PROJECT REPORT ON PRODUCTION OF YARN ON SOLAR CHARKHA

PRIME MINISTER'S EMPLOYMENT GENERATION PROGRAMME



Khadi & Village Industries Commission Ministry of MSME, Govt. of India, Mumbai

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		SOLAR CHA	ARKHA 24 SPINDLE/33s- UNIT
6	Cost of Project	:	Rs.	14,67,304
8	Means of Finance Term Loan KVIC Margin Money Own Capital Debt Service Coverage Ratio	:		13,13,939.00 5,13,556.00 73,3653.00 1.80
9	Pay Back Period	:		5 Years
10	Project Implementation Period	:		12 Months
11	Break Even Point	:		45.79%
12	Employment	:		12
13	Power Requirement	:		1 KW
14	Major Raw materials	:		Sliver/Roving
15	Estimated Annual Sales Turnover	:		Rs.57,95,650.00

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 these Khadi institutions. The yarn produced in this solar powered charkha will be used to convert into cloth using handlooms already available with these Khadi Institutions.

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. Training for a week on solar charkha will assist the spinners to operate the solar charkha at their dwelling place itself.

Production Process

The project captioned "Production of Solar Charkha cloth" envisages deployment of 10 solar power operated charkhas to one khadi institution. The Khadi institution 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.

The yarn produced out of solar charkhas will be converted into cloth using the weaving implements available with the Khadi institutions and subsequent processing for finishing 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.

Basis and assumptions

KVIC in its existing Khadi activities takes up production of Khadi cloth using hand spun yarn produced from hand operated charkhas. The hand spun yarn is made

into khadi cloth using hand or pedal operated looms. In the existing khadi production activity enough number of spinner artisans required to operate the charkhas are not available. In order to expand the activities of KVIC, it is proposed to introduce solar powered charkha to attract artisans and create new employment opportunities in the rural areas.

With this objective the instant project envisages initially for introduction of minimum of 10 Nos. solar power operated charkha each having 24 spindles (per charkha) in each Khadi institutions. The cost of charkha and minimum cycle of working capital will be provided to the Khadi institutions through PMEGP Scheme by Banks. The yarn produced through these solar charkhas will be taken-up for further production of cloth by the Khadi institutions and the 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 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.

<u> </u>				
2	ABOUT THE PROMOTER:	Khadi in:	stitutions / Ent	repreneurs
3	COST OF PROJECT :			
	A. Fixed Capital Investment			
	Land and Workshed	Renta	l Workshed	Own
	B. Machinery	Qty.	Rate	Amount (in Rs.)
	8 Spindle Charkha with Solar Panel,	10	85000.00	850000.00
	Battery, Motor, etc.			
	Transportation	1	36000.00	36000.00
	Total			886000.00

