

DETAILED PROJECT REPORT

for

**Modernization-cum-expansion of Cooperative Spinning
Mills**

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1. Abbreviations

BOM	Board of Management
RCS	Registrar of Cooperative Societies
DOHT	Director of Handlooms & Textile
NHDC	National Handloom Development Corporation
DOAC & FW	Department of Agriculture Cooperation and Farmers Welfare
GOI	Government of India
AIFCOSPIN	All India Federation of Cooperative Spinning Mills
SWOT	Strength, Weakness, Opportunities, Threats
SITRA	South India Textile Research Association, Coimbatore
DPR	Detailed Project Report
FDR	Fixed Deposit Receipt

2. PROJECT DETAILS :

The ABC Cooperative Spinning Mills Limited, Maharashtra has planned to submit proposal for availing financial assistance of Rs.975.00 lakh for modernization-cum-expansion of its spinning mills at a total cost of the Rs. 1500.00 Lakh. The mill will contribute Rs.525.00 Lakh which is 35% of the project cost by raising share capital from its members.

3. DETAILS OF THE COOPERATIVE SOCIETY / BORROWER :

- i) The objective of the society is :
 - (a) Ensure fair price of cotton grower members produce;
 - (b) To process raw material purchased from grower members as well as non - grower members and add value to benefit its customers;
 - (c) To create suitable market for the finished products of grower members and to ensure remunerative prices to improve their financial position and;
 - (d) To provide employment opportunity to farmers and their families.
- ii) The soil of the area of operation is rich and good for growing cotton. In earlier decades this area was well known as cotton growing belt. In recent decades due to uncertain rains the agriculturists are reluctant to grow cotton. In order to encourage the farmers to grow more cotton in large scale, modern scientific methods are taught and guaranteed price for their cotton is assured to the farmers.
- iii) Society is having **5184** share holders and total share capital is as on today **Rs.289.09 lakhs** including Govt. Share capital is **Rs. 131.00 lakh**. The society expects to increase its membership base by adding extra 500 members in the next financial years to extend more benefits to its members.

- iv) The Cooperative Spinning Mills Limited, Maharashtra, is a registered Cooperative Society under the Maharashtra Co-operative Society Act, 1960 which is engaged in the business of procuring best quality cotton from its farmer members, traders and State Cooperative Cotton Federations and producing 100% cotton yarns in the count range of 30's Ne to 64's Ne in both carded and combed categories and selling it to handloom/ powerloom cooperative societies, private traders, exporters and promoters for getting best remunerative prices to benefit its farmers members. The mill is well known for the quality of yarn manufactured by it.
- vii) Though the mill had done modernization of the machines in some sections during the past few years, but a few sections such as Blow room, Breaker Draw Frames and Speed Frames could not be modernized due to paucity of funds. Due to old machinery present in these departments, the quality of the yarn, the productivity of the mill and the yarn realization and the power and labour cost are adversely affected. The mill therefore now proposes to submit a proposal of modernization of the machines in those sections which have old machinery by availing financial assistance.
- viii) In the last financial year the society has done a business of Rs.7500.10 lakh and earned net profit of Rs. 34.56 lakh as compared to last year net profit of Rs. 28.63 lakh. The society has planned to do business of Rs.9457.78 during the current financial year.
- ix) At present the society has net block of Rs.942.95 lakh. Against by modernization of new machinery, the society will add further net block of Rs.1500.00 lakh.

4. PRESENT ACTIVITIES OF THE COOPERATIV SOCIETY :

- i) The society is engaged in the business of procuring cotton bale and process it through a series of preparatory and spinning machines to produce yarns of the counts required. The final product is cone with yarn wound on it, weighing approximately 2.00 Kg. These cones are then packed in cartons or in hessian bags as per the requirement of the customer and then dispatched.
- ii) The Society owned a spinning mill which was commissioned in the year 1990 with install capacity of **22000** spindles. The ring spinning capacity was enhanced by installing additional spindles in 2005-06 and today spindle capacity is 35000 with production capacity of **9800** kgs per day. The operational performance of the mill during the past 3 years is as under :

Sl. No.	Particulars	2015-16	2016-17	2017-18
1	Installed Capacity (no. of spindles)	28,440	28,440	28,440
2	Average capacity utilisation %	90	90	90
3	No. of days worked	350	350	350
4	Average count spun	31.61	28.52	29.73
5	Average yarn realisation%	83.2	84.34	83.12
6	Production/spdl./shift of 8 hrs	95.96	92.59	86.61
7	Total cotton consumed			
	a) In lakh kg	51.05	50.45	51.55
	b) Value (₹ in lakh)	5360.00	5550.00	5670.36
8	Total yarn produced			
	a) In lakh kg	40.36	41.60	42.85
	b) Value (₹ in lakh)	8072.00	8736.00	9427.00
9	Total yarn sold			
	a) In lakh Kg	38.60	39.10	40.09
	b) Value (₹ in lakh)	7720.00	8211.00	8819.80
10	Total waste sold			
	a) In lakh Kg	7.66	7.57	7.73
	b) Value (₹ in lakh)	329.26	340.57	386.62

