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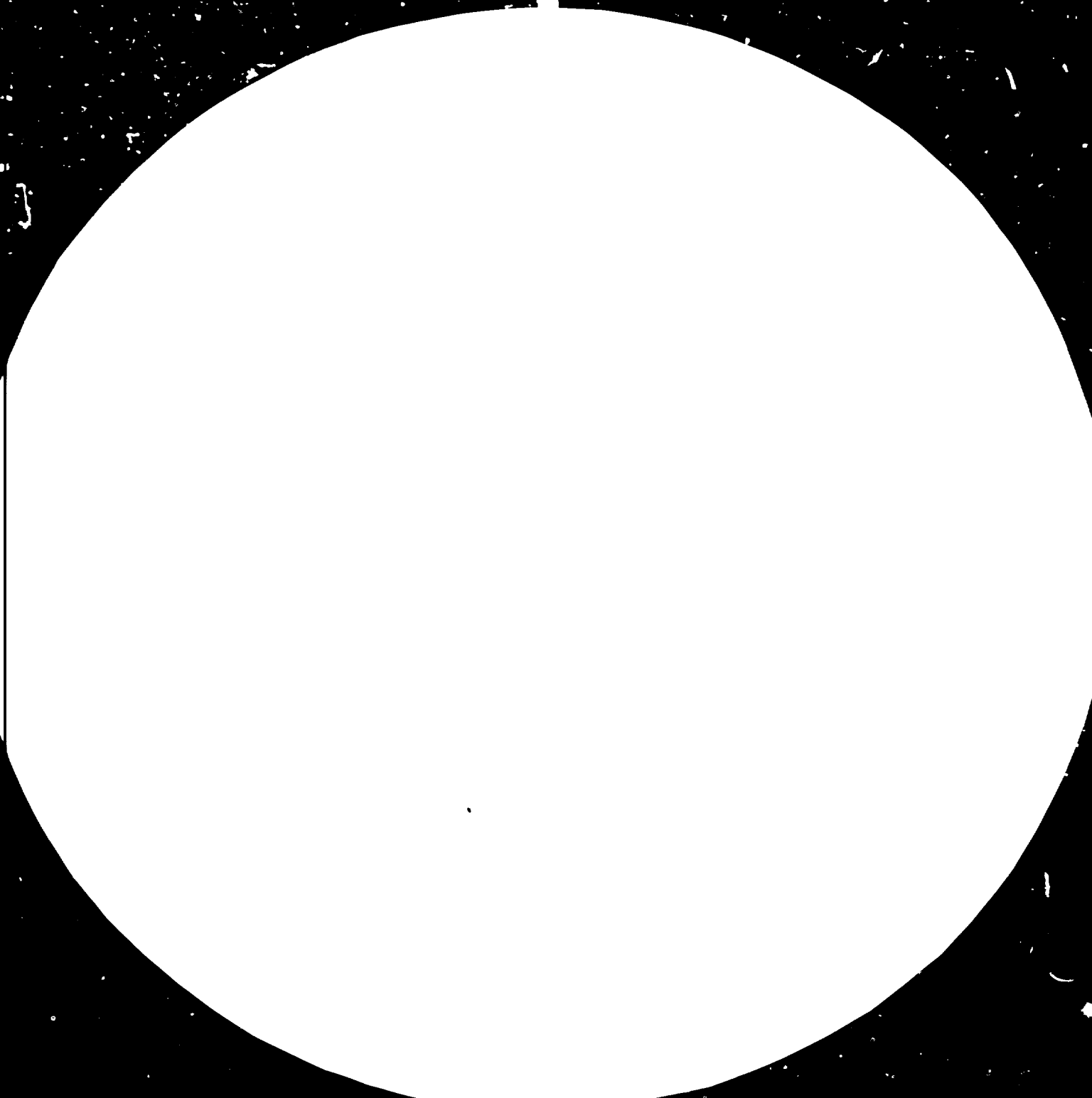
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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

SAMPLE APPRAISAL REPORT OF
"XYZ WOOLLEN MILLS LTD" (Proposed)^{1/}

prepared by
the Secretariat of UNIDO



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I. PROJECT ABSTRACT SHEET

1. Name of the Project W/s WYB Woollen Mills Ltd', (Proposed)
2. Type of Industry Woollen and Worsted Textiles (Spinning)
- Item of production and Government Permit Woollen carpet yarn
Sanctioned by Ministry of Industries
on
3. Sanctioned Capacity (rated) product wise Woollen carpet yarn, 7's count, -
950.400 lbs per annum, working
2 shifts/day and 300 days/year
4. a) Annual Sales Value C.U. 4,141.000 at 85 % capacity
utilization (3rd year)
- b) Annual Foreign Exchange Value, if same goods imported approx. same
5. Location Lot 41, Industrial Estate at
6. New/Balancing and Modernization/Expansion New
7. Investment in Project
 - a) Fixed cost C.U. 1,572.000
 - b) Working Capital including Commercial Bank Borrowings C.U. 550.000
 - c) Total Investment C.U. 2,132.000
8. This Bank's Foreign Exchange Loan) 126.064, equivalent to
C.U. 605.000
9. Foreign Exchange Credit Line Federal Republic of Germany
10. Total Foreign Exchange Component of Project C.U. 605.000
11. This Bank's local currency loan NIL
12. a) Annual foreign exchange requirement of raw material and spares (C + F values) Raw material - NIL
Spares (1st year) - C.U. 3000
- b) Duty, Freight and clearing charges for imported raw material NIL
13. Total Raw Material and Spares requirement/year

	Year	Quantity	Value
	3rd at		
	85 % capacity		
a) Indigenous		1,777.000 lb of raw wool	C.U. 2,773.000
b) Imported (Spares)			C.U. 10.000

14.	New Jobs created (total)	60	
	of which		
	a) Technically skilled	4	
	b) Labour (skilled and semi-skilled)	33	
	c) Labour (un-skilled)	13	
15.	Utility Requirements	<u>Quantity</u>	<u>Value</u>
	a) Electric energy in kWh	50 kWh	
	b) Electric energy in kWh		C.U. 33.720
	c) Fuel oil (Gallons)	6.000/year	C.U. 6.000
	d) Gas (in cu ft)	-	-
	e) Coal/Coke (tons)	-	-
	f) Water (Gallons)	15.000/day	C.U. 6.000/year
16.	a) Total Cost of imported Machinery, including duty and other charges	C.U.	1,200.000
	b) Total cost of locally bought machinery	C.U.	42.000
17.	Total of Salaries and Wages	C.U.	125.000 (3rd year)
18.	Start of Production est.	18 months from the date of opening letter of credit for machinery	
19.	Estimated Foreign Exchange Savings (by Import Substitution)	—	
20.	Estimated Foreign Exchange Earnings	C.U.	559.000 (3rd year)
21.	Estimated Profit - 3rd year	<u>Gross</u>	<u>Net</u>
	(Gross - Net)	C.U. 1,202,000	C.U. 898.000
22.	Owners' Equity	C.U. 1,000,000	
	of which		
	a) Local	C.U. 1,000,000	
	b) Foreign	NIL	
	c) Share Capital authorized	C.U. 2,000,000	
	d) Paid-Up	C.U. 1,000,000	
	e) Loans from Directors	C.U. 312,000	
23.	Commercial Bank Borrowings	C.U.	209.000 (1st year)
24.	Other Medium or Long Term Loans	Government debentures C.U. 121.000 (3 yearly instalments for custom duty)	
25.	Debt/Equity Ratio	Fixed cost 39 : 61 Over-all 32 : 68	

II. 'A' - THE PROJECT

1. Name of the Project: XYZ Woollen Mills Ltd. (Proposed)
2. Location of the Project:
 - a) Factory: Lot 41, Industrial Estate at
 - b) Office: adjoining the factory
3. Industrial Classification: Woollen and Worsted Textiles (Spinning)
4. Unit Classification (New, Balancing output, Modernization, Expansion) New
5. Amount of Loan: Foreign Currency Loan, equivalent to C.U. 605.000 (approximately)
6. Eligibility for Loan: Project sanctioned by Ministry of Industries on
(or: covered under item No. of Priority List of 1970, issued by Ministry of Industries)

7. Cost of the Project:	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
	C.U.	C.U.	C.U.
Fixed cost (without working Capital)	605.000	967.000	1,572.000
Working Capital (including Bank Borrowings)	---	560.000	560.000
TOTAL C.U.	605.000	1,527.000	2,132.000
	=====	=====	=====

III. 'B' INTRODUCTION

M/s ABC and Sons, a partnership concern, registered in 1933 with the Registrar of Companies in applied on 19 ... for a foreign currency loan, equivalent to C.U. 605,000 approx. for the import of machinery for setting up a Woollen Spinning unit at The Industrial Estate at on lot 41, to produce semi-worsted woollen yarn. The unit will comprise of 400 spindles and component machinery. To undertake the project, the sponsors propose to form a private limited company under the name "XYZ Woollen Mills Ltd" at

The sponsors have applied for the tax-holiday privilege, which in principle has been granted by the Ministry of Industries for a period of three years, beginning with the start of production.