	d Prelim	ninary & Pre-ope	rative Cost		Rs.10000.00				
	e. Furnit	Rs.20000.00							
	f. Contir	Rs.5000.00							
	Total Ca	pital Expenditu	re:		Rs. 921000.00				
	Working	Capital			Rs. 54630.00				
	Total Co	st Project			Rs. 1467304.00				
3.1	Means o	f Financing:							
	Own Con	ntribution		5%	Rs.73365.00				
	Bank Fin	ance :		95%					
			Term L		Rs.874950.00				
			Working Ca	pital	Rs.518989.00				
				otal	Rs. 1393939.00				
	Margin M	loney (Govt. Sub	osidy) From KVIC	35%	Rs.513556 .00				
	per norms of PMEGP in the name of Beneficiary for three years in the financing branch STATEMENT SHOWING THE REPAYMENT OF TERM LOAN & WORKING CAPITAL								
3.2	STATEM	ENT SHOWING	financing I	oranch	-				
3.2	STATEM	ENT SHOWING	financing I	OF TERM LOAN	-				
3.2	STATEM	ENT SHOWING Opening Balance	financing I	OF TERM LOAN	-				
3.2		Opening	financing I	DE TERM LOAN DAN Closing	& WORKING CAPITAL :				
3.2	Year	Opening Balance	financing I THE REPAYMENT O TERM LO Installment	DE TERM LOAN DAN Closing Balance	& WORKING CAPITAL : Interest @ 13.00%				
3.2	Year 1st	Opening Balance 874950	THE REPAYMENT OF TERM LOTTERN	DE TERM LOAN Closing Balance 699960	& WORKING CAPITAL : Interest @ 13.00% 113744				
3.2	Year 1st 2nd 3rd 4th	Opening Balance 874950 699960 524970 349980	THE REPAYMENT OF TERM LOSS INSTAILMENT OF TERM	Closing Balance 699960 524970	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246 45497				
3.2	Year 1st 2nd 3rd	Opening Balance 874950 699960 524970	THE REPAYMENT OF TERM LONG Installment 174990 174990 174990	Closing Balance 699960 524970 349980	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246				
3.2	Year 1st 2nd 3rd 4th	Opening Balance 874950 699960 524970 349980	THE REPAYMENT OF TERM LOSS INSTAILMENT OF TERM	Closing Balance 699960 524970 349980 174990 0	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246 45497				
3.2	Year 1st 2nd 3rd 4th	Opening Balance 874950 699960 524970 349980	THE REPAYMENT OF TERM LONG Installment 174990 174990 174990 174990 174990 174990	Closing Balance 699960 524970 349980 174990 0	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246 45497 22749				
3.2	Year 1st 2nd 3rd 4th 5th	Opening Balance 874950 699960 524970 349980 174990 Opening	financing Interest of the REPAYMENT Control of	Closing Balance 699960 524970 349980 174990 0	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246 45497 22749 Ince Interest @				
3.2	Year 1st 2nd 3rd 4th 5th	Opening Balance 874950 699960 524970 349980 174990 Opening Balance	THE REPAYMENT OF TERM LOSS INSTAILMENT OF TERM	Closing Balance 699960 524970 349980 174990 0 CAPITAL Closing Balance	& WORKING CAPITAL : Interest @ 13.00% 113744 90995 68246 45497 22749 Ince Interest @ 13.00%				
3.2	Year 1st 2nd 3rd 4th 5th Year 1st	Opening Balance 874950 699960 524970 349980 174990 Opening Balance 518989	THE REPAYMENT CONTINUE	Closing Balance 699960 524970 349980 174990 0 CAPITAL Closing Balance 415191	**Interest @ 13.00% 113744 90995 68246 45497 22749 22749 13.00% 67469				
3.2	Year 1st 2nd 3rd 4th 5th Year 1st 2nd	Opening Balance 874950 699960 524970 349980 174990 Opening Balance 518989 415191	### THE REPAYMENT CONTROL TERM LOOK Installment	Closing Balance 699960 524970 349980 174990 0 CAPITAL Closing Bala 415191 311393	**Interest @ 13.00% 113744 90995 68246 45497 22749 22749 13.00% 67469 53975				