- iii) The Financial performances of the society during the past 3 years are as under :

A. Summarised Profit & loss account :

(Rs. in lakh)

Sl. No.	Particulars	During 2015-16	During 2016-17	During 2017-18*
1	Business turnover	6086.42	6966.56	7500.10
2	Gross profit before interest, depreciation & Tax	407.79	466.76	488.97
3	Interest	338.56	386.26	396.89
4	Cash profit (2-3)	69.23	80.5	92.08
5	Depreciation	39.47	43.28	47.15
6	Profit before tax(4-5)	29.76	37.22	44.93
7	Income Tax	6.87	8.59	10.37
8	Net Profit	22.89	28.63	34.56

B Summarised balance sheet of last three years :

Sl. No.	Particulars	As on 31.03.2016	As on 31.03.2017	As on 31.03.2018*
1	Gross block	1412.23	1412.23	1412.23
2	Less: Depreciation	428.56	453.29	469.28
3	Net block(1-2)	983.67	958.94	942.95
4	Work in progress	0.00	0.00	0.00
5	Investments	38.56	29.46	32.28
6	Total fixed assets (3+4+5)	1022.23	988.40	975.23
7	Current assets			
	a)Cash, bank balance & Deposits	23.48	12.64	44.34
	b) Inventory	429.83	436.65	451.66
	c) Sundry Debtors	180.06	204.23	359.56
	d) Loans, advances & prepaid exp.	129.56	239.21	228.43
	e) Others if any (Deferred expenses)	0.00	0.00	0.00
	Sub Total (a to e)	762.93	892.73	1083.99
8	Current liabilities			
	a)Working capital loan	608.59	650.23	580.46
	b)Sundry creditors	290.57	279.09	320.07
	c) Interest payable	76.58	66.35	61.12
	d)Short term loans	0.00	0.00	0.00
	e) Other provisions, liabilities & RD	15.20	21.12	12.44
	Sub total : (a to e)	990.94	1016.79	974.09

B Summarised balance sheet of last three years (continued) :

Sl. No.	Particulars	As on 31.03.2016	As on 31.03.2017	As on 31.03.2018*
9	Net working capital (7-8)	-228.01	-124.06	109.90
10	Long term loans & deposits	402.14	436.58	652.68
11	Paid up share capital	289.09	289.09	289.09
12	Reserves excluding depreciation	129.57	142.36	112.49
13	Un-distributed profits(+)/ Accumulated losses(-)	-26.58	-3.69	30.87
14	Net worth (11+12+13) OR (6+9- 10)	392.08	427.76	432.45
15	Net disposable resources(10+11+12+13-6)	-228.01	-124.06	109.90

* Tentative figures

C. Ratio :

Sl. No.	Particulars	As on 31.03.2016	As on 31.03.2017	As on 31.03.2018*
1	Current Ratio (Current assets :Current liabilities)	43 :57	47 : 53	53 :47
2	Debt Equity ratio (Long term loan : Net worth)	51 : 49	51 : 49	60 : 40

- iv) The society has made necessary provisions for depreciation, interest payment and tax etc. during the past few years.
- v) The society has revalued its land during 2016-17 and as on 31.03.2018, the society has net block of Rs.942.95 lakh, earned net profit during the past 3 years and has positive networth of Rs.432.45 lakh. There is no erosion in paid up share capital .

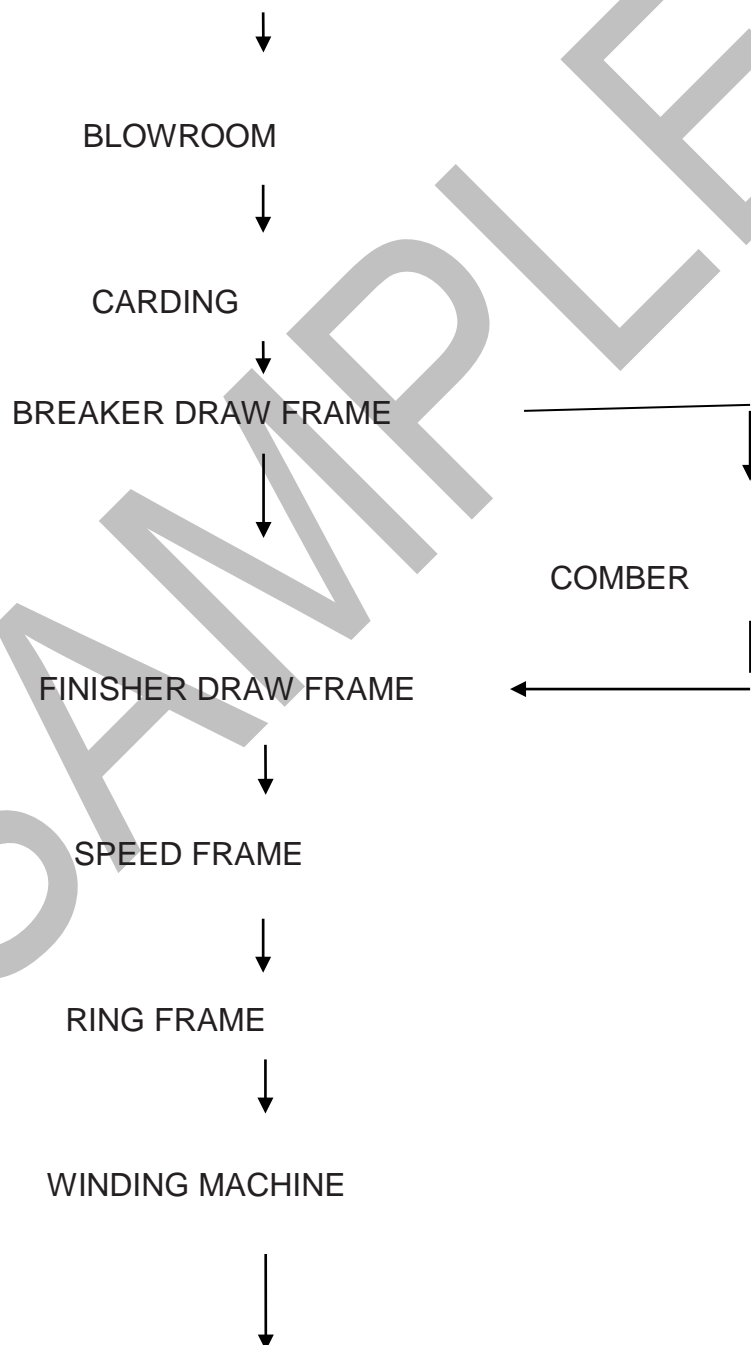
5. DETAILS OF THE PROPOSED PROJECT :

- i) **Proposed project** : The ABC Cooperative Spinning Mills Limited, Maharashtra has planned to submit proposal for availing financial assistance of Rs.975.00 lakh for modernization-cum-expansion of its spinning mills at a total cost of the Rs. 1500.00 Lakh. The mill will contribute Rs.525.00 Lakh which is 35% of the project cost by raising share capital from its members.
- ii) The mill is situated on the National Highway, hence there is no problem in marketing of finished goods, supply of raw-material, power, water, fuel and labours. The society has 12 acres of vacant land adjacent to the mill, which will be utilized for expansion of the mill.
- iii) The main product of the mill will be 100% cotton yarn. Basically two categories of yarn can be produced viz. carded and Combed. Combed yarns are superior to carded yarns in terms of quality parameters like strength, uniformity, hairiness and imperfections. However they are also costly and hence used for making costly high end textiles. The society will produce both carded and combed of counts which contribute a major share in the domestic market and also have a good demand in the international market. Spin-plan is drawn accordingly.
- iv) **Justification for projects** : During the past few years, though the mill had done modernization of the machines in some sections, but a few sections such as Blow room, Breaker Draw Frames and Speed Frames could not be modernized due to paucity of funds. Now, due to old machinery present in these departments, the quality of the yarn, the productivity of the mill and the yarn realization and the power and labour cost are adversely affected. Therefore, the mill now proposes to submit a proposal of modernization of the machines in those sections which have old machinery by availing financial assistance.

- v) **Availability of raw material :** Cotton is an important raw material for Textile Industry. It is a natural fibre and due to its properties like absorbency, technical properties due to which it can be spun to very wide range of counts and varieties of yarn and comfort properties cotton finds use in very wide applications of textiles. Share of cotton amounts to over 35% of all the fibres used at global level and in India its use is over 50%. The mill is situated in the cotton growing area i.e., Vidharba region of the state. The grower members of the mill are holding 2400 hectares of land and produce 6000 MT of kapas (i.e., 2040 MT of lint) which can meet 35% of raw material requirement of the spinning mill and the balance has been purchased from the market. Out of cotton production of 85 lakh bales/annum in Maharashtra, it has been consuming only 25 lakh bales and the balance has been purchased by other states in the country. So adequate raw material is available in the state.
- vi) **YARN MARKETING :** The mill is located in the vicinity of powerloom centres in the State like Bhiwandi, Malegaon, Kolhapur, Ichalkaranji, Sangli & Nagpur etc. Around 9.5 lakh powerlooms are running in Maharashtra state (i.e., 38% of country's capacity) and consumes 5.5 lakh MT of cotton yarn per annum. Maharashtra is having 4.7 million spindles and producing cotton yarn of 3.1 lakh MT of cotton yarn per annum. The balance yarn requirement of Maharashtra has been met by the other southern states in the country. So, adequate demand for cotton yarn is available in the state. Also, the society has been exporting its 25% of yarn production to Bangladesh, China & Vietnam through deemed exports.
- vii) The society posses the expertise / skill manpower and the technical know how for running the project and obtained necessary statutory and other clearances required for the project
- viii) The society has sources of water, electricity and other resources for running the project.
- ix) **Production Process Description :**

The production processes involve procuring bale cotton and process it through a series of preparatory and spinning machines to produce yarns of the counts required. The final product is cone with yarn wound on it, weighing approximately 2.00 Kg. These cones are then packed in cartons or in hessian bags as per the requirement of the customer and then dispatched. Process flow chart and brief description of each step of operation is given below :

PROCESS FLOW CHART FOR SPINNING



YARN CONDITIONING



PACKING

6. ITEM-WISE PROJECT COST WITH DETAILED ESTIMATES/
ASSUMPTION :

i) Project details :

Amount : Rs. in lakh)

Sl. No.	Particular	Project cost	NCDC's assistance		
			Term Loan	Subsidy	Total
1	Building and civil works	143.13	71.57	21.47	93.03
2	Plant and Machinery	923.12	461.56	138.47	600.03
3	Miscellaneous Fixed Assets	182.29	91.15	27.34	118.49
4	Contingencies	62.43	31.21	9.36	40.58
5	Machinery Spares and Stores	189.03	122.87	0.00	122.87
	Total	1500.00	778.35	196.65	975.00
	Society's contribution	35%			525.00
	Total				1500.00

ii) **Building and Civil works** : The society has planned to do earth work and construction of building to accommodate additional machinery at a total cost of Rs.143.12 lakh as per estimate prepared by Civil Engineer.

iii) **Plant & Machinery** : The total cost of machines to be procured for modn.-cum-expansion works out to Rs. 923.12 Lakh as per the details given below:

(Amount : Rs in lakh)

SL No	PARTICULARS	NO.OF UNITS REQUIRED	UNIT COST	TOTAL excluding packing cost	Other incidental cost including M/C @21%	TOTAL COST UPTO COMMISSIONING
1	BLOW ROOM LMW INCL WASTE COLLECTION AND METAL DETECTOR AND SPARK DIVETER	2	118.89	237.79	57.07	294.86
2	BREKER DRAW FRAMES LD2	4	14.32	57.28	13.75	71.03
3	SPEED FRAMES LMW LF4200 (160 SPILDLES) OVER HEAD CLEANERS	6	46.11	276.66	66.40	343.06
4	SPEED FRAMES (UNIROLS)	8	1.25	10.00	2.40	12.40
5	DUCTING FOR BLOWROOM AND CARDS	4	14.43	57.72	13.85	71.57
6	SLUB ATTACHMENT	7	15.00	105.00	25.20	130.20
	TOTAL			744.45	178.67	923.12

@INDIAN MACHINES GST 18%+TRANSPORTATION 2%+INSURANCE AND ERRECTION 1%(TOTAL 21%)

vi) **Miscellaneous Fixed assets** : The total cost towards Miscellaneous fixed assets has been worked out as Rs.182.29 lakh as per details given below :

(Amount : Rs. in lakh)

SL NO	PARTICULARS	NO.OF UNITS REQUIRED	UNIT PRICE	TOTAL PRICE	INCIDENTAL COST @21%	TOTAL
1	HUMIDIFICATION PLANT REPAIRING	2	50.435	100.87	24.21	125.08
2	ELECTRICAL EQUIP. (REQD FOR ADDL. MACHINES)	2	23.07	46.14	11.07	57.21
	TOTAL			147.01	35.28	182.29

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INDIAN MACHINES GST 18%+TRANSPORTATION 2% +INSURANCE AND ERRECTION 1%(TOTAL 21%) :

vii) Contingencies : Provision of contingencies has been worked at Rs.62.43 lakh @5% of Building and Civil works, Plant and Machinery and Miscellaneous fixed assets.

viii) Machinery Spares and Stores : Some machinery spares and stores like cans, bobbins etc are required to be procured because the new machines are being procured. Some machines spares are required because the machines have become old and some essential parts have to be replaced to bring them up to mark of required quality and productivity. The total cost of the machinery spares and stores to be procured has been assessed for Rs.189.03 lakh as per details given below :

(Amount : Rs. in lakh)

NO.	PARTICULARS	QUANTITY (Units)	RATE PER UNIT (Rs.)	TOTAL COST
1	CARD CANS 24" X48" RIMTEX	100	5200.00	5.20
2	RING TUBES	55000	13.50	7.43
3	MACHINERY SPARES			
a)	COMBER SPARE SETS	3	20.00	60.00
b)	DRAW FRAME GEAR CONVERSION KITS	4	5.00	20.00
c)	AUTOCONER SPARES	LUMPSUM	10.00	10.00
d)	RINGS	15000	310.00	46.50
4	ROVING BOBBINS	60000	66.50	39.90
	TOTAL			189.03

ix. Projected Profitability & Cash flow Statement :

SI	Particular	Unit	Assumption	1	2	3	4	5	6	7	8
1	Installed capacity	No.	Actual	35000	35000	35000	35000	35000	35000	35000	35000
2	Capacity utilisation	%	Assumption	90	95	95	95	95	95	95	95
3	Total working days	No.		350	350	350	350	350	350	350	350
4	Total yarn production	Lakh Kg.		41.98	44.08	44.08	44.08	44.08	44.08	44.08	44.08
	INCOME										
5	Total yarn Sales	₹in lakh	Details at 14(a)	9457.78	9836.09	10229.5	10638.72	11064.26	11617.48	12314.53	13053.4
	EXPENDITURE										
6	Total purchase of Cotton	₹in lakh	Details at 14(b)(i)	5887.99	6182.39	6491.51	6816.08	7156.89	7514.73	7890.47	8284.99
7	Power and utility cost	₹in lakh	Details at 14 (c)(i)	1443.95	1516.15	1591.95	1671.55	1755.13	1842.89	1935.03	2031.78
8	Packing material cost	₹in lakh	Details at 14(b)(ii)	75.13	78.89	82.83	86.97	91.32	95.89	100.68	105.72
9	Labour wages cost	₹in lakh	Details at 14(d)	775	813.75	854.44	897.16	942.02	989.12	1038.57	1090.50
10	Stores and spares	₹in lakh		67.25	70.61	74.14	77.85	81.74	85.83	90.12	94.63
11	Selling and distribution expenses	₹in lakh	Projections based on actual of previous year expenses.	131.55	138.13	145.03	152.29	159.90	167.89	176.29	185.10
12	Factory overhead	₹in lakh		55.36	58.13	61.03	64.09	67.29	70.65	74.19	77.90
13	Salary to staff	₹in lakh		81.00	85.05	89.30	93.77	98.46	103.38	108.55	113.98

SI	Particular	Unit	Assumption	1	2	3	4	5	6	7	8
14	Repair and maintenance cost	₹in lakh		29.00	30.45	31.97	33.57	35.25	37.01	38.86	40.81
15	Admn. overhead expenses	₹in lakh		126.93	133.28	139.94	146.94	154.28	162.00	170.10	178.60
16	Insurance cost	₹in lakh		15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
17	Total manufacturing cost (6) to (16)	₹in lakh		8688.16	9121.82	9577.16	10055.27	10557.28	11084.39	11637.86	12219.01
18	PBITD (4) - (17)	₹in lakh		769.62	714.27	652.38	583.45	506.98	533.08	676.66	834.39
19	Interest of Working capital	₹in lakh		208.52	218.92	229.85	241.33	253.37	266.03	279.31	293.26
20	Interest on proposed NCDC loan	₹in lakh	11.25% compounding	57.14	110.19	93.86	77.54	69.38	51.41	35.09	18.76
21	Depreciation by WDV	₹in lakh		187.23	177.87	168.98	160.53	152.50	144.88	137.63	130.75
22	Profit before tax (18-19-20-21)	₹in lakh		316.73	207.29	159.69	104.06	31.73	70.77	224.63	391.63
22	Income tax	₹in lakh	Tax @30%+Cess @3%	97.87	64.05	49.34	32.15	9.80	21.87	69.41	121.01
23	Net Profit (21) - (22)	₹in lakh		218.86	143.24	110.35	71.90	21.93	48.90	155.22	270.61
24	Fund available for serving debt (31+32+35)	₹in lakh	-1500	463.23	431.30	373.18	309.97	243.81	245.19	327.94	420.12
21	Repayment on NCDC loan	₹in lakh		0.00	139.29	139.29	139.29	139.29	139.29	139.29	139.29
26	Total debt service requirement	₹in lakh		57.14	249.48	233.15	216.83	208.67	190.70	174.38	158.05
27	DSCR			8.11	1.73	1.60	1.43	1.17	1.29	1.88	2.66
28	AVERAGE DSCR			2.48							
29	IRR			18%							

x. **Calculation for Payback Period with discounting on current ROI of 11.25% on monthly compounding :**

SI	Particular	Unit	Assumption	1	2	3	4	5	6	7	8
1	Cash Flow	₹in lakh		463.23	431.30	373.18	309.97	243.81	245.19	327.94	420.12
2	Discounting Factor (11.25% monthly com. Basis)	₹in lakh		0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.40
3	Discounted Cash Accruals	₹in lakh		412.28	345.04	264.96	198.38	138.97	125.05	147.57	168.05
4	Cumulative Total	₹in lakh	-975	412.28	757.31	1022.27	1220.65	1359.62	1484.67	1632.24	
5	Payback Period	Period		2 Years 10 Months							
	Without Discounting										
1	Cash Flow	₹in lakh		463.23	431.30	373.18	309.97	243.81	245.19	327.94	420.12
2	Cumulative Total	₹in lakh	-975	463.23	894.53	1267.71	1577.68	1821.49			
3	Payback Period	Period		2 Years 2 Months and 19 days							

xi. **BREAK EVEN ANALYSIS:**

(Amount : Rs. in lakh)

Sl.	Particular	At optimum level	5% decrease in sales realisation	5% increase in raw material cost
A	Sales realisation	9457.78	8984.89	9457.78
B	Variable cost of production			
1	Raw material	5887.99	5887.99	6182.39
2	Cost of Power and utility cost	1443.95	1443.95	1443.95
3	Cost of Packing material cost	75.13	75.13	75.13
4	Labour wages cost	775.00	775.00	775.00
5	Stores and spares	67.25	67.25	67.25
6	Selling and distribution expenses	131.55	131.55	131.55
7	Interest of Working capital	208.52	208.52	208.52
8	Factory overhead	55.36	55.36	55.36
9	Insurance cost	15.00	15.00	15.00
10	Repair and maintenance cost	29.00	29.00	29.00
	Total (B)	8688.75	8688.75	8983.15
C.	Fixed cost of production			
1	Salary to staff	81.00	81.00	81.00
2	Admn. overhead expenses	126.93	126.93	126.93
3	Interest on NCDC loan	57.14	57.14	57.14
4	Depreciation by WDV	187.23	187.23	187.23
	Total (C)	452.30	452.30	452.30
D	Contribution (A)-(B)	769.03	296.14	474.63
E	Break Even Point % (C*100/D)	58.81	152.73	95.30
F	Cash Break Even Point % [C1+(C2+(C3)*100/D]	34.47	46.65	29.10

xii) **ASSUMPTIONS** : The details of assumption made are as under :

a) **SALES REALISATION :**

SR. NO.	COUNTS TO BE WORKED	BASIC SALE PRICE IN RS./KG	GST 5% IN RS./KG	TOTAL SALES REALISATION LAKH RS.
1	32KW	180	9	539.58
2	30'S KW	185	9.25	1673.44
	SLUB			
3	41's KW	209	10.45	2155.52
4	44's KW	215	10.75	1866.51
5	40'S CW	215	10.75	2805.02
	TOTAL			9040.08
6	WASTE SALES REALISATION			
i)	@' 6 %'FOR COMBED YARNS			168.3
ii)	@' 4%'FOR CARDED YARNS			249.4
	TOTAL SALES REALISATION			9457.78

b) **RAW MATERIAL:**

The raw material for the project is cotton. Based on the production plan the maximum requirement of cotton for full scale operations of 350 days and 95% capacity will be as under :

Sl. No	Count to be worked	Production per year (Lakh Kg.)	Yarn realisation (%)	Amount of raw material required (Lakh Kg.)	Average mixing rate per Kg (Rs.)	GST @ 5%	Total raw material cost (Rs. In lakh)
1	32KW	2.85	86	3.32	110.08	5.5	365.43
2	30'S KW	8.61	86	10.02	110.08	5.5	1102.71
	SLUB						
3	41's KW	9.82	86	11.42	110.08	5.5	1257.26

4	44's KW	8.27	86	9.61	110.08	5.5	1058.31
5	40'S CW	12.43	65	19.12	110.08	5.5	2104.28
	TOTAL	41.98		53.49			5887.99

The cotton price is assumed to be Rs.39500/- per Candy of 356 Kg.

c) Packing material :

Generally the yarns are wound on a paper package called as cone due to the conical shape of the package. The cones are normally made from compressed paper. Each cone carries a label on inside surface mentioning the name of the mill, count of the yarn and other quality specifications. After the yarn is wound on the cones, the cones are conditioned in the yarn conditioning machine and then each cone is enclosed in a plastic bag. These cones are then packed in hessian bags or in paper cartoons depending on whether yarn is sold in domestic market or in international market. The Cost of packing material has been worked out to Rs.75.13 lakh as per detail given below :

COST OF PACKING MATERIAL

S.No.	PARTICULARS	
1	YARN PACKED ON CONE PER YEAR LAKH Kg.	41.99
2	PACKING COST Rs./ Kg.	1.79
3	TOTAL PACKIG COST LAKH Rs.	75.13

d) Electrical Power : Electrical power is the major input for the process and the mill. The total installed load is estimated at 3909.00 KW and the maximum demand will be 2133.00 KVA. The total units consumed are estimated at around 51657 KWH per day. The power will be availed from the Maharashtra State Electricity Board and the effective rate of power will be Rs. 7.50 per KWH. The power connection is from 33KVA from Express feeder so that the power will be available continuously with minimum interruptions. The annual cost of power and fuel charges has been estimated to Rs.1443.95 lakh as per details given as under :

DETAILS OF POWER AND FUEL CHARGES :

Sl. No	Department	No.	KW per M/c	Total		Working hours/day	Actual m/c to be worked	KWH
1	BLOW ROOM :							
a)	Blow room with chute feeding and automatic waste collection unit	2	73.73	147.46	103.22	22.5	0.97	2253
b)	Roving waste opener	0	2	0	0	8	1	0
	Sub-Total :		75.73	147.46	103.22			2253
2	PREPARATORY :							
a)	Cards	17	16.69	283.73	198.61	24	0.99	4719
b)	Draw frames LDA/1	5	11.9	59.5	41.65	24	0.99	990
	LD2	3	13.45	40.35	28.25	24	0.3	203
c)	Speed-frames	5	50.9	254.5	178.15	24	0.98	4203
d)	Card room accessories	1	7	7	4.9	8	1	39
e)	Overhead cleaner	5	2.2	11	7.7	24	0.98	182
	Sub-Total :			645.08	451.56			10154
3	RING SPINNING :							
a)	Ring Frame (Average)	46	45	2070	1656	24	0.95	37757
b)	Testing	1	10	10	8	16	1	128
c)	Cots buffing	1	5	5	4	8	1	32
d)	Overhead Cleaners	46	4	184	147.2	24	0.95	3356
	Sub-Total :			2269	1815.2			41272.96

DETAILS OF POWER AND FUEL CHARGES (continued) :

Sl. No	Department	No.	KW per M/c	Total		Working hours/day	Actual m/c to be worked	KWH
4	POST SPINNING							
a)	Auto Cone winders	8	23	184	184	22.5	0.95	3933
b)	Yarn Cond m/c	1	121	121	121	8	1	968
	Sub-Total :			305	305			4901
5	MISC. :							
a)	Humidification	1	403	403	277.26	24	0.9	5989
b)	Workshop & pump	1	5	5	3.44	8	1	28
c)	Lighting Industrial	1	20	20	13.76	24	1	330
d)	Lighting Res.	1	5	5	3.44	18	1	62
e)	Compressors	2	55	110	75.68	24	0.8	1453.06
	Sub-Total :			543	373.6			7861.64
	GRAND TOTAL :-			3910	3049			66442

Total installed load in KW	:	3909.54
Maximum demand load in KVA		2133.99
Power units per year including lighting	:	18603900 KWA per year 1550325 KWH per month
a) Maximum demand charges per month @' Rs.190 per KVA for 2133.99 KVA	:	Rs. 4.05 lakh
b) Energy charges per month @' Rs.7.5per unit for 1550325 Unit	:	Rs. 116.27 lakh
c) Total power charges per month	:	Rs. 120.33 lakh
d) Power charges per year		Rs. 1443.95 lakh

- e) **Water:** Water is mainly required for Humidification Plants, Sanitation and for gardening. The water requirement of the mill per day is estimated at 3.00 lakh Liters per day. The water will be lifted from own well in the premises of the mill.
- f) **Labour requirement :** The man power requirement in various categories (operators, packing & maintenance workers and technical & admn. supervisory staff are 457 with total monthly labour wages has been worked out Rs.775.00 lakh per annum. The details are given as under :

SALARY FOR LABOUR, TECHNICAL & ADMN.STAFF

(Rs. in Lakhs)

Year	Labour Wages including fringe benefits @ 34.5% and to increased @ 5% every year	Staff Salary including fringe benefits @ 28.5% and to increased @ 5% every year	Total wages and salaries with fringe benefits (Year)
I	662.00	113.00	775.00
II	695.10	118.65	813.75
III	729.86	124.58	854.44
IV	766.35	130.81	897.16
V	804.67	137.35	942.02
VI	844.90	144.22	989.12
VII	887.14	151.43	1038.57
VIII	931.50	159.00	1090.50

xiii) FEASIBILITY ASSESSMENT :

- a) At present the mill has quite old generation machines in Blow room, Breaker draw frames and speed frames sections. Due to this the quality of the yarn produced, Productivity of the mill, and the production cost is adversely affected.

- b) Modernisation-cum-expansion of the machines in the above mentioned sections will improve the quality of the yarn produced by the mill substantially. The better yarn quality will enable the mill to fetch Rs.2 to 3 higher price per Kg. of yarn. The value addition in the form of slub yarn will fetch Rs.7 to 10 higher price per kg. for the yarn. Due to higher quality of yarn it will be possible to achieve a much higher productivity. The productivity of the mill at present is around 100 g/spindle shift (40's conversion) will be raised to 110 g/spindle per shift (40's Conversion)
- c) Due to the modern Blow room the yarn realization of the mill will be improved. The present old manual process Blow room results in low yarn realization of 83% for carded yarns and 61% for combed yarns only due to higher amount waste removed. With the modern automatic blow room process the waste will get reduced and it will be possible to achieve a yarn realization of 86% for carded yarns and 65% for combed yarns. Thus there will be a saving of up to 3% of the raw material. This will result in a substantial reduction in production cost of yarn manufactured.
- d) Because of the reduction of the number of machines in Blow room, Breaker draw frame and speed frame sections there will be some saving in power as well as manpower requirements.

7. PLAN OF IMPLEMENTATION :

- i) The society has already initiated following steps towards implementation of the proposed project :
- Society has proposed to implement the project within 7 – 8 months.
 - The society has already raised additional share capital of Rs.200.00 lakh;
 - Obtained consent from State Electricity Board for providing required electricity connection;
 - Prepared plan and estimates for civil work of main plant and other ancillary buildings;

- Obtained quotations from suppliers of plant & machinery and other equipment;
- Identified adequate marketing/selling channels for finished products.

ii) **Detailed Schedule of Implementation:**

Activity	Duration	Completion
Land & Land Development		
• Acquisition of land		Already done
• Development of land		Already done
Civil Works		
• Factory Building & Ancillary Building	3 months	April 2020
• Machinery Foundation	6 months	September 2020
Plant & Machinery		
• Placement of Order	1 month	April 2020
• Delivery at Site	2 months	July 2020
• Erection & Equipments	1 month	August 2020
Commissioning of Project		
• Procurement of Raw Material	1 month	October 2020
• Trial Runs	1 month	
• Commercial Production	1 month	

8. **SWOT Analysis :**

SWOT ANALYSIS	
<p>Strength Forward and backward linkages Availability of skilled labour Availability of market Competitive prices Selling tie-ups</p>	<p>Weakness Maintaining quality Continuous power arrangement Controlling cost of production</p>
<p>Opportunities Abundance of raw material Consumer basic need High shelf life of product</p>	<p>Threats Fluctuation in the price of raw material Sudden policy changes by Govt. Weather/nature dependence as it is agro-based industry</p>

9. BENEFITS TO FARMER MEMBERS :

The society will procure raw material from farmer members, process it by spinning into yarn and sell it to its customer for better remunerative price and the entire process will generate employment for many poor laborers.

10. RISK MANAGEMENT :

Risk mitigation by the company for turn around and prompt repayment of present as well as proposed debts in the light of present overdues and deteriorate financial position of the company. The steps taken to mitigate the risk are as under :

- i) There have always been cycles of good and bad market situations in textile industry. Last one and half years the industry was very adversely affected due to demonetization and implementation of GST. Now the bad cycle has been over and the industry is coming out of the effects of demonetization and implementation of GST.
- ii) The modernization of the machinery will definitely improve its performance and will also generate excess information.
- iii) The society will appoint technical/professionals for running the processing unit, skilled labours are available in the area of operation since it is a industrially developed area, so that the utilization of the mill will be always maintained at around 95%.
- iv) Society has also planned to install DG Set for electricity backup so that electricity problem will not hamper the production process.