This is the first loan application of the sponsors to this industrial development bank.

IV. 'C' HISTORY OF PAST OPERATIONS

The sponsors, M/s ABC and Sons, have been dealing for the last 22 years in hardware, paints, iron and steel, cement and other building materials. The trading results and the financial position for the last three years are summarized as under:

a) Operating Results:

Summarized Trading Profit and Loss Accounts

	<u>19..</u>	<u>19..</u>	<u>19..</u>
	C.U.	C.U.	C.U.
Sales	949.000	776.000	781.000
Cost of Goods sold	<u>859.000</u>	<u>696.000</u>	<u>702.000</u>
Gross Profit	90.000	80.000	79.000
General Administrative and Selling Expenses	<u>36.000</u>	<u>37.000</u>	<u>35.000</u>
Net Operating Profit	54.000	43.000	43.000
Other Income	<u>1.000</u>	<u>1.000</u>	—
	55.000	44.000	43.000
Financial Expenses	<u>2.000</u>	<u>2.000</u>	<u>2.000</u>
Profit before Tax*	<u>53.000</u>	<u>42.000</u>	<u>41.000</u>

RATIOS:

Gross Profit to Sales	9.4 %	10.3 %	10.1 %
Operating Profit to Sales	5.7 %	5.5 %	5.4 %
Net Profit before Tax to Sales	5.6 %	5.4 %	5.2 %
Net Profit before Tax to Owners' Equity	15.3 %	11.8 %	11.4 %

*) M/s 'ABC and Sons' is a registered partnership firm. As such earnings of the firm are subject to tax to be paid by the individual partners.

b) Financial Position:

Summarized Balance Sheets

	<u>19..</u> <u>C.U.</u>	<u>19..</u> <u>C.U.</u>	<u>19..</u> <u>C.U.</u>
<u>Assets:</u>			
Current	435.000	454.000	393.000
Fixed	<u>14.000</u>	<u>12.000</u>	<u>23.000</u>
Total Assets	<u>449.000</u> =====	<u>466.000</u> =====	<u>421.000</u> =====
<u>Liabilities and Owners' Equity:</u>			
<u>Liabilities</u>			
Current	81.000	82.000	42.000
Long-Term	<u>21.000</u>	<u>21.000</u>	<u>21.000</u>
Total Liabilities	102.000	103.000	63.000
<u>Owners' Equity:</u>	<u>347.000</u>	<u>363.000</u>	<u>358.000</u>
Total Liabilities and Owners' Equity	<u>449.000</u> =====	<u>466.000</u> =====	<u>421.000</u> =====
<u>Working Capital</u>	354.000	372.000	351.000
<u>Current Ratio</u>	5.4 : 1	5.5 : 1	9.3 : 1

Sales, net profit (before tax), margin on sales and the return on Owners' Equity show a declining trend during this three-year period. Decrease in profitability has been mainly due to change in sales mix and increasing operating expenses. The working capital position and the current ratios have shown an improvement and the financial position can be considered as sound, although excess funds appear to be tied up in larger stocks of items with relatively low profit margins.

V. 131 - DESCRIPTION OF THE PROJECT

The sponsor of the project will set up a woollen spinning mill to produce semi-worsted woollen yarn. The mill will be situated on lot 41 of the Industrial Estate at

The main machinery will consist of 400 spindles, complete with back-process facilities, including a wool scouring unit. Various counts of woollen yarn can be manufactured. However for the first few years, only 7's count is planned for production, as this count is widely used for the manufacture of carpets, blankets and other hand-woven articles.

The annual production of the mill, based on 2 shifts and 300 days per year, would at a rated 100 % efficiency amount to 950,000 pounds of 7's yarn of the Yorkshire Skien System. For the purpose of this appraisal it is assumed that the operating efficiency would be 65 % in the first year, 75 % in the second and 85 % in the third and subsequent years.

VI. USE - FACILITIES FOR THE IMPLEMENTATION
OF THE PROJECT

(i) MANUFACTURING PROCESS

Greasy wool is first scoured and washed in the finishing and washing machine. The scoured wool is passed through the opener, where it is opened and blended with oil. The blended wool is then taken to the carding machine for separation of fibre and formation of sliver. The sliver thus formed is drawn in three different stages in the intersecting frames for the regularisation and parallelisation of fibre and the formation of the final sliver. The final sliver is then put on the finisher for imparting a slight twist and formation of roving on bobbins. The roving bobbins are then taken to spinning for the making of the woollen yarn.

The yarn on bobbins is formed into hanks on the reeling machine, bundled and baled in the presses and despatched for marketing.

During the process 40 % of the raw wool will become scouring waste, which is unsaleable and 10 % spinning waste, which can be sold at C.U. 1.0 per pound.

(ii) LAND

The sponsors have already been allotted a plot of land, measuring 60,000 sq. ft. on lot 41 at the Industrial Estate at

The land is sufficiently large for the proposed project as well as for future expansion.

The cost of land, including grading, drainage, sewers and water mains, as well as internal road (all provided by the Industrial Estate Management) amounts to C.U. 60,000.

Water and electricity is being laid on up to the border of the plot.

(iii) BUILDINGS

The following new buildings, having a covered area of 11,544 sq.ft. will be built on the allotted land of 60,000 sq.ft.

The construction will be executed as follows:

- R.C.C. Slab Roof
- Backed Brick Walls
- Cement-concrete flooring
- Doors and Windows of steel

Item	Size	Area sq.ft.	Rate sq.ft.C.U.	Total C.U.
Main Factory Shed	135' x 60'	8,100	18.00	145.800
Godown for Raw Material	50' x 20'	1,000	18.00	18.000
Godown for Finished Material	40' x 20'	800	18.00	14.400
Canteen	30' x 20'	600	20.00	12.000
Lavatory	20' x 20'	400	22.00	8.800
Office Block	20' x 20'	400	24.00	9.600
Boiler Room	12' x 12'	144	19.00	2.592
Gate Post	10' x 10'	100	16.00	1.600
Underground Tank	10,000 Gallons	1.00		10.000
		per gallon		
Overhead Tank	5,000 Gallons	2.5		12.500
		per gallon		
Boundary Wall	980 running ft.		8.00 per running ft.	7.340
				243.132
			Say:	243.000

The above costs have been quoted by the Contractor and checked by the Banks' Engineering Department. The cost of construction of buildings appears to be adequate and is within the standard of prices in the locality. Land purchase price and construction costs will be met by the sponsors from their own resources.

(iv) MACHINERY AND EQUIPMENT

The machinery for the woollen yarn manufacturing unit of the semi-worsted system will consist of 430 spindles, complete with back process, scouring and washing unit and necessary component machinery and auxiliary equipment.

The sponsors have submitted three quotations for the machinery proposed to be imported. The prices of machinery from three different sources are as follows:

<u>Source of Machinery</u>	<u>Cost in foreign Exchange</u>
West Germany, C + F	£ 126.064
United Kingdom, F.O.B.	£ 67.590
U.S.S.R. C + F	£ 100.052

Details of machinery proposed to be imported as well as machinery to be purchased locally are shown in Annexures II-1 and II-3 respectively, which combined form a complete manufacturing unit as far as the proposed work is concerned.

The sponsors intend to place the order with the West German suppliers, M/s of

Locally procurable machinery will be bought at an estimated price of C.U. 42.000.

(v) RAW MATERIAL

Indigenous wool is the main raw material, available from sheep farms and from local markets. At 100 % production capacity the unit would require 1,900.800 lbs of greasy wool and 28.512 lbs of batching oil, which is also available locally.

(vi) ESSENTIAL SERVICES

a) Electricity

Power requirements are estimated at 50 KW, which will be supplied from the local power grid through a transformer station, belonging to the Industrial Estate.

b) Water

Water requirements are estimated at 15.000 gallons/day, which will be supplied by the Industrial Estate and will be used for scouring and washing of the greasy wool, for feeding the boiler and other purposes

c) Fuel

Oil at the rate of 20 gallons/day will be required for the firing of the boiler.

d) Transport

The sponsors have not budgeted for the purchase of vehicles, as all in- and out-going goods will be transported by contractors or the occasional hire.

(vii) STAFF AND LABOUR

The proposed mill, working in 2 shifts will require:

1 qualified spinning master

1 foreman

2 supervisors

16 skilled workers

22 semi-skilled workers

13 un-skilled workers

All technical personnel and workers will be recruited locally. On-the-job training will be provided to achieve satisfactory efficiency.