	MACHINERY @10.00%	_	t year		nd year	3 rd ye		4 th year	5 th yea	
	Opening Balance		86000	7	797400	7176		645894	581305	
	Depreciation		88600		79740	7176		64589	58130	
	Closing Balance	79	97400	7	17660	64589	94	581305	523174	
	TOTAL DEPRECIATION									
	Machinery	8	88600		79740	7170	66	64589	58130	
	Total		00988		79740	7170	66	64589	58130	
4	Schedule of Sales Reali	zati	on :							
4.1	Details of Sales									
	Particulars of Product	Particulars of Product			e/unit	No.of uni	t	Amount	(in Rs.)	
	Yarn				290	5795650.0	00	5	795650.00	
	Total							5	795650.00	
4.2	Capacity Utilization of Sales									
	Particulars	1st	Year	2nd Year		3rd Year		4th Year	5th Year	
	Capacity Utilization	7	70%		0%	90%		90%	90%	
	Sales / Receipts	40	4056955 46		36520	5216085		5216085	5216085	
5	Raw materials:									
	Particulars	l	Jnit	Rate/unit		Reqd.Unit		Amount (in Rs.)		
	Sliver/Roving	k	⟨gs.	184.00 20		2000	3680000			
	Total								3680000	
5.1	Wages	:								
	Particulars		No. Worl			ages Month		Amount in Rs. (Per Annum)		
	Spinner			10		5400.00	648000.00			
	Total				10 3400.00			648000.00		
5.2	Repairs and Maintenance		<u> </u>	-					s.5795.65	
5.3	Power and Fuel							R	s.8693.48	
0.0										
5.4	Other Overhead Expense								s.5795.0	

6	Administrative Expenses :					
6.1	Salary	No.	Per mont	h (in Rs.)	Annual amo	unt (in Rs.)
	Manager/Entrepreneurs	01		0.00	8400	
,	Technical Assistant /Office	01	540	0.00	6480	0.00
	Assistance/ Accountant					
	Total	02			14880	0.00
6.2	Telephone Expenses				2897	' 83
	Stationery & Postage				4346	
	Advertisement & Publicity				2897	
	Workshed Rent				1800	
	Other Miscellaneous Expens	ses			2318	
<u> </u>	Total	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			20012	
	. • • • • • • • • • • • • • • • • • • •				20012	.0100
7	Capacity Utilization of Man	ufacturin	g & Admin	istrative Ex	xpenses :	
	Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
•	Capacity Utilization	70%	80%	90%	90%	90%
•	Manufacturing Expenses					
•	Raw materials	2576000	2944000	3312000	3312000	3312000
,	Wages	453600	518400	583200	583200	583200
•	Repairs & Maintenance	4057	4637	5216	5216	5216
,	Power & Fuel	6085	6955	7824	7824	7824
•	Other Overhead Expenses	4057	4637	5216	5216	5216
•	Administrative Expenses					
	Salary	148800	148800	148800	148800	148800
•	Postage Telephone	2028	2318	2608	2608	
	Stationery & Postage	3043	3477	3912	3912	
	Advertisement & publicity	2028				
•	Workshed Rent	18000				
i	Other Miscellaneous	16228			20864	+
	Expenses					
	Total:	3233927	3672088	4110249	4110249	4110249
8	Assessment of Working Ca	apital	:			
	Particulars				Amount	(in Rs.)
	Sale					5795650.00
	Manufacturing Expenses					
	Raw Material					3680000.00
•	Wages					648000.00
,	Repair & Maintenance					5795.65
	Power & Fuel					8693.48
	Other Overhead Expenses					5794.65
ŀ	Production Cost					4348284.78
ŀ	Administrative Cost					200125.00
ŀ	Manufacturing Cost					4548409.76

Working Capital Estimate

Element of Working Capital	No of Days	Basis	Amount (in Rs.)
Raw materials	8	Material Cost	98133.00
Stock in process	10	Production Cost	144943.00
Finished goods	10	Manufacturing Cost	151614.00
Receivable by	10	Manufacturing Cost	151614.00
Total Working Capital Requir	ement	Per Cycle	546304.00

9 Financial Analysis

9.1 Projected Profit & Loss Account:

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
Sales		4056955	4636520	5216085	5216085
Receipts		4056955	4636520	5216085	5216085
Manufacturing Expenses					
Raw materials		2576000	2944000	3312000	3312000
Wages		453600	518400	583200	583200
Repairs & Maintenance		4057	4637	5216	5216
Power & Fuel		6085	6955	7824	7824
Other Overhead Expenses		4057	4637	5216	5216
Depreciation		88600	79740	71766	64589
Production Cost		3132399	3558368	3985222	3978046
Administrative Expenses					
Salary		148800	156240	164052	172255
Postage & Telephone		2028	2318	2608	2608
Stationery & Postage		3043	3477	3912	3912
Advertisement & Publicity		2028	2318	2608	2608
Workshed Rent		18000	18000	18000	18000
Other Miscellaneous Expenses		16228	18546	20864	20864
Administrative Cost		190127	200900	212044	220247
Interest on Bank credit @ 13%					
Term Loan		113744	90995	68246	45497
Working Capital Loan		67469	53975	40481	26987
Cost of Sale		3503739	3904237	4305994	4270778
Net Profit Before Tax		553216	732283	910091	945307
Net Profit		553216	732283	910091	945307

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

Particulars	0 year	1st Year	2nd Year	3rd Year	4th Year
Net Profit		553216	732283	910091	945307
Add :Depreciation		88600	79740	71766	64589
TOTAL - A		641816	812023	981857	1009896
Payments :					
On Term Loan :					
Interest		113744	90995	68246	45497
Installment		174990	174990	174990	174990
On Working Capital					
Interest		67469	53975	40481	26987
TOTAL - B		356202	319960	283717	247475
D.S.C.R = A/B		1.80	2.54	3.46	4.08
Average D.S.C.R					

9.3 PROJECTED BALANCE SHEET:

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
LIABILITIES :					
Promoters Capital		73365	73365	73365	73365
Profit		553216	732283	910091	945307
Term Loan		874950	699960	524970	349980
Working Capital Loan		518989	415191	311393	207596
Current Liabilities		0	0	0	0
Sundry Creditors		0	0	0	0
Total		2020520	1920799	1819819	1576248
ASSETS :					
Gross Fixed Assets:		906000	817400	737660	665894
Less : Depreciation		88600	79740	71766	64589
Net Fixed Assets		817400	737660	665894	601305
Preliminary & Pre-Op. Exper	nses	10000	7500	5625	4219
Current Assets		518989	415191	311393	207596
Cash in Bank/Hand		684131	767948	842532	767347
Total		2020520	1920799	1819819	1576248

9.4 CASH FLOW STATEMENT :

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
Net Profit		553216	732283	910091	945307
Add : Depreciation		88600	79740	71766	64589
Term Loan		874950	699960	524970	349980
Working Capital Loan		518989	415191	311393	207596
Promoters Capital		73365	0	0	0
Total		2109120	1927174	1818220	1567472
Total Fixed Capital Invested		921000			
Repayment of Term Loan		174990	174990	174990	174990
Repayment of WC Loan		103798	103798	103798	103798
Current Assets		518989	415191	311393	207596
Total		797777	693979	590181	486383
Opening Balance		0	1311343	2544538	3772577
Surplus		1311343	1233195	1228039	1081089
Closing Balance		1311343	2544538	3772577	4853666

9.5 BREAK EVEN POINT AND RATIO ANALYSIS:

Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year
Fixed Cost		392471	371635	352057	330334
Variable Cost		3199868	3612343	4025703	4005033
Total Cost		3592339	3983977	4377760	4335367
Sales		4056955	4636520	5216085	5216085
Contribution (Sales-VC)		857087	1024177	1190382	1211052
B.E.P in %		45.79%	36.29%	29.58%	27.28%
Break Even Sales in Rs.		1857731	1682416	1542663	1422773
Break Even Units		6406	5801	5320	4906
Current Ratio		1.13	0.98	0.80	0.59
Net Profit Ratio		13.64%	15.79%	17.45%	18.12%

This Project Report has been prepared based on the data furnished by the entrepreneur whose details are given in the application.

wnos	e details are given in the application.
Place :	
Date:	
Prepared by :	
Director, Khadi & Village Indus	tries Commission,
State/Divisional Office,	
Signature with round real	
	Signature of the Beneficiary
	Full Name:
	Address:
	Phone:
	Fax:
	Email: