING CAPITAL :
3.2	STATEM	ENT SHOWING	TERM LO Installment	eneficiary for thr ranch TERM LOAN & V AN Closing Balance	ee years in the
3.2	STATEM	ENT SHOWING 1 Opening Balance	Fin the name of B financing br THE REPAYMENT OF	eneficiary for thr ranch TERM LOAN & V AN Closing	VORKING CAPITAL : Interest @ 13.00%
3.2	STATEM Year 1st	Opening Balance 1361250	THE REPAYMENT OF TERM LO Installment 272250	Eneficiary for threat ranch TERM LOAN & V AN Closing Balance 1089000	Interest @ 13.00% 176963
3.2	Year 1st 2nd	Opening Balance 1361250 1089000	THE REPAYMENT OF TERM LO Installment 272250 272250	Closing Balance 1089000 816750	Interest @ 13.00% 176963 141570
3.2	Year 1st 2nd 3rd	Opening Balance 1361250 1089000 816750	THE REPAYMENT OF TERM LO Installment 272250 272250 272250	Closing Balance 1089000 816750 544500	Interest @ 13.00% 176963 141570 106178
3.2	Year 1st 2nd 3rd 4th	Opening Balance 1361250 1089000 816750 544500	THE REPAYMENT OF TERM LO Installment 272250 272250 272250 272250	Closing Balance 1089000 816750 544500 272250	Interest @ 13.00% 176963 141570 106178 70785
3.2	Year 1st 2nd 3rd 4th	Opening Balance 1361250 1089000 816750 544500	TERM LO Installment 272250 272250 272250 272250 272250 272250 272250	Closing Balance 1089000 816750 544500 272250	Interest @ 13.00% 176963 141570 106178 70785 35393
3.2	Year 1st 2nd 3rd 4th 5th	Opening Balance 1361250 1089000 816750 544500 272250 Opening	THE REPAYMENT OF TERM LO Installment 272250 272250 272250 272250 272250 WORKING CA	Closing Balance 1089000 816750 544500 272250 0	Interest @ 13.00% 176963 141570 106178 70785 35393
3.2	Year 1st 2nd 3rd 4th 5th	Opening Balance 1361250 1089000 816750 544500 272250 Opening Balance	THE REPAYMENT OF TERM LO Installment 272250 272250 272250 272250 272250 WORKING CA	Closing Balance 1089000 816750 544500 272250 0 APITAL Closing Balance	Interest @ 13.00% 176963 141570 106178 70785 35393
3.2	Year 1st 2nd 3rd 4th 5th Year 1st 2nd 3rd 4th 5th	Opening Balance 1361250 1089000 816750 544500 272250 Opening Balance 877675	Installment WORKING CA Installment 175535	Closing Balance 1089000 816750 544500 272250 0 APITAL Closing Balance 702140 526605 351070	Interest @ 13.00% 176963 141570 106178 70785 35393 144098 91278 68459
3.2	Year 1st 2nd 3rd 4th 5th Year 1st 2nd	Opening Balance 1361250 1089000 816750 544500 272250 Opening Balance 877675 702140	## Installment Column	Closing Balance 1089000 816750 544500 272250 0 APITAL Closing Balance 702140 526605	Interest @ 13.00% 176963 141570 106178 70785 35393 144098 91278

3.3	STATEMENT SHOWING	TH	E DEPI	RECI	ATION	ON FIXED A	SSETS:	
	MACHINERY @10.00%							
	Opening Balance	13	62500	12	226250	1103625	993263	893936
	Depreciation		36250		122625	110363		89394
	Closing Balance	+	26250		103625	993263	893936	804543
	TOTAL DEPRECIATION							
	Machinery		36250		122625	110363	99326	89394
	Total		36250		122625	110363	99326	89394
4	Schedule of Sales Real	izati	on :					
4.1	Details of Sales							
	Particulars of Product			Rat	te/unit	No.of unit	Amount	(in Rs.)
	Garments				445	18000		00.00000
	Total							00.00000
4.2	Capacity Utilization of S	Sales	S					
	Particulars	1s	t Year	2nd	d Year	3rd Year	4th Year	5th Year
	Capacity Utilization	7	70%	3	30%	90%	90%	90%
	Sales / Receipts	56	00000	64	400000	7200000	7200000	7200000
5	Raw materials:							
	Particulars	U	Jnit	Rat	te/unit	Reqd.Unit	Amount	(in Rs.)
	Sliver/Roving	ł	⟨gs.		225.00	6260	1408500.	
	Total						1	408500.00
5.1	Wages	:	1					
	Particulars		No. Worl			ages Month	Amount (Per An	
	Spinner			25		5490.00	1647000.00	
	Weaver			10	9033.33		1084000.00	
	Master Cutter-1, Tailor-5,	ı		7		6250.00	525000.00	
	Overlock Operator-1							
	Т	otal		42			3	256000.00
5.2	Repairs and Maintenance	э:					R	s.12000.00
5.3	Power and Fuel						R	s.24000.00
5.4	Other Overhead Expense	25					-	Rs.9000.00
U. T	Totalor Ovorrioda Experior	,,,					<u> </u>	13.0000.00

6	Administrative Expenses :					
6.1	Salary	No.	Per mont	h (in Rs.)	Annual amou	unt (in Rs.)
	Manager/Entrepreneurs	1	1500	00.00	18000	0.00
	Accountant/Office	1	800	0.00	96000	0.00
	Assistance					
	Production Staff	2	600		14400	
	Sales staff	1	400	0.00	48000	
	Total	5			46800	0.00
6.2	Stationery & Postage				6000	.00
6.3	Workshed Rent				15000	0.00
6.4	Other Miscellaneous Expens	ses			61600	0.00
	Total				68560	
7	Capacity Utilization of Mar	nufacturin	g & Admin	istrative Ex	cpenses :	
	Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
	Capacity Utilization	70%	80%	90%	90%	90%
	Manufacturing Expenses					
	Raw materials	985950	1126800	1267650	1267650	1267650
	Wages	2279200	2604800	2930400	2930400	2930400
	Repairs & Maintenance	8400	9600	10800	10800	10800
	Power & Fuel	16800	19200	21600	21600	21600
	Other Overhead Expenses	6300	7200	8100	8100	8100
	Administrative Expenses					
	Salary	468000	468000	468000	468000	468000
	Stationery & Postage	4200				
	Workshed Rent	150000	150000	150000	150000	150000
	Other Miscellaneous	43120	49280	55440	55440	55440
	Expenses					
	Total:	3961970	4439680	4917390	4917390	4917390
8	Assessment of Working Ca	apital	:			
	Particulars				Amount	
	Sale				1	8000000.00
	Manufacturing Expenses					4 400500 00
	Raw Material					1408500.00
	Wages				,	3256000.00
	Repair & Maintenance					12000.00
	Power & Fuel					24000.00
	Other Overhead Expenses					9000.00
	Production Cost					4709500.00
	Administrative Cost					685600.00
	Manufacturing Cost				!	<u>5395100.00</u>

Working Capital Estimate

Element of Working Capital	No of Days	Basis	Amount (in Rs.)
Raw materials	12	Material Cost	56340.00
Stock in process	15	Production Cost	235475.00
Finished goods	18	Manufacturing Cost	323706.00
Receivable by	20	Manufacturing Cost	359673.00
Total Working Capital Requirement		Per Cycle	975194.00

9 Financial Analysis

9.1 Projected Profit & Loss Account:

Particulars	1st Year	2nd Year	3rd Year	4th Year
Sales	5600000	6400000	7200000	7200000
Receipts	5600000	6400000	7200000	7200000
Manufacturing Expenses				
Raw materials	985950	1126800	1267650	1267650
Wages	2279200	2604800	2930400	2930400
Repairs & Maintenance	8400	9600	10800	10800
Power & Fuel	16800	19200	21600	21600
Other Overhead Expenses	6300	7200	8100	8100
Depreciation	136250	122625	110363	99326
Production Cost	3432900	3890225	4348913	4337876
Administrative Expenses				
Salary	468000	491400	515970	541769
Stationery & Postage	4200	4800	5400	5400
Workshed Rent	150000	150000	150000	150000
Other Miscellaneous Expenses	43120	49280	55440	55440
Administrative Cost	665320	695480	726810	752609
Interest on Bank credit @ 13%				
Term Loan	176963	141570	106178	70785
Working Capital Loan	114098	91278	68459	45639
Cost of Sale	4389280	4818553	5250359	5206909
Net Profit Before Tax	1210720	1581447	1949641	1993091
Net Profit	1210720	1581447	1949641	1993091

9.2 CALCULATION OF DEBT SERVICE CREDIT RATIO (D.S.C.R) :

Particulars	1st Year	2nd Year	3rd Year	4th Year
Net Profit	1210720	1581447	1949641	1993091
Add :Depreciation	136250	122625	110363	99326
TOTAL - A	1346970	1704072	2060004	2092417
Payments :				
On Term Loan:				
Interest	176963	141570	106178	70785
Installment	272250	272250	272250	272250
On Working Capital				
Interest	114098	91278	68459	45639
TOTAL - B	563310	505098	446886	388674
D.S.C.R = A/B	2.39	3.37	4.61	5.38
Average D.S.C.R				

9.3 PROJECTED BALANCE SHEET :

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
LIABILITIES :					
Promoters Capital		248769	248769	248769	248769
Profit		1210720	1581447	1949641	1993091
Term Loan		1361250	1089000	816750	544500
Working Capital Loan		877675	702140	526605	351070
Current Liabilities		0	0	0	0
Sundry Creditors		0	0	0	0
Total		3698414	3621356	3541765	3137430
ASSETS :					
Gross Fixed Assets:		1462500	1326250	1203625	1093263
Less : Depreciation		136250	122625	110363	99326
Net Fixed Assets		1326250	1203625	1093263	993936
Preliminary & Pre-Op. Exper	nses	50000	37500	28125	21094
Current Assets		877675	702140	526605	351070
Cash in Bank/Hand		1494489	1715591	1921898	1792423
Total		3698414	3621356	3541765	3137430

9.4 CASH FLOW STATEMENT :

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
Net Profit		1210720	1581447	1949641	1993091
Add : Depreciation		136250	122625	110363	99326
Term Loan		1361250	1089000	816750	544500
Working Capital Loan		877675	702140	526605	351070
Promoters Capital		248769	0	0	0
Total		3834664	3495212	3403359	2987987
Total Fixed Capital Invested		1512500			
Repayment of Term Loan		272250	272250	272250	272250
Repayment of WC Loan		175535	175535	175535	175535
Current Assets		877675	702140	526605	351070
Total		1325460	1149925	974390	798855
Opening Balance		0	2509204	4854491	7283459
Surplus		2509204	2345287	2428969	2189132
Closing Balance		2509204	4854491	7283459	9472591

9.5 BREAK EVEN POINT AND RATIO ANALYSIS:

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
Fixed Cost		978533	959675	943350	922720
Variable Cost		3546998	3981503	4417371	4383515
Total Cost		4525530	4941178	5360721	5306236
Sales		5600000	6400000	7200000	7200000
Contribution (Sales-VC)		2053002	2418497	2782629	2816485
B.E.P in %		47.66%	39.68%	33.90%	32.76%
Break Even Sales in Rs.		2669155	2539561	2440900	2358822
Break Even Units		2669155	2539561	2440900	2358822
Current Ratio		1.19	1.03	0.85	0.62
Net Profit Ratio		21.62%	24.71%	27.08%	27.68%

This Project Report has been prepared based on the data furnished by the entrepreneur