(viii) TECHNICAL CO-OPERATION (if any)

No technical co-operation with a foreign company is envisaged, as the production of woollen yarn is considered a domestic industry and qualified technical staff is available in the country.

(ix) CONSTRUCTION SCHEDULE

The proposed mill could start normal production 18 months after the date of opening the Letter of Credit for the machinery to be imported. The construction schedule is shown in Annexure III.

VII. 'F' MARKET AND ECONOMIC JUSTIFICATION

. MARKET

DEMAND FOR CARPET (AND BLANKET) YARN

The internal and export demand for carpet (and blanket) yarn of 7's count over the last 5 years has shown a steady rise, whereas a decline in the demand for the other types of woollen yarn is noticeable.

(i) Internal consumption:

Whereas statistics of exported woollen carpet yarn give a fairly accurate picture of the quantities involved, the internal consumption can only be estimated, mainly by the increase in numbers of woollen carpet manufacturing units and their output in square feet.

It is generally assumed that for one square foot of a finished carpet 4 ounces of yarn are required.

A survey of the Ministry of Industries shows the following output of manufactured carpets in the country:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
million sq.ft. of carpets	13.2	14.3	15.9	17.3	24.5
est. consumption of woollen carpet yarn in million lbs.	3.4	3.7	3.97	4.32	6.0

(ii) Exports

Export statistics show the following quantities of woollen carpet yarn marketed over the last five years:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
exported woollen carpet yarn in .000 lbs.	200	648	452	518	694

It may be assumed that the demand of overseas distributors will reach in the next years the one million mark of woollen carpet yarn.

(iii) Selling Prices of Carpet Yarn

a) Home Market

The average prices of woollen carpet yarn of 7's count on the home market during the past five years have been showing a rising trend as under:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
Average price of 7's woollen carpet yarn per lb in C.U.	4.0	4.04	4.15	4.25	4.36

The prices of woollen carpet yarn are expected to maintain a rising trend in future years as well and therefore an increase of 2.5 % each year has been assumed in the sales value estimate.

b) Export Market

The average export prices of 7's count of woollen carpet yarn during the past five years have shown a slight rising trend, as under:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
Average export price of 7's woollen carpet yarn per lb in C.U.	3.0	3.06	3.12	3.16	3.30

In view of the increasing demand and rising prices on the export market it is assumed that the trend will continue and the export sales value per pound is increased each year by 2.5 % in the estimates.

(iv) Domestic Production of Carpet Yarn and Imports

25 years ago all locally produced raw wool was sold as such in the domestic and export markets, as the country did not possess any spindle capacity for the manufacture of woollen, worsted or carpet yarn. Since then, year by year new spinning units were installed, until last year the number of spindles in production reached 60,830 spindles, producing all types of yarn.

Those manufacturers, who specialized in 7's count carpet yarn, working their units at 85 to 90 % capacity in 2, or sometimes 3 shifts, are still not able to cover the domestic and export demand and imports of yarn from neighbouring countries are still required to feed the growing local carpet industry.

In view of this, the Ministry of Industries has sanctioned the installation of further spinning mills for woollen carpet yarn up to an output of 2.2 million pounds over the next 3 years.

Import of Woollen Carpet Yarn

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
Imported woollen carpet yarn in .000 lbs	312	432	794	804	945

The proposed project with 480 spindles is assumed to produce 0.95 million pounds of woollen carpet yarn at 100 % rated capacity and 0.81 million pounds at 85 % capacity and as such will be meeting approximately 27 % of the shortfall in demand.

(v) Raw Wool

To examine the justification for setting up a new mill for the production of woollen carpet yarn, it will be necessary to inquire into the economics of raw wool, that is whether the country gains or loses in producing yarn, instead of selling the raw wool. This is directly connected with "Added Value", foreign exchange benefit and employment.

a) Prices of Raw Wool - Home Market

The prices of raw wool during the past three years have been showing an average annual increase of about 2 % as indicated below:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
Average Price of raw wool per pound in C.U.	1.38	1.40	1.44

In view of the past trend, the prices of raw wool during the next four years have been assumed to maintain a rising trend and the estimate foresees an increase of 2 % each year.

b) Prices of Raw Wool - Export Market

Scoured raw wool has been exported in appreciable quantities, however due to the international market situation the average export prices during the last three years have shown a sharp decline:

<u>Year</u>	<u>19..</u>	<u>19..</u>	<u>19..</u>
Average export price of scoured raw wool per pound in C.U.	2.50	2.04	1.52

The export prices of raw wool have been assumed as C.U. 1.25 per pound in the first year and as C.U. 1.00 in each of the three subsequent years. An export price of raw wool at C.U. 1.00 per pound is assumed as a rock bottom price, below which the exporter will have no inducement to sell overseas.

(Observation: For the better understanding of the peruser of this report it is pointed out, the the Government of the country issues bonus vouchers for exporting indigenuous products, which in turn can be sold to importers with a considerable premium, so that de facto the exporter achieves much higher prices.)

(vi) Marketing Arrangements

Marketing arrangements will be worked out by the sponsors before start of production. Due to the great demand of woollen carpet yarn, both in the domestic as well as in foreign markets, no marketing difficulties are expected to arise.

2. ECONOMIC JUSTIFICATION

M/s "XYZ Woollen Mills Ltd." (proposed) would be the first spinning mill in the district of, which being an under-developed region, would greatly benefit from the establishment of such a plant.

At 85% capacity utilization, the unit would require about 1,777,000 pounds of raw wool. In the district one finds 13 well defined breeds of sheep, all belonging to the carpet wool breed group and therefore no shortage of the raw wool of required quality will arise. Sheep growers, as well as wool merchants will welcome this new mill, as it will provide them a ready market for the sale of greasy wool.

a) Foreign Exchange Benefit

The proposed new mill will export 20% of its yearly production. The net foreign exchange earnings during the first four years of operation are estimated as follows:

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
Quantity estimated to be exported (20% of total production) lbs.	113,256	141,000	159,984	161,536
Export price of woollen yarn per lb.	3.5	3.59	3.68	3.77
F.O.B. Price of Woollen yarn in C.U.	<u>396.396</u>	<u>506.219</u>	<u>588.741</u>	<u>608.991</u>
<u>L e s s</u>				
1. F.O.B. price of exportable domestic raw material consumed	203.140	282.015	319.968	323.072
2. Value of spares and stores	3.025	6.050	9.075	12.100
3. Depreciation on C+P of machinery (10%)	60.500	60.500	60.500	60.500
4. Interest payable in foreign currency for machinery at 6% p.a.	<u>30.000</u>	<u>26.585</u>	<u>23.075</u>	<u>19.565</u>
Total (1 to 4)	<u>376.665</u>	<u>375.151</u>	<u>412.613</u>	<u>415.237</u>
Net foreign exchange earnings	<u>19.731</u>	<u>131.068</u>	<u>176.123</u>	<u>193.754</u>
Say C.U.	<u>20.000</u>	<u>131.000</u>	<u>176.000</u>	<u>194.000</u>
	=====	=====	=====	=====

b) Contribution to Gross National Product (GNP)

The proposed project during the first four years of its operation will contribute to the Gross National Product of the country as follows:

	<u>Value Added</u>			
	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U. in 000			
Sales (Net)	2806	3564	4141	4280
<u>L e s s</u>				
Raw Material consumed	1890	2225	2570	2620
Power, Fuel and Water etc.	34	33	43	43
Spares and Stores	3	6	10	13
Postage, Telegram, Telephone and Electricity etc.	6	7	8	9
Stationery and Printing	4	5	6	7
Advertising	50	50	50	50
Packing and other distribution costs	52	66	77	36
	<u>2039</u>	<u>2397</u>	<u>2764</u>	<u>2828</u>
Value added C.U.	<u>767</u>	<u>1167</u>	<u>1377</u>	<u>1452</u>

c) Employment Opportunities

The project after implementation will provide employment opportunities for 60 persons in the under-developed region. The capital investment per employed person would amount to C.U. 35,500.

VII. 'C' - COST OF PROJECT, TERMS OF FINANCE
AND DEBT-EQUITY RATIO

1. COST OF PROJECT:

The total cost of the project as per details of Annexures I and IV is estimated at C.U. 2,132.000 of which C.U. 605.000 is in foreign currency. The cost of project is summarized as below:

<u>Fixed Cost</u>	C.U.	
Land	60.000	
Buildings	250.000	
Machinery	1,251.000	
Other Assets	<u>6.000</u>	
Total Fixed Cost		1,572.000
<u>Working Capital</u>		560.000
including Commercial Bank Borrowings		<u>-----</u>
<u>Total Cost</u>	C.U.	<u><u>2,132.000</u></u>

2. TERMS OF FINANCE:

The above cost of project is proposed to be financed as below:

<u>Proposed Sources of Financing</u>	<u>Mixed Cost</u>	<u>Working Capital</u>
	C.U.	C.U.
<u>A. Short Term Borrowings</u>		
(Commercial Bank Borrowings against hypothecation of stocks) -	-	209.000
<u>B. Long-Term Debt</u>		
(a) Bank's Foreign Currency loan 90% of C and P cost of machinery	544.000	-
(b) Deferred customs duty	121.000	-
(c) Directors' Loan	<u>250.000</u>	<u>-----</u>
	923.000	
<u>C. Sponsors' Contribution</u>		
Paid-up Capital	<u>649.000</u>	<u>351.000</u>
Total:	1,572.000	560.000
Total Cost:		<u><u>2,132.000</u></u>

The sponsors will be required to contribute an additional sum of C.U. 54,000 towards two instalments falling due during the construction period. The sponsors' contribution will thus total to C.U. 1,312.000 of which C.U. 1,000.000 will be through paid-up capital and C.U. 312.000 as long-term loans from Directors.

3. DEBT-EQUITY RATIO:

The debt-equity ratio in the fixed cost of the project after 10% down payment and two instalments of banks' loan falling due during the construction period works out to be 39:61. The ratio in the overall cost of the project will be 32:68. Directors' loan of C.U. 312.000 which will not be repaid during the subsistence of the banks' loan, for the purposes of computation of this ratio has been treated as part of sponsors' equity (quasi equity).



III. UNIT - PROFITABILITY

The detailed forecast of earnings and its underlying assumptions in respect of the proposed project for the first four years of operations are given in Annexures V to IX. A summary of the Forecast of Earnings is given below:

	1st year	2nd year	3rd year	4th year
	C.U. in .000			
Sales	2306	3564	4141	4280
Gross Profit	783	1012	1202	1237
Net Operating Profit	532	786	954	970
Total Profit Before Tax	493	725	893	922

The Company is expected to earn pre-tax profit on sales of 17.5%, 20.28%, 21.58% and 21.54% in the first, second, third and fourth year of operations respectively. If the plant is assumed to be a tax-paying unit the after-tax profit on sales for the four years will be 9.1%, 9.8%, 10.9% and 9.8% respectively.

The pre-tax and after-tax return on owners' average equity as well as on average capitalization for the first four years of operations are given as below:

Return on Owners' Equity

<u>Year of Operation</u>	<u>Pre-Tax</u>	<u>After-Tax</u>
First	41.2%	21.4%
Second	43.1%	20.3%
Third	39.6%	18.4%
Fourth	35.1%	16.00%

Return on Capitalization

<u>Year of Operation</u>	<u>Pre-Tax</u>	<u>After-Tax</u>
First	26.8%	15.5%
Second	31.4%	16.5%
Third	31.9%	15.8%
Fourth	29.8%	14.4%

It may also be noted that the proposed unit promises to yield the following pre-tax and after-tax earnings for a share of C.U. 100.00:

<u>Year of Operation</u>	<u>Earnings per Share (Before Tax)</u>	<u>Earnings per Share (After Tax)</u>
First	C.U. 49.30	C.U. 25.60
Second	C.U. 72.30	C.U. 34.90
Third	C.U. 59.97	C.U. 27.87
Fourth	C.U. 61.47	C.U. 23.00

The company would be able to declare a 10% cash dividend in the first year of operation, a 15% cash dividend in the second year, a 20% cash dividend in third and fourth year each. The company will also be issuing a 50% stock dividend (bonus shares) in the third year.

X. '11' DEBT-SERVICE COVERAGE

1st year 2nd year 3rd year 4th year
C.U. in .000

A. ASSUMING TAX HOLIDAY UNIT

Net Profit as per Earnings Forecast	493	723	898	922
Less: Income Tax (Annexure-XII)	— Tax Holiday —			502*
Add:	493	723	898	420
Interest on Government Debentures	7	7	5	2
Interest on Banks' Loan	42	37	32	27
Income Available for meeting Liabilities	<u>542</u>	<u>767</u>	<u>935</u>	<u>449</u>
<u>Liabilities</u>				
Instalments on Banks' Loan	54	54	54	54
Instalments on Govt. Custom Duty Debentures	-	40	40	41
Interest on Banks' Loan	42	37	32	27
Interest on Govt. Debentures	7	7	5	2
Total	<u>103</u>	<u>138</u>	<u>131</u>	<u>124</u>
Debt Service Coverage (Times)	<u>5.26</u>	<u>5.55</u>	<u>7.13</u>	<u>3.62</u>

*The tax-holiday privilege of the company expires after 3 years.

B. ASSUMING TAX PAYING UNIT

Net Profit as per Earnings Forecast	493	723	898	922
Less: Income Tax (Annexure-XII)	237	374	430	502
	256	349	418	420
Add:				
Interest on Banks Loan	42	37	32	27
Interest on Government Debentures	7	7	5	2
Income Available for meeting Liabilities	305	393	455	449
Liabilities as in A above	<u>103</u>	<u>138</u>	<u>131</u>	<u>124</u>
Debt Service Coverage (Times)	<u>2.96</u>	<u>2.84</u>	<u>3.47</u>	<u>3.62</u>

The project will enjoy tax-holiday under Section of the Income Tax Act for 3 years. The debt service coverage during the tax-holiday period works out to be 5.26, 5.55, 7.13 in the first, second and third year of operations respectively. On the expiry of the tax-holiday period the debt-servicing capacity will be reduced to 3.62, but still would be sufficiently high and above the requirements.

If the unit were a tax-paying one, the debt-service coverage works out to be 2.96, 2.34, 3.47 and 3.62 in the first, second, third and fourth year of operations respectively, showing a satisfactory debt-servicing capacity of the unit.

'J' BREAK-EVEN POINT

The project will break even (Annexure XIII) at a sales volume of C.U. 1,478,000 at 50% capacity utilization thus leaving a considerable gap under which the project can freely operate before it could suffer a loss. Sales required to earn a 15% pre-tax return on equity employed are C.U. 1,964,300 which necessitate 66.5% capacity utilisation.

'K' CASH FLOW

A detailed cash flow statement (Annexure K) covering the first four years of operations is attached as Annexure K. The company is expected to generate funds sufficient enough to pay off the banks' loan instalments, interest, deferred customs duty instalments and interest and 10% cash dividend in the first year, 15% cash dividend in the second year, and a 20% cash dividend in the third and the fourth year each. Besides, the net cash surplus of C.U. 2,123,000 at the end of the fourth year indicates that the project will have surplus cash more than necessary to replace the plant at the end of its expected economic life.

RECOMMENDATION

Considered from all aspects the project of M/s XYZ Woollen Mill Ltd. (Proposed) is feasible and suitable for the banks financing. It is, therefore, recommended that a foreign currency loan equivalent to C.U. 605,000 (approximately) may be sanctioned to them.

CHIEF MANAGER

Signatures

Manager
Project Department
Project Officer
Engineer
Economist

....., the 19

ANNEX I

L/S. KYZ MOOLLEN HILLS LTD. (PROPOSED)

COST OF PROJECT

<u>I t e m</u>	<u>Cost in Foreign Currency (₹)</u>	<u>Equivalent in C.U.</u>	<u>Local Currency Cost C.U.</u>	<u>Total Cost C.U.</u>	<u>Basis for Estimate*</u>
1. <u>LAND</u>					
a) Cost of 60.000 sq.ft. of land	-	-	55.000	55.000	II
b) Cost of Filling, Grading, Landscaping	-	-	-	-	
c) Drainage, Sewers, Water-mains	-	-	3.000	3.000	IV
d) Roads	-	-	2.000	2.000	III
Total:				<u>60.000</u>	
2. <u>BUILDING</u>					
a) Factory	-	-	145.300	145.300	III
b) Office	-	-	9.600	9.600	III
c) Godown/Store	-	-	32.400	32.400	III
d) Workers' Quarters	-	-	-	-	
e) Others (Canteen Boiler Room, Lavatory, Tanks etc.)	-	-	47.500	47.500	III
f) Fencing, Compound Wall	-	-	7.800	7.800	
Total:				<u>243.100</u>	
3. <u>MACHINERY + EQUIPMENT</u>					
a) Main Machinery, Cost C+F/and/or ex works in case of domestic origin (as per encl. quotations)	126.064	605.000	42.000	647.000	III
b) Spare parts, cost C+F and/or ex works in case of domestic origin (as per encl. quotations)	-	-	-	-	
c) Tubewells, Power Plant, Transformers, Cables from Main, Fuel Storage, Other (Railway siding etc.)	-	-	2.000	2.000	III
d) Marine Insurance	-	-	4.500	4.500	IV
e) Import Duty	-	-	302.500	302.500	IV

I t e m	Cost in Foreign Currency (2)	Equivalent in C.U.	Local Currency Cost C.U.	Total Cost C.U.	Basis for Estimate*
f) Bonus Bouchers à 170 ₣	-	-	102.850	102.850	II
g) Clearing charges etc.	-	-	500	500	
h) Inland freight to site including loading and unloading	-	-	28.000	28.000	IV
i) Inland Insurance	-	-	2.000	2.000	IV
Total:				1,039.350	
4. <u>COST OF INSTALLATION</u>					
a) Mechanical (Insta- llation of machinery)	-	-	40.000	40.000	IV
b) Electrical	-	-	20.000	20.000	IV
c) Insurance	-	-	-	-	
Total:					60.000
5. <u>VEHICLES (for use)</u>					
a) Inside Factory Com- pound	-	-	-	-	
b) Outside of Factory	-	-	-	-	
Total:					-
6. <u>OFFICE EQUIPMENT</u>					
a) Office Furniture	-	-	2.000	2.000	III
b) Office machines	-	-	1.000	1.000	III
Total:					3.000
7. <u>CONSULTANTS FEES</u>					
a) Surveys	-	-	-	-	
b) Plans, Drawings	-	-	1.000	1.000	IV
Total:					1.000
8. <u>PRE-OPERATING EXPENSES</u>					
a) Promotional	-	-	1.000	1.000	III
b) Legal	-	-	1.000	1.000	IV
c) Banks' Fees, L/C Charges etc.	-	-	20.000	20.000	IV
d) Import Licence Fee	-	-	2.000	2.000	IV

Item	Cost in Foreign Currency (\$)	Equivalent in C.U.	Local Currency Cost C.U.	Total Cost C.U.	Basis for Estimate*
e) Expenses for starting up production (experts, trial-runs etc.)	-	-	5.000	5.000	IV
f) Any other charges (details)	-	-	-	-	
Total:				29.600	
9. INTEREST PAYABLE DURING CONSTRUCTION					
a) On Machinery and Auxiliaries	-	-	45.400	45.400	IV
b) On Building + Others	-	-	-	-	
Total:				45.400	
10. CONTINGENCIES					
a) On Machinery and Auxiliaries 5% of local currency cost	-	-	28.350	28.350	IV
b) On Building 5%	-	-	12.150	12.150	IV
Total:				41.000	
Total estimated Fixed Cost				1,571.350	
11. WORKING CAPITAL REQUIRED (Including Commercial Bank Borrowings)					
TOTAL ESTIMATED COST				560.000	
				C.U. 2,131.350	
			Say	C.U. 2,132.000	

*Note: (Explanation of column 6 "Basis for Estimate")

- I - purchase has been completed
- II - a binding quotation has been received
- III - a proforma quotation has been received
- IV - an estimated price has been given

I confirm herewith, that after thorough investigation of all anticipated expenditures, a realistic estimate of the cost of the project has been given.

Dated: _____ 19

Initials: Engineer:

Project Officer:

Manager

Project Department:

N/S. XYZ WOOLLEN MILLS LTD. (PROPOSED)

List of Machinery to be Imported.

Description	Operation	Model	Capacity	No. of units	Price in £	Name of Manufacturers
1. FINE Gress Washing and Rinsing machine	Scouring + Washing	-	3000 lbs/shift	1	11.550	Spina West Germany
2. Opener with 600 mm working width	Opening	-	2500 lbs/shift	1	1.936	- do -
3. Single swift Card 2200 mm working width	Carding	-	2000 lbs/shift	1	40.432	- do -
4. Rapid Intersecting with 1 head 1 can.	Drawing	-	2000 lbs/shift	1	6.487	- do -
5. Rapid Intersecting with 1 head 2 cans	Drawing	-	2000 lbs/shift	1	7.034	- do -
6. Rapid Intersecting with 1 head 2 cans 4 slivers	Drawing	-	2000 lbs/shift	1	7.650	- do -
7. High Draft Finishes Automat with 8 heads and 16 bobbins	Preparation of Roving	-	2000 lbs	1	11.080	- do -
8. Ring Spinning frames	Spinning	-	3.30 lbs per spindle and shift (240 spindles of 7's York Shire Skien) (2 sets)		31.000	- do -
					Price F.O.B. = £ 117.269	
					Freight = £ 8.795	
					<u>£ 126.064</u>	
					Equivalent to C.U. 605.000	
					=====	

Initials

Engineer:

Project Officer

Manager
Project Department

ANNEX IIBE/S. NYE MOOLLEN HILLS LTD. (PROPOSED)List of Machinery to be Purchased Locally

S.No.	Description	No. of Set	Price
1.	Boiler (Oil fired) 150 P.S.I.	1 set	C.U. 30.000
2.	Bundling Press	1 set	C.U. 1.000
3.	Baling Press (Screw type)	1 set	C.U. 4.000
4.	Reeling Machine	2 sets	C.U. 5.000
5.	Weighing machine	1 set	C.U. 2.000
		Total	<u>C.U. 42.000</u>

Initials

Engineer

Project Officer

Manager
Project Department

ANNEX III

M/S XYZ WOOLLEN MILLS LTD. (PROPOSED)

PROJECT CONSTRUCTION TIME (ESTIMATED IN MONTHS)

Post L/C Period

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Land acquisition	X																							
2. Establishment of Letter of Credit (Machinery Order)	X																							
3. Site development started		X																						
4. Site development completed			X																					
5. Building construction started			X																					
6. Building construction completed											X													
7. Arrival of machinery-port										X														
8. Arrival of machinery - factory											X													
9. Machinery installation completed															X									
10. Unforeseen delays																X								
11. Trial runs																	X	X						
12. Normal Production started																			X					

M/S. XYZ WOOLLEN MILLS LTD. (PROPOSED)

SALES ESTIMATES (PER FACTORY)

Year of Operation	1st year	2nd year	3rd year	4th year
Capacity Utilization	65 %	75 %	85 %	85 %
<u>Quantities</u>	(lbs)	(lbs)	(lbs)	(lbs)
Opening Stock of Finished Goods	-	30.888	35.482	40.234
Production during the year	597.163	709.632	804.672	807.840
Quantity available for Sale	597.163	740.520	840.154	848.074
Less: Closing Stock of finished goods (15 days production)	30.888	35.482	40.234	40.392
Quantity estimated to be sold	566.280	705.038	799.920	807.682
Quantity estimated to be sold in the local market (80 %)	453.024	564.030	639.936	646.146
Quantity estimated to be exported (20 %)	113.256	141.008	159.984	161.536
	566.280	705.038	799.920	807.682

Sales Value

	C.U.	C.U.	C.U.	C.U.
<u>A. Finished Goods</u>				
i) Local	2,083.910	2,656.581	3,090.891	3,198.423
ii) Exports	396.396	506.219	588.741	608.991
	2,480.306	3,162.800	3,679.632	3,807.414
<u>B. Spinning Waste</u>	123.552	142.560	161.563	161.568
Sales Value	2,603.858	3,305.360	3,841.200	3,968.982
Add:				
i) Bonus Earnings & 30 % of Exports	118.919	151.366	176.622	182.697
ii) Premium on Bonus Vouchers @ 79 %	83.243	106.306	123.635	127.888
Total Sales Revenue	2,806.020	3,563.532	4,141.457	4,279.567

Assumptions and Explanatory Remarks:

1. Operation Time - Two shifts of 8 hours each
2. Production Period - 300 days in a year
3. Work-in-Process Period - 10 days

4. Total number of spindles - 100
5. Production per spindle - 3.3 lbs. per shift
6. Production during the year figures have been worked out as under:

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	65 %	75 %	85 %	85 %
	(lbs)	(lbs)	(lbs)	(lbs)
Production at stated capacity for 290 days of the year	597.168	639.040	780.912	780.912
Add: 10 days production at previous years capacity (units in work-in-process of the previous year	-	20.592	23.760	26.928
Quantity Produced during the year	597.168	709.632	804.672	807.840

7. The home market and export prices for 1st year of operation have been assumed at C.U. 4.60 and 3.50 per lb. respectively. Thereafter an increase of 2.5 % each year has been assumed. The sale price for first 4 years of operation will be as below:

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U.	C.U.	C.U.	C.U.
Local	4.60	4.71	4.83	4.95
Export	3.50	3.59	3.68	3.77

8. Saleable spinning waste would be 10 % of the total raw material consumed and would be sold at C.U. 1.00 per lb.

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M/S. KYE WOOLLEN MILLS LTD. (PROPOSED)

COST OF GOODS MANUFACTURED AND SOLD STATEMENT

(C.U. in '000)

Year of Operation	1st year	2nd year	3rd year	4th year
Plant Capacity	65 %	75 %	85 %	85 %
Work-in-Process (Opening stock)	-	74	86	99
<u>Raw Materials</u>				
Opening Stock	-	139	223	257
Purchase	<u>2.079</u>	<u>2.258</u>	<u>2.605</u>	<u>2.625</u>
Raw material available for use	2.079	2.447	2.827	2.882
Less: Closing stock	189	222	257	262
Raw material (30 days)				
Raw Material consumed during the year	1,890	2,225	2,570	2,620
Factory Wages + Salaries	98	112	126	132
<u>Factory Overheads</u>				
Water, Power + Fuel	34	38	43	43
Spares + stores	3	6	10	13
Repairs + Maintenance	15	30	45	60
Depreciation Machinery	125	125	125	125
Depreciation Factory Building	12	12	12	12
Other manufacturing Overheads	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
Total Factory Overheads	<u>219</u>	<u>246</u>	<u>275</u>	<u>293</u>
Total Work-in-Process	2.207	2.557	3.057	3.149
Less: Work-in-Process (Closing Stock 10 days)	<u>74</u>	<u>86</u>	<u>99</u>	<u>102</u>
Cost of goods manufactured during the year	2.133	2.571	2.958	3.047
Add: Opening stock of finished goods	-	<u>110</u>	<u>129</u>	<u>148</u>
Total Finished Goods Available for Sale	2.133	2.681	3.087	3.195
Less: Finished Goods (Closing Stock 15 days)	<u>110</u>	<u>129</u>	<u>148</u>	<u>152</u>
Cost of Goods Sold	<u>2.023</u>	<u>2.552</u>	<u>2.939</u>	<u>3.043</u>

Assumption and Explanatory Remarks:

1. At 100% plant efficiency, Greasy Wool and Batching Oil - the raw materials for the project - will be required in the following quantities

Greasy Wool	1,900.800 lbs.
Batching Oil	23.512 lbs.

2. The cost of greasy wool and batching oil for 1st year of operation has been assumed C.U. 1.50 and C.U. 2.00 per lb. respectively. Thereafter an increase of 2% each year has been assumed. The cost of the raw materials per lb. for the first 4 years of operation would be as follows:

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U.	C.U.	C.U.	C.U.
Greasy wool	1.50	1.53	1.56	1.59
Batching Oil	2.00	2.04	2.08	2.12

3. It is assumed that the scouring waste will be 40% of the total raw material consumed and will be unsaleable. The spinning waste is estimated at 10% of the total raw material consumed, and will be sold at C.U. 1.00 per lb.
4. The purchase of raw materials for the first four years of operation have been worked out as on page 4.
5. Factory Wages + Salaries:

	<u>No.</u>	<u>Salary per month</u>	<u>Annual Salary</u>
		C.U.	C.U.
<u>Fixed:</u>			
Spinning Master	1	1.500	18.000
Supervisor	2	500	12.000
Foreman	1	500	6.000
			<u>36.000</u>

	<u>No.</u>	<u>Wages per day</u>	<u>Annual Wages</u>
<u>Variable:</u>			
Skilled Labour	16	at 6	28.800
Semi-Skilled Labour	22	rated	5
Un-Skilled Labour	18	capacity	4
			<u>21.600</u>
			<u>83.400</u>

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U.	C.U.	C.U.	C.U.
<u>Factory Wages + Salaries</u>				
a) <u>Fixed Cost</u>	36.000	36.000	36.000	36.000
Increment at 5% p.a.	-	1.800	3.600	5.400
	36.000	37.800	39.600	41.400
Bonus 1 month	3.000	3.150	3.300	3.450
Total (a)	<u>39.000</u>	<u>40.250</u>	<u>42.900</u>	<u>44.850</u>

b) <u>Variable Cost</u>	54.210	62.550	70.390	70.390
Increment à 5 % p.a.	-	<u>2.710</u>	<u>5.837</u>	<u>2.381</u>
	54.210	65.260	76.227	80.271
Penus 1 month	<u>4.517</u>	<u>5.438</u>	<u>6.394</u>	<u>6.689</u>
Total (b)	58.727	70.698	83.121	86.960
Total Factory Wages and Salaries (a+b)	<u><u>97.727</u></u>	<u><u>111.648</u></u>	<u><u>126.021</u></u>	<u><u>131.810</u></u>

6. Stores and Spares

% of the C+F/Ex-Works Cost of Machinery	0.5 %	1.0 %	1.5 %	2.0 %
--	-------	-------	-------	-------

7. Repairs and Maintenance

% of the total cost of Machinery + Building	1.0 %	2.0 %	3.0 %	4.0 %
--	-------	-------	-------	-------

8. Water Power + Fuel at
100 % Capacity

a) Power:

i) Connected load - 50 KW
 Power Factory - .8
 kWh - 50 x .8 x 16 x 300 = 192.000
 Cost = 192.000 x 0.135 = 25.920 (Variable)

ii) Surcharge à C.U. 13.0 per KW per month = C.U. 7.300 (fixed)

b) Fuel Oil:

20 gallons per day à C.U. 1.00 per gallon = C.U. 6.000 (Variable)

c) Water:

15 gallons per day à C.U. 2.00 per 100 gallons = C.U. 9.000 (Variable)

Total (a + b + c) C.U. 40.920 (Variable)
 C.U. 7.800 Fixed

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U.	C.U.	C.U.	C.U.
<u>Power, Water + Fuel Cost:</u>				
Fixed	7.300	7.300	7.800	7.800
Variable	<u>26.598</u>	<u>30.690</u>	<u>34.782</u>	<u>34.782</u>
	<u><u>34.398</u></u>	<u><u>38.490</u></u>	<u><u>42.582</u></u>	<u><u>42.582</u></u>

9. Decreciation

<u>Item</u>	<u>Cost</u>	<u>Rate of</u>	<u>Amount</u>
	C.U.	Depreciation	Depreciation
		%	C.U.
Machinery	1,251.600	10	125.160
Factory Building	244.970	5	12.248
			<u><u>137.408</u></u>

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
	C.U.	C.U.	C.U.	C.U.

10. <u>Other Manufacturing Overheads - Lump Sum</u>	30.000	35.000	40.000	45.000
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PURCHASE OF RAW MATERIAL

	1st year		2nd year		3rd year		4th year	
	Quantity lbs.	Value C.U.	Quantity lbs.	Value C.U.	Quantity lbs.	Value C.U.	Quantity lbs.	Value C.U.
<u>Raw Material Requirements</u>								
a) <u>Greasy Wool:</u>								
Quantity required for 300 days' products	1,235.520	1,853.230	1,425.600	2,181.168	1,615.680	2,520.461	1,615.680	2,563.931
Stock to be maintained at all times during the year (30 days requirements)	123.552	185.328	142.560	213.117	161.568	252.046	161.568	250.892
<u>Total Requirements</u>	<u>1,359.072</u>	<u>2,038.608</u>	<u>1,568.160</u>	<u>2,394.285</u>	<u>1,777.248</u>	<u>2,772.507</u>	<u>1,777.248</u>	<u>2,825.824</u>
Less: Opening Stock Purchases to be made during the year	-	-	123.552	185.328	142.560	213.117	161.568	252.046
	1,359.072	2,038.608	1,444.603	2,213.957	1,634.688	2,559.390	1,615.680	2,573.778
b) <u>Batching Oil</u>								
Quantity required for 300 days' production	18.533	37.066	21.384	43.623	24.235	50.409	24.235	51.378
Stock to be maintained at all times during the year (30 days' requirements)	1.853	3.706	2.138	4.362	2.424	5.041	2.424	5.139
<u>Total Requirements</u>	<u>20.386</u>	<u>40.772</u>	<u>23.522</u>	<u>47.985</u>	<u>26.659</u>	<u>55.450</u>	<u>26.659</u>	<u>56.517</u>
Less: Opening Stock Purchases to be made during the year	-	-	1.853	3.706	2.138	4.362	2.424	5.041
	20.386	40.772	21.669	44.279	24.521	51.088	24.235	51.476
<u>Total (a + b)</u>		<u>2,079.380</u>		<u>2,258.236</u>		<u>2,605.478</u>		<u>2,625.254</u>

M/S. XYZ WOOLLEN MILLS LTD. (PROPOSED)ESTIMATES OF GENERAL, ADMINISTRATIVE, SELLING EXPENSES

(in '000)

Year of Operation	1st year C.U.	2nd year C.U.	3rd year C.U.	4th year C.U.
A. General + Administrative Expenses:				
Salaries - Office Staff	36	38	40	42
Directors' Fee	-	-	-	-
Managing Agent Allowance	-	-	-	-
Postage, Telephone, Telegram + Electricity	6	7	8	9
Stationery + Printing	4	5	6	7
Travelling + Conveyance	5	6	7	8
Misc. Expenses	8	10	12	14
Depreciation - Office Building and Equipment	1	1	1	1
Total (A)	60	67	74	81
B. Selling Expenses:				
Salaries - Sales	22	23	24	25
Advertising	50	50	50	50
Packing + Other Distribution Costs	52	66	77	86
Misc. Expenses	17	20	23	25
Total (B)	141	159	174	186
Total (A + B)	201	226	248	267

Assumption + Explanatory Remarks:1. Office Salaries (Fixed)

	No.	Salary per month C.U.	Annual salary C.U.
Manager	1	1.000	12.000
Accountant	1	600	7.200
Typist-cum-Clerk	1	350	3.000
Production Clerk	2	200	4.800
Mess. + Guard	3	100	3.600
			<u>30.600</u>

	<u>1st year</u> C.U.	<u>2nd year</u> C.U.	<u>3rd year</u> C.U.	<u>4th year</u> C.U.
Salary	30.600	30.600	30.600	30.600
Increment à 5 % p.a.	-	1.530	3.060	4.590
	30.600	32.130	33.660	35.190
Provident Fund à 10 %	3.060	3.213	3.366	3.519
Bonus 1 month	2.550	2.677	2.805	2.933
	<u>36.210</u>	<u>38.020</u>	<u>39.831</u>	<u>41.642</u>

2. Depreciation (Fixed)

<u>Item</u>	<u>Cost</u> C.U.	<u>Rate of</u> <u>Depreciation</u>	<u>Annual</u> <u>Depreciation</u> C.U.
Office Building	10.080	5 %	504
Office Furniture	3.000	15 %	450
			<u>954</u>

3. Salaries (Sales) Fixed

	<u>No.</u>	<u>Salary per Month</u> C.U.	<u>Annual Salary</u> C.U.
Sales Officer	1	600	7.200
Sales Assistants	2	300	7.200
Typist-cum-Clerk	1	250	3.000
Messenger	1	100	1.200
			<u>18.600</u>

	<u>1st year</u> C.U.	<u>2nd year</u> C.U.	<u>3rd year</u> C.U.	<u>4th year</u> C.U.
Salary	18.600	18.600	18.600	18.600
Increment à 5 % p.a.	-	930	1.860	2.790
	18.600	19.530	20.460	21.390
Provident Fund à 10 %	1.860	1.953	2.046	2.139
Bonus 1 month	1.550	1.627	1.705	1.783
	<u>22.010</u>	<u>23.110</u>	<u>24.211</u>	<u>25.312</u>

4. Packing and other distribution costs have been assumed à 2 % of sales.

M/S. KYZ MOOLLEN HILLS LTD. (PROPOSED)

ESTIMATED FINANCIAL EXPENDITURE

(C.U. in '000)

Year of Operation	1st year	2nd year	3rd year	4th year
Interest on Banks' Loan	42	37	32	27
Interest on Commercial Bank Loan	21	-	-	-
Interest on Government Custom Duty Debentures	7	7	5	2
Interest on Director's Loan	19	19	19	19
Total:	89	53	56	48

Explanatory Remarks:

1. 10 % of Banks' foreign currency loan will be paid as down payment before establishment of P/C. The remaining 90 % amount will be paid in 20 equal half-yearly instalments of C.U. 27.225 each, the payment commencing 6 months after the shipment of machinery.
2. The interest on the Banks' loan has been calculated @ 9 % p.a. on the average balance of the Banks' loan during the year.
3. The interest on Commercial Bank loan has been calculated @ 10 % p.a.
4. Due to adequate liquid funds available at the end of the first year it is assumed that the Commercial Bank Borrowings are completely repaid during the second year of operation.
5. The interest on deferred customs duty of C.U. 121,000 has been calculated @ 6 % p.a. The deferred duty will be paid off in 3 equal yearly instalments commencing from the second year of operation.
6. The interest on directors' loan of C.U. 312,000 has been calculated @ 6 % p.a. (One percent above the Bank Rate).

N/S. THE WOOLLEN MILLS LTD. (PROPOSED)
ESTIMATE OF WORKING CAPITAL REQUIREMENTS

(C.U. in .000)

	Tied Up Period	Constr. Year	1st Year	2nd Year	3rd Year	4th Year
C A P A C I T Y	-	-	65 %	75 %	85 %	85 %
A. Current Assets:						
<u>Raw Materials</u>						
Raw Materials (imported)	-	-	-	-	-	-
Raw Materials (local)	30 days	-	139	222	257	262
Work-in-Process	10 days	-	74	86	99	102
Finished Goods (in store)	15 days	-	110	129	148	152
Debtors (Sales)	1 month	-	234	297	345	391
Others (General administrative + selling expenses Finished goods, 15 days + W.I.P. 10 days)	25 days	-	17	19	21	22
Total Estimated Working Funds Required	-	-	624	753	870	929
B. Proposed Means of Financing						
(i) Current Liabilities:						
Material purchased on open account	-	-	-	-	-	-
Commercial Bank Borrowings*	-	-	209	245	284	289
Total Estimated Current Liabilities-	-	-	209	245	284	289
(ii) Estimated Working Capital to be contributed by the Sponsors (A-B1)						
		351**	415	500	536	640
T O T A L		-	624	753	870	929

* (70 % of Raw Material)	-	132	155	180	183
(70 % of Finished Stocks)	-	77	90	104	106

The Cash content of working capital for the first year to be arranged at the end of the construction year is C.U. 351.000 as shown below:

Working capital requirements for first year C.U. 415.000

Less:

1. Pre-Tax Profit for 1 month included in the value of sales shown above C.U. 41.000

2. Depreciation for 1 month 25 days included in the value of sales, finished goods and work in process shown above. C.U. 23.000

64.000

C.U. 351.000

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M/S. XYZ WOOLLEN MILLS LTD. (PROPOSED)

FORECAST OF EARNINGS

(C.U. in '000)

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
Sales	2.806	3.564	4.141	4.280
Cost of Goods Sold	2.023	2.552	2.939	3.043
Gross Profit	783	1.012	1.202	1.237
General Administrative and Selling Expenses	201	226	243	257
Net Operating Profit	582	786	954	970
Other Income	-	-	-	-
	582	786	954	970
Financial Expenses	89	63	56	48
Total Profit Before Tax	493	723	898	922
Income Tax	Tax Holiday			502
Profit After Taxes	493	723	898	420
Proposed Dividend	100	150	200	300
Profit Retained	393	573	698	120

RATIOS

Gross Profit To Sales	27.90 %	28.39 %	29.02 %	23.90 %
Operating Profit To Sales	20.74 %	22.05 %	23.03 %	22.66 %
Net Profit Before Tax To Sales	17.57 %	20.28 %	21.68 %	21.54 %
Net Profit Before Tax To Owners Equity	41.2 %	43.1 %	39.6 %	35.14 %
Net Profit Before Tax and Interest To Capitalization	26.80 %	31.41 %	31.87 %	29.77 %

N/S. XYZ MCOLLEN HILLS LTD. (PROPOSED)

CASH FLOW STATEMENT

(C.U. in '000)

	Construction Period	1st year	2nd year	3rd year	4th year
A. Source of Funds					
Net Profit before Tax and Interest	-	522	736	954	970
Depreciation	-	138	138	138	133
Total Funds Genera- ting from Operations	-	720	924	1,092	1,103
Sponsor's Equity (Paid-up Capital)	1,000	-	-	-	-
Borrowings from Directors/Partners	312	-	-	-	-
Banks' Loan	605	-	-	-	-
Debentures (Customs Duty)	121	-	-	-	-
Increase in Short-term Commercial Bank Borrowings	-	209	-	-	-
Increase in other current liabilities	-	-	-	-	-
TOTAL SOURCE OF FUNDS (A)	2,038	929	924	1,092	1,108

	<u>Construction Period</u>	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
<u>B. Application of Funds</u>					
Investment in fixed assets including capitalized expenditure	1.572	-	-	-	-
Increase in Current Assets	-	624	129	117	59
Decrease in Commercial Bank Borrowings	-	-	209	-	-
Decrease in other Current Liabilities	-	-	-	-	-
Interest payable on Banks' Loan	-	42	37	32	27
Interest on Directors Loan	-	19	19	19	19
Interest on Commercial Bank Borrowings	-	21	-	-	-
Interest on Customs Debentures	-	7	7	5	2
Amortisation of loan from Directors	-	-	-	-	-
Amortisation of the Banks' Loan	115	54	54	54	54
Amortisation of Customs Debentures	-	-	40	40	4
Tax on issue of Bonus Shares (50% share dividend)	-	-	-	100	-
Income Tax	-	-	-	-	-
Dividends/Drawings	-	-	100	150	200
Investments	-	-	-	-	-
Total Application (B)	1.687	767	595	577	402
Cash Surplus (Deficit) during the year (A-B)	351	162	329	575	706
Cash at the beginning of the year	-	351	513	842	1.417
Cash at the end of the year	351	513	842	1.417	2.123

M/S. XYZ MOOLLEN HILLS LTD. (PROPOSED)

PROJECTED BALANCE SHEET

(C.U. in '000)

	<u>Construction Year C.U.</u>	<u>1st year C.U.</u>	<u>2nd year C.U.</u>	<u>3rd year C.U.</u>	<u>4th year C.U.</u>
<u>ASSETS</u>					
<u>Current</u>					
Cash + Bank Balance	351	513	842	1,417	2,123
Other Current Assets	-	624	753	870	929
Total Current Assets	351	1,137	1,595	2,287	3,052
<u>Investment</u>					
Fixed Assets (Net)	1,572	1,434	1,296	1,158	1,020
Total Assets	1,923	2,571	2,891	3,445	4,072
<u>LIABILITIES + OWNER EQUITY</u>					
<u>Current Liabilities</u>					
Sundry Creditors	-	-	-	-	-
Short Term Borrowings	-	209	-	-	-
Income Tax Payable	-	-	-	-	502
Other Current Liabilities (Dividends Payable)	-	100	150	200	300
Total Current Liabilities	-	309	150	200	802
<u>LONG TERM LIABILITIES</u>					
The Banks' Loan	490	436	382	328	274
Other Borrowings (Deferred Customs Duty)	121	121	31	41	-
Loans from Directors	312	312	312	312	312
Total Long-term Liabilities	923	869	775	681	586
<u>OWNERS' EQUITY</u>					
Paid up Capital	1,000	1,000	1,000	1,500	1,500
Retained Earnings	-	393	966	1,064	1,184
Total Liabilities + Owners' Equity	1,923	2,571	2,891	3,445	4,072
<u>RATIOS</u>					
Long Term Debt/Equity	32:68	25:75	16:84	11:89	8:92
Current Assets/ Current Liabilities	-	3.67:1	10.63:1	11.43:1	3.37:1
Fixed Assets Coverage (Times)	2.57	2.57	2.79	3.13	3.72
Break-up Value of Shares	C.U.100.00	C.U. 139.30	C.U. 196.60	C.U.170.93	C.U.185.60

M/S. XYZ WOOLLEN HILLS LTD. (PROPOSED)

INCOME TAX COMPUTATION

(C.U. in 000)

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>4th year</u>
Profit as per Earnings Forecast	493	723	898	922
Add: Depreciation	<u>138</u>	<u>133</u>	<u>138</u>	<u>138</u>
Total Earnings Before Depreciation	631	861	1.036	1.060
<u>Less Depreciation Allowance:</u>				
1. <u>Machinery</u>				
a) Normal @ 10 %	125	113	101	91
b) Extra-shift @ 5 % increase	63	56	51	46
2. Building @ 5 %	13	12	12	11
3. Office Furniture Equipment @ 6 %	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>201</u>	<u>181</u>	<u>164</u>	<u>148</u>
Taxable Income	430	680	872	912
Income Tax @ 55 %	<u>237</u>	<u>374</u>	<u>480</u>	<u>502</u>

N/X WOOLLEN MILLS LTD. (PROPOSED)

BREAK-EVEN ANALYSIS

(C.U. in '000)

Sales of woollen yarn produced at 65 % capacity			2.952
Total production costs, selling-, administrative and financial expenses at 65 % capacity			2.497
<u>Analysis of Total Costs</u>	<u>Total</u>	<u>Fixed</u>	<u>Variable</u>
Raw Material	1.890	-	1.890
Factory Wages + Salaries	98	49	49
Water, Power + Fuel	34	8	26
Spares + Stores	3	2	1
Repairs + Maintenance	15	10	5
Depreciation	133	133	-
Other Manuf. Overheads	30	15	15
Salaries - Office	36	36	-
Postage, Telegrammes, Telephone	6	6	-
Stationary, Printing	4	4	-
Travelling, Conveyance	5	5	-
Misc. Admin. Expenses	8	3	-
Salaries - Sales	22	22	-
Advertising	50	50	-
Packing + Distrib. Costs	52	-	52
Misc. Expenses -Sales	17	14	3
Interest on Banks' Loan	42	42	-
Interest on Commercial Bank Loan	21	21	-
Interest on Govt. Debentures	7	7	-
Interest on Directors' Loan	19	19	-
	<u>2,497</u>	<u>456</u>	<u>2.041</u>
	=====	=====	=====

FORMULA:

$$\begin{aligned} \text{Break-even Sales} &= \frac{\text{Fixed Expenses}}{1 - \frac{\text{Variable Expenses}}{\text{Sales}}} \\ &= \frac{456.000}{1 - \frac{2.041.000}{2.952.000}} \\ &= \frac{456.000}{1 - 0.6915} \end{aligned}$$

Sales of = C.U. 1,473.000 or a capacity utilization to utilization to break-even will be 50 %.

To calculate the amount of sales required and the capacity utilization of the mill to achieve a 15 % pre-tax profit on owners' equity, the following formula is employed:

$$\begin{aligned} &= \frac{\text{Fixed Expenses} + 15\% \text{ Profit}}{1 - \frac{\text{Variable Expenses}}{\text{Sales}}} \\ &= \frac{456.000 + 150.000}{1 - \frac{2.041.000}{2.952.000}} \\ &= \frac{606.000}{1 - 0.6915} \\ &= \underline{\underline{\text{C.U. 1,964.300 or 66.5 \% of capacity}}} \end{aligned}$$

M/S "KYZ WOOLLEN MILLS LTD" (PROPOSED)

INVESTMENT CRITERIA

1. Optimum Attainable Capacity: (4th year)

<u>Item</u>	<u>Quantity</u>
Woollen Carpet Yarn, 7's count	307.840 lbs

2. F.O.B. Price of production at optimum attainable capacity:

<u>Quantity</u>	<u>F.O.B. Price</u>	<u>Total</u>
307.840 lbs.	C.U. 3.77 per lb.	C.U. 3,045.557

3. Foreign Exchange Requirements at optimum attainable capacity:

a) (i) F.O.B. price of exportable domestic raw material consumed for above	C.U. 1,615.680
(ii) Other imported raw materials (C + F)	-
b) Value of spares at 2% of machinery value	12.500
c) <u>Amortization cost</u>	
Machinery imported, 10%	60.500
Royalties	-
Salaries of foreign technicians	-
Profit remittance on foreign equity	-
Interest on foreign loans	<u>19.565</u>

Total Foreign Exchange Cost

C.U. 1,707.845

4. Domestic Currency Cost of production of optimum attainable capacity:

a) Raw Material, Labour, etc.

(i) Other indigenous raw materials not accounted for in 3 a) (ii) above	51.000
(ii) Wages + Salaries (including salaries of general administration but excluding sales department salaries and other distribution costs)	174.000
(iii) Power, Fuel, Electricity, etc.	43.000
(iv) Repairs + Maintenance (buildings, plant, machinery)	60.000
(v) Rent, Insurance, Taxes (factory + office buildings only)	31.000

(vi) Other Factory and Administration Overheads (excluding depreciation)	103.000	
(vii) Differential Interest in foreign currency loans at 2 1/2 %	7.525	
b) <u>Depreciation of Fixed Assets</u> <u>financed from local resources:</u>		
(i) Factory buildings at 5 %	13.000	
(ii) Plant + machinery at 10 %	13.900	
(iii) Furniture + fixtures at 6 %	-	
(iv) Other assets at 10 %	-	
<u>Total domestic Currency Cost</u> <u>(4a) and 4 b) only</u>		= <u>C.U. 501.425</u>

RANKING OF INDUSTRY

(Domestic currency unit cost per foreign exchange unit earned.)

FORMULA :

$$\begin{aligned} &= \frac{\text{Total Domestic Currency Cost}}{\text{Total F.O.B. Price attainable} - \text{Total Foreign Exchange Cost}} \\ &= \frac{\text{Total Domestic Currency Cost}}{\text{Net Foreign exchange earned}} \\ &= \frac{\text{C.U. 501.425}}{\text{C.U. 3,045.557} - \text{1,707.345}} \\ &= \frac{\text{C.U. 501.425}}{\text{C.U. 1,337.712 : exchange rate of foreign currency unit}} \\ &= \text{earning ratio of domestic currency units to one foreign currency unit.} \end{aligned}$$

- (The lower the ratio, the smaller the domestic currency)
(costs to earn foreign exchange. Important when drawing)
(comparisons from several projects or when Government)
(has imposed an upper limit of the ratio.